GROUP MANAGEMENT REPORT

1 Fundamentals of the Group

1.1 Business model of the Group

Profile

The euromicron Group is organized into the three segments of "Smart Buildings", "Critical Infrastructures" and "Distribution".

From design and implementation, operation, to intelligent services – euromicron provides its customers with tailor-made digitalization solutions from a single source. To achieve that, the companies in the euromicron Group combine the technically and economically most expedient components from the fields of devices and sensors, infrastructure, platforms, applications and services.

As a result, euromicron enables its customers from small and medium-sized enterprises (SMEs) and the public sector, as well as large companies, to network business and production processes and successfully implement digitized processes at their organization.

The Group's structure and locations

euromicron AG, Frankfurt/Main, is a strategic management holding that discharges cross-Group tasks. They include not only strategic controlling, but also assumption of cross-cutting functions such as financing, Group controlling and accounting, taxes, legal affairs, human resources, purchasing, IT, corporate marketing, investor relations corporate development and innovation management.

Alongside euromicron AG as the ultimate parent company, the euromicron Group's operating business is conducted by the following Group companies:

The companies in the euromicron Group

euromicron Deutschland GmbH
euromicron telent
sachsenkabel
euromicron austria GmbH
SIM
ELABO
KORAMIS
EUROMICRON GROUP
ssm euromicron
SIM
MICROSENS euromicron group
Netzikon
QUBIX
ATECS AG
ProCom
EUROMICRON GMBH
SIM SKYLINE

The regional focus of the euromicron Group's business operations is on German-speaking countries. euromicron's companies are represented at a total of 28 locations distributed throughout Germany. That enables ideal proximity to and intensive care and support for euromicron's customers.

The companies in the euromicron Group are represented in other European countries with locations in Italy, Austria, France, Poland and Switzerland. Group companies are also based in some non-European countries in the shape of project offices so as to cater for country-specific market requirements there. Examples of that are Islamabad (Pakistan), Singapore or Beijing (China).

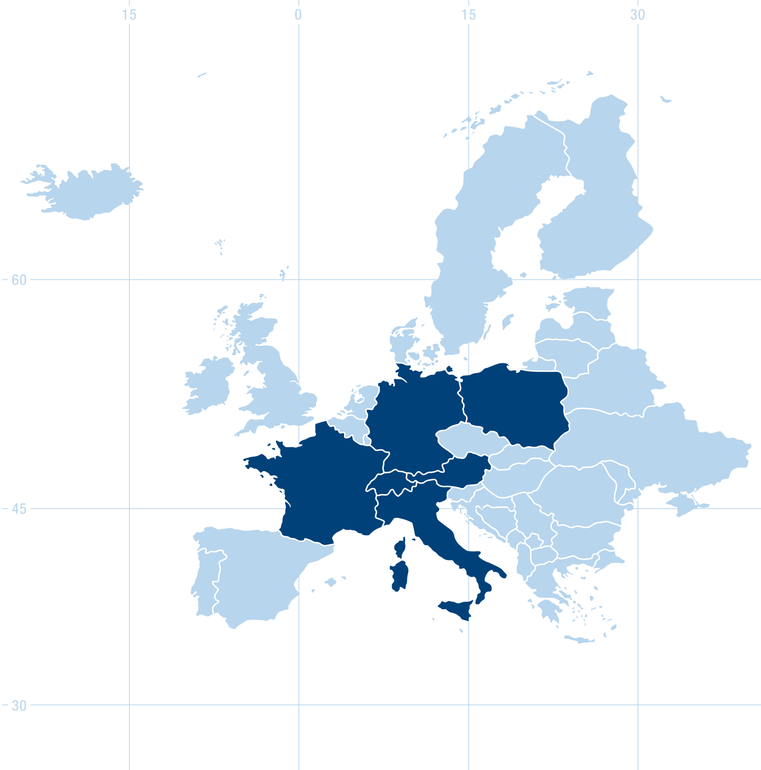
We tap emerging markets with their great demand, such as the United Arab Emirates, Brazil or the former CIS countries, through project and export business and intensified international sales activities, with these operations usually being controlled from Germany. As part of its internationalization strategy, the euromicron Group permanently examines strategic options for tapping interesting foreign markets through acquisitions as a springboard for additional business activities.

Sales by region

in € m.

The chart below shows the regional footprint of the euromicron Group's companies:

Main euromicron locations



GERMANY
28

Augsburg
Backnang
Bamberg
Berlin
Burkhardtsdorf
Crailsheim
Erfurt
Essen
Frankfurt/M.
Gornsdorf
Hamburg
Hamm
Hanover/Langenhagen
Karlsruhe
Kirchheim
Langenfeld
Leipzig/Zwenkau
Munich
Neu-Isenburg
Neustadt a. d. W
Radeberg
Reutlingen
Saarbrücken
Sallgast
Schkopau
Sinn-Fleisbach
Stuttgart
Teltow

EUROPE
6

Padua **IT**
Paris **FR**
Seekirchen **AT**
Vienna **AT**
Wrocław **PL**
Zug **CH**

ASIA
3

Islamabad **PK**
Beijing **CN**
Singapore **SG**

Segments

Smart Buildings | **Critical Infrastructures** | **Distribution**

In line with its strategy, the Group's internal and external reporting structure is geared toward operating business on a market-oriented basis. The euromicron Group's segments in accordance with its internal reporting structure are as follows:

Smart Buildings

All the activities of the euromicron Group in the markets of "Digital Buildings" and "Smart Industry" are pooled in the "Smart Buildings" segment. Smart, digital buildings are an integral part of the Internet of Things. The term "digital building" describes the automation and central operation of the technical equipment of office, commercial and industrial properties, such as train stations, airports or shopping malls. The interplay between all the disciplines creates an intelligent whole that enhances efficiency, security and convenience.

Services relating to building or process automation, alerting, fire prevention, video surveillance, access control or support services as part of efficient energy and building management are integrated in unified, highly available overall systems. Examples of that are intelligent access control or optimizing energy efficiency in running buildings so as to slash operating costs.

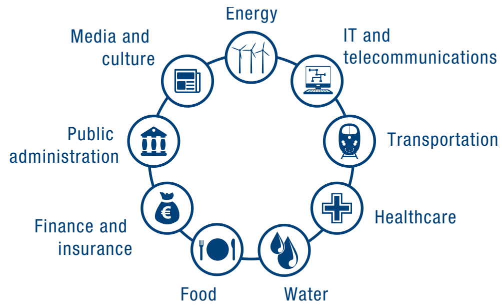
For "Digital Buildings", euromicron delivers cross-industry, all-round solutions for innovative building, network and security technology, as well as complementary digital and other services. Using suitable software in the smart building means manual processes can be eliminated and improved, resources used more efficiently and so costs cut. Application examples of that are intelligent, energy-efficient room and lighting systems ("Smart Office" and "Smart Lighting"). This area also includes equipping data centers with high-performance cabling systems.

The focus in "Smart Industry" is on digitizing and networking development, production and service processes at medium-sized industrial companies. The euromicron Group develops holistic Smart Industry approaches for and with its customers and implements them in a forward-looking way that protects investments. Intelligent data management and a highly available, fault-tolerant network infrastructure are crucial success factors for customers. In networking and automating digital business processes, the euromicron Group also sets store by comprehensive risk analysis. It offers cybersecurity solutions integrated with "Smart Industry" so that production can be networked securely and with a high level of performance.

Critical Infrastructures

The "Critical Infrastructures" segment caters for operators of such infrastructures with highly available and secure communications solutions. Critical infrastructures (KRITIS) are vital business infrastructures whose failure is highly problematic for a company and also for large sections of the public.

That may be the digital mobile radio system at an airport or the communications network of Deutsche Bahn or a power utility, for example. Critical infrastructures include:



Operators of critical infrastructures are also leveraging the technological possibilities now offered by digitalization and networking, as well as the opportunities the Internet of Things and artificial intelligence open up, to optimize their processes and increase productivity. However, special availability, integrity and confidentiality requirements are above all demanded of these networks. They relate to security standards and the ability to repel attacks, as well as system solutions that are sufficiently fault-tolerant. Integrated, efficient IT security concepts will therefore be vital in the future. The euromicron Group has intimate knowledge of the requirements, guidelines and standards to meet those demands and offers a legally secure overall package for operators of critical infrastructures. With its broad customer base in the segments telecommunications, energy and transportation, euromicron boasts extensive practical experience as a specialist for planning, creating and operating secure networks and systems. Moreover, customers in the "Critical Infrastructures" segment obtain specialized expertise for holistic solutions relating to cybersecurity, automation, process control systems and power system control technology. Cyberattacks pose an existential risk, for example, to companies from the energy sector or public authorities – and so to public welfare. Integrated, efficient IT security concepts will therefore be vital in the future.

Customers of euromicron have a one-stop shop for tailored, secure all-round solutions for process and enterprise networks. Potential application areas are the production, energy, chemicals and transportation industries. Last but not least, the technology manufacturing companies in this segment round out the product portfolio in this target market with their professional video, audio and special technology solutions for sensitive security restricted areas.

– Distribution

The "Distribution" segment groups consulting and supply of vendor-independent products relating to active and passive network components in the fiber-optic and copper arena.

Products and solutions

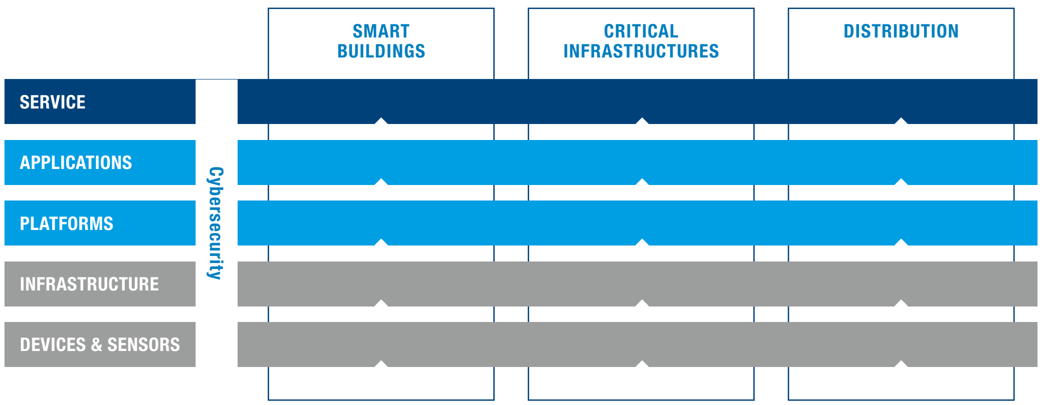
As a medium-sized specialist, euromicron accompanies its customers in digitizing and networking their business processes, with tailored solutions "Made in Germany". Underpinned by expertise and technologies in the field of IT, network and security infrastructures, the euromicron Group's solutions dovetail seamlessly into the innovative concepts for the Internet of Things. The euromicron Group offers customized, vertical IoT solution concepts for its markets.

To achieve that, euromicron combines the technically and economically most expedient solutions from the fields of devices and sensors, infrastructure, platforms, applications and services. End-to-end cybersecurity concepts round out the portfolio.

The Group's technology companies develop and produce active and passive optical network components, high-quality fiber-optic cabling systems, public address systems, testing and inspection equipment, networked workplace systems and highly professional safety and security technology for special applications. Reliable delivery, professional training in how to use the products and comprehensive services round out the range of services.

As a system integrator, euromicron takes care of management and handling of the entire project – from planning, consulting, selecting and installing the system technology to service, maintenance and network management. In doing so, it combines innovative internal and external technologies to suit customers' requirements in order to create best-in-class solutions.

Business model of the euromicron Group



In view of the specific customer requirements, euromicron nurtures strategic partnerships with external technology suppliers. Thanks to these established partnerships with vendors from the fields of network, transmission and security technology, the companies in the euromicron Group are always able to deliver an ideal solution for the customer's specific needs. For example, the range of cybersecurity services begins with an end-to-end analysis of weak points throughout the IT infrastructure, extending as far as continuous security monitoring in real time. Apart from analysis, the service portfolio also includes a review of the individual security strategy. That slashes the risk of external and internal system manipulation and significantly increases the IT infrastructure's security. At the same time, the companies have the necessary certification to ensure top quality when it comes to planning, installing and maintaining the products used. Customer proximity by means of on-site service is crucial in the consulting-intensive solution business and euromicron achieves that with its comprehensive network of branch offices. Services are provided directly on-site or through the central Service and Network Operation Center (NOC).

Markets

The possibilities for digitization are innumerable and enable holistic technical solutions in all areas of life and business. Solutions, products and services relating to the Internet of Things and Smart City will gain strongly in importance in the coming years. The growing level of digitalization increasingly poses new challenges for cities, municipalities and enterprises – and the most efficient way of solving them is with digital business models.

The euromicron Group pools the know-how of different small and medium-sized enterprises for these topics, with a focus on “Digital Buildings”, “Smart Industry” and “Critical Infrastructures”. In each of these markets, euromicron offers its customers tailored IoT solutions – from the infrastructure to services – with a combination of technology, system integration and smart services. There is significant market potential for the euromicron Group with its more than 20 years of experience in view of the growing digitization and networking of infrastructures. euromicron therefore constantly gears its business model toward sustainably leveraging the existing potentials.

1.2 Objectives and strategy

Building on the company's existing business, the Executive Board of euromicron AG has strategically aligned the euromicron Group toward the growth market of the Internet of Things (IoT). The overriding objective is to position the company with customized, secure digitalization solutions in the IoT market in order to leverage that market's growth potential sustainably. Against that backdrop, euromicron is increasingly evolving away from a technical component manufacturer into an end-to-end solution provider for digital software-based services in selected IoT markets.

Technological developments, such as the Internet of Things, Smart Industry, smart services or cloud services, mean enterprises face the challenge of establishing digitized processes at their organization. Increasing networking and digitization of all conceivable information are impacting how existing and potential customers work and live to a greater and greater extent, as numerous examples from practice already demonstrate: Meeting rooms, along with the heating, lighting and WLAN, prepare themselves for the next meeting and its specific needs. Track points send status information to signal boxes. Industrial robots preventively report an impending failure of testing equipment or databases. Intelligent analysis and management of data using artificial intelligence (AI) will help networking of things achieve the breakthrough. Useful recommendations for users are derived from analysis of the data that is gathered.

Data is the resource for digital value creation and our economy's future engine. It is the basis for new business models and services. However, the Internet of Things cannot work without fail-safe infrastructures and highly available networks. The euromicron Group has decades of experience in the networking arena. In the meantime, the Group is a specialist for enabling digitalization and unites know-how in secure infrastructures, intelligent processes and smart applications under one roof.

In the past years, customers mainly demanded individual communications and IT infrastructures or individual solutions for building technology, but now want complex, holistic solutions as a result of increasing digitization of processes – from sensors and infrastructure to software platforms, applications and services. This is where euromicron steps up to the plate, by developing not only the hardware required for the customer's network infrastructure, but also end-to-end digital solutions for expanding and optimizing traditional business models. Planning, implementing and operating digital infrastructures is the focus of euromicron's business activity and so the company is positioned in a growth market.

Digitalization in the SME sector and the related innovative transformation of business models at the euromicron Group offer great opportunities for development moving ahead. That is demonstrated by the Group's new projects, which leverage potential for customers with predictive maintenance models or smart security concepts and which can be developed into scalable solutions.

Implementing future-proof structures is one of the key factors in enabling our company to leverage our growth potential fully and profitably. euromicron works constantly to gear its corporate strategy to current market developments, innovations and its sustained strengths.

By sticking unswervingly to our IoT strategy, intermeshing collaboration between the technology and system integration companies and pooling know-how, euromicron will be able to offer an even broader range of smart services for all strategic target markets in the IoT market. In this way, the Group differentiates itself clearly and lastingly from the competition.

euromicron's extensive customer base, broad solution portfolio and innovativeness in the areas of technology and system integration are the foundation for sustainable growth. In the years to come, euromicron aims to generate profitable growth through rigorous continuation of the IoT strategy, as part of which it intends to significantly grow the share that smart services contribute to system integration sales.

As part of its focus on strategic divisions, the Group also continuously examines divestments and acquisitions and seizes the chance to make them if good opportunities arise. Its planning is based on the Group's current structure and so may need to be adjusted if divestments or acquisitions are made.

1.3 Control system

Corporate controlling

euromicron AG with its Executive Board members and implemented cross-cutting functions sees itself as a strategic management holding. Corporate controlling is geared toward liquidity and profitable growth. Securing competitiveness is based on innovativeness, a focus on solutions and proximity to our customers. Our focus is on digitalization: Apart from our physical business, we also offer digital business models with a high share of software and services. Future markets in the growth market of the Internet of Things are tapped by means of a structured, Group-wide innovation process. The key success factor as part of that is our excellent employees.

Internal key control indicators

Our main financial control factors comprise key indicators for our business development, profitability, capital efficiency and liquidity controlling. At present, the operating EBITDA, the operating EBITDA margin, sales and the working capital ratio are the main key indicators used to control the Group.

Operating EBITDA and operating EBITDA margin

The factor for measuring operating results of the business units and Group and so the key earnings ratio for segment reporting is "earnings before interest, taxes, depreciation and amortization" (EBITDA). To permit better comparison over time, we look at EBITDA adjusted for special costs ("operating EBITDA"). Another focus of the analysis is on return on earnings. The operating EBITDA margin (operating EBITDA relative to sales) is used as the key figure for return on earnings.

Sales

Profitable organic sales growth is a key element of our strategy to increase the company's value. The development of sales is used as the factor for measuring that.

Working capital ratio

In addition, the working capital ratio (working capital deployed relative to sales) is used to control the Group so that the Group's tied-up capital and liquidity development can be systematically monitored and continuously optimized. Working capital is defined as the total of inventories, trade accounts receivable and contract assets (previous year: the gross amount due from customers for contract work) minus trade accounts payable and contract liabilities (previous year: the gross amount due to customers for contract work).

All the euromicron Group's activities are controlled and monitored on a segment-oriented basis. Important key figures that are monitored regularly are shown in the table below: Table 003

Key figures and control factors 003

	2018	2017
	€ m.	€ m.
Sales	**318.0**	**332.9**
Operating earnings before interest, taxes, depreciation and amortization (operating EBITDA)*	6.5	13.5
Operating EBITDA margin*	2.0 %	4.1 %
Special costs (with an impact on EBITDA)	–4.6	–4.0
Earnings before interest, taxes, depreciation and amortization (EBITDA)	1.9	9.5
EBITDA margin	0.6 %	2.9 %
Working capital	28.7	43.0
Working capital ratio	**9.0 %**	**12.9 %**

* Adjusted for special costs (previous year: special effects of the reorganization).

The development in these key figures is explained in sections 2.2 "Course of business" and 2.3 "Net assets, financial position and results of operations".

Future control system

Introduction of the standard IFRS 16 – "Leases" will have a considerable impact on the presentation of future financial statements and so on the key control indicators derived from that. Operating EBITDA is a control factor at euromicron that is affected by that. In the future, the leasing costs (finance rate) that have been recognized to date as an expense for operating leases in accordance with IAS 17 will no longer be carried in the "Other operating expenses". Instead, the right of use approach will mean that the lease expenses are split into amortization of the recognized right of use and an interest expense.

euromicron has decided to continue using the existing EBITDA as a control factor in the future, since there has been no change to the system of cash-oriented corporate controlling. In future, we will therefore reconcile the EBITDA reported in the financial statements with EBITDA "adjusted" for leasing effects and present that accordingly.

There will also be no adjustment of EBITDA to reflect special costs as of fiscal year 2019.

The other key control indicators will be retained without any changes.

1.4 Research and development

Objectives

Research and development are a key pillar in our infrastructure-related IoT solutions and play a major part in helping us stand out from the competition. Our main goal is – from sensors and infrastructure to applications – to develop solutions that enable our customers to make their work processes more efficient and effective. In addition, our innovations should have unique technical selling points in order to safeguard our position in our physical business and profitable niche markets, as well as let us tap new markets of the future for digital services.

Significant projects and results

The focus of development activities at MICROSENS GmbH & Co. KG is on further development of its own software and hardware components and on development of new products and solutions. The lion's share of R&D expenditure in 2018 went toward further development of the "Smart Building Solutions" concept, with which MICROSENS is positioning itself in the field of digital building technology and automation, a market with a highly promising future.

Digitalization of buildings is based on as secure networking of devices as possible and use of the data obtained from that. With its Smart Building Solutions concept, MICROSENS has developed an IP-based solution that enables networking at the room level. In this decentralized approach, every room has an intelligent control instance, thus ensuring the greatest-possible scalability. The system is suitable for an individual conference room, but also for large complexes such as office buildings, hotels or hospitals. The focus here is on user authentication, with the result that this concept meets the very highest security standards.

Important components of the concept are the new Central Smart Lighting Controller and the Smart I/O Controller, which were also presented at Light & Building 2018, the world's leading trade show in the industry. The Central Smart Lighting Controller is used as an intelligent means of powering up to 24 LED luminaires that can be controlled individually. With standardized twisted-pair cables, up to 50 W are available to each luminaire. MICROSENS' building automation application "Smart Director" is installed on the Central Smart Lighting Controller; it manages and controls the luminaires or luminaire groups in accordance with defined lighting scenarios. The application also integrates heating and shading in automation.

The Smart I/O Controller has a module that is powered by PoE and with which every device can be directly integrated at the sensor/actuator level in the IP infrastructure of modern buildings. Even older devices in the field can be addressed directly in the IP network with state-of-the-art control options. With its software-based programmable logic controller (PLC) "microRTS", MICROSENS integrates the automation level in the network infrastructure. The software installed on the Ethernet switches replaces conventional PLC systems and enables IEC-61131-3-compliant programming with the engineering tool "microSys". "microRTS" offers building planners maximum flexibility and planning security. Integration of the automation level in the network means the traditional components of the trade disciplines in building planning are re-apportioned and minimized.

In the field of network components, MICROSENS has rounded out its range of ruggedized, highly available switches with the 10G Profi Line Rack Switch. The fanless switch is used where there are greater connectivity needs, as well as the very highest reliability and bandwidth requirements, and mechanical fans cannot be used. The latest development in MICROSENS' industrial switches with its 28 ports is suitable for cabling large units in industrial environments, as well as for in-house use. With its scalable, broadband connection, it delivers maximum performance and availability of the applications.

KORAMIS GmbH provides solutions for automation, process control systems and power system control technology. It boasts many years of expertise in industrial automation, industrial software and industrial security. In order to evaluate and implement suitable technologies, KORAMIS is involved in the research project "fast semantics" (Secure Manufacturing Real Time Semantics), which runs from 2018–2021 and aims to develop an RT logic for ASIC or FPGA for real-time semantic integration of sensors and actuators by means of OPC UA.

Up to the end of 2018, KORAMIS participated in the project RiskViz ("Risk exposure in industrial IT security in Germany"), which was funded as part of the "National Strategy for the Protection of Critical Infrastructures", and is helping to develop new methods and technological approaches to identify risks in the field of industrial IT security as part of that. The findings from the project are already being incorporated by KORAMIS in consulting services and action concepts. The joint research project "AnoKo" ("Anomaly detection in the communication of industrial plants 4.0 for the defense against cyberattacks") has likewise been completed. The aim of "AnoKo" was to enable timely identification of unauthorized access to, interference with and manipulation of production systems and their infrastructure. In cooperation with ZeMa (Center for Mechatronics and Automation Technology) in Saarbrücken, KORAMIS has developed a technological solution concept as a test bed that can now be used in customer projects.

Malware in industrial infrastructures and system environments represents one of the greatest potential threats. In industry, operators cannot usually ensure end-to-end protection by anti-virus software on their production systems or in their infrastructures. To overcome that challenge, KORAMIS developed the data lock-keeper concept "InDEx", which was developed further in 2018 with a managed service solution approach and additional features. The digital data lock-keeper InDEx scans mobile data carriers for malware and cleans them if they are infected. That is done before the data carriers are connected to a network and the malware can enter the target infrastructures. A service package can be optionally booked, comprising maintenance, monitoring, remote maintenance, patch management, signature updates and an on-site replacement service, and rounds off the offering.

The activities of telent GmbH – a euromicron Group company – focus on the development and engineering of IoT solutions that make smart city concepts and energy infrastructures safer, more secure and more efficient. Such solutions let users digitize their business processes and operate them at low cost: Monitoring of secondary substations in power grids ensures, for example, that they deliver the prescribed high voltage quality by IoT sensors in the station sending signals to a central control station via the LoRaWAN™ wireless network. This information is continuously analyzed and visualized by means of the evalorIQ™ software platform telent has developed in-house.

Another example is telent's smart waste solution: Filling level sensors in public trash cans enable ideal route planning for emptying them. Cities and municipalities can thus increase their efficiency as part of waste disposal management by up to 45% and cut fuel consumption by up to 50%. In addition, IoT tracking solutions to pinpoint vehicles and for asset management have been developed.

The Netzikon LoRaWAN™ has been expanded continuously. Customers expect highly available infrastructures and reliable IoT services. Netzikon's core functionalities have been expanded and installed in a carrier-grade data center. As a result, euromicron is able to offer its customers highly professional IoT services. LPWANs, such as Netzikon's network, are the basis for transporting IoT data in an energy-efficient way.

The network specialist Cisco Systems has confirmed euromicron as a Gold Partner for the third year in succession. telent's Technology Team plays a key role in that as an IP system integrator. To achieve this certification, telent had to fulfill strict standards in the areas of network expertise and support. In the field of cybersecurity, telent and KORAMIS are committed to strategic partnerships, such as with SecurityMatters. The SilentDefense™ software is a passive monitoring solution that enables comprehensive inventorization of all system components.

LWL-Sachsenkabel GmbH has been synonymous with innovative fiber-optic cabling systems for more than 25 years. Sachsenkabel also focused its development activities in 2018 on hardware and software projects, with the goal of creating digital fiber-optic solutions for a connected future. Together with its sister company EUROMICRON Werkzeuge GmbH, it has developed the second generation of the low-attenuation high-density connector URM and made it ready for the market. The URM NG connector, which has been specifically designed for data centers, impresses with its ease of handling and smaller footprint and is suitable for cutting-edge applications with 40, 100 and 400 GbE.

To enable further business areas to be tapped strategically, new production technologies have been created for fiber optics that are also used outside telecommunications in sensor systems,optical measurement technology and fiber-based laser technology. Pinpointed R&D measures for FTTH, a market with a highly promising future, resulted in an innovative product solution and method that is currently being patented. Sachsenkabel creates a competitive edge with its digital solutions and the smart service platform "Sachsenkabel pulse" plays a crucial role in that. Thanks to the interfaces that were implemented in 2018, customers benefit directly from the advantages of smart services in using their ERP or documentation systems.

Sachsenkabel helps its customers implement an end-to-end digitalization strategy: "Sachsenkabel pulse" creates the foundation for sustained optimization of project planning – from procurement to quality assurance. With these new approaches, Sachsenkabel is geared more strongly to the digital needs of its customers.

EUROMICRON Werkzeuge GmbH presented a new generation of polishing machines for the fiber-optic industry in 2018. The APC8010 is designed for mass production of up to 36 ferrules per polishing operation. Apart from the new generation's enhanced user friendliness with a 5.7" touch display, great attention was paid to ensuring stable and efficient process steps in production so as to address growing requirements in the fiber-optic industry.

ELABO GmbH, a euromicron Group company, specializes in the customized design of workplace, assembly and testing systems and has established itself as a competent partner for SME-driven Smart Industry solutions. Once again in 2018, ELABO developed forward-looking solutions and so is strengthening its position as a leading Smart Industry provider.

In the past year, ELABO premiered its Field Tuition Suitcase for Knowledge Sharing 4.0, which is aimed at two application areas: First, it give trainees in industrial metal and electrical engineering occupations and mechatronics engineers a better understanding of what Smart Industry is all about. It also supports change processes as part of the digitalization of divisions at small and medium-sized enterprises. The combination of software and concrete application cases makes it easier to learn about Smart Industry, prejudices and fears are dispelled, and trainees are guided step by step toward the digital working world. ELABO picked up the innovation award "100 locations for Industry 4.0 in Baden-Württemberg" for the second time thanks to this solution. In this competition, the "Industry 4.0 Baden-Württemberg Alliance" seeks innovative concepts from business that succeed in intelligent networking of production and value added processes. Their degree of innovation and practical relevance for Smart Industry are assessed in that.

ELABO also developed the new Smart Module Testing (SMT) series in 2018. The modules can be used in safety, insulation and PE testing in automation technology. All the parameters of the SMT modules can be programmed via an Ethernet interface and integrated in existing Smart Industry solutions by means of appropriate driver modules. External operating controls are largely dispensed with, since the factory software Elution® is used for configuration and controlling.

In the field of product and room planning, ELABO again presented new applications last year. ELABO remains trues to its customer care approach using virtual and augmented reality and supports its customers comprehensively with innovative solutions in the consulting and planning phase. Workplaces and workspaces are now simulated in advance and can be experienced by customers before they are finished.

In the field of aftersales, ELABO developed a solution to ensure more customer-friendly maintenance work: the new Digital Field Service. In the future, an ELABO employee no longer has to be perform maintenance work on site at the customer's premises. The expert from ELABO can guide and instruct the customer's employee by means of remote maintenance from a tablet. That means customers can carry out repairs – even complicated ones – on their own and on the spot. That reduces downtimes considerably and saves a lot of time and money.

R&D ratios

Investments in innovative and competitive new products and solutions are also reflected in the carrying amounts of capitalized development costs and self-created software, which were €10.3 million at December 31, 2018 (previous year: €9.7 million); amortization of capitalized development costs and self-created software was €2.5 million (previous year: €2.3 million). The newly capitalized costs in fiscal 2018 totaled €3.1 million (previous year: €2.9 million).

2 Economic Report

2.1 General economic and industry-specific conditions

General economic conditions

The global economy lost momentum all in all in 2018, according to the Kiel Institute for the World Economy (IfW). The main reasons for that were uncertainty as a result of growing trade conflicts and tightening of monetary policy in the U.S. The latter resulted in a reversal of global capital flows, which in turn led to a sharp drop in the economic buoyancy of many emerging countries. As regards further economic development, the mood grew much gloomier in the second half of 2018, not least due to the change in capital flows and the weaker level of economic activity in China.

In the U.S., economic growth was again stronger in 2018 as a result of fiscal stimuli, whereas there was a drop in economic buoyancy in Japan and the Euro zone. The increase in production slowed down a little in most emerging countries, while Argentina and Turkey slipped into recession. Global economic growth remained constant at 3.7% compared to 2017 and so was sightly below expectations. The IfW's economists forecast slower GDP growth of of 3.4% for the current year 2019 and an increase of likewise 3.4% for 2020.

Trends in the Euro zone

The extremely strong upturn in 2017 lost momentum noticeably in the first half of 2018. In the third quarter, too, the European economy only grew by 0.2%, in particular due to a decline in output in the automotive industry. The unemployment rate of 8.1%, which has been stagnant recently, indicates a sustained slowdown in growth. In view of the weakening in economic buoyancy, the IfW's economists only expect a slow tightening of interest rate policy in Europe initially and so a base rate of just 0.5% at the end of 2020.

They anticipate further positive growth in the coming years, although production will increasingly run up against capacity limitations and structural problems will impede economic dynamism. Risks are seen not only in a further intensification of trade conflicts, but also in Italy's debt sustainability, the delay in reforms in France and, last but not least, the possibility of a disorderly Brexit. Consequently, growth in the Euro zone is expected to be 1.7% in 2019 and just 1.5% in 2020.

The economic situation in the Federal Republic of Germany

The regional focus of the euromicron Group companies' business operations is on German-speaking countries. According to the Federal Statistical Office, the increase in gross domestic product (GDP) in Germany in 2018 was 1.5% (after price and working-day adjustments) and so well below the previous year's figure of 2.5%. Boosts to growth came mainly from domestic consumption and investments by companies.

Two special factors dampened economic output in Germany in 2018: Production and delivery problems in the automotive industry as part of transition to the new approval standard WLTP and restrictions on inland shipping capacity as a result of low water levels in important rivers.

The IfW expects Germany's GDP to grow by 1.0% in 2019 and by 1.8% in 2020. In the opinion of the IfW's economists, there is a positive impact on the economy now that these special factors no longer apply. At the same time, companies face increasing difficulties in expanding their production capacities at a sufficient pace. That is also reflected in the strained situation on the labor market. Consequently, wages will likewise continue to rise and that, together with reductions in taxes and fiscal charges, will result in a further increase in households' disposal income. As a result, domestic demand will become a key engine of economic growth in the coming years, also in view of the fact that lower international demand is anticipated.

The German ICT market

The ICT market last year outstripped the 1.7% growth forecast by The German Association for Information Technology, Telecommunications and New Media (Bitkom). Revenues rose by 2.0% in 2018, from €162.7 billion to €166.0 billion. Good business for software houses and IT service providers made a particular contribution to that. Most of the new jobs were also in these fields. 36,000 additional jobs were created in 2018 according to calculations by Bitkom.

Digitalization also means companies have to invest in IT security. According to calculations by the market research firm IDC, revenue from IT security hardware, software and services totaled around €4.1 billion in Germany in 2018, a year-over-year increase of 9%. Most of the investments by companies were in digital security services. Around €2.2 billion was spent in this segment in 2018.

Outlook for 2019

Bitkom assumes that revenue and employment in the ICT sector in Germany will continue to increase in 2019. The overall IT, telecommunications and entertainment electronics market is expected to grow by 1.5% to €168.5 billion.

The main growth driver will still be information technology with the segments IT services, software and hardware. It is regarded as the indicator for the level of digitalization of the economy. Bitkom forecasts that revenues for this largest sub-market in the ICT industry will increase by 2.5% to €92.2 billion.

The software segment will grow particularly sharply in 2019, by 6.3% to €26.0 billion. It is also anticipated that the market for IT services will also grow above average by 2.3% to €40.8 billion. This segment also includes project business and IT consulting. However, IT hardware revenue is expected to decline slightly to €25.4 billion (–0.7%).

The market research firm IDC predicts further growth in revenue from IT security in 2019 by 9% to €4.4 billion.

Digitalization continues to ensure constant jobs growth: 40,000 jobs are expected to be created in Germany in 2019, a rise of 3.5% over 2018. However, adequate availability of skilled workers is seen as a limiting factor.

All in all, according to Bitkom, there will be large demand for IT consultants and software applications to enable the development of products, value networks and the corporate culture and to gear them to the digital era.

The European IT Observatory (EITO), a project of Bitkom Research with the market research institutes IDC and GfK, forecasts that global ICT revenue will grow by 3.2% to €3.4 trillion.

2.2 Course of business

General statement on the performance of the euromicron Group in fiscal year 2018

The euromicron Group closed fiscal year 2018 with sales of €318.0 million (previous year: €332.9 million), a decline of € –14.9 million or –4.5%. Consequently, sales in fiscal year 2018 were within the forecast range of €310 million to €330 million that was adjusted in third quarter of 2018 (original forecast in the 2017 Annual Report: €340 million to €360 million).

The decline in consolidated sales is mainly due to the fact that sales at the “Smart Buildings” segment fell by € –18.2 million. That was impacted in particular (to an amount of € –9.2 million) by unplanned non-recurring effects from settlements of claims from old projects and from the streamlining of the project portfolio that was completed by the end of 2018 as part of the realignment of construction-related business. In addition, € –8.0 million of the decline is due to the fact that sales from the

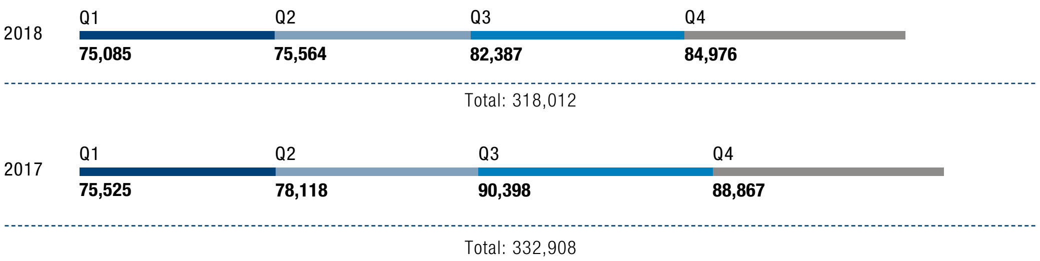
"Network Technology" division came in below expectations. The organizational and sales structures at this division were reorganized in the second half of 2018, a process that was likewise completed by the end of fiscal 2018. There were further reductions in sales (€ –4.0 million) from disposal of the "Telecommunications" division effective April 30, 2017, as a result of which the sales included in the comparative figure for 2017 were no longer generated in fiscal 2018. On the other hand, sales at the "High-voltage current" division in particular were €3.8 million up on the previous year. There were only insignificant effects on sales to a net amount of € –0.8 million from the remaining divisions in this segment.

Sales at the "Critical Infrastructures" segment were €120.8 million and so roughly at the same level as the previous year (€121.0 million); sales trends at the individual divisions of this segment varied, but canceled each other out.

Sales in the "Distribution" segment were €26.0 million, a sharp rise of €2.4 million above the comparative figure for fiscal 2017 (€23.6 million), due in particular to positive trends in the Italian sales market.

Sales by quarter

in € thousand



Apart from that, the segment "Non-strategic Business Areas" posted a drop in sales of € –0.6 million to €0.2 million.

The sales effect from cross-segment consolidation fell by €1.7 million in fiscal 2018 and so had a positive impact on the Group's total sales.

We refer to the presentation of the segments' development for a further explanation of the individual segments' total sales.

The traditionally cyclical nature of business at the euromicron Group, which generates most of its sales in the second half of the year and in particular in the fourth quarter, was also noticeable in fiscal 2018, albeit less substantially than in previous years. 52.6% of annual sales were achieved in the second half of 2018 (previous year: 53.8%). The sales generated in the traditionally weaker first half of the fiscal year accounted for 47.4% of the total figure, compared to 46.2% in the previous year.

The Group's adjusted total operating performance (sales from operations plus inventory changes) was €317.1 million, € –15.2 down on the previous year (€332.3 million). The adjusted material usage ratio (cost of materials from operations relative to adjusted total operating performance) was unchanged from the previous year at 51.9% and resulted in a € –7.5 million reduction in gross operating profit (adjusted total operating performance minus cost of materials from operations).

However, two opposite effects must be differentiated in an analysis of the gross operating profit:

The previously mentioned non-recurring effects from settlements of claims from old projects and streamlining of the project portfolio in the "Smart Buildings" segment reduced total operating performance by € –9.2 million and – taking into account further effects on cost of materials totaling € –0.3 million – resulted in a fall of € –9.5 million in gross operating profit. That meant the Group's material usage ratio increased by 1.5 percentage points.

However, volume effects from the remaining reduction in total operating performance of € –6.0 million were more than offset by an improvement in the material usage ratio by 1.5 percentage points. That was impacted by the improved margin mix in product and solution business at the technology companies, as well as the further reduction in the material usage ratio of 1.3 percentage points in distribution business in fiscal 2018. As a result, gross operating profit was €2.0 million higher despite the fall in total operating performance.

Operating EBITDA (EBITDA before special costs) was €6.5 million, € –7.0 million below the level of the previous year (€13.5 million). The operating EBITDA margin (relative to sales) was 2.0%. It is therefore within the target range of 2.0% to 4.0% forecast in the third quarter of 2018 (original forecast: 4.0% to 5.0%).

The fact that operating EBITDA was € –7.0 lower is attributable to an amount of € –7.5 million to the gross operating profit effects presented above. That was also impacted by an increase in personnel costs from operations (€ –1.0 million) and a decrease in other operating income of € –0.5 million. On the other hand, other operating expenses fell by €2.0 million year on year. That was mainly due to lower costs for personnel leasing, lower effects from allocations to impairment allowances, and lower foreign currency losses.

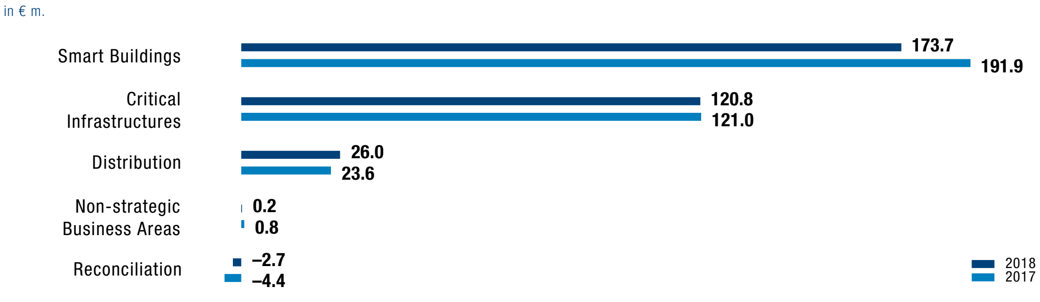
Special costs with an impact on EBITDA totaled €4.6 million and reduced the EBITDA margin by 1.4%. They are thus below the figure forecast in the third quarter of 2018 of up to €5 million (original forecast: up to €2 million). We refer to section 2.3 “Net assets, financial position and results of operations”, subsection “Results of operations”, for an explanation of how the special costs are broken down.

The euromicron Group’s working capital ratio (working capital relative to sales) fell by –3.9 percentage points to 9.0% in 2018 and so was one percentage point below the figure of around 10.0% forecast in the 2017 Annual Report. The decline is mainly attributable to a reduction in inventories and lower contract assets. This trend is also reflected in the cash flow from operating activities: Despite the non-recurring burden on the operating result and special costs, the cash flow from operating activities was positive at €3.3 million and so improved by €4.9 million over the previous year.

In summary: The Group’s earnings performance in fiscal 2018 was below expectations as a result of non-recurring effects in the “Smart Buildings” segment. These effects are cushioned by the positive performance of the Group’s other divisions. That includes in particular an increase in the quality of margins in product and solution business and in distribution business. A further positive aspect of note is the further reduction in working capital and the sharp improvement in the positive cash flow from operating activities.

Development of the segments
The key figures for the individual segments of the euromicron Group changed as follows in fiscal 2018:

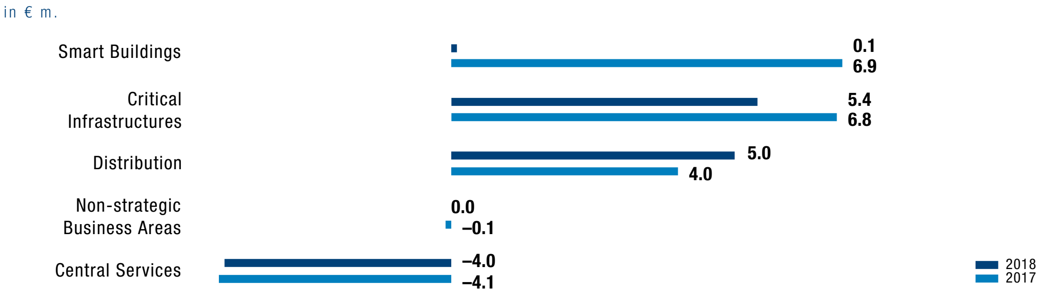
Sales



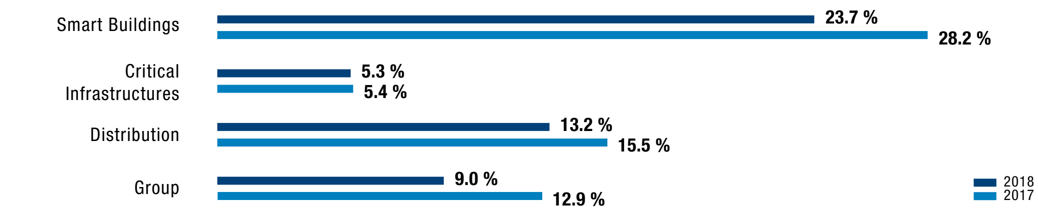
Reconciliation of the reported EBITDA with operating EBITDA / presentation of the special costs 004

	2018			2017		
	Reported EBITDA	Special costs	Operating EBITDA	Reported EBITDA	Reorganization costs	Operating EBITDA
	€ m.	€ m.	€ m.	€ m.	€ m.	€ m.
Smart Buildings	–1.3	1.4	0.1	6.0	0.9	6.9
Critical Infrastructures	5.4	0.0	5.4	6.8	0.0	6.8
Distribution	5.0	0.0	5.0	4.0	0.0	4.0
Non-strategic Business Areas	–0.3	0.3	0.0	–0.5	0.4	–0.1
Central Services	–6.9	2.9	–4.0	–6.8	2.7	–4.1
Total EBITDA	**1.9**	**4.6**	**6.5**	**9.5**	**4.0**	**13.5**

Operating EBITDA



Working capital ratio



Smart Buildings

Total sales in the "Smart Buildings" segment (external sales and sales within the Group) were €173.7 million, a fall of € –18.2 million or 9.5% compared to the previous year's figure of €191.9 million. As previously presented, this was due to unplanned non-recurring effects from settlements of claims from old projects and from the streamlining of the project portfolio as part of the realignment of construction-related business, sales effects from the disposal of the "Telecommunications" division in 2017, and the sales performance of the "Network Technology" division. On the other hand, sales at the "High-voltage current" division in particular were higher.

The forecast for the "Smart Buildings" segment envisaged sales growth in the low single-digit percentage range. In addition to the previously explained causes for the year-on-year deviation in sales, there was also the fact that sales in the "Smart Industry" division were slightly below planned compared to the forecast. However, that did not have any negative impact on earnings due to the improved quality of margins at that division.

Operating EBITDA decreased by € –6.8 million from €6.9 million to €0.1 million, meaning the operating EBITDA margin fell from 3.6% to 0.1%. This decline is mainly due to an amount of € –9.5 million to the presented non-recurring effects in construction-related business. There were positive effects in this segment from the sharp increase in earnings contributed by business with smart switches and related solution business. Earnings here were able to be increased by €3.1 million year on year.

An operating EBITDA margin in the medium single-digit percentage range was forecast for 2018. Apart from the previously presented effects, a further reason for the deviation from the forecast EBITDA margin is in particular a loss in contribution margins due to lower sales than planned at euromicron Deutschland GmbH.

Special costs with an impact on EBITDA in the "Smart Buildings" segment totaled € –1.4 million and so increased over the previous year (€0.9 million). No special costs with an impact on EBITDA were forecast for this segment. € –1.2 million of the special costs were attributable in particular to costs for personnel measures at euromicron Deutschland GmbH, where there were adjustments in personnel structures in administration and sales and at individual business units.

The working capital ratio in this segment fell sharply by –4.5 percentage points to 23.7% in fiscal 2018. The forecast target of reducing the working capital ratio by up to 6.0 percentage points was therefore not met only by a narrow margin. Despite the fact that working capital was reduced sharply in absolute terms, sales were below planned and so that had a negative impact on this key figure.

We expect this segment to post sales growth of around 10% in 2019, in particular due to market development and the fact that there will no longer be any special effects. The adjusted EBITDA is expected to improve sharply and so we anticipate an adjusted EBITDA margin in the medium single-digit percentage range. As a result of continued implementation of the measures to optimize working capital, we expect a further reduction in the working capital ratio of up to 3.0 percentage points for the year after.

Critical Infrastructures

The "Critical Infrastructures" segment posted total sales of €120.8 million, i.e virtually on a par with the previous year (€121.0 million). Whereas sales increased in system house business, they declined in the business area "Technology solutions for sensitive security restricted areas". This business area relies on being awarded defined individual projects, which did not materialize to the planned extent in fiscal 2018. The forecast envisaged an increase in sales in the medium single-digit percentage range for this segment and assumed in particular that the business area "Technology solutions for sensitive security restricted areas" would post growth in sales, which did not occur in 2018 for the above-described reasons.

The segment's operating EBITDA fell by € –1.4 million to €5.4 million (previous year: €6.8 million). The operating EBITDA margin was 4.5% following 5.6% the year before. The loss of contribution margins from lower technology sales had a particular impact on that. They were only partly offset by contribution margins from higher sales by the system houses, since these sales have lower margins.

The forecast envisaged an operating EBITDA margin of 5.6%, i.e. slightly above the level of fiscal 2017. The deviation in the operating EBITDA margin compared with the forecast is attributable to the reasons presented in the comparison with the previous year.

As in the previous year, there were no special costs with an impact on EBITDA for the "Critical Infrastructures" segment in fiscal 2018, nor were they forecast.

This segment's working capital ratio fell from 5.4% to 5.3%, meaning that the forecast target of keeping the working capital ratio to below 7% was achieved.

Sales in fiscal year 2019 are to be increased by a figure in the medium single-digit percentage range. Whereas only moderate sales growth is assumed in system house business, this increase will be attributable in particular to higher sales in technology business. Those sales have largely been secured through orders already on the books. The anticipated adjusted EBITDA margin for 2019 is slightly above the level of 2018. In addition, a working capital ratio of below 7.0% is still aimed for in this segment.

Distribution

The segment's sales were €26.0 million, €2.4 million or 10.2% above the level of the previous year (€23.6 million). The forecast for fiscal 2018 envisaged sales growth in the low to medium single-digit percentage range; the forecast target was thus far surpassed. Foreign distribution business in particular made an above-proportionate contribution to that.

The operating EBITDA margin was 19.1% and so well up on the previous year's 16.9%. The operating EBITDA was thus €5.0 million, €1.0 million above the previous year's figure. The operating EBITDA margin of around 11.5% forecast for 2018 was therefore far exceeded – in particular due to the further improvement in the gross profit margin for the sold product mix. The anticipated price-related decline in the gross profit margin did not occur.

As in the previous year, special costs were not incurred in this segment and were also not forecast.

The working capital ratio was 13.2% and so 2.3 percentage points lower than in the previous year (15.5%). As a result, the forecast target of keeping the working capital ratio slightly above the 2017 level was exceeded.

Sales at this segment in 2019 are expected to be slightly down on the previous year. The adjusted EBITDA margin of around 15% forecast for 2019 is likewise slightly below the EBITDA margin for 2018. A price-related decline in the gross profit margin was assumed in the planning; in addition, costs for the planned further expansion of the sales organization were taken into account. For the subsequent year, we expect a working capital ratio slightly above the level of 2018.

Overall, the euromicron Group generated an operating EBITDA of €10.5 million (previous year: €17.7 million) from the operating segments that must be reported. The operating EBITDA margin was 3.3% compared with 5.3% the previous year.

Non-strategic Business Areas

Liquidation of Avalan GmbH i.L. and remaining winding-up activities for RSR Datacom GmbH & Co. KG were continued as planned in the past fiscal year.

Sales in this segment, which were forecast to be €0.6 million, were just €0.2 million (previous year: €0.8 million), due to remaining winding-up activities for RSR Datacom GmbH & Co KG.

The special costs incurred in 2018 (follow-up costs from the closures) totaled €0.3 million (previous year: €0.4 million) and so were slightly up on the forecast figure of €0.1 million

There was no operating EBITDA in fiscal 2018 (previous year: € –0.1 million).

Further sales of around €0.3 million and follow-up costs with an impact on EBITDA from the closure totaling approximately € –0.1 million are anticipated in 2019 until the planned final liquidation/winding up of these companies.

Central Services

The "Central Services" area mainly includes euromicron AG, the strategic management holding company responsible for central controlling functions for the euromicron Group.

The negative operating EBITDA for "Central Services" increased slightly from € –4.1 million to € –4.0 million in 2018. The operating EBITDA was €1.4 million better than the forecast € –5.4 million. The positive deviation from the forecast is attributable in particular to lower personnel costs and reductions in material costs.

The special costs were € –2.9 million, € –0.2 higher than in the previous year. They were € –1.0 million above the upper end of the range of € –1.7 million to € –1.9 million specified in the original forecast in the 2017 Annual Report. That is attributable in particular to unplanned effects on earnings from a provision set up for litigation costs and higher special costs for legal and consulting services. There were also unplanned special costs in connection with personnel measures.

A negative adjusted EBITDA of € –6.7 million to € –7.0 million is anticipated for the subsequent year. It should be noted in this respect that no special costs will be reported due to the future reporting structure. Taking into account this change in reporting, the EBITDA for 2019 is forecast to be around the level of 2018. Whereas there is a planned increase in personnel costs, there will be higher income from group services.

2.3 Net assets, financial position and results of operations

Net assets

The table below presents the asset and equity structure of the euromicron Group: Table 005

Asset and equity structure 005

	Dec. 31, 2018		Dec. 31, 2017	
	€ m.	%	€ m.	%
Noncurrent assets	148.4	60.9	146.8	58.2
Current assets	88.8	36.4	100.4	39.8
Cash and cash equivalents	6.5	2.7	5.0	2.0
Assets	**243.7**	**100.0**	**252.2**	**100.0**
Equity	66.2	27.2	78.6	31.1
Noncurrent liabilities	45.6	18.7	30.7	12.2
of which financial liabilities	39.7	16.3	21.7	8.6
Current liabilities	131.9	54.1	142.9	56.7
of which financial liabilities	60.3	24.7	72.6	28.8
Equity and liabilities	**243.7**	**100.0**	**252.2**	**100.0**

The euromicron Group's total assets at December 31, 2018, decreased by 3.4% to €252.2 million compared with €243.7 million in the previous year.

The increase in noncurrent assets by €1.6 million to €148.4 million (previous year: €146.8 million) is mainly the result of a €2.5 million increase in deferred tax assets. That is substantially due to the fact that deferred tax assets were carried on tax loss carryforwards.

On the other hand, intangible assets and property, plant and equipment fell by a total of € –0.9 million. That is due to the fact that amortization and depreciation (€ –9.6 million; previous year: € –8.4 million) and disposals at remaining book values (€ –0.1 million; previous year: € –0.1 million) exceeded total capital spending (€8.8 million; previous year: €14.5 million) in fiscal 2018. The investments in 2018 comprise €2.8 million (previous year: €2.8 million) on capitalized development costs, €1.0 million (previous year: €1.6 million) on other intangible assets and €5.0 million (previous year: €7.4 million) on property, plant and equipment. The previous year's figure also included additions from company acquisitions totaling €2.8 million, of which there were none in fiscal 2018.

The ratio of equity and long-term outside capital to noncurrent assets is 75.4% (previous year: 74.4%).

Current assets (excluding cash and cash equivalents) fell by € –11.6 million to €88.8 million. € –2.7 million of that decrease is due to the reduction in inventories. In particular, inventories at the system houses and technology companies in the "Critical Infrastructures" segment fell by € –2.3 due to a reduction in stocking.

In addition, contract assets (previous year: the gross amount due from customers for contract work) fell by € –11.7 million from €52.5 million to €40.8 million, due to positive effects from the Group's working capital program and the lower volume of business, as well as nonrecurring effects at euromicron Deutschland GmbH. On the other hand, trade accounts receivable rose by €2.9 million to €11.9 million (previous year: €9.0 million). This is due in particular to the lower volume of receivables sold as part of the factoring program.

Cash and cash equivalents increased by €1.6 million to €6.6 million. We refer in this regard to the consolidated statement of cash flows and the comments on the Group's financial situation.

Working capital, which is calculated as trade accounts receivable and contract assets (previous year: the gross amount due from customers for contract work) and inventories minus trade accounts payable and contract liabilities (previous year: the gross amount due to customers for contract work and prepayments) was €28.7 million at the balance sheet date, a sharp decrease of € –14.3 million over the previous year (€43.0 million). The reduction in working capital is mainly attributable to the described decrease in inventories and contract assets. The Group's working capital ratio (working capital relative to sales) thus fell sharply by 3.9 percentage points to 9.0% in 2018 (previous year: 12.9%).

Equity at December 31, 2018, was €66.2 million and so below the level of the previous year (€78.6 million). The equity ratio was 27.2% (previous year: 31.1%), but still at a high level. The decline in equity by € –12.4 million is mainly due to an amount of € –11.2 million to the consolidated net loss in fiscal 2018. In addition, revaluation effects from pensions, which had to be recognized directly in equity, reduced equity by € –0.3 million. Moreover, the adjustments from first-time application of IFRS 9 and IFRS 15 effective January 1, 2018, which had to be recognized directly in equity, and other effects reduced equity by € –0.7 million and € –0.2 million respectively.

Noncurrent liabilities increased by €14.9 million to €45.6 million in fiscal 2018 (previous year: €30.7 million). This increase is attributable to an amount of €19.0 million to higher long-term liabilities to banks and is mainly the result of reclassification of liabilities from long-term to short-term liabilities to banks (owing to the length of time in which they are due) pursuant to the financing agreement concluded in March 2018. On the other hand, there was in particular a reduction in deferred tax liabilities and other noncurrent financial liabilities of € –2.9 million and € –0.6 million respectively.

Current liabilities declined by € –11.0 million to €131.9 million (previous year: €142.9 million). € –11.9 million of this fall is due to lower short-term liabilities to banks, resulting to an amount of € –19.0 million from the above-mentioned reclassification as long-term liabilities to banks owing due to the length of time in which they are due. On the other hand, utilization of short-term credit lines increased by €7.1 million.

The Group's net financial debt (the total of liabilities to banks and from finance leases less cash and cash equivalents) at December 31, 2018, totaled €92.2 million (previous year: €87.3 million). The increase in net financial debt of €4.9 million is attributable to an amount of €4.2 million thousand to effects from the euromicron Group's factoring program. The lower volume of sold receivables at December 31, 2018, had a particular impact on that.

Trade accounts payable at the key date increased slightly by €1.6 million to €48.6 million compared to €47.0 million in the previous year.

There were counter-effects among the current liabilities, in particular due to a € –1.2 million drop in other tax liabilities (mainly value-added tax) and a € –1.1 million decline in other liabilities. € –1.0 million of the decline in other liabilities is attributable to the change in recognition of prepayments under IFRS 15, because prepayments have had to be carried under "Contract liabilities" since fiscal of 2018.

Financial position

The Group is largely financed centrally through euromicron AG. This is done through a central cash pooling system to which all Group companies are linked in principle. Internal financial equalization as part of a cash management system of the individual companies reduces the volume of outside funding at the Group. Centralization of financing makes a contribution to optimizing the costs of capital and the opportunities for obtaining and investing capital. Apart from financing through euromicron AG, individual Group companies have a number of smaller lines of funding, which are however insignificant in terms of volume.

At December 31, 2018, unutilized promised credit lines of €17.9 million were available to the Group (previous year: €23.5 million).

The Group's cash funds changed in fiscal 2018 as follows: Table 006

Statement of cash flows of the euromicron Group 006

for the period January 1 to December 31, 2018 (IFRS)	2018	2017
	€ thou.	€ thou.
Net cash provided by/used in operating activities	**3,346**	**–1,560**
Net cash used in investing activities	**–7,803**	**–13,471**
Net cash provided by financing activities	**6,056**	**13,141**
Net change in cash funds	1,599	–1,890
Cash funds at start of period	4,954	6,844
Cash funds at end of period	**6,553**	**4,954**

The reported net cash provided by operating activities in fiscal 2018 was €3.3 million (previous year: net cash used of € –1.6 million): However, the reported cash flow figures from operating activities are substantially impacted by effects resulting from the Group's factoring program.

In order to obtain comparable cash flow figures that permit a statement to be made on the development of cash flows from operating activities, the figure was therefore adjusted to take into account the factoring effects.

This involves the following:

- Elimination of the effect from the change in the volume of factoring used between the balance sheet date and the respective balance sheet date for the previous period. This resulted in a negative cash flow effect to be eliminated of € –2.8 million at December 31, 2018 (previous year: € –2.3 million), due to the lower volume of factoring compared with at December 31, 2017.
- Where Group companies received monies from customers resulting from receivables sold as part of factoring shortly before the balance sheet date and the Group companies were not able to pay these monies over to the factoring company, this results in a liability from customer monies to be passed on, which is carried under "Other financial liabilities". The effect on liquidity from the change in these liabilities between the respective balance sheet date and the balance sheet date of the previous period is eliminated for the purposes of analyzing the cash flow from operating activities. That resulted in an effect of € –0.1 million in the fiscal year (previous year: no effect).
- The full amount of the receivable offered for sale is initially not paid out by the factoring company, but a blocked amount is withheld. Some of the sold receivables were also still being examined and so had not been paid out by the factoring company. The resultant receivable due from the factoring company is carried under "Other financial assets"; here too, the change in the balance sheet item has to be eliminated for the purposes of analyzing the cash flow from operating activities. This negative cash flow effect to be eliminated was € –1.3 million in 2018 (previous year: positive cash flow effect to be eliminated of €0.3 million).

All in all, reconciliation of these three factors results in cash flows from operating activities after adjustment for factoring effects as summarized in the table below: Table 007

Adjusted cash flow 007

	Cash flow from operating activities in acc. with the statement of cash flows	Effects from factoring and customers' monies to be passed on included in the above	Adjusted cash flow
	€ m.	€ m.	€ m.
2017	–1.6	2.0	0.4
2018	3.3	4.2	7.5

The described factoring effects meant there was a negative cash flow effect of € –4.2 million in fiscal 2018, which resulted correspondingly in a greater need for external financing and so an increase in the euromicron Group's net financial debt.

After adjustment for factoring effects, there was net cash provided by operating activities totaling €7.5 million in fiscal 2018 compared with €0.4 million in the previous year. As a result, the cash flow from operating activities after adjustment for the effects of factoring rose sharply by €7.1 million in fiscal 2018.

Coupled with an decrease in EBITDA of € –7.6 million and a € –0.7 million higher cash outflow from the balance of paid and received income taxes and interest, this is attributable to an amount of €16.2 million to effects from the change in working capital: Whereas the slight increase in working capital resulted in negative cash flow effects of € –2.5 million in 2017, the cash flow for 2018 was influenced positively to an amount of €13.7 million by the decrease in working capital. That was countered slightly by effects of € –0.8 million from the change in other items.

Net cash used in investing activities is derived from the net cash from the disposal of assets and the net cash used for investments in property, plant and equipment and intangible assets, as well as company acquisitions. The net cash used in the fiscal year was € –7.8 million or €5.7 million lower than in the previous year (€ –13.5 million). This is mainly the result of lower net cash used in purchasing property, plant and equipment (€ –2.7 million) and in purchasing intangible assets (€ –0.7 million). Apart from that, the year-on-year decrease of € –1.6 million in net cash used in company acquisitions (in the previous year: mainly as a result of the acquisition of KORAMIS GmbH) and the fact that there were no longer effects from the disposal of subsidiaries and other business units (previous year: € –0.7 million; mainly in connection with disposal of the "Telecommunications" division of euromicron Deutschland GmbH) led to a decrease in net cash used in investing activities compared to the previous year.

After adjustment for factoring effects, there was almost a balanced free cash flow in 2018 of € –0.3 million (previous year: € –13.1 million).

The net cash provided by financing activities in fiscal 2018 was €6.1 million (previous year: €13.1 million). This is due to an amount of €6.7 million (previous year: €13.9 million) to the raising of new financial loans that exceeded the net cash used to repay loans. On the other hand, there were cash repayments of liabilities from finance leases totaling € –0.5 million (previous year: € –0.5 million) and distributions to non-controlling shareholders and from profit shares of minority interests totaling € –0.1 million (previous year: € –0.3 million).

Results of operations

The results of operations of the euromicron Group are shown in the table below. Table 008

Results of operations 008

Income statement of the euromicron Group for the period January 1 to December 31, 2018 (IFRS)	2018 incl. special costs	Special costs	2018 operational*	2017 incl. reorganization costs	Reorganization costs	2017 operational*
	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.	€ thou.
Sales	**318,012**	**231**	**317,781**	**332,908**	**–12**	**332,920**
Inventory changes	–670	0	–670	–612	0	–612
Own work capitalized	3,362	0	3,362	3,389	0	3,389
Other operating income	1,779	71	1,708	2,190	7	2,183
Cost of materials	–165,112	–428	–164,684	–172,432	–25	–172,407
Personnel costs	–114,304	–1,577	–112,727	–112,551	–826	–111,725
Other operating expenses	–41,181	–2,906	–38,275	–43,389	–3,127	–40,262
Earnings before interest, taxes, depreciation and amortization (EBITDA)	**1,886**	**–4,609**	**6,495**	**9,503**	**–3,983**	**13,486**
Depreciation/amortization	–9,636	2	–9,634	–8,405	0	–8,405
Earnings before interest and taxes (EBIT)	**–7,750**	**–4,611**	**–3,139**	**1,098**	**–3,983**	**5,081**
Interest income	23	0	23	313	0	313
Interest expenses	–6,282	–350	–5,932	–4,943	–120	–4,823
Other financial income	0	0	0	200	0	200
Other financial expenses	–34	0	–34	–219	0	–219
Income before income taxes	**–14,043**	**–4,961**	**–9,082**	**–3,551**	**–4,103**	**552**
Income taxes	2,896	0	2,896	45	0	45
Consolidated net loss/net income for the year	**–11,147**	**–4,961**	**–6,186**	**–3,506**	**–4,103**	**597**
Thereof for euromicron AG shareholders	–11,466	–4,961	–6,505	–3,769	–4,103	334
Thereof for non-controlling interests	319	0	319	263	0	263
(Un)diluted earnings per share in €	**–1.60**	**–0.69**	**–0.91**	**–0.53**	**–0.57**	**0.05**

* Adjusted for special costs (previous year: special effects of the reorganization).

As in previous years, consolidated earnings for 2018 were reduced by special costs incurred as part of the strategic realignment. The special costs are distributed over the individual companies of the euromicron Group as follows: Tabelle 009

The special costs of euromicron AG (totaling € –3.3 million) were mainly due to costs for legal advice, costs for financial advice, other consulting costs, costs for personnel measures, court and litigation costs, costs for interim managers and costs in connection with structuring of funding.

Special costs 009

	2018	2017
	€ thou.	€ thou.
Special costs (with an impact on EBITDA)		
euromicron AG	–2,931	–2,727
euromicron Deutschland GmbH	–1,420	–910
Avalan GmbH (in liquidation)	–154	–204
RSR Datacom GmbH & Co. KG	–107	–40
RSR Datacom Verwaltungs GmbH	3	0
euromicron NBG Fiber Optics GmbH	0	–84
euromicron benelux S.A.	0	–14
ssm euromicron GmbH	0	–4
Total special costs with an impact on EBITDA	**–4,609**	**–3,983**
Special costs (write-downs)		
RSR Datacom GmbH & Co. KG	–2	0
Total special costs with an impact on EBIT	**–4,611**	**–3,983**
Special costs (net financial result)		
euromicron AG	–350	–120
Total special costs	**–4,961**	**–4,103**

The lion’s share of the special costs of € –1.4 million at euromicron Deutschland GmbH resulted from costs to optimize the personnel structure (€ –1.2 million).

The special costs of Avalan (in liquidation), RSR Datacom GmbH and RSR Datacom Verwaltungs GmbH (totaling €0.3 million) result from follow-up costs from the closure of these companies, whose business operations were discontinued at the end of 2015 and 2016 respectively.

The following explains the year-on-year changes in the results of operations of the euromicron Group after adjustment for the special effects:

The euromicron Group generated sales of €317.8 million in fiscal 2018 and so € –15.1 million or 4.5% below the previous year’s figure of €332.9. We refer to the presentation of the segments’ development for an explanation of the decrease in sales.

A breakdown by the various regions shows that most sales were posted within Germany, as in previous years. The sales generated in Germany in fiscal 2018 were €264.5 million (previous year: €277.8 million) or a share of 83.2% (previous year: 83.4%). Foreign sales fell slightly in fiscal 2018 from €55.1 million to €53.5 million, with the result that international sales contributed around 16.8% (previous year: 16.6%) to the euromicron Group’s total volume of sales.

The euromicron Group's total operating performance (sales plus inventory changes) was €317.1 million, down € –15.2 million or 4.6% on the previous year (€332.3 million).

Own work capitalized was €3.4 million and so at the level of the previous year (€3.4 million). The euromicron Group continued to invest in developing new products to expand its market position and increase its innovativeness. As in the previous year, the focus of development activities in 2018 was at MICROSENS GmbH & Co. KG, where own work capitalized totaled €1.5 million (previous year: €1.8 million).

Other operating income was €1.7 million, a fall of € –0.5 million over the previous year (€2.2 million). That was due in particular to an amount of € –0.3 million to lower foreign currency gains.

As in the previous year, the cost of materials was the largest expense item in the euromicron Group's income statement. The (adjusted) cost of materials in fiscal 2018 was €164.7 million (previous year: €172.4 million); its (adjusted) ratio to total operating performance (material usage ratio) remained constant at 51.9%. There were negative margin effects of – 1.5 percentage points in the Group as a whole, resulting from the previously presented non-recurring effects at euromicron Deutschland GmbH, but they were offset by a more positive, higher-margin product and solution mix at the technology companies. We refer in this regard to the comments in the section "General statement on the performance of the euromicron Group in fiscal year 2018".

(Adjusted) personnel costs increased in fiscal 2018 by €1.0 million from €111.7 million to €112.7 million, a rise of 0.9%. The average headcount (excluding trainees) in the year under review rose by 4.4% from 1,768 to 1,846. The effects from the larger workforce and pay adjustments were countered in particular by lower performance-related compensation and effects from lower provisions for vacation and flexitime.

(Adjusted) other operating expenses in the fiscal year were €38.3 million, € –2.0 million below the comparative figure for the previous year of €40.3. The decline was due in particular to lower costs for personnel leasing (€ –0.6 million), lower allowances for trade accounts receivable (€ –0.6 million) and lower foreign currency losses (€ –0.5 million). The largest items in the (adjusted) other operating expenses were still vehicle and travel expenses (€12.5 million; previous year: €12.5 million), rent/room costs, including ancillary costs of tenancy (€7.3 million; previous year: €7.2 million) and legal and consulting costs (€3.0 million; previous year: €3.1 million).

Operating earnings before interest, taxes, depreciation and amortization (operating EBITDA) totaled €6.5 million (previous year: €13.5 million). The operating EBITDA margin was 2.0% (previous year: 4.1%).

(Adjusted) amortization and depreciation totaled €9.6 million, an increase of €1.2 million compared with the previous year (€8.4 million). That was attributable in particular to higher amortization and depreciation due to the capital spending in the previous year.

After allowing for amortization and depreciation, operating EBIT was € –3.1 million, a fall of € –8.2 million over the previous year (€5.1 million).

The (adjusted) net financial result was € –5.9 million, € –1.4 million down on the previous year (€ –4.5 million). That was caused by the higher utilization of the credit lines during the year and adjusted interest terms.

The tax ratio in the year under review was 20.6% after 1.3% in the previous year. Tax income was €2.9 million (previous year: €45 thousand). The deviation from the anticipated tax ratio of 30% (expected tax income: €4.2 million) is attributable to an amount of € –0.6 million to the fact that, as a result of the current tax losses made by a number of companies, no deferred tax assets were carried on tax losses incurred in fiscal 2018 in accordance with IFRS regulations, which meant there was a negative impact on the tax ratio. In particular, the net tax expenses and income not related to the period also had a negative impact of € –0.7 million on the tax ratio.

We refer in this regard to the tax reconciliation in section 24 of the notes on the consolidated income statement.

The (adjusted) consolidated net loss for shareholders of euromicron AG was € –6.5 million (previous year: consolidated net income of €0.3 million). (Adjusted) undiluted earnings per share were € –0.91 versus €0.05 in the previous year.

Without adjustment for special effects, the consolidated net loss for shareholders of euromicron AG for fiscal 2018 was € –11.5 million (previous year: € –3.8 million) and the undiluted earnings per share € –1.60 (previous year: € –0.53).

New orders and order books
New orders at the euromicron Group in fiscal 2018 were €336.6 million (previous year: €341.2 million), a decline of € –4.6 million or –1.3%. Order books at December 31, 2018, were €149.1 million, €22.0 million or 17.3% above the previous year's figure of €127.1 million.

It should be noted in this regard that the above figures for fiscal years 2017 and 2018 still contain new orders and order books from the divisions that have been discontinued or sold in the meantime.

New orders from continuing core business totaled €336.4 million (previous year: €333.4 million), a year-over-year increase of €3.0 million or 0.9%.

Order books from continuing core business totaled €148.6 million (previous year: €126.5 million), an increase of €22.1 million or 17.5% and a good springboard for fiscal 2019.

2.4 Non-financial performance indicators

As a German specialist for the Internet of Things, not only key economic ratios are important for us, but also the sustainability of our activities. That is also reflected in the non-financial performance indicators. Competent and motivated employees, sparing use of the natural resources available to us, increasing and preserving our brand value, our customers' satisfaction and social responsibility are preconditions for our Group's sustainability. We endeavor to increase and improve sustainability at all times.

Employee development and loyalty
It goes without saying that qualified, motivated employees are vital to a company's competitiveness. The euromicron Group aims to employ qualified and committed employees at all times and to offer them attractive working conditions and prospects.

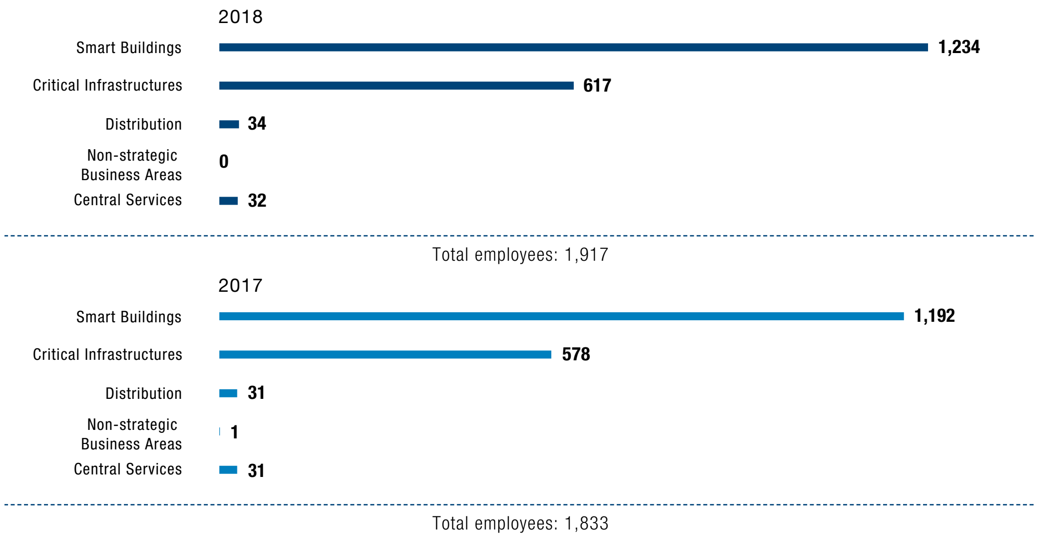
The average headcount in fiscal 2018 increased slightly from 1,833 to 1,917 or by 4.6%. The average number of employees (excluding trainees) was 1,846, an increase of 4.4% over the previous year (1,768).

Personnel costs in fiscal 2018 were €114.3 million compared with €112.6 million in the previous year. After adjustment for special costs, personnel costs were €112.7 million (previous year: €111.7 million). Personnel costs after adjustment for special costs consequently increased by €1.0 million or 0.9%.

Enhancing the loyalty of our employees to euromicron is a key task for us. They and their expertise and dedication are the main guarantee of our Group's sustainable success and further development – especially in times of a shortage of skilled workers and demographic change.

Our focus in personnel development is therefore on close cooperation with the individual employees. We also nurture constructive dialog with the HR departments and managers at our locations.

Employees by segment



Employee qualification

euromicron's activities relating to personnel development and employee qualification are also undergoing change. New learning concepts, digital formats and networking events are intended to prepare employees for the rapid developments and changes in markets.

Personnel development is increasingly becoming part and parcel of and flanking an organizational development process that continuously helps new practical knowledge an expertise be shared throughout the Group and enables dialog between all parties.

One area of emphasis is to promote and ensure open, transparent communication between employees and their managers. That means ideal measures for qualifying employees to suit their individual needs can be defined better. As part of the HR strategy, our HR tools such as performance and career reviews, agreements on objectives and development plans support communication between the teams and managers.

Trainee ratio

euromicron attaches great importance to training its own future experts. The euromicron Group's trainee ratio in the year under review was 3.8% and so at a similar high level as in the previous year (4.0%). Our goal for fiscal 2019 is to keep the trainee ratio at that level.

Under euromicron's trainee program, trainees at the Group are provided with support as they start they career, while collaboration and dialog among them and with other staff are strengthened.

Diverse measures help trainees get to know the company and their colleagues. The trainee program contains modules such as "Business etiquette" and "Visit to the Smart Factory", as well as the possibility of job rotation and dialog with euromicron's Executive Board. The program is rounded out by an annual meeting of all trainers in the euromicron Group so that they can share notes.

Responsible use of natural resources
euromicron and its subsidiaries predominantly operate in the service sector. Consequently, the details on resource consumption mainly relate to operation of its own buildings (energy, water, waste) and indirectly to processes at customers that are impacted by euromicron's products and services. In operating its headquarters and own buildings, euromicron ensures the use of smart technologies and control systems to minimize consumption.

As part of moving to new locations, we also ensured that the new buildings meet the latest environmental protection guidelines. The existing and new offices and workplaces have been equipped with energy-efficient equipment whose individual components are predominantly recyclable. All in all, euromicron makes a major contribution to achieving green IT by using hardware that has low power consumption.

The production operations of euromicron's technology companies are also geared to energy-saving processes. These include, for example, computer-aided control of the standby switches or the continuous review and rollout of electric motors with higher efficiency classes. Although none of the Group's companies is subject to special environmental protection guidelines, euromicron nevertheless aims to live up to its responsibility for society as a whole and so attaches great importance to complying with environmental protection regulations.

In procuring new vehicles for the fleet, whether by leasing or other means of expanding it, the companies in the euromicron Group attach importance to economical vehicles with low CO_2 emissions. The Group-wide Car Policy was updated with a focus on reducing CO_2 and has been in force since January 1, 2018. For the first time, a limit to the maximum CO_2 emission figures for vehicles that can be chosen has been defined: They are between 150g and 180g CO_2/km, depending on the user group.

In the case of existing vehicles, we ensure that they are passed on internally. In order to enhance preventive healthcare among employees, the cars used in the fleet also have ergonomic seats as minimum equipment. euromicron is also examining the possibility of converting the fleet to electric vehicles or ones with alternative drives.

Consequently, euromicron's corporate philosophy, which is geared toward sustainability, is not only manifested in its commercial operations, but also in sparing use of natural resources.

Established brands and growing visibility
Under the umbrella brand "euromicron", the Group and its technology companies have corporate brands that in some cases have been established in their specific market segment for more than 40 years. These brands include LWL-Sachsenkabel, telent, MICROSENS and ELABO, for example.

All the brands have a high reputation and so a brand value in their segment due to the fact that they have operated so long and successfully in the market. Preserving and increasing the value of our brands will continue to be a key element of our corporate strategy in future: Continuous investments in product innovations, modern manufacturing methods, patent applications and appropriate sales and marketing activities help entrench our brands lastingly in their special segments.

Strategic partnerships with leading technology suppliers are also key success criteria for best-in-class solutions. Thanks to our many established partnerships with vendors in the fields of network, transmission and security technology, we are able to deliver ideal solutions for the customer's specific needs. euromicron has a trusted working relationship with all leading vendors on the market and holds the highest levels of certification from just about all technology partners. Our customers benefit from technical further developments by our partners and our excellent collaboration with them.

We still keep on striving to enhance the visibility and image of our umbrella brand. Further positioning of the euromicron brand is especially important so that in particular our realignment toward clearly defined segments in the growth market of the Internet of Things can be presented understandably and in detail on the capital market.

We aim to increase the value of the euromicron brand on the capital market, as well as ensure transparent, clear reporting as the basis of a trusted relationship with our investors. As part of that, we conduct active investor and public relations work. In the year under review, we presented our company in a raft of investor conferences and roadshows, as well as in programs and articles in various media.

We demonstrated the innovativeness and high performance of the euromicron Group at prestigious international trade shows, such as "productronica", the world's leading trade fair for electronics development and production, InnoTrans, the international trade show for transport technology, or "it-sa", Europe's leading IT security fair.

Customers and quality

Apart from our employees and our visibility as a brand, another aspect of great importance to us is to ensure the products and services we offer give our customers maximum satisfaction. That demands the very highest standards as regards the quality of our processes, products and services, and employees.

We gage our customers' satisfaction by means of standardized customer satisfaction surveys and analyses. We thus use customer feedback to actively achieve potentials for improvement and optimization.

To meet the very highest demands made of the quality of our products and services, some of euromicron's companies are certified in accordance with ISO 9001. In the production arena, we also hold certification, for example for making and assembling certain products, as well as approvals to supply specific products and solutions.

3 Forecast, Opportunity and Risk Report

3.1 Explanation of deviations from the previous year's forecast

The previous year's forecast envisaged a sales target of €340 million to €360 million. and an operating EBITDA margin between 4.0% and 5.0% for fiscal 2018. It was also anticipated that special costs would still reduce EBITDA in fiscal 2018 by around €2.0 million. A working capital ratio of around 10% was forecast.

The forecast for fiscal 2018 was adjusted with publication of the report on the third quarter of 2018 on November 8, 2018. The adjusted forecast envisaged sales of €310 million to €330 million for fiscal 2018. An operating EBITDA margin in the range between 2.0% and 4.0% was forecast. The expected reduction in EBITDA by special costs was put at up to €5.0 million. The forecast for the working capital ratio remained unchanged.

The forecast was adjusted since the sales and earnings performance of the euromicron Group in the first nine months of fiscal 2018 was below the planned figures and burdens on earnings were also anticipated for the fourth quarter of 2018. One particular cause of that were structural deficits at individual divisions of the "Smart Buildings" segment, which were remedied by the end of the year by extensive packages of measures. The realignment also entailed higher special costs at the Group.

In addition, the fall in sales in the business area "Technology solutions for sensitive security restricted areas" meant that earnings in the "Critical Infrastructures" segment were reduced. This business area relies on being awarded defined individual projects. Postponements in these projects cannot usually be offset soon in terms of sales and earnings.

Sales in fiscal year 2018 were €318.0 million and so at the middle of the adjusted forecast range of €310 million to €330 million. Operating EBITDA in fiscal 2018 was thus €6.5 million. The operating EBITDA margin was 2.0% and so at the lower end of the target range of 2.0% to 4.0% in the adjusted forecast. Special costs reduced EBITDA by €4.6 million in fiscal 2018 and so were lower than the €5.0 million expected in the adjusted forecast. The working capital ratio was 9.0% and so one percentage point better than the forecast figure of around 10.0%.

For the purpose of explaining the deviation between the actual and forecast figures for fiscal 2018, reference is made to the original forecast for fiscal 2018, irrespective of the adjusted forecast dated November 8, 2018.

As part of that, the actual figures for sales and operating EBITDA/operating EBITDA margin are compared with the lower thresholds of the original forecast. The actual figure for special costs with an impact on EBITDA is compared with the figure from the original forecast of €2.0 million.

We refer to the section "Development of the segments" in 2.2 "Course of business" as regards segment-specific reporting on the forecasts. P.050

Deviation from forecast sales

Deviation from forecast sales 010

	€ m.
Forecast sales for 2018 (lower end of the forecast range)	340.0
Actual sales in 2018	318.0
Deviation from the forecast	**–22.0**

The deviation from the forecast sales totaling € –22.0 million is due for the very great part to an amount of € –19.3 million to lower sales at the "Smart Buildings" segment. Unplanned non-recurring effects from settlements of claims from old projects and from the streamlining of the project portfolio as part of the realignment of construction-related business accounted for € –9.2 million of that. A further € –9.0 million resulted from sales below the planned level at the "Network Technology" division, which was reorganized in the second half of 2018.

In addition, there was a deviation of € –4.2 million from the sales forecast for the "Critical Infrastructures" segment, which was mainly attributable to postponements in sales in the business area "Technology solutions for sensitive security restricted areas".

On the other hand, the sales generated by the "Distribution" segment were €2.0 million higher than forecast as a result of the positive trend on the Italian sales market. The remaining deviation in sales from the forecast (€ –0.5 million) was due in particular to higher cross-segment consolidation effects. Table 010

Deviation from forecast operating EBITDA

Deviation from forecast operating EBITDA 011

	€ m.
Forecast operating EBITDA for 2018 (lower end of the forecast range)	13.6
Actual operating EBITDA in 2018	6.5
Deviation from the forecast	**–7.1**

The deviation from the forecast for operating EBITDA (€ –7.1 million) is due to an amount of € –15.3 million to the act that gross operating profit was below planned. The main reason for that was effects on gross operating profit of € –9.5 million from the previously presented non-recurring effects in construction-related business. The remaining effect of € –5.8 million on gross operating profit is due to the fact that total operating performance was below planned (despite a material usage ratio that was 0.3 percentage points better than forecast).

Since personnel costs and material costs were able to be adjusted to the lower volume of sales, there was a positive EBITDA effect of €6.7 million. Other operating income, which was €1.1 higher, and own work capitalized, which was €0.4 million higher, also had a positive effect. Table 011

Deviation from forecast special costs

Deviation from forecast special costs 012

	€ m.
Forecast special costs with an impact on EBITDA for 2018	around –2.0
Actual special costs with an impact on EBITDA in 2018	–4.6
Deviation from the forecast	**–2.6**

The € –2.6 million deviation from the forecast for special costs is due to an amount of € –1.4 million to the "Smart Buildings" segment and mainly comprises unplanned costs for measures to adjust the personnel structure at euromicron Deutschland. In addition, special costs at euromicron AG ("Central Services" area) were € –1.2 million above the forecast figure. € –0.5 of the extra costs result from effects on earnings from a provision set up for litigation costs. Apart from that, the special costs for legal and consulting services and the costs of measures in the area of human resources at euromicron AG were slightly higher than planned. Table 012

Deviation from forecast working capital ratio

Deviation from the forecast working capital ratio 013

	%
Forecast working capital ratio for 2018	around 10 %
Actual working capital ratio in 2018	9.0 %
Deviation from the forecast	**–1.0 %**

The plan envisaged reducing the working capital ratio (defined as working capital relative to sales) by around 10% by continuation of the Group-wide working capital program. The working capital ratio fell in 2018 by –3.9 percentage points to 9.0% and so was one percentage point above the forecast figure. That is attributable in particular to the fact that the working capital ratios at the "Critical Infrastructures" and "Distribution" segments improved more strongly than forecast. Table 013

3.2 Risk report and salient features of the risk management system

Risk strategy and general risk management

euromicron AG and its subsidiaries have an established risk management system based on statutory stipulations and that also includes analysis of opportunities. The risk management system identifies and documents the main risks and opportunities in accordance with their risk categories and assesses them as regards the probability of their occurring and the level of financial damage. The risk management system is applied in standardized form at all associated companies and is an integral part of their extensive continuous planning, controlling and reporting processes. This ensures that the Executive Board is informed promptly of all major risks and can respond suitably. The risk management system also covers the accounting processes. Group-wide policies are in place to ensure compliance with consistent standards in the risk management system and accounting process.

The internal control system and compliance policies are inseparable from the risk management system. They ensure that financial reporting is performed correctly and the rules of conduct are observed by employees. The existing system of controls and policies enables the euromicron Group to comply with the stipulations of the corporate governance guidelines. The focus is in particular on finance and accounting, controlling and taxes, legal and compliance and the main operating processes.

Risk identification, risk assessment and risk management

A risk owner has been appointed at every subsidiary and reports to central Controlling and the central risk manager at euromicron AG. Opportunities and risks are classified in the following categories in accordance with the risk management system.

Every identified risk is assessed in terms of the probability of its occurring and its specific level of damage. The probability of a risk occurring is defined as follows:

Probability of the risk occurring

Definition			
1 Low	2 Moderate	3 High	4 Very high
> 0 to ≤ 20%	> 20 to ≤ 50%	> 50 to ≤ 80%	> 80%

The assessment is conducted for the 12 months subsequent to the reporting date for the above categories before the measures taken to limit the risk and before the planned measures to limit risks (analysis of the gross risk). However, all risks (including long-term ones) are reported and analyzed. The forward-rolling 12-month period helps ensure clear segregation as part of the assessment.

Due to the different sizes and business areas of the individual subsidiaries, euromicron's risk management system has a detailed structure. Sweeping damage categories have been deliberately avoided so that the risk exposure at the individual companies can be presented. The level of damage is calculated as a ratio of the respective EBIT and multiplied by the likelihood of the risk occurring. That ensures that risks can be compared and aggregated.

The Executive Board of euromicron AG is notified as warranted if defined thresholds for key individual risks are exceeded. Three thresholds have been defined and are based on the size of the company in question.

Categories in the risk management system

Risik management system							
Markets and competition	Products, technology and R&D	Projects	Finances and liquidity	Procurement and production	Service and sales	IT	Corporate

Presentation of the risks

The following explains the existing risks that may have significant negative impacts on our business situation, net assets, financial position, results of operations and reputation, based on the regular reporting as part of risk management at December 31, 2018, as well as the individual categories in more detail.

The sequence in which the risks are presented within the categories reflects the current assessment of the relative risk measure and so offers a starting point for the current significance of these risks for euromicron AG. Further risks of which we are currently unaware, or risks that we currently assess as immaterial, may also have a negative impact on our business activities and objectives.

Markets and competition

In principle, the euromicron Group is dependent on positive economic trends in the Euro zone; the German market accounts for around 83.2% (previous year: 83.4%) of the company's sales and so is crucial to its success. Germany is also the place of activity of most of euromicron's subsidiaries, which benefit from investments in communications, security and data networks. Consequently, the development of the German market is of great significance for the overall Group's earnings. Given the general economic forecasts and positive expectations for the ICT industry, the probability of economic risks that impact euromicron occurring in the German market is assessed as low for 2019. According to current assessments, the slightly weaker growth expectations in the Euro zone will not have any direct impact on euromicron. There are currently only few business relationships outside the European economies. However, there is the risk of postponements in sales due to geopolitical developments for individual subsidiaries.

Apart from economic risks, euromicron is subject to the fundamental risks relating to competition and the related pressure on prices. Margins may be reduced due to intense competition. euromicron tackles these challenges by means of diversification and by nurturing intensive contacts with customers so as to be able to offer top-quality products and services at competitive prices. Certain subsidiaries have a low degree of dependence on individual large accounts. This risk at the Group level is relativized, since – as in the previous year – only one customer accounts for more than 10% of total sales. The risk of default by large customers is assessed as being low due to their very good creditworthiness. The risk of nonpayment is additionally reduced by factoring of some receivables from customers.

Products, technologies and R&D

Technology/R&D risks exist to the extent that leaps in technology might mean the loss of technological leadership. However, that applies to the Group only to a limited extent: euromicron's system houses and distributors can keep up with technological innovations without any problems because they have access to their own products and a diversified product portfolio from a wide range of different vendors (philosophy of vendor independence) for delivering customer solutions. euromicron's customers demand that the technology companies deliver top-quality, tailored solutions. To meet this requirement, euromicron's development departments not only respond to technological trends, but also occupy a pioneering role in research and development. To achieve that, the development units at the technology companies have been expanded in the past years and the quality and quantity of support for them enhanced by enlisting the services of external development partners. Due to the continued investments in innovative new products and solutions, which is also reflected in the capitalized development costs, only low risks to the Group's future earnings performance are seen in this area.

Projects

Project business harbors general risks that can never be ruled out completely, but are countered with clearly defined measures.

They include risks from up-front financing for projects. The Group's system integration companies are primarily affected by up-front financing for projects. If a customer does not meet its payment obligations, the result may be financial losses, depending on the size of the project. To minimize this risk, there are clear stipulations that down-payments and partial invoices should be agreed when the project is accepted, and that partial invoices are to be submitted regularly during the project, so that up-front financing and so potential risks of default are minimized. In addition, the business administration organization and the units Construction Law and Claim Management have been strengthened.

Further risks are also the realization of revenue billed for individual large projects acquired by euromicron Deutschland GmbH in previous periods. In some cases, final negotiations are being conducted with the customers; in individual cases, claims are also currently being enforced through legal action, which means receipt of payment may be delayed. This risk was reflected in measurement of revenues from these projects as part of preparation of the annual financial statements. Nevertheless, there may be new findings in subsequent periods that may result in an amended assessment of their revenue measurement.

Further extensive structural measures were implemented at euromicron Deutschland GmbH in fiscal 2018 in order to minimize risks in the future. As part of the realignment of construction-related business, restructuring was carried out in various regions where larger projects are now not handled any more. Instead, the business focus of these regions is now on higher-margin small projects and on service business. As a result of the adjustment to the personnel structure in these regions, the measures minimize the risk profile and also entail a perceptible reduction in costs.

Risks in project business also lie in the adequate availability of qualified subcontractors and price developments on the subcontractor market. Since 2018, euromicron has addressed the current market trend – a growing shortage of personnel resources in the subcontractor arena and rising market prices – by increasingly adding to its own workforce, in particular by building up its own assembly capacities. That mitigates dependency on outside service providers and the risk of rising market prices. At the same time, the use of qualified in-house staff reduces potential quality risks and risks in the area of subcontractor management.

It is also necessary to ensure that the technical specifications for the acquired projects can be handled and the projects can be completed in time and in the agreed quality. That is influenced by many factors, such as cooperation with suppliers and partners or the availability and qualifications of employees. euromicron counters possible risks from that with a clearly defined approval process before offers are submitted or orders accepted. This process evaluates risk factors such as a project's technical complexity, the availability of internal or outside personnel to carry out the project, or project costing. Only then is a decision taken on whether to accept a project on the basis of the project's size and risk structure and subject to the defined responsibilities for approving projects.

Finances and liquidity

The Group's focus on Germany and the Euro zone minimizes risks relating to the exchange rate between the US dollar and Euro. Goods paid for in US dollars are purchased on the basis of short-term, foreign currency-based sales lists, which means that the currency risk can be controlled. Other currencies have as good as no relevance to the euromicron Group.

A further significant financial risk at the euromicron Group is the earnings strength of its companies. Since the Group companies are part of the centrally managed cash pool of euromicron AG, it is necessary to ensure that there are no risks to financing of them through the cash pool. This is achieved by permanent and standardized finance management and reporting that constantly monitors and assesses the Group companies' activities and assigns measures to them, which is why the likelihood of this risk occurring is assessed as being low.

In fiscal 2018, the euromicron Group had sufficient funds to finance its operational business. The existing financing agreement runs until March 31, 2021. The agreement specifies that the company must fulfill specific key ratios (covenants), which must be tested quarterly starting from from June 30, 2018. They include the gearing ratio and key indicators relating to earnings and liquidity. In addition, the agreement specifies contractually stipulated repayments of €2.5 million effective March 31, 2019, and €25.0 million effective January 31, 2020. The lenders also have an extraordinary right to terminate the agreement if 30% or more of the shares and/or voting rights are taken over.

In addition to its policy of cash-oriented corporate governance, euromicron aims to reduce the debt it incurred as a result of the past “buy and build” strategy. €25.0 million is to be repaid in a first step by the end of January 2020. The company has various repayment options available to it and the Executive Board initiated the process for validating them in 2018. They include measures to obtain liquidity on the capital market, as well as divestment measures involving the sale of non-strategic assets. Moreover, the company is holding discussions with investors and financial institutions about replacing or refinancing the current financing structure. Finally, there is the option of agreeing an extension to the special repayment II with the financiers. euromicron has engaged expert consultants to support it in all the measures. In view of the measures and planning that have been initiated, the Executive Board believes that reduction of debt by the above-described extent by January 2020 is ensured as far as can be seen at present.

In summary, the Executive Board is of the view that it is highly likely the company will continue as a going concern as a result of these various, realistic options and does not see any significant uncertainty as regards the planned repayment.

Risks from pending legal disputes and tax risks are also subsumed under the category “finances and liquidity”.

- euromicron AG is taking legal action before the Frankfurt/Main District Court against a former member of the Executive Board to obtain repayment of bonuses totaling around €0.3 million paid for the fiscal years 2012 and 2013 and for damages of around €4.2 million due to breaches of duty in the preparation of annual financial statements and interim reports. The legal action is pursuant to accounting errors in the IFRS consolidated financial statements for fiscal years 2012 and 2013 identified by the German Financial Reporting Enforcement Panel (FREP). They resulted in inflated key financial ratios being reported, on the basis of which excessively high bonuses were paid. In addition, the company incurred damage of €4.2 million, in particular from payment of a dividend for which there were actually no corresponding net retained profits due to the accounting errors, as well as from costs for dealing with the aftermath of the accounting errors. The claim for repayment of the bonus (€0.3 million) was already capitalized in previous periods as part of correction of the accounting errors; however; the claimed damages due to breaches of duty (€4.2 million) have not been included on the balance sheet and so represent an opportunity. The Executive Board member in question disputes the claims and the validity of his dismissal and has brought a cross-action claiming compensation of €1.6 million for unfair dismissal. Based on the assessment of external lawyers, who consider the dismissal to be effective and so the claims of the former Executive Board member to be unjustified, this matter has not been carried in the balance sheet to date. The possible risk of the claims being payable is assessed as low.
- euromicron AG conducted securities lending transactions with a bank beyond the dividend record date in the years 2010 to 2012. The tax audit for the years 2010 to 2012 came to the conclusion that euromicron AG was not the economic owner of the shares in question at the respective dividend record date and so refused to credit the capital gains taxes withheld on the dividends. The assessing tax office then issued euromicron AG with amended corporation income tax assessment notices for the years 2010 to 2012, demanding repayment of credited amounts totaling approximately €5.8 million (plus interest). euromicron AG appealed these assessment notices in due time and form; levying of the amounts was suspended. Moreover, it applied for crediting of the amounts for reasons of equity and requested the bank involved to apply to its tax office alternatively for the amounts to be credited to it. If the tax office credits the bank involved with the paid-over capital gains tax, the bank has given a written pledge to pass on said amounts to euromicron AG. Alongside that, legal action was taken against the bank involved in August 2017, among other things to claim reimbursement of the excess compensation payments made as part of the securities lending transactions to the

amount of the above-stated amounts of capital gains tax. The value in dispute is €5.8 million. The suit was dismissed by the court of first instance, Frankfurt/Main District Court, with its ruling dated November 23, 2018. euromicron AG has appealed the ruling before Frankfurt/Main Higher Regional Court. The appeal proceedings are at an early stage. There have not been any court hearings or hearing of evidence so far. Moreover, a third party notice was filed against the former Executive Board members in January 2018, since they are responsible for the securities lending transactions in the years 2010–2012. If neither the fiscal proceedings nor the civil case end in success for euromicron, it intends to seek recourse against the company's former Executive Board members on the basis of the third-party notice. Any such claims against the former Executive Board members are covered by the directors' and officers' (D&O) policy. All in all, the company's Executive Board does not therefore expect a negative impact on the Group's liquidity as a result of this risk.

Procurement and production

As a producer, service provider and operator of IoT and Smart Industry solutions, there are procurement risks as regards the supply of raw materials and in the supply of complete technical components. We counter these risks with organizational and contractual measures, as well as measures relating to purchasing strategy. Our procurement management delivers the basis for qualified consulting in all portfolio groups. By pooling this expertise, we ensure that our customers and own companies benefit from the very best procurement channels and optimum terms and conditions. That enables us to leverage synergies to the full, yet also minimize risks at the euromicron Group and internal process costs. The market success of our products goes hand in hand with the previously described technology leadership. Constant orientation toward customers' technological needs reduces the risk of producing solutions that ignore market requirements, so this risk is assessed as being low.

Service and sales

In addition, the ethos of service is a key aspect in our business model. Leading technologies, customer proximity and total commitment to service help secure sales. Proximity to customers also means that tendencies and trends are identified and the solution portfolio expanded in good time. Training and innovative service concepts underpin the product, training and sales strategy.

IT

A large part of our field of business is in digital technologies. In particular in times of growing cybercrime, risks to IT security must be addressed to a greater and greater extent. It is vital for data, networks and systems to be protected and reliable. We counter the higher risk by means of constant monitoring, the use of protective systems, and regular training and further education. Apart from planned manipulative interference in networks, it is also necessary to take into account technical faults, which we counter by systematic protection, backup and modern data structures. The risk is regarded as low all in all.

Corporate

The loss of qualified personnel is a key risk at a technology group with a medium-sized character like euromicron, in particular in project business, which is highly reliant on the existing staff. That is why the Group offers its employees regular, systematic further qualifications to reflect needs. That enables employees to assume more responsibility in their departments and demanding, varied tasks in their function. euromicron believes that professional and personal further development is a means of enhancing employee loyalty and key to a successful HR policy. As in the previous year, the employee loyalty program formulated by the Executive Board and HR was also implemented throughout the Group in fiscal 2018. Nevertheless, there is still the risk of not having adequately qualified personnel or staff being available.

Compliance

For the Executive Board of euromicron AG, corporate governance based on integrity means morally and legally responsible conduct, in particular toward executives, employees and all business partners. These maxims are actively practiced by the Executive Board, Supervisory Board and employees and have been incorporated in the company's Code of Conduct. This serves as the basis for creating a consistent understanding of ethical conduct in the Group. The Code of Conduct can be viewed on the company's homepage at www.euromicron.de/downloads/mediathek/euromicron-code-of-conduct.pdf. In addition to the general guidelines for compliance in practice, the Executive Board – in coordination with the compliance officer of euromicron AG – selects each year a special area of focus so as to ensure adequately at all times that our individual divisions are able to cope with the changes that they are subject to. The aim of this is to address the changes in requirements from operational business and in the market environment. Our divisions are to be developed further on the basis of the created compliance structure with reference to the separately defined areas of focus.

Summary of the risk situation

The main risks were presented in accordance with the categories from the risk management system, with most attention paid to financing and project risks. The residual risk is calculable given the countermeasures that have been initiated, guidelines and constant controls.

With the exception of the legal risks presented in the section "Finances and liquidity", there are no other legal risks from pending legal proceedings above and beyond current business.

In summary: In the assessment of the Executive Board, the currently known risks will probably have no significant impact on the net assets, financial position and results of operations of euromicron.

3.3 Opportunity report

Opportunities for the euromicron Group lie in the possibilities and potential of digitalization, which in some cases have already been leveraged in practice in the form of concrete projects. Examples are "digitized" points, trash cans "that also use their brain", "intelligent" hotel rooms or the use of self-propelled robots in production.

In order to create profitable growth and so increase the company's value sustainably, we intend to link our physical business even more strongly with solution business in promising new market segments – digital software-based services. Due to this combination and the strategic orientation toward the growth market of the Internet of Things, a market with prospects of large growth will open up for euromicron. New opportunities keep on arising due to the great dynamism of the market environment.

The euromicron Group also boasts innovativeness in the field of network components "Made in Germany" and an international footprint.

The technological and security challenges facing enterprises wishing to capitalize on the advantages of increasing digitization represent a further opportunity for the euromicron Group. It is increasingly difficult for small and medium-sized customers in particular to achieve the necessary transformation solely with their internal resources or to recruit additional experts. The expertise and skills of digitalization providers such as euromicron are therefore highly sought by users, ideally in combination with specific industry know-how.

As an digitalization expert, euromicron is one of the few providers to be able to offer companies and public institutions overarching solutions from a single source. The euromicron Group has vertical know-how that allows it to create a perfectly fitting technical infrastructure for customers. To achieve that, euromicron combines the technical and economically most expedient modules from the fields of terminal devices and sensors, infrastructure, platforms, applications and services. euromicron's solutions enable users to increase the flexibility and efficiency of their business and production processes.

IoT solutions "Made by euromicron" have significant scaling potential. At the "Future Work Lab" of Fraunhofer IAO and IPA in Stuttgart, an SME-specific assembly workplace system already conveys a vision of work in the future. The heart of the system is the Smart Industry software from euromicron's subsidiary ELABO, which enables fully networked production environments to be created.

euromicron Deutschland is supporting AWS GmbH, a provider of waste water, water and other services and member of the GELSENWASSER Group, in modernizing its multi-site enterprise network and digitizing business-critical applications. euromicron's IT experts implemented tailored network and security infrastructures at the 28 locations – from creation of the concept and planning, installation and commissioning, to service and maintenance. The market will demand similar project requirements in the coming years.

We will implement largish video surveillance projects for Deutsche Bahn at many train stations in Germany in the coming years. The potential for video security at public places is virtually unlimited.

Digitization of the power distribution networks for controlling alternative energies and e-mobility is a challenge facing our customers. Here too, euromicron is implementing IoT solutions in order to master these challenges in a cost-effective and innovative way.

Apart from the strategic alignment, systematic leveraging of synergies between technology companies and system integrators represents further large potential for improving the euromicron Group's results in the medium term. In 2018, for example, euromicron's subsidiaries MICROSENS and euromicron Deutschland jointly implemented passive network infrastructures and accompanying IT services for central municipal properties of the city of Hanover – including in the listed New Town Hall and more than 150 schools. The video surveillance projects at the train stations are carried out by euromicron Deutschland using technology from MICROSENS. KORAMIS delivers security solutions for telent's critical infrastructure projects and ensures secure Smart Industry solutions for ELABO.

Pinpointed organizational changes will help improve marketing opportunities in the "Digital Buildings" arena in the future. Following MICROSENS' success in the field of automation with "Smart Lighting" and "Smart Office", it is merging building automation and IT fully with the division "Smart Building Solutions". The declared objective is to digitize automation processes in the entire building and achieve even closer cooperation with the Group's system integrators.

Further opportunities for euromicron lie in rigorously continuing the measures to reduce working capital and so the Group's tied-up capital.

There are also opportunities from further increasing the share of services in our solution portfolio in order to provide our customers with help tailored to their needs in the digital transformation of their business processes, strengthen their loyalty to euromicron and so increase our profitability lastingly.

3.4 Forecast for fiscal year 2019

On the basis of the sales of €318 million in 2018, sales expectations for 2019 – allowing for the presented opportunities and risks – are in a range between €325 million and €345 million

We also assume an EBITDA margin of between 4.0% and 5.5% for 2019. The figure for it in 2019 is calculated without any adjustment for special costs and not including the changes to EBITDA as a result of the new standard IFRS 16 – "Leases".

The anticipated margin is impacted to a substantial extent by positive effects from the realignment of construction-related business and by investments in further expansion of innovation business in the target market of the Internet of Things.

Following a working capital ratio (defined as working capital relative to sales) of 9.0% in fiscal 2018, it is to kept below 10.0% by the end of 2019 through further intensification of working capital management.

We expect a continuous improvement in our profitability in the coming years. We assume that the EBITDA margin will rise by approximately one percentage point per annum in the following years, with the result that an EBITDA margin of more than 8.0% will be achieved in the medium term.

As part of our focus on strategic areas of innovation, we also continuously examine divestments and acquisitions and seize the chance to make them if good opportunities arise. The forecast is based on the Group's current structure and so may need to be adjusted if divestments or acquisitions are made.

This forecast is based on the assumption of a positive economic development in the Federal Republic of Germany and in the general conditions in the IT/ICT industry in 2019, as presented in section 2.1 "General economic and industry-specific conditions". Nevertheless, the actual results may deviate significantly from the expectations and forecasts if one of the above, or other, uncertainties arise or the assumptions on which the statements were based should prove to be inaccurate.

4 Internal control and risk management system in relation to the consolidated accounting process

Legal background and definition of an internal accounting control and risk management system (ICS/RMS)

Stock corporations as defined by Section 264d HGB (German Commercial Code) are obliged pursuant to Section 315 (4) of that code to present the salient features of the ICS/RMS in relation to the consolidated accounting process in the group management report. The ICS/RMS comprises all principles, procedures and measures to ensure effective, cost-efficient and proper consolidated accounting and compliance with the relevant financial reporting regulations. It is integrated in the risk management system of the overall Group, which is described in detail in section 3.2 "Risk report and salient features of the risk management system".

Fundamental regulatory and control activities to ensure proper and reliable consolidated accounting

The measures in the ICS at euromicron AG and the euromicron Group are geared to proper and reliable consolidated accounting and ensure that business transactions are recorded fully, promptly and in compliance with statutory provisions. They also ensure that stocktakes are carried out properly and assets and liabilities are carried, measured and reported accurately in the consolidated financial statements. The regulatory activities also ensure that reliable and transparent evidence relating to business transactions is available in the form of accounting documents.

The concrete risks to which the euromicron Group is exposed in terms of assets, liabilities and strategic alignment are mainly in changes in the market situation, financing situation and interest rates. To minimize them, the basic elements of the business and financial policy are defined by the Executive Board and monitored by the Supervisory Board. In turn, Finance and Accounting, Controlling and Taxes are responsible for operationally implementing the financial policy and constant risk management.

With the increase in the workforce at the corporate units of euromicron AG, especially in Group Accounting and Group Controlling, Taxes, Working Capital Management, Internal Auditing and Compliance, the planned target structure has been implemented , resulting in an improvement in the internal accounting control system. In addition, extensive guidelines are drawn up continuously, updated and implemented throughout the Group so that processes, the design of the ICS and specific accounting matters are documented and governed consistently throughout the Group. In addition, the structures and processes in system house business were further optimized to harmonize and standardize implementation management and project controlling at the project companies and to integrate project controlling more deeply in Group reporting.

In order to permit selective analysis of deviations between actual and planned figures and to enable swift and effective countermeasures to be taken in response to deviations from planning, the organizational structure of Group Controlling is geared toward ensuring direct assignment of staff from Group Controlling to the individual operating companies and so integration of these in process-related or accounting-specific matters at the subsidiaries in question. Reporting and the process for preparing the monthly financial statements have been standardized throughout the Group. Integrated income statement, balance sheet and liquidity planning is created and is the foundation for monthly analyses with regard to deriving monthly budget figures. The company uses an IT-aided planning tool for preparing the integrated Group planning and it is further adapted successively to the needs of the euromicron Group's planning process.

Process-integrated and process-independent control measures form the main elements of the ICS at the euromicron Group. Apart from manual process controls – such as the "four eyes principle" –, automated IT process checks are also a key part of the process-integrated controls. This ensures that Financial Accounting is informed promptly of the status of all documents, which significantly reduces the risk of matters not being completely or correctly reported in accounting. The separation of functions and the four eyes principle are prescribed in work instructions or have been implemented in some cases in the systems used. Strict compliance with these measures also reduces the possibility of acts of criminal intent.

The controls are carried out throughout the Group and their suitability and comprehensiveness are reviewed regularly on a test basis. Regular training courses make sure that employees at Accounting are informed of changes to the law that may have an impact on preparation of the consolidated financial statements. In addition, the text of laws and commentaries on them are available to an adequate extent.

In fiscal 2018, euromicron AG's risk identification system complied with the measures to set up a suitable risk identification system specified by Section 91 (2) AktG (German Stock Corporation Law). The risk identification system is suitable for promptly detecting developments that might jeopardize the company's continued existence.

Other control bodies, such as the Supervisory Board and independent auditor, are integrated in the company's control environment with their process-independent auditing and monitoring activities. The suitability and effectiveness of the internal control system are also examined constantly by the work of the Internal Auditing department.

Specific accounting-related risks

A particular risk in relation to consolidated accounting is that the consolidated financial statements to be published contain errors that may have a significant influence on the Group's financial position, net assets and results of operations. This risk exists in reporting unusual or particularly complex business transactions or other business transactions that are not routine and so have a relatively high inherent risk. We refer you in this regard to the comments in section 3.2 "Risk report and salient features of the risk management system".

Other aspects

In preparation of the consolidated financial statements, Accounting is also dependent in part on data and information from other organizational units of the euromicron Group. Of particular importance in examining the intrinsic value of goodwill and other assets is the budgeting prepared in agreement with the

Controlling unit of euromicron AG and approved by its Executive Board and Supervisory Board. The Treasury unit provides the data required for presenting factoring in the balance sheet, for example. The data, which is provided by other organizational units, is subjected to a plausibility check in Accounting before being further processed as part of preparation of the consolidated financial statements.

At the euromicron Group, the segments are assessed among other things by their achievement of earnings- or cash flow-based targets. The course of business is assessed during the year with reference to various key indicators, as well as liquidity, profitability and comparison with budgeting. In the course of a fiscal year, three calculations on expectations with forecasts for the end of the year are conducted. However, far more criteria than pure key indicators are required as a basis for investment and business decisions in fast-moving technology markets and these are obtained through permanent monitoring and reviews. The company's management also bases its decisions on analyses by the specialists and persons responsible who are involved in the process and have extensive market, product and sector know-how. A wide range of different evaluation criteria are used, tailored to the specific case. The companies are accompanied permanently by investment controlling by euromicron AG; deviations are identified and countermeasures initiated immediately.

5 Corporate governance declaration by the Group in accordance with Section 315d HGB (German Commercial Code)

The (Group) corporate governance declaration in accordance with Section 315d in conjunction with Section 289f HGB (German Commercial Code) can be found in the 2018 Corporate Governance Report; the latter is available at all times on the homepage of euromicron AG.
www.euromicron.de/en/investor-relations/corporate-governance-code-18

6 Separate non-financial report

euromicron AG has disclosed its activities in the field of sustainability in the Declaration of Conformity with the German Sustainability Code (DNK). In the declaration, we present information – in accordance with the Act Implementing the CSR Directive within the meaning of Sections 315b and 315c in conjunction with Sections 289c to 289e HGB (German Commercial Code) – on the Group's sustainability strategy and the action we take to promote sustainability as regards matters relating to the environment, employees and society, as well as respect for human rights and combating of corruption.

The Declaration of Conformity is available at all times on the homepage of euromicron AG.
www.euromicron.de/en/investor-relations/sustainability

7 Compensation Report

Salient features of the compensation system for Executive Board members

euromicron's future success depends on the company's ability to acquire, motivate and retain good personnel. The compensation system for euromicron AG's Executive Board is therefore oriented toward performance incentives for long-term corporate governance geared to sustainability.

The Executive Board members' compensation is also part of an end-to-end system for executives at the euromicron Group and is intended to reflect the size and strategic alignment of the company, its economic situation and future prospects and the personal performance of the board member in question.

The compensation should be competitive nationally and internationally and so offer incentives for committed and successful work. Overall responsibility for defining the compensation principles for the Group lies with the Supervisory Board, which also regularly reviews them.

Compensation of members of the Executive Board

The Executive Board of euromicron AG was composed of the following members in fiscal 2018:

- Ms. Bettina Meyer was Spokeswoman of the Executive Board throughout the whole of fiscal 2018.
- Mr. Jürgen Hansjosten was a further member of the Executive Board from January 1, 2018, to April 30, 2018.
- On April 30, 2018, Mr. Jörn Trierweiler was appointed as successor to Mr. Jürgen Hansjosten as a further member of the Executive Board for the term of one year.

The compensation of Ms. Bettina Meyer and Mr. Jürgen Hansjosten in fiscal 2018 was defined by the contract of service that has been concluded with the two Executive Board members and has the same wording.

In the case of Mr. Jörn Trierweiler, however, what is termed a "third-party appointment" was agreed with VTR Germany GmbH, where Mr. Jörn Trierweiler is Managing Director. Since the underlying service agreement was concluded only for the term of one year (for the term he has been appointed as the Executive Board, namely from April 30, 2018, to April 30, 2019), it has differing arrangements to those under the contracts of service concluded with Ms. Bettina Meyer and Mr. Jürgen Hansjosten.

Compensation of Ms. Bettina Meyer and Mr. Jürgen Hansjosten under the contracts of service with Executive Board members

The total compensation of members of the Executive Board under the Executive Board contracts of service is based on Section 87 AktG (German Stock Corporation Law) and takes into account the Group's earnings targets. In fiscal 2018, it was made up of performance-unrelated components (salary, other remuneration) and performance-related components (earnings-related bonus and a variable component with a long-term incentive effect ("LTI")). The performance-unrelated component accounts for around 60.0%, the performance-related component for around 30.0% and the component with a long-term incentive effect for around 10.0% of the agreed total compensation, if the targets for the performance-related components are achieved in full.

euromicron AG's compensation strategy also envisages offering remuneration that is fair and transparent and takes the interests of shareholders into consideration.

The following criteria apply to the individual components of the Executive Board's compensation:

The performance-unrelated compensation is paid as a monthly salary, along with non-cash compensation. The two Executive Board members each received identical fixed compensation. The other remuneration relates to use of company cars, premiums for a group accident insurance policy and for a direct company insurance policy, and contributions to health and nursing care insurance. The Executive Board members pay tax on the respective benefit in money's worth of these non-cash benefits.

The company maintains an insurance policy for board members of the euromicron Group, what is termed a directors' and officers' (D&O) policy. This insurance covers personal liability if claims for financial loss are made against Executive Board members as part of their work. In accordance with the applicable arrangement in the contracts of service with Executive Board members, a deductible of 10.0% of the damage up to at least one-and-a-half times the fixed annual compensation of the Executive Board member is provided for in accordance with statutory provisions (deductible within the meaning of Section 93 (2) Sentence 3 AktG (German Stock Corporation Law) in conjunction with Section 23 (1) EGAktG (Introductory Act to the German Stock Corporation Law)).

The variable, performance-related components of the compensation for Executive Board members are geared to the company's sustainable development and consist of the following, mutually independent components:

First, there is a performance-related bonus in the form of a variable cash payment which is geared to the achievement of quantitative (50%) and qualitative (50%) targets. A target agreement for the Executive Board contract of service for fiscal 2018 was concluded solely with Ms. Bettina Meyer. The quantitative targets for fiscal 2018 were linked to achievement of a specific consolidated EBITDA and a specific working capital for the Group. The individual personal targets for fiscal 2018 envisaged an improvement in transparency and reliability and compliance with covenants, rollout of Group-wide sales controlling, and an improvement in the personnel structure and quality of personnel at the Managing Director level. An upper limit (cap) avoids entitlement to an excessively high bonus in the event of highly positive developments.

Second, the system for Executive Board compensation includes variable components with a multi-year basis of assessment (LTI). For the contribution made to increases in the company's value, the Executive Board members can receive a long-term compensation component geared to the individually agreed targets.

The performance period originally covered the time from the start of the employment relationship (April 1, 2015) to December 31, 2017. Due to inclusion of the target of ensuring a going concern in preparation of the annual and consolidated financial statements for fiscal year 2017 by means of an appropriate financing structure, the performance period was extended by the Supervisory Board until when the annual and consolidated financial statements are prepared in March 2018. For the period from January 1, 2018, to December 31, 2020, the annual LTI component is also linked to the achievement of interim financial targets ("milestones") to a proportion of 60% and to the company's share price performance to a proportion of 40%.

The entitlement to payment of the LTI becomes due ten business days after approval of the consolidated financial statements for fiscal year 2018; the 2018 consolidated financial statements were approved in April 2019. Payments on account for the LTI are made annually to an amount of 66% of the bonus calculated for the respective fiscal year and are due ten business days after approval of the consolidated financial statements for the fiscal year in question.

The payments on account are offset with the respective amount to be granted for the entire performance period in accordance with the degree to which the targets are achieved. If the total for the payments on account is larger than the amount to be granted for the entire performance period, the difference is immediately reimbursed by the member of the Executive Board.

It was stipulated under the two Executive Board contracts that they would both end effective March 31, 2020 (please refer to the section "Other benefits in the event of premature departure" as regards the premature termination of the Executive Board contract with Mr. Jürgen Hansjosten by mutual consent).

Under their respective Executive Board contract of employment, Ms. Bettina Meyer and Mr. Jürgen Hansjosten received the following compensation for their work in fiscal 2018:

The total compensation for all members of the Executive Board was €633.8 thousand. The performance-unrelated, fixed basic compensation accounted for €373.7 thousand (including other non-cash compensation of €7.0 thousand), the variable, performance-related compensation for €68.7 thousand, and the components with a long-term incentive effect €191.4 thousand.

The following amounts were paid to Ms. Bettina Meyer and Mr. Jürgen Hansjosten:

- Bettina Meyer: €445.1 thousand (performance-unrelated compensation €280.7 thousand, including €5.7 thousand in other remuneration, performance-related compensation €68.7 thousand and €95.7 thousand from the variable component with a long-term incentive effect)
- Jürgen Hansjosten: €188.7 thousand (performance-unrelated compensation €93.0 thousand, including €1.3 thousand in other remuneration, and €95.7 thousand from the variable component with a long-term incentive effect)

On the basis of the above-presented regulations, Ms. Bettina Meyer and Mr. Jürgen Hansjosten were granted the following interest-free advances on the LTI component in the form of payments on account in the years 2016 and 2017.

- Bettina Meyer: €57.9 thousand
- Jürgen Hansjosten: €57.9 thousand

The payments on account were offset in 2018 with the amount to be granted for the entire performance period in accordance with the degree to which the targets were achieved. The difference was paid out in April 2018 and was as follows for Ms. Bettina Meyer and Mr. Jürgen Hansjosten:

- Bettina Meyer: €37.8 thousand
- Jürgen Hansjosten: €37.8 thousand

No loans were granted to the members of the Executive Board in the year under review.

In fiscal 2018, the members of the Executive Board did not receive any benefits from third parties that had been promised or granted in relation to their work as board members. Activities in or for subsidiaries are not remunerated separately.

Compensation of Mr. Jörn Trierweiler under the contract of service concluded with VTR Germany GmbH

Before being appointed to the Executive Board, Mr. Jörn Trierweiler was already working as CRO for the company. The contract of service governing his work as CRO was suspended for the length of Mr. Jörn Trierweiler's appointment to the Executive Board. The contract of service that was concluded between euromicron AG and VTR Germany GmbH and that governs Mr. Jörn Trierweiler's activity on the Executive Board is – in accordance with the period of time for which he has been appointed a member of the Executive Board – limited to one year and so contains a number of special arrangements compared to the other Executive Board contracts of employment at euromicron AG.

The overall compensation of VTR Germany GmbH for the obligation it has undertaken toward euromicron AG to provide the services of Managing Director of VTR Germany GmbH, Mr. Jörn Trierweiler, in discharging all his tasks as a member of the Executive Board is composed of a performance-unrelated component (compensation on an hourly basis; other benefits) and a performance-related component (variable compensation). The compensation emulates the compensation that had been contractually agreed previously for Mr. Jörn Trierweiler's work as CRO.

The performance-unrelated component is a net payment for each hour Mr. Jörn Trierweiler works in discharging his activities for the Executive Board. VTR Germany GmbH invoices the compensation along with a record of the hours he has worked. The compensation is paid after the record of hours worked has been examined and approved by the Supervisory Board. The other benefits relate to the assumption of Mr. Jörn Trierweiler's rent and reimbursement of his travel expenses.

The company has also taken out a directors' and officers' (D&O) policy in favor of Mr. Jörn Trierweiler. In accordance with the arrangements under his contract of service, a deductible of 10.0% of the damage up to at least one-and-a-half times the fixed annual compensation of the Executive Board member is provided for under the policy.

The variable compensation is based on a supplemental agreement concluded between VTR Germany GmbH and euromicron AG. The quantitative targets for fiscal 2018 were linked to achievement of a specific consolidated EBITDA and a specific working capital for the Group.

The individual personal targets for fiscal 2018 envisaged an improvement in transparency and reliability and compliance with covenants, realignment of the subsidiary euromicron Deutschland GmbH, and presentation of an IT strategy and a plan for its implementation. An upper limit (cap) avoids entitlement to an excessively high bonus in the event of highly positive developments.

The total compensation paid to VTR Germany GmbH for making Mr. Jörn Trierweiler available to discharge duties on the Executive Board of euromicron AG in fiscal 2018 was €322.1 thousand. The performance-unrelated compensation accounted for €278.9 thousand, the variable, performance-related compensation component for €28.0 thousand, and the reimbursement of travel expenses and rent for €15.2 thousand.

Other benefits in the event of premature departure

If the appointment of an Executive Board member is terminated prematurely at the instigation of the company, without the company having the right to revoke the appointment for cause or terminate the contract of employment without notice, the contract of employment with the Executive Board member still effective for the remainder of the term can be rescinded by mutual consent. In practice, a severance payment is generally made in exchange for rescission of the contract in this way. The severance payment is defined at the equitable discretion of the Supervisory Board.

Mr. Jürgen Hansjosten departed from euromicron AG's Executive Board effective April 30, 2018. Under a severance and discharge agreement, severance pay of €200 thousand gross was agreed as compensation for the remuneration and benefits he would lose due to premature termination of his contract of service. The severance payment was made to him at the end of May 2018. In accordance with the contractual agreement, Mr. Jürgen Hansjosten was to pay tax on the severance payment.

Salient features of the compensation system for the Supervisory Board

The compensation of members of the Supervisory Board is governed by the Articles of Association of euromicron AG. Apart from being reimbursed for their outlays, the members of the Supervisory Board receive a fixed annual remuneration of €30 thousand. The Chairwoman of the Supervisory Board receives double and her deputy one-and-a-half times the fixed remuneration. The overall compensation for the Supervisory Board for 2018 in accordance with the Articles of Association was thus €135 thousand, which is broken down as follows:

- Evelyne Freitag: €60 thousand
- Klaus Peter Frohmüller: €27 thousand (since May 29, 2018)
- Dr. Martina H. Sanfleber: €18 thousand (since June 5, 2018)
- Rolf Unterberger: €18 thousand (until May 22, 2018)
- Dr. Alexander Kirsch: €12 thousand (until May 29, 2018)

In its own interests, the company maintains a directors' and officers' (D&O) insurance policy that also covers the members of the Supervisory Board. Its deductible is 10.0%.

The members of the Supervisory Board did not receive any further payments for services provided in the year under review.

8 Disclosures in accordance with Section 315a (1) HGB (German Commercial Code)

a) The subscribed capital of euromicron AG on the balance sheet date comprises 7,176,398 no-par value registered shares.

b) The company's Executive Board is not aware of restrictions on voting rights or transfer of shares, even if they may be defined under agreements between shareholders.

c) There are no direct or indirect capital stakes exceeding 10.0% of the voting rights, where the disclosures do not have to be made in the notes on the consolidated financial statements.

d) There are no holders of shares with special rights that confer controlling powers.

e) The Executive Board is appointed and removed by the Supervisory Board in accordance with the Articles of Association in compliance with Section 84 AktG (German Stock Corporation Law). Amendments to the Articles of Association require the consent of the General Meeting.

f) Powers of the Executive Board to issue or buy back shares:

Authorized capital
The General Meeting on June 13, 2018, adopted a resolution to create new authorized capital totaling €7,339,020.00. The Executive Board is thereby authorized, with the consent of the Supervisory Board, to increase the capital stock of the Company until June 12, 2023, by up to €7,339,020 through the issue of up to 2,870,558 registered shares in exchange for cash and/or non-cash contributions (authorized capital 2018). The authorization can be exercised once or more times in partial amounts. In accordance with the Articles of Association, there is the possibility, under specific preconditions, to exclude the statutory shareholders' subscription right.

Contingent capital
The General Meeting on June 13, 2018, adopted a resolution to create new contingent capital totaling €7,339,020.00. As a result, the capital stock is increased conditionally by up to €7,339,020.00 through the issue of up to 2,870,558 registered shares (contingent capital 2018).

The contingent capital increase is to be used to grant option or conversion rights or service conversion obligations and to grant shares instead of cash payments to the holders of bonds which the company or its group companies issue in compliance with the authorization adopted by the General Meeting on June 13, 2018. The new shares shall be issued at the option or conversion price defined in compliance with the authorization adopted by the General Meeting on June 13, 2018.

The conditional capital increase shall be carried out only and insofar as the holders or creditors of bonds issued or guaranteed on the basis of the authorization adopted by the General Meeting on June 13, 2018, make use of their option or conversion rights, fulfill their conversion obligations or shares are granted to the holders or creditors of these bonds instead of cash payments and other forms of fulfillment to service them are not used. The new shares will participate in profits from the beginning of the fiscal year in which they are issued. The Executive Board is authorized to define the further details of the contingent capital increase with the consent of the Supervisory Board.

Treasury shares
At December 31, 2018, there is no authorization from the General Meeting for euromicron AG to acquire its own shares. As in the previous year, the company did not therefore hold any treasury shares at December 31, 2018.

g) There are no significant agreements by the company as defined by Section 315a (1) Nos. 8 and 9 of the German Commercial Code (HGB).

Frankfurt/Main, April 8, 2019

Bettina Meyer Spokeswoman of the Executive Board	Dr. Frank Schmitt Member of the Executive Board	Jörn Trierweiler Member of the Executive Board