

**KUKA**

**KUKA AKTIENGESELLSCHAFT**

**CONSOLODATED FINANCIAL REPORT and  
ANNUAL FINANCIAL STATEMENTS 2016**

# CONSOLODATED FINANCIAL REPORT OF KUKA AKTIENGESELLSCHAFT

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# Consolidated Financial Report

## Group basis

### Group structure and business activities

In the year under review, KUKA Group consisted of KUKA Aktiengesellschaft and the Robotics, Systems and Swisslog divisions. KUKA Aktiengesellschaft headquartered in Augsburg is the Group's holding company and is responsible for managing corporate activities within the group of companies. The management of the individual divisions coordinates the operational business activities in the respective segments. The divisions operate globally and are supported by their regional subsidiaries in both their sales efforts and their assembly and field service work.

KUKA is one of the world's leading specialists in automation. Its aim is to support its customers in the overall optimization of their value added by providing comprehensive automation and digitization know-how. As a global technology corporation, KUKA offers its customers everything they need from a single source: from the core component – the robot – to cells, turnkey systems and networking. Through its advanced automation solutions KUKA contributes to increased efficiency and improved product quality for its customers. Industrie 4.0 is bringing digital, networked production, flexible manufacturing concepts and new business models to the fore. With its decades of experience in automation, in-depth process know-how and cloud-based solutions, KUKA ensures its customers are well ahead of the competition.

The Robotics division develops, manufactures and distributes the core component for automation – the robot. In addition to the manufacture of industrial and service robots, it also focuses on robot control and software along with the analysis and use of big data in production operations. Robotics additionally offers its customers a wide range of services.

The core competence of the Systems division (with KUKA Industries) lies in customized solutions for the automation of manufacturing processes. Systems plans and implements automated systems for its customers, and upgrades existing systems to increase sustainability and efficiency. It focuses on large-scale automotive and production-oriented industries. KUKA bundles this expertise of cell business and in-depth process know-how within the KUKA Industries business unit, which forms part of the Systems division.

The Swisslog division has two units: Healthcare Solutions implements automation solutions for forward-looking hospitals in order to sustainably increase efficiency and improve patient care. In the logistics segment the Warehouse and Distribution Solutions unit supplies automated, robot-based and data-controlled intralogistics systems, covering the spectrum from planning to implementation and service. By combining Swisslog logistics solutions with the robotic automation solutions of the other divisions of the Group, KUKA as an automation powerhouse offers new possibilities of flexible automation along the entire value chain.

### Robotics division

The core component for automating production processes is provided by the Robotics division: industrial robots together with the controller and software. The broad product portfolio covers payload ranges from 3 to 1,300 kg. This enables KUKA to meet the various requirements of its customers optimally. A greater part of robot models are developed and assembled in Augsburg. The control cabinets are produced in two Hungarian plants, in Taksony and Füzesgyarmat. For the Asian market, KUKA produces robots and control cabinets at its Chinese plant in Shanghai. The KUKA Colleges provide technical training courses for customers at more than 30 sites worldwide.

KUKA Robotics is continuously expanding its range of products so as to offer customers from all kinds of sectors the solutions that are appropriate for them and to allow even small and medium enterprises to use robots economically. Research and development has an important role to play here. KUKA's new products and technologies open up additional markets and create new applications for robot-based automation.

KUKA has smoothed the way for human-robot collaboration with the development of the sensitive lightweight robot LBR iiwa. Intelligent safety technologies enable robots to assist human workers in their immediate vicinity. The controller has modular and open interfaces so that robots can easily be integrated into existing, networked production systems. Autonomously navigating robots like the KMR iiwa are another means of increasing the flexibility and efficiency of production.

KUKA Connect, a cloud-based platform, collects and processes the complete information from all networked production devices on a central basis. This knowledge allows users to register error messages in real time, to monitor maintenance activities and condition data, and to produce comprehensive event logs. That minimizes downtimes and service times, therefore saving costs.

### Systems division

The Systems division offers customers complete tailor-made solutions for automating manufacturing processes. It plans, designs and builds automated production systems. The range covers the entire value chain of a system: from individual system components, tools and fixtures to automated production cells and even complete turnkey systems. The division's expertise lies in automating individual production processes such as welding and joining, processing various materials and integrating different production stages to form a fully automatic system.

The Systems division supplies large-scale automated lines principally to the automotive industry for body-in-white production as well as assembling engines and transmissions. Markets in Germany and elsewhere in Europe are served from Augsburg, while the Greater Detroit area in the USA is responsible for the North/South America region and Shanghai in China handles the Asian market. Automated assembly lines and test rigs for engines and transmissions are designed at and supplied from the Systems sites in Bremen, Greater Detroit/USA and Shanghai/China. Systems also operates a production plant for the entire body of Chrysler's Jeep Wrangler (KTPO) in Toledo/USA. As well as the automotive industry, more and more other sectors are coming to rely on the expertise that Systems has acquired over many years in the automation business.

KUKA bundles this expertise of cell business and in-depth process know-how within the KUKA Industries business unit, which forms part of the Systems division. At its sites worldwide, KUKA Industries offers its customers innovative joining and machining technologies, laser welding and special welding processes, as well as all the process steps in the foundry sector and in photovoltaic and battery production. KUKA Industries is an expert in process- and customer-oriented cells and solutions, from the initial idea to production support, for customers in the automotive, consumer goods, energy & storage and electronics industries as well as many other sectors.

## Swisslog division

With its Swisslog division, KUKA is opening up the growth markets of e-commerce/warehouse logistics and healthcare. Based in Buchs/Aarau, Switzerland, Swisslog serves customers in over 50 countries. From planning and design, through to implementation and service over the whole life cycle of the solutions, Swisslog provides integrated systems and services from a single source.

The Healthcare Solutions (HCS) unit provides automation solutions for forward-looking hospitals in order to increase efficiency in a sustained manner and improve patient care. The solutions optimize work procedures in the areas of material transport and medication management. This allows hospital staff more time for looking after their patients. At the same time the probability of errors in medication is reduced.

The Warehouse and Distribution Solutions (WDS) unit implements automation solutions for forward-looking warehouses and distribution centers. With automated intralogistics solutions, Swisslog optimizes warehouse logistics and assists companies to achieve maximum throughput at minimum cost, to handle a large number of stock-keeping units efficiently and to fulfill supply requirements with a high level of accuracy. As a general contractor, WDS offers complete turnkey solutions, employing data-controlled and robot-based automation in particular. Swisslog offers an Industrie 4.0 portfolio comprising the latest intralogistics technologies, innovative software and a variety of matching services covering all aspects of warehouse operation.

## Markets and competitive positions

KUKA operates in a highly dynamic, innovation-driven market environment, which is continuously changing and redefining itself under the influence of digitization.

The automotive sector continues to represent an important factor in KUKA Group's success and accounted for about 50% of total sales revenues during the year under review. This is the market in which KUKA has grown over the past 40 years and become established as a specialist for robot-based automation solutions. KUKA is a market leader in the automotive industry. There are also many opportunities to expand business in sectors outside the automotive industry, i. e. in general industry. For several years the Group has successfully expanded its business in general industry so as to benefit from the growth potential and achieve a greater degree of differentiation in its sales revenues. General industry and the automotive industry contributed about equally to overall sales revenues during the year under review. In 2016, KUKA continued to focus on the strategic market segments of automotive, electronics, consumer goods, metal industry, healthcare, e-commerce and logistics.

KUKA occupies a strong position in the European market. The company also sees growth potential in the expansion of global sites, particularly those in the high-growth countries of Asia. The primary focus here is on the potential of the Chinese market.

KUKA is broadening its presence energetically in China, the biggest growth market for automation. The robots are shipped to the Asian market from the Shanghai production location. According to a forecast from the international robotics association IFR, sales of robot units in China are predicted to increase by an average of 20% per year between 2017 and 2019.

Through intensive research and development, Robotics brings out technologies and products which create new possibilities for the use of robots. Ever more sectors are benefiting from the automation solutions, for example the consumer goods and electronics industries. KUKA Robotics is one of the leading robot manufacturers in the world, and is regarded as the market leader for industrial robotics in Europe.

Systems is a top supplier for body-in-white construction activities in the automotive industry and is market leader in North America. Systems is also expanding into sectors outside the automotive industry. The cell business of KUKA Industries in the Systems division focuses predominantly on the automotive, consumer goods, energy & storage and electronics sectors.

Swisslog supplies customers in more than 50 countries. The Healthcare Solutions division is the market leader in the area of automated materials transport in hospitals (pneumatic tube solutions, automated guided vehicles) and an innovative niche supplier in the automated management of medication (storage, packaging and sorting of drugs). The Warehouse and Distribution Solutions division operates throughout the world and is a leading supplier of intralogistics solutions. As a general contractor, WDS offers complete turnkey solutions, employing data-controlled and robot-based automation.

## Corporate strategy

KUKA operates in a highly dynamic, innovation-driven market environment, which is continuously changing and redefining itself under the influence of digitization. Robot-based automation represents a global trend that is experiencing a tailwind, particularly in Asia.

Industrie 4.0, the digital networking of automated production, is gaining ever more importance. Its aim is to support its customers in the overall optimization of their value added by providing comprehensive automation and digitization know-how. KUKA is therefore supplementing its automation expertise with know-how in cloud-based networking of machines and systems as well as data analytics. For this reason, a team is researching cloud-based big data applications at the US development site in Austin, Texas. An important aspect in the course of digitization is working on new business models. These will fundamentally and permanently transform not only production in the future, but also the value creation process as a whole. A central Industrie 4.0 team is intensively addressing the potential of digitization for the entire KUKA Group.

The “KUKA 2020” program comprising several projects supports the implementation of strategy internally and also pursues the aim of making KUKA’s own corporate structures and employees fit for digitization. For example, the company now features a standard IT architecture following the global harmonization of structures and processes.

KUKA 2020 is also enhancing the corporate culture. Employees communicate via the digital social business platform “Chatter” across all divisions and national borders, and are networked in work groups. This promotes global collaboration.

A new website allows customers and visitors to enter the digital world of KUKA. Via the KUKA marketplace developed during the year under review, customers set out on their own “customer journey”. They are able to become part of the digital KUKA world and procure products and services from KUKA through the Internet. The KUKA marketplace will be rolled out in 2017.

A further strategic focal issue is to safeguard and expand KUKA’s leading position in terms of innovation and technology.

### 1. Expansion of leadership in technology and innovation

KUKA stands for innovations in automation and is a driver of Industrie 4.0. Together with customers and partners, KUKA is developing smart products and solutions for the intelligent factory of the future. The combination of Swisslog logistics solutions with robot-based automation solutions from the other business divisions is of central significance for the Group.

With a new generation of robots that are sensitive and can work hand in hand with humans, KUKA is setting new trends in robotics. Enhanced by mobility and autonomous navigation, robots are being transformed into flexible production assistants. The trend is also towards robots that are simple to program, flexible to deploy and easily integrated and networked. In KUKA Connect, KUKA is placing an innovative product on the market which enables customers from a vast range of sectors to network machines and systems in the cloud digitally. With the help of data-based analysis, customers can track their energy consumption or the maintenance intervals in their own production facilities, for example. This opens up access to new business models for KUKA. With its start-up partner, Connyun, KUKA is planning a platform for partners with the aim of creating an ecosystem for customers and their production environment.

### 2. Diversification of business operations in new markets and regions

KUKA is a market leader in the automotive industry. There are also growth opportunities in markets outside this sector, i. e. in general industry.

The focus markets addressed by KUKA are especially important because their growth and profit potential is high. The degree of automation in these sectors is still relatively low, particularly as compared with the automotive industry. KUKA’s aim is to support its customers in the holistic optimization of their value creation processes by providing automation and digitization expertise. This enables processes to be designed for greater efficiency and flexibility. Additionally, it will optimize resource and energy consumption while raising quality. With various acquisitions and their integration, KUKA has selectively expanded its know-how, making use of it to strengthen its own market position.

In 2016, KUKA further intensified its focus on the following strategic market segments:

#### Automotive

Automotive customers have always been of great importance for KUKA. They are very important drivers of technology and innovation. The German premium brands in particular play a significant role here. The automotive segment currently accounts for about 50 percent of sales revenues. KUKA will continue to grow around the world with its automotive customers and support them as a partner in automation and digitization.

#### Aerospace

KUKA is an all-round supplier for the aerospace sector and covers the entire manufacturing process for customers, for example the riveting of components. KUKA has continuously built up expertise here over many years. After the sale of the aerospace division in the USA, which took place in the context of the Midea takeover, KUKA is now concentrating strongly on Europe and Asia. The goal here is to utilize our existing know-how to push ahead with growth in Europe and Asia.

### Electronics

The 3C market is one of the key markets of the future. The degree of automation is still low, but is rising rapidly. Products for the electronics market are chiefly manufactured manually in Asia, KUKA's global focus market. What is required here are flexible, scalable solutions for the manufacture of high-tech products. After all, customers in this segment are faced with challenges such as rising labor costs, shorter life cycles and higher unit quantities of the products.

### Consumer Goods

For many years, robots have been successfully and efficiently assisting in the production of fast-moving consumer goods (FMCG), i.e. everyday products. Nowadays, they are used predominantly in the food and drinks industry, but also in shoe and textile production as well as in the manufacture of cosmetics or pharmaceuticals. With the increase of individualization, value creation by the consumer goods industry will undergo sharp change. Consumers can design products on the Internet to suit their requirements and have them delivered by express shipment. Flexible, networked production and innovative logistics solutions have an important role to play here. The new generation of robots that are sensitive and mobile, and thus are able to work hand in hand with humans, are opening up new applications along the process chain. Digitization will further strengthen this trend.

### Metal Industry

KUKA can draw on years of experience in the metalworking industry. In arc welding or laser welding, but also in the foundry industry, customers benefit from KUKA's expertise.

### Healthcare

Healthcare is currently facing a major challenge. Demographic changes and a shortfall in healthcare personnel are making modern technologies indispensable in the provision of all-round care for the future. Automation solutions ensure greater efficiency in hospitals and improve work procedures. The workload on nursing staff is thus reduced, enabling them to concentrate more on patient care in the future.

Solutions from Swisslog help modern hospitals and healthcare facilities to optimize work procedures and costs, for example in the areas of efficient material transport and management of medicines, thereby increasing patient wellbeing. KUKA also has a long history of products for the healthcare sector. Mobile and sensitive robots open up entirely new possibilities for assisting patients in the field of healthcare.

### e-commerce

Electronic commerce results in large quantities of varied goods being sent to consumers via goods distribution centers – quantities which in the long term can only be catered for through automation. The e-commerce segment is therefore an important sales market for smart logistics concepts combined with innovative, robot-based automation.

KUKA has a strong position on the European market. The company sees growth potential in the expansion of global sites, particularly those in the high-growth regions of Asia and North America. The primary focus here is on the potential of the Chinese market. According to a forecast of the International Federation of Robotics (IFR), the Chinese market is expected to undergo strong growth in the coming years. Sales of robot units in China are predicted to increase by an average of 20% per year between 2017 and 2019.

China is already the largest growth market worldwide. This is an opportunity which KUKA has been able to grasp during the year under review. KUKA has been represented for many years by several subsidiaries in Asia and has greatly expanded its presence on the Chinese market in recent years. The headquarters for its Asian business are in Shanghai, where a hub bundling various functions was established in 2016.

Midea, the new majority shareholder, supports this strategic approach and is smoothing the way.

## 3. Continuous establishment of sustainable and efficient cost structures

In order to support profitable growth and thereby secure long-term competitiveness, various measures are being implemented in the field of operational excellence.

Power ON is a key initiative which, over the coming years, will optimize and harmonize further procedures, the organizational structure and IT systems and tools throughout the Group. During the year under review, for example, uniform IT systems were introduced in several pilot companies throughout the Group. Alongside a Customer Relationship Management (CRM) system and a global Human Resource Management system, in particular a uniform Group-wide Enterprise Resource Planning (ERP) system including a modern cloud-based procurement platform has been implemented. The program covers KUKA's worldwide operations and encompasses all divisions and core functions.

In addition to this, KUKA is establishing business process management throughout the entire organization as part of the Power ON program. Initially, process coordinators have been nominated at the global level for the respective core, management and support processes. A worldwide hub concept has also been developed and implemented in order to bundle the administrative functions of the individual companies in shared service centers. The hub in China was established during the year under review with the goal of modernizing procedures in Asia, increasing efficiency and supporting growth.

## Financial control system and objectives

The Group's strategy is aimed at sustainably increasing the enterprise value. Various key financial performance indicators are used as part of Group management and to monitor the business performance and position of the Group. KUKA Group's financial targets are key performance indicators (KPIs) that track the enterprise value of the company.



The most important KPIs for KUKA Group are revenues, EBIT, ROCE and free cash flow. The development of these variables is presented in the “Business performance” section starting on page 11 and under “Financial position and performance” from page 14. Earnings before interest and taxes (EBIT) are compared to sales revenues to determine return on sales, which results in the EBIT margin. EBIT is compared to average capital employed to determine the return on capital employed, or ROCE. EBIT and ROCE are determined for KUKA Group and the divisions. Free cash flow – cash flow from operating and investment activities less capital spending – shows whether the investments can be funded from cash flow, and how much cash is available to pay a dividend and service debt.

These key indicators are components of the target and remuneration system in place at KUKA Group and are published. This ensures that all employees share the same goals. See the glossary of the group annual report for definitions of key performance indicators.

Medium term, i.e. between three and five years, the EBIT target margin is at least 12% for the Robotics division and at least 6% for Systems. At Swisslog the target EBIT margin (before purchase price allocation) is to be increased to at least 5%. Currently, the largest share of revenues of over 50% is generated in Europe. KUKA plans to further expand activities in Asia and expects about 30% of revenues to be generated here in the medium term. The ability to reach these targets is largely dependent on the expertise and dedication of our employees. This is why it is essential for KUKA to be an attractive employer globally.

An important early indicator of business performance for mechanical and systems engineering companies is orders received. Order backlog for a certain period is determined by subtracting sales revenues from orders received during that time. Order backlog is a key indicator of the expected utilization of operational capacities in the coming months. Orders received and order backlog are determined for KUKA Group and for the divisions.

All key indicators are continuously tracked and reviewed by KUKA Group’s management companies and its corporate accounting and controlling departments. Management analyzes any deviations from plan and decides on the necessary corrective actions required to achieve the targets.

#### Key performance indicators for KUKA Group over 5-year period

in € millions	2012	2013	2014	2015	2016
Sales revenues	1,739.2	1,774.5	2,095.7	2,965.9	2,948.9
EBIT	109.8	120.4	141.8	135.6	127.2
ROCE (in %)	32.3	36.9	28.9	20.0	16.2
Free cash flow	77.1	95.4	-172.2	95.7	-106.8

## Achievement of targets

In the year under review, 2016, KUKA Group met its financial targets. In its outlook in the 2015 annual report and at the annual results press conference on March 22, 2016, the Executive Board forecast sales revenues for 2016 of more than €3.0 billion and an EBIT margin in excess of 5.5% before purchase price allocation for Swisslog.

Overall demand in 2016 was expected to remain relatively stable. Both customer segments – general industry and automotive – and from a regional viewpoint, China and North America, were expected to make a positive contribution to sales revenue development.

On publication of the results for the first nine months of 2016, the revenue target for 2016 was adjusted to about €3.0 billion. The reason for this was that the improving trend in revenues over the second half-year was not anticipated to be sufficient to offset the declines in the first half-year.

In 2016 the EBIT margin was likely to be affected by growth investments in Group-wide development of solutions for Industrie 4.0, in general industry and in China. In addition, higher costs were expected in connection with the development and launch of new products. The expenditure for purchase price allocation for Swisslog was scheduled to amount to about €10 million in 2016, significantly less than in the previous year.

When reporting the first-half results for 2016, the Executive Board adjusted the target for the EBIT margin on account of the takeover bid from Midea. An EBIT margin of more than 5.5% was still expected before purchase price allocation for Swisslog, but now also before the additional extraordinary expenses of about €30 million related to the takeover.

2016 target values	Sales revenues	EBIT margin
Annual results press conference for the full year 2015	> €3.0 billion	> 5.5% <sup>1</sup>
1 <sup>st</sup> quarter 2016	> €3.0 billion	> 5.5% <sup>1</sup>
2 <sup>nd</sup> quarter 2016	> €3.0 billion	> 5.5% <sup>2</sup>
3 <sup>rd</sup> quarter 2016	~ €3.0 billion	> 5.5% <sup>2</sup>

<sup>1</sup> Before purchase price allocation for Swisslog

<sup>2</sup> Before purchase price allocation for Swisslog and before extraordinary expenses related to the Midea takeover

In the year under review, the target value forecast for sales revenues and adjusted in November was met. The Group achieved sales revenues of €2,948.9 million. This value corresponds approximately to the previous year’s level and lay within the target corridor of around €3.0 billion. In particular the Robotics division succeeded in increasing its sales revenues by 9.2%. For Systems and Swisslog, the results declined.

Adjusted for the exceptional effects arising from the Midea takeover and the effects of the scheduled depreciation on the purchase price allocation for Swisslog, the EBIT margin stood at 5.6%. This met the operational target for 2016.

The Robotics division achieved an EBIT amounting to €100.7 million in 2016, thus matching the previous year's level of €100.2 million. Strong growth in all three customer segments, namely automotive, general industry and service, and also in the regions of Europe, North America and especially China contributed to this positive result.

The EBIT margin in the Systems division declined from 7.8% in 2015 to 6.5%. In 2015 Systems had benefited significantly from book profits arising from the sale of HLS Group and the Tools and Dies business unit.

Swisslog recorded an EBIT margin of 0.8% compared to the 2015 result of -7.4%. Adjusted for the effects of purchase price allocation amounting to €10.8 million, the margin was 2.6%.

In the year under review KUKA achieved a net profit of €86.2 million, virtually equaling that of the previous year (2015: €86.3 million).

Capital expenditure was €99.6 million (2015: €107.0 million). This reflects the continuing high level of investment in research and development to lay the groundwork for future growth. At the same time, investment in tangible assets reduced significantly, due mostly to completion at the beginning of 2016 of the new Development and Technology Center in Augsburg.

Free cash flow in fiscal 2016 was negative, amounting to -€106.8 million, contrary to the set target of a positive double-digit million euro value. In the previous year the free cash flow had still been clearly positive at €95.7 million. This development is primarily due to the marked increase in trade working capital.

For more detailed information, please refer to the "Financial position and performance" section beginning on page 14.

## Research and development

The area of research and development (R&D) is of crucial importance for KUKA as an innovative technology enterprise. That is why KUKA invested in this area once again in the year under review. R&D expenditure amounted to €126.6 million in 2016, higher than the value for the same period of the previous year (2015: €105.4 million).

R & D expenditure is attributable predominantly to the Robotics division and, to an increasing extent, to topics concerning the whole Group. In the year under review, a total of 213 patent applications were filed by Robotics, of which 195 were granted. Swisslog filed 14 patent applications, of which 47 were granted. Systems mainly carries out research and development activities within the framework of customer projects. A total of 42 patent applications were filed and 61 granted here.

In the year under review, KUKA worked on expanding the existing product portfolio to meet the specific requirements of the growth markets on which efforts are being focused – the electronics industry, for example. A further focus was on key technologies for Industrie 4.0, such as human-robot collaboration (HRC), mobility and smart platforms. At the major flagship industrial fairs in Hanover and Munich, KUKA showcased tangible solutions and application examples for networking in the cloud, big data and the smart factory. KUKA demonstrated the added value that customers can gain from the megatrend of digitization and how cloud computing and networking can help increase the efficiency of the company's own production – for example, by reducing service costs.

KUKA's Corporate Research is active on a Group-wide scale and develops technologies for future-proof products and solutions of all the Group companies.

### Robotics division

KUKA Connect enables customers to easily access the data on their KUKA robots at any time and on all devices. The new cloud-based platform collects and processes the complete information from all networked devices on a central basis. This knowledge allows users to register error messages in real time, to monitor maintenance activities and condition data, and to produce comprehensive event logs. Analyzing these data can increase the efficiency of customers' own production operations by enabling them to track energy consumption and service intervals, for example. This minimizes service times, therefore saving costs.

At Hannover Messe, KUKA unveiled the newly developed KR 3 AGILUS that has been specifically tailored to the requirements of the electronics industry, and here in particular to micro-cell concepts in confined spaces. The 3C market (Computer, Communications and Consumer Electronics) is one of the world's largest and fastest-growing markets for robotic automation.. As with the other small robots of the KR AGILUS series, a particular focus is on speed and precision.

With the example of the KR AGILUS Cobotics Concept (CC), KUKA additionally demonstrated how collaboration between humans and robots can also be applied to classic industrial robots. For this, KUKA has equipped the KR AGILUS series with a force/torque sensor in the robot base as part of a concept study. This enables the KR AGILUS CC to detect collisions with humans and perform sensitive tasks. Here, the extreme speed and precision of an industrial robot are combined with the functionality of HRC. The user can carry out a teaching process by manually guiding the KR AGILUS CC in HRC mode. The small robot executes the application at production velocity in automatic mode within the enclosed area.

Using the KUKA Sunrise.Workbench engineering suite, graphical programming of the sensitive LBR iiwa is now really easy – even without programming knowledge. Users subsequently have the opportunity, as usual, to intuitively teach the target points by simple demonstration and to optimize the parameters of the blocks. Immediately afterwards, the LBR iiwa executes the application as desired by the users.

An autonomously navigating AGV with a payload capacity of 1500 kg, the KMP 1500, has also been equipped with a Sunrise controller. A prototype of this vehicle was presented at Hannover Messe and Automatica and was being tested by various customers in trials and pilot applications. The KMP 1500 provides the basis for logistics automation in the automotive segment and in other industries and can be equipped with different industrial robots for mobile robotic applications. KMR iiwa is a Sunrise-controlled, HRC-compliant mobile robot that carries out complex manipulation tasks in varying locations without the need for safety fencing.

At the Computer Assisted Radiology and Surgery (CARS) research congress, KUKA showcased the “Haptic Ultrasound” application. The robotic ultrasound application with the LBR iiwa sensitive lightweight robot demonstrated the possibilities that HRC opens up in the field of medical technology. The robot arm is fitted with an ultrasound sensor and executes exactly those motions specified by the user in a haptic input system. The sensor then generates images in real time, which are transferred to the monitors via a USB interface. The separation of controller and robot allows the patient and doctor to be in different places.

### Systems division

The concept of versatile body-in-white production was developed further. The “Matrix bodyshop” concept enables the individual process steps to be executed in standardized cells with automated guided vehicles (AGVs) performing the logistics operations. In the period under review, a test cell was set up to validate all the technologies required in order to realize the concept. This test cell provides customers with an opportunity to watch a live demonstration of the technical implementation of this innovative solution. The test set-up involves a standard production cell as well as a small warehouse with all relevant parts, and a tool store. It is equipped with various AGVs so that all the functionalities of a real production system are illustrated.

In addition to the flexFELLOW a comprehensive ecosystem was planned for the LBR iiwa with which KUKA provides customers with the fullest possible set of highly compatible elements from which they are able to build their individual solution. Based on the flexFELLOW, a mobile robotic unit with the LBR iiwa, solution modules were developed that enable the user to automate certain tasks within a short time and without the need for major programming. In the period under review, initial elements and products of this planning were developed, for example the pneumatic HRC gripper and a safe electric gripper. Prototype-status grippers are being tried out by various test customers.

### KUKA Industries

KUKA Industries presented the new “KUKA flexibleCUBE laser” compact welding cell at Lasys 2016, the international trade fair for laser material processing. With its plug & play solution, the laser cell is user-friendly and its compact design enables flexible implementation. It is ideal for a dynamic production environment and can be upgraded, converted or relocated very quickly. The special features of the laser cube are the stationary optics for laser cladding and the robot that takes over workpiece handling tasks inside the cell.

KUKA Industries revealed the future of production at Hannover Messe and Automatica with the Coffee 4.0 application. Based on an easy-to-follow example taken from everyday life – coffee beverages in all variations – a production system fully networked via the cloud was presented, demonstrating all the important aspects of Industrie 4.0.

### Swisslog division

Among the new products presented last year by Swisslog Warehouse and Distribution Solutions (WDS) are the highly dynamic CycloneCarrier warehouse shuttle system for small parts and the PowerStore shuttle technology for pallets. Shortly after its launch, CycloneCarrier was already sold to the first customer, the German organic food producer, Alnatura.

One software innovation from Swisslog is the SynQ – Synchronized Intelligence – control solution, a warehouse management system geared to meeting the high requirements of digitization and the successor to the WM-6 in-house software platform. SynQ is to be launched on the market at the start of the international logistics trade fair, LogiMAT 2017. This cloud-based platform offers all the essential functionalities of a warehouse management system, supplemented by numerous useful applications for integrative warehouse management that can be used on all end devices – whether mobile or in the workplace. Expanded services such as Condition Monitoring, permanent computer-controlled monitoring of material flows in real time and 3D visualization round off the activities of Swisslog in the IT sector. They lay the foundation for a future in which the optimized operation of machinery and data-driven warehouse automation will play a central role.

### Corporate research

KUKA presented innovative Group research projects at ICRA (International Conference on Robotics and Automation), the world’s largest robotics conference held in Stockholm. Taking the KR AGILUS as an example, a new type of energy-efficient path planning was demonstrated that can achieve savings of up to 30 percent depending on the specific task. The important value of peak demand for energy supply can even be reduced by up to 60 percent. KUKA is developing technologies for the energy-efficient operation of robots as part of the AREUS project. In another application, KUKA demonstrated machine learning with a smart KUKA LBR iiwa lightweight robot.

### Awards for KUKA products and solutions

The human-robot order-picking solution “Automated Item Pick (AIP)” from Swisslog was honored with the Industry Award 2016 at Hannover Messe. With the slogan “Success through progress”, AIP managed to win through as the most innovative solution with the greatest benefits for the economy and society in the category “Intralogistics & Production Management”. At the end of 2016, Swisslog also received the award “Líderes da Saúde 2016” in the category “Suprimentos e Logística” in Brazil, and the Coca Cola Excellent Supplier Award in China. The Logistics & Material Handling magazine also honored Swisslog and the CycloneCarrier with two awards, while the CarryPick took the Logistics Technology Award 2016.

At the Volvo Asia-Pacific Annual Supplier Convention at the end of last year, KUKA Systems China received the Volvo Innovation Award for outstanding achievements. Various KUKA products also won designer awards last year. For example, the KR 120 R2100 nano F exclusive (Foundry) gained several awards, including the iF Award, the Red Dot Design Award, the Good Design Award USA and the International Design Excellence Award USA. The KMR iiwa proved successful with the German Design Award in the category of Special Mention 2016/17.

## Procurement

The advanced integration of Swisslog enabled savings and improved supply conditions to be achieved with joint suppliers of the KUKA companies in 2016 too. Savings effects were attained in indirect purchasing by combining volumes and suppliers. To this end, all KUKA companies launched a project in the previous year with the objective of facilitating close cooperation in the future procurement of these materials and services.

### Procurement at Robotics

The favorable raw material prices enabled Robotics to achieve purchasing savings in the double-digit million euro range in the year under review. There was also a significant increase in localization in China and the supplier base was expanded considerably.

### Procurement at Systems

The procurement volume of the Systems division increased by 30% in the year under review. This was achieved, inter alia, through an increase in turnkey contracts. KUKA Systems thus reached an all-time high. The analysis and fine-tuning of the purchasing interfaces and processes in 2015 as part of an optimization project resulted in a new purchasing organization which showed initial successes: greater strategic cooperation, a more proactive approach and a strengthening of front loading. Additional savings in the mid-single-digit million euro range were achieved in conjunction with the interface partners.

The negotiating skills of the teams were enhanced with appropriate training sessions. The collaboration with strategic purchasers in the HUBs helped to enhance joint global procurement successes. Strategic partnerships with suppliers were also identified within the scope of Industrie 4.0 projects.

### Procurement at Swisslog

Existing framework agreements with key suppliers were transferred to KUKA Group in the year under review. This enabled further savings to be achieved and improved supply conditions to be negotiated.

The Swisslog production site of Warehouse and Distribution Solutions (WDS) in Kunshan/China was transferred to the KUKA Industries sites in Kunshan (Asian production volume of the ProMove pallet conveyor system) and Chomutov/Czech Republic (European production volume of ProMove) at the turn of the year 2016/2017. The WDS site in Austria (entire production line of CycloneCarrier) was also transferred to KUKA Industries in Chomutov. This meant that production and the associated procurement was handled in conjunction with KUKA Industries in the year under review.

The savings targets formulated in the previous year for the project business of the WDS division were accomplished. Material cost improvements were also made in procurement at the production sites of both divisions – WDS and Healthcare Solutions (HCS). The main drivers of these developments were design-to-cost initiatives combined with tenders and reallocations along with a reduction in the vertical range of manufacture and therefore the purchasing of pre-assembled units. Significant cost improvements were also made in conjunction with KUKA in the field of indirect materials as a result of pooling and reallocations: this related, for example, to the procurement of business vehicles and cell phones in Germany and the courier, express and parcel service (CEP) in four European countries.

## Economic report

### Macroeconomic and industry conditions

#### IMF forecasts economic growth of 3.4% – USA and China are drivers of this trend

According to the International Monetary Fund (IMF), global economic growth amounted to 3.1% in the past financial year. Growth of 3.4% is expected for the coming year and even 3.6% in 2018. This means an increase of 0.3 percentage points for 2017 compared to the previous year. The IMF considers the USA and China to be the drivers behind these developments. The reasons for this are that the new US government has announced tax cuts for companies and investments in infrastructure which have a positive impact on the economy. Growth of 2.3% is expected for 2017 and 2.5% for 2018. In the forecast, reference is also made to growing protectionism as a consequence of the US government's policies, which will mainly have an effect on economically weaker countries such as Mexico, India and Brazil.

According to the IMF, China continues to be one of the largest motors for growth of the global economy. However, compared to previous years, growth rates have continued to decline. The IMF forecasts a slowdown in growth from 6.7% to 6.5% in 2017 and 6.0% in 2018. The IMF economists adjusted the anticipated growth for Europe to 1.7% in 2016. Economic growth totaling 1.6% is anticipated for this region in 2017. They also forecast a decline in growth from 2.0% to 1.5% for the United Kingdom. The reason for this is the United Kingdom's exit from the European Union, which results in the British currency being devalued and a negative impact on real income. The growth forecast for Germany was reduced in October from 1.7% to 1.5%. In order to promote global growth, the IMF demands more political impetus such as labor market reforms and the dismantling of trade barriers.

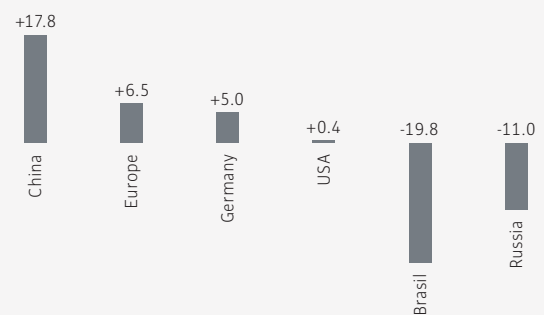
The Business Climate Index of the Institute of Economic Research (ifo) is regarded as an early indicator of economic development in Germany. The ifo index reached its highest level since April 2014 last October at 110.5 points, climbing to 111.0 points by the end of the year before dropping to 109.8 points at the end of January. Companies are therefore less optimistic about the future business performance over the course of the next six months.

#### Significant sales growth in the automotive markets of Germany and China

According to the German Automotive Industry Association (VDA), there were just under 3.4 million new registrations in Germany in 2016. This corresponds to an increase of 5.0% and resulted in the highest market volume of this decade. 5.7 million new cars were manufactured in Germany during the year under review. This is equivalent to an increase of 1% compared to production of the previous year. Domestic orders received were down slightly at 1% below the value of the previous year, while orders from abroad increased by just under 3%. Exports amounted to 4.4 million passenger cars and remained unchanged compared to the previous year.

The USA recorded a slight increase of 0.4% in sales of light vehicles (passenger cars and light trucks) in 2016. Car sales in China increased by almost 18% to 23.7 million units. Trends on the Russian (-11.0%) and Brazilian (-19.8%) markets were negative. According to VDA, the markets in Western Europe grew. The number of new registrations rose by 5.8% to nearly 14 million cars. Almost all Western European countries reported a rise: Italy by 16%, Spain by 11% and France and Germany by 5%.

2016 car sales by region/country  
Change year-on-year in %



Source: VDA, January 2017

#### Mechanical and systems engineering in slight decline

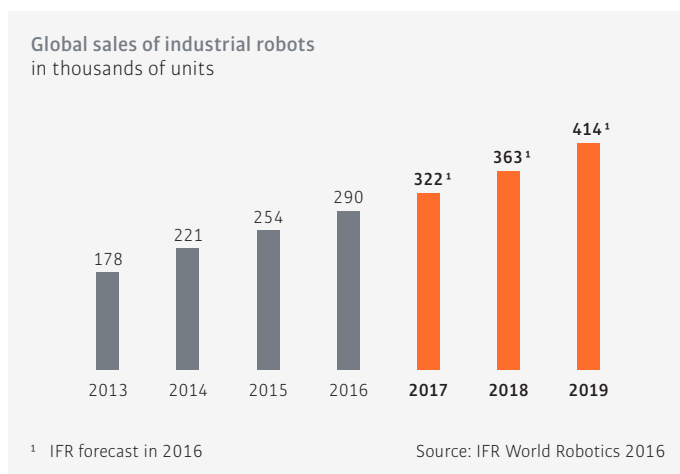
According to the German Engineering Association (VDMA), the mechanical and systems engineering sector recorded a decrease of -2% in orders received during the 2016 fiscal year compared to the previous year. There was a decline in demand both domestically and abroad. This was attributable to the political uncertainties worldwide and the moderate economic outlook for 2016. The VDMA is predicting a rise of 1.0% in German machinery production for the 2017 fiscal year. According to the VDMA, orders received in the robotics and automation sectors increased by 6%, while sales revenues rose by 2% compared to the previous year.

## Growth potential in robotics and automation through Industrie 4.0

In 2016, the global trend towards robot-based automation of production processes continued. Research and development is placing pioneering technologies and products on the market, leading to new fields of application. Numerous process steps can now be automated where until recently it was hard to imagine robots could be used. Automation enables companies from different industries and small and medium-sized enterprises to make their production more efficient. The focus is on connecting the real and virtual production worlds in the context of Industrie 4.0, as well as on safe collaboration between humans and robots, and on mobile robotics. The safety factor, intuitive operation and solutions for networked digital production are playing an important role. From a regional perspective, China offers huge sales potential as the largest growth market for robotics. The reasons for this are rising labor costs, growing quality requirements and the focus on increasing efficiency and the previously low robot density.

As the global industry association, the International Federation of Robotics (IFR) estimated worldwide sales of 290,000 industrial robots for 2016. This was an increase of 14% on the previous year (250,000 units). In Asia, IFR was anticipating 190,000 industrial robots sold in 2016, of which 90,000 are accounted for by China alone. This was a rise of 15% in Asia (including Australia) and even an increase of 22% in China. For 2017 to 2019, the IFR forecasts annual average growth of 13%, and around 20% in China. At the end of 2019 about 2.6 million industrial robots are expected to be deployed in factories worldwide, with an estimated 730,000 units used in China.

According to forecasts, this trend will continue in all major sales markets for robots in Asia. The automotive industry and, above all, the electronics industry are considered to be the largest growth drivers for robotics in Asia. Broken down by industry, IFR states that approximately 70 percent of industrial robots are currently used worldwide in the automotive, electronics and metal segments. The greatest increase in the number of operational units in 2015 was in the electronics industry with 18 percent.



## Business performance

### Orders received

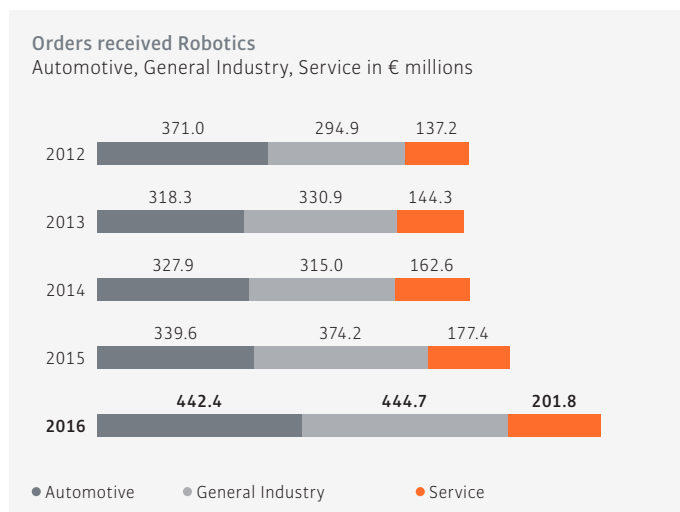
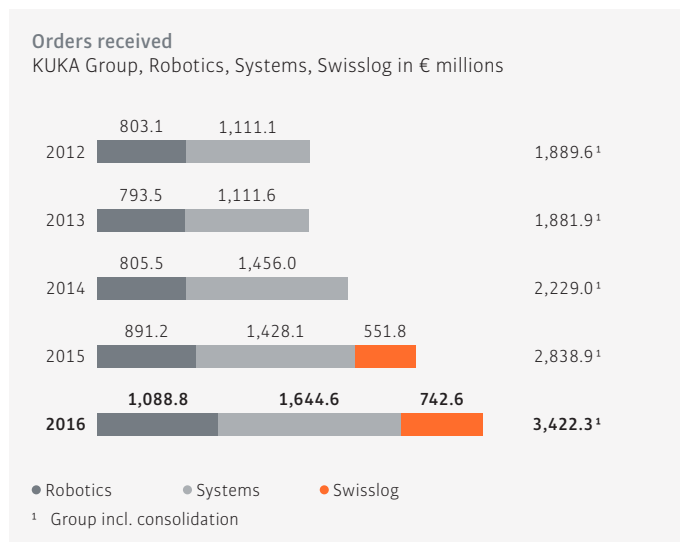
During the past financial year KUKA Group received orders amounting to €3,422.3 million; this was 20.6% higher than the value for the previous year (2015: €2,838.9 million). This record value surpassed the three billion euro mark for the first time. All three business divisions contributed to this good result.

In the year under review, **KUKA Robotics** once again increased the volume of orders received from €891.2 million to €1,088.8 million. This good result was attributable to strong demand in all three customer segments: automotive, general industry and service. From a regional perspective, the increase was particularly strong in Europe, China and North America. China deserves special mention, accounting for about 21% of Robotics sales of robots and services during the past financial year. Compared with 2015 this represents an absolute increase of 37%. In 2016 the orders received from the automotive industry amounted to €442.4 million (2015: €339.6 million). In general industry too, orders received were significantly higher than the previous year, at €444.7 million (2015: €374.2 million). This was a gain of 18.8%. These were mainly smaller orders which tended to offer higher margins and to come from different sectors. Further expansion in the general industry segment is one of the main strategic objectives of the Robotics division. This is being driven by a broadening of the product portfolio and an increase in the workforce. Service business generated €201.8 million, representing a gain of 13.8% on the value of €177.4 million for the previous year. This increase was due to the greater number of installed KUKA robots.

**KUKA Systems** also benefited from the very good order situation, and posted orders received amounting to €1,644.6 million for the financial year (2015: €1,428.1 million). The automotive division supported this trend and was able to provide a positive impetus with several large-scale orders. Strong demand continued in North America. Orders from leading automobile manufacturers were also received from other regions such as Germany and China. As in the previous year, the other Systems segments Assembly & Test, Pay on Production and KUKA Industries also contributed to the positive trend.



**Swisslog** won orders totaling €742.6 million during the past financial year (2015: €551.8 million), thereby establishing a new record. Almost 75% of the orders received were generated by the Warehouse and Distribution Solutions (WDS) division and about 25% by the Healthcare Solutions (HCS) division. WDS benefited from the high rates of growth in the e-commerce segment and the relatively low degree of automation in logistics warehouses. The orders received improved accordingly by more than 60%. HCS was affected by weaker demand, especially in Asia and parts of Europe, which the virtually stable trend in the USA could not offset. Orders received dropped by around 10%.



## Sales revenues

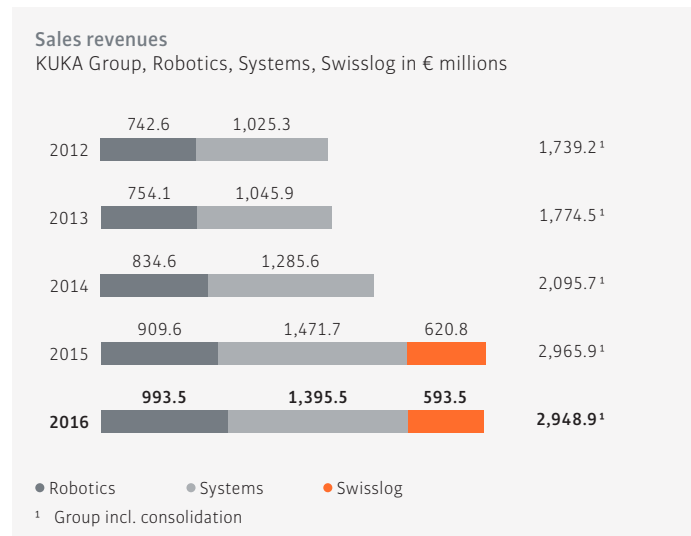
The sales revenues of KUKA Group reached a value of €2,948.9 million in 2016 and were thus at almost the same level as the previous year, when they amounted to €2,965.9 million.

**Robotics** was again able to increase its sales revenues to €993.5 million. Compared to the previous year, revenues rose by 9.2% (2015: €909.6 million). This means that KUKA Robotics has reported an increase in revenues for seven successive years. The average annual growth rate since 2011 has been about 9%. Sales figures in China have led to very high capacity utilization, with the result that the KUKA management has decided to expand production capacities in China.

**Systems** achieved sales revenues amounting to €1,395.5 million in 2016. This represents a decline of 5.2% on the previous year (2015: €1,471.7 million). One reason for this is that call-offs on orders will predominantly be made in subsequent quarters. Major orders in the Systems division are often characterized by a lapse of more than nine months between winning a contract and realizing the corresponding revenue. This can result in a different pattern of sales revenues compared to orders received.

Furthermore the revenues of HLS Group and the Tools and Dies business unit sold in 2015 were still included in the previous year.

The **Swisslog** division generated sales revenues totaling €593.5 million. This represents a decline of 4.4% from €620.8 million in 2015.



## Book-to-bill ratio and order backlog

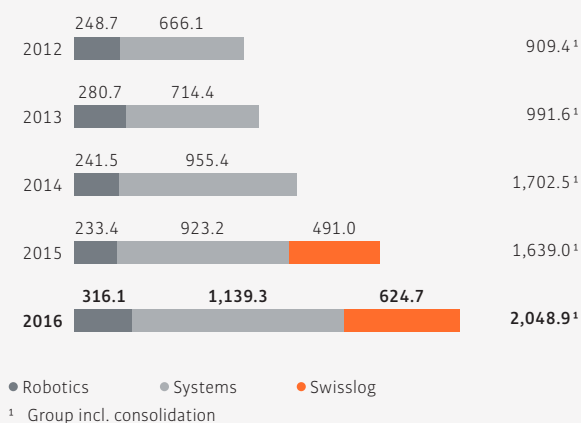
The book-to-bill ratio, in other words the ratio of orders received to sales revenues, came in at 1.16 at Group level (2015: 0.96). Values of about 1 represent good capacity utilization and values above 1 signify an increased volume of business. In 2016, all three business divisions achieved outstanding figures in this respect: Robotics 1.10 (2015: 0.98), Systems 1.18 (2015: 0.97) and Swisslog 1.25 (2015: 0.89).

KUKA Group's order backlog amounted to €2,048.9 million at year-end 2016. This was an increase of 25.0% compared to the previous year-end (2015: €1,639.0 million). The persistently high order backlog represents around two thirds of annual sales revenues and will thus ensure good capacity utilization during fiscal 2017 and to some extent already for 2018 as well. Robotics had an end-of-year order backlog (not including framework agreements from the automotive industry) of €316.1 million (2015: €233.4 million). The order backlog at KUKA Systems reached a year-end level of €1,139.3 million, a substantial increase on the prior-year figure of €923.2 million. Swisslog had an order backlog of €624.7 million at the end of the year (2015: €491.0 million).

in € millions	2015			2016		
	Orders received	Sales revenues	Book-to-bill ratio	Orders received	Sales revenues	Book-to-bill ratio
Group	2,838.9	2,965.9	0.96	3,422.3	2,948.9	1.16
Robotics	891.2	909.6	0.98	1,088.8	993.5	1.10
Systems	1,428.1	1,471.7	0.97	1,644.6	1,395.5	1.18
Swisslog	551.8	620.8	0.89	742.6	593.5	1.25

### Order backlog (Dec. 31)

KUKA Group, Robotics, Systems, Swisslog in € millions



## EBITDA and EBIT

EBITDA, namely earnings before interest, taxes, depreciation and amortization, totaled €205.3 million, after €259.1 million in the previous year. The EBITDA margin in 2016 was thus 7.0%, having been 8.7% in 2015.

Before depreciation on the purchase price allocation for Swisslog and before extraordinary expenses for the Midea takeover, EBIT stood at €166.0 million in 2016. This corresponds to an EBIT margin of 5.6%. In 2015 EBIT before depreciation on the purchase price allocation for Swisslog and before extraordinary income from the disposals of HLS Group and the Tools and Dies business unit was €181.7 million. This corresponded to a margin of 6.1%. These figures should however be viewed in the context of the additional investments in preparation for future growth undertaken by KUKA in 2016 in the fields of Industrie 4.0 and software. The area of research and development alone benefited by more than €20 million from this commitment to growth.

Taking into account all the expenditure in 2015 and 2016, KUKA achieved an EBIT of €127.2 million (margin: 4.3%) in the past financial year, compared to €135.6 million (margin: 4.6%) in the preceding year. In 2016 the exceptional expenses relating to the Midea takeover and depreciation on the purchase price allocation for Swisslog amounted to €28.0 million and €10.8 million respectively.

**Robotics** recorded an EBIT of €100.7 million in 2016, a slight increase from €100.2 million in 2015. This was a year-on-year rise of 0.5%. The EBIT margin at 10.1% was however lower than for the previous year (2015: 11.0%). The principal reason for the lower margin was the significant increase in R&D expenditure, which outweighed the effects of scale and higher sales revenues in the general industry and service segments.

**Systems** posted an EBIT of €91.3 million for the past financial year. Compared to the prior-year value of €114.7 million, this represented a decline of 20.4% in the EBIT. The EBIT margin trend was negative from 7.8% to 6.5%. In 2015 Systems benefited especially from book profits arising from the sale of HLS Group and the Tools and Dies business unit.

**Swisslog** achieved an EBIT of €4.8 million in fiscal 2016, having posted a negative EBIT of -€45.9 million in the previous year. This resulted in a positive EBIT margin of 0.8% in 2016, after a figure of -7.4% in 2015. Before the depreciation on the purchase price allocation, the EBIT in 2016 was €15.6 million (margin: 2.6%) after €20.9 million in 2015 (margin: 2.1% or, adjusted, 3.4%).



## Financial position and performance

### Summary

2016 was another successful year for KUKA Group. The revenue target of around €3 billion was achieved. The strong order situation over a number of years points to further growth. The Robotics division received new orders worth of over €1.1 billion for the first time.

The Swisslog division made its first positive contribution to EBIT in 2016 including the negative effects of the purchase price allocation. The Robotics division achieved an absolute increase in EBIT, thereby surpassing the previous year's record level. These two developments thus compensated for the decrease in EBIT in the Systems division. Overall EBIT was significantly impacted by one-off expenses in connection with the Midea Group takeover bid. Excluding these charges of €28.0 million, EBIT would have risen from €135.6 million to €155.2 million. Fiscal 2016 can therefore be regarded as a positive year on the whole for KUKA Group.

### Earnings

KUKA Group posted orders received amounting to €3,422.3 million in the year under review – a significant increase over the prior year's level (2015: €2,838.9 million), thus once again exceeding all previous figures.

### Sales revenues remain high

Sales revenues totaled €2,948.9 million. They are thus at approximately the previous year's level. The target of around €3.0 billion has thus been achieved.

Since 2009, the Robotics division has reported annual increases in sales revenues and this trend continued in 2016. It was possible to achieve a further 9.2% increase on the very high level of the previous year from €909.6 million to €993.5 million. The division's revenues are therefore now just under the billion mark. KUKA fosters this trend by, for instance, systematically focusing sales on particular customer-oriented market segments and intensifying its service business. Measures such as developing products which are specifically aimed at certain geographical markets or customer groups are proving successful. Orders received and sales revenues in the three segments – automotive, general industry and services – rose in comparison with the previous year and now total €1,088.8 million (2015: €891.2 million) and €993.5 million (2015: €909.6 million) respectively.

Over the past financial year the Systems division was not able to fully match the success enjoyed in the previous year. With sales revenues of €1,395.5 million, the segment was 5.2% down on the previous year (2015: €1,471.7 million). However at this juncture it should be noted that Systems has an extremely positive order situation with new orders of €1,644.6 million (2015: €1,428.1 million) and an order backlog of €1,139.3 million (2015: €923.2 million), a new record for the division. The order backlog is thus theoretically equivalent to about 81.6% (2015: about 62.7%) of annual revenues and allows a high level of capacity utilization to be anticipated for 2017 as well.

### Key figures KUKA Group

in € millions	2012	2013	2014	2015	2016
Orders received	1,889.6	1,881.9	2,229.0	2,838.9	3,422.3
Order backlog	909.4	991.6	1,702.5	1,639.0	2,048.9
Sales revenues	1,739.2	1,774.5	2,095.7	2,965.9	2,948.9
EBIT	109.8	120.4	141.8	135.6	127.2
in % of revenues	6.3	6.8	6.8	4.6	4.3
in % of Capital Employed (ROCE)	32.3	36.9	28.8	20.0	16.2
Special items <sup>1</sup>	–	–	–	–	28.0
EBIT adjusted <sup>1</sup>	109.8	120.4	141.8	135.6	155.2
EBIT adjusted <sup>1</sup> in % of revenues	6.3	6.8	6.8	4.6	5.3
EBIT adjusted <sup>1</sup> in % of capital employed (ROCE)	32.3	36.9	28.8	20.0	19.8
EBITDA	138.5	158.4	185.3	259.1	205.3
in % of revenues	8.0	8.9	8.9	8.7	7.0
Special item <sup>1</sup>	–	–	–	–	28.0
EBITDA adjusted <sup>1</sup>	138.5	158.4	185.3	259.1	233.3
EBITDA adjusted <sup>1</sup> in % of revenues	8.0	8.9	8.9	8.7	7.9
(Average) capital employed	339.8	326.2	492.0	676.8	783.0
Employees <sup>2</sup> (Dec. 31)	7,264	7,990	12,102	12,300	13,188

<sup>1</sup> One-off effect due to the takeover bid by Midea Group

<sup>2</sup> Figures for employees are based on the full-time equivalent throughout the annual report.

The Swisslog division achieved revenues amounting to €593.5 million (2015: €620.8 million), with about two thirds in Warehouse & Distribution Solutions and one third in Healthcare Solutions.

Gross earnings from sales increased 9.8% on the previous year to €766.5 million (2015: €698.0 million). The decline in the cost of sales in particular, due in part to an improved cost-of-materials ratio and foreign currency effects pertaining to supplies and services, contributed to this improved result. The considerably lower purchase price allocation charges for Swisslog are also of relevance here. The Group's gross margin thus rose from 23.5% in 2015 to 26.0% in 2016.

The main contribution to the rise in the gross margin was made by the Swisslog division. With gross earnings from sales of €159.6 million (2015: €97.7 million), a margin of 26.9% was achieved.

The gross margin in the Robotics division decreased slightly from 38.0% in the previous year to 37.0% in 2016 with gross earnings of €345.8 million in 2015 and €367.5 million in 2016. Despite lower sales revenues the Systems division achieved a slight rise in the gross margin from 17.2% in 2015 to 17.4% in 2016 with gross earnings of €242.4 million in 2016 (2015: €253.7 million).

The key figures for the individual divisions were as follows:

#### Key figures – Robotics

in € millions	2012	2013	2014	2015	2016
Orders received	803.1	793.5	805.5	891.2	1,088.8
Order backlog	248.7	280.7	241.5	233.4	316.1
Sales revenues	742.6	754.1	834.6	909.6	993.5
EBIT	80.2	77.1	88.9	100.2	100.7
in % of revenues	10.8	10.2	10.7	11.0	10.1
in % of Capital Employed (ROCE)	57.2	49.6	53.1	56.6	51.7
EBITDA	95.9	101.9	112.0	126.1	123.2
in % of revenues	12.9	13.5	13.4	13.9	12.4
Capital employed	140.2	155.6	167.3	177.1	194.9
Employees (Dec. 31)	3,180	3,416	3,644	4,232	4,726

#### Key figures – Systems

in € millions	2012	2013	2014	2015	2016
Orders received	1,115.1	1,111.6	1,456.0	1,428.1	1,644.6
Order backlog	666.1	714.4	955.4	923.2	1,139.3
Sales revenues	1,025.3	1,045.9	1,285.6	1,471.7	1,395.5
EBIT	47.7	60.8	80.2	114.7	91.3
in % of revenues	4.7	5.8	6.2	7.8	6.5
in % of Capital Employed (ROCE)	23.8	43.0	67.9	87.9	42.8
EBITDA	57.8	71.0	97.4	135.6	113.5
in % of revenues	5.6	6.8	7.6	9.2	8.1
Capital employed	200.5	141.5	118.1	130.5	213.1
Employees (Dec. 31)	3,902	4,362	5,810	5,146	5,189

#### Key figures – Swisslog

in € millions	2014 <sup>1</sup>	2015	2016
Orders received	–	551.8	742.6
Order backlog	517.2	491.0	624.7
Sales revenues	–	620.8	593.5
EBIT	–	-45.9	4.8
in % of revenues	–	-7.4	0.8
in % of Capital Employed (ROCE)	–	-14.5	1.5
EBITDA	–	24.5	28.2
in % of revenues	–	3.9	4.8
Capital employed	154.6	315.9	317.4
Employees (Dec. 31)	2,369	2,555	2,679

<sup>1</sup> Swisslog was consolidated for the first time as of December 31, 2014.

KUKA Group's functional costs – the costs of administration and sales as well as research and development – rose year-on-year from €569.7 million in 2015 to €622.7 million in 2016. These overhead costs amounted to 21.1% of sales revenues, which was higher than the previous year's level of 19.2%. If the one-off expenses in connection with the Midea Group takeover bid are taken into account, the share amounts to just 20.2%.

The increase in selling expenses (2015: €251.2 million; 2016: €267.9 million) was partly attributable to the strengthening of the sales team. KUKA had 1,560 sales employees as at December 31, 2016, 11.9% more than at the previous year-end, when the number was 1,394. This expansion is an important foundation for increasing market penetration and tapping new markets. Another step towards this goal is optimization of the communication culture between KUKA and its customers and partners. Cooperation with Salesforce enables KUKA to achieve much closer interaction of customers and partners with sales, service and marketing employees along the entire value chain. The selling expenses ratio amounted to 9.1% (2015: 8.5%).

A rise of €15.1 million in administrative expenses was recorded. In fiscal 2016 this was mostly attributable to one-off effects from the takeover bid of June 16, 2016 by Midea Group (for further details, please refer to the “KUKA on the capital market” section). Considerable unplanned consultancy expenses arose in relation to the takeover bid as well as additional personnel costs for the existing phantom share programs for members of the Executive Board and senior management. Overall, the one-off effects currently amount to around €28.0 million. These are presented in the segment report under reconciliation and consolidation.

The remainder of the increase is attributable to cross-segment measures aimed at optimally focusing KUKA Group on the requirements of existing and future markets. These measures are being implemented in ongoing internal projects relating to the harmonization, standardization and optimization of processes as well as the introduction of global IT platforms. They initially lead to higher external and internal expenditure, which is reflected in increased administrative costs.

It has been and remains important for KUKA as a technology company to provide its employees with a modern environment and the freedom to pursue groundbreaking research & development activities. Progress towards this goal was also marked by the construction of the new Development and Technology Center (DTC) at the Augsburg site. After a construction period of around 2 years, the new building was officially inaugurated in July 2016 with around 200 guests from business and politics. As well as room for around 850 staff, the new building houses an impressive showroom and the KUKA College, where between 6,000 and 7,000 customer employees are to undergo training each year.

Research and development costs carried in the income statement rose to €126.6 million in 2016, up €21.2 million on the prior year's figure of €105.4 million.

This planned increase reflects the sustained strategic orientation of the Group based on the expansion of investment in products and solutions as well as in new and forward-looking technologies. Examples of this are the three ongoing innovative projects presented at the ICRA (International Conference on Robotics and Automation, Sweden) in May 2016:

- › In Project AREUS, KUKA and its partners are developing technologies for the energy-efficient operation of robots
- › Machine learning via algorithms and the use of 3D cameras on the smart KUKA LBR iiwa lightweight robot, e.g. for automatic sorting after a short training phase
- › Concept study “youBot in a box”: options for simple programming in Java (the programming standard for KUKA industrial robots) via KUKA Sunrise.Workbench on the user's own PC to control a five-axis robot arm with a two-finger gripper connected to the PC by means of an Ethernet cable.

Another key focus of current projects is the development of industrial robots in the 3 kg range for cells of limited size. The new compact KR 3 AGILUS was presented to the wider public at Automatica 2016 with great success as an ideal solution for small cell concepts and for assembling and handling extremely small parts.

In cooperation with system partners, KUKA is also developing solutions to meet the growing needs for flexibility and ever shorter product life cycles. In October 2016 at the K trade fair for plastics in Düsseldorf, KUKA showcased a “ready-to-use” application as an application-oriented automation solution.

In the Systems (Industries) division, LaserSpy, an optical sensor designed to monitor safety in laser processing, offers safe protection from misdirected laser beams. Through efficient further development, the radius of the sensor range for monitoring has been increased from 2.5 to 3.5 meters. This makes laser cells even safer and offers significantly improved and more cost-effective design possibilities in cell construction (for example, the use of elements with large surface areas).

In the Swisslog segment the focus of development in the Healthcare division is on upgrading the enterprise-wide software used to control and monitor the flow of materials and the administration of medication, incorporating the various Swisslog solution components. Also the existing solution components are being developed further, particularly in the hospital pharmacy area.

In industrial warehouse automation a new shuttle system (“Cyclone Carrier”) has been developed and investments have been made in palletizing solutions (“Automated Case Picking” and “Automated Item Picking”); these solutions enable Swisslog customers to achieve greater gains in efficiency in the automation of their warehouses.

Please refer to the research and development section of this management report for further examples and information.

With the aim of actively addressing the opportunities offered by Industrie 4.0 and retaining our technological leadership in the field of robot-based automation solutions in the future as well, KUKA is pursuing a number of strategies. Firstly, KUKA has been investing in brain power for many years: the Group now employs 906 people in research and development – this is equivalent to 7.0% of the workforce (2015: 5.9%).

Development work is also increasingly being conducted outside Europe in order to cater even better for regionally specific market requirements. Furthermore, KUKA is intensifying its cooperation with innovative companies and taking an active role in partnerships. For example, KUKA entered into an “Industrie 4.0 partnership” with Infosys at Hannover Messe in April 2016. One of the objectives of the cooperation is to develop a software platform which will enable customers to collect, evaluate and use data in order to improve their own processes. The founding of the company conyunn GmbH in April 2016 is also worthy of mention. This company develops app-based applications which are controlled via cloud platforms. With these tools customers are able to evaluate the data they have collected on production and logistics processes and use them to improve the efficiency of their processes.

The costs of €20.1 million (2015: €18.9 million) incurred for new developments in the period under review were capitalized and will be reported as an expense through scheduled amortization in subsequent financial statements. Amortization costs were €8.3 million (2015: €16.6 million) and mainly included research and development costs.

Net other expenses and income amounted to -€11.6 million compared with €8.2 million in 2015. They include expenses for other taxes (2016: €6.8 million; 2015: €5.9 million), income from subsidies (2016: 1.9 million; 2015: €2.0 million).

#### EBIT margin exceeds guidance<sup>1</sup>

Earnings before interest and taxes (EBIT) totaled €127.2 million over the past financial year compared with €135.6 million in 2015. The EBIT margin for the 2016 reporting period decreased to 4.3% compared to the figure of 4.6% for the previous year. The above-mentioned one-off effects amounting to €28.0 million due to the ongoing takeover bid by Midea Group had a significant impact on EBIT. Without these one-off effects, EBIT would have been €155.2 million with an EBIT margin of 5.3%. If the effects of the scheduled amortization relating to the purchase price allocation in connection with the acquisition of Swisslog Group (2016: €10.8 million; 2015: €58.7 million) are eliminated, EBIT amounts to €166.0 million (€194.3 million) with an EBIT margin of 5.6% (2015: 6.6%). The previous year's EBIT, excluding the book profit from the sale of HLS and the Tools and Dies business unit in 2015, by way of comparison amounts to €181.7 million with an EBIT margin of 6.1%.

#### Group EBIT and EBIT margin

in € millions	2015	2016
EBIT	135.6	127.2
in % of revenues	4.6	4.3
EBIT adjusted - special item Midea	135.6	155.2
in % of revenues	4.6	5.3
EBIT (incl. special item Midea and purchase price allocation Swisslog)	194.3	166.0
in % of revenues	6.6	5.6
<b>EBIT (incl. special item Midea and purchase price allocation Swisslog as well as without accounting profit for sale of HLS / WZB)</b>	<b>181.7</b>	<b>166.0</b>
<b>in % of revenues</b>	<b>6.1</b>	<b>5.6</b>

In the latest guidance for fiscal 2016, KUKA's Executive Board forecast an EBIT margin of more than 5.5% before purchase price allocation for Swisslog and before extraordinary expenses in connection with the Midea takeover. Taking into consideration these influences, KUKA met and even slightly exceeded its forecast with an EBIT margin of 5.6%.

The Robotics division achieved an EBIT of €100.7 million in 2016, slightly surpassing the previous year's level of €100.2 million by 0.5%.

Systems had an EBIT of €91.3 million in fiscal 2016 and was therefore below the prior-year value of €114.7 million. The EBIT margin fell accordingly from 7.8% to 6.5%. Without the book profit from the sale of HLS and the Tools and Dies business unit in 2015, the EBIT margin would have been 6.9% in 2015.

At €4.8 million (2015: -€45.9 million) Swisslog saw a considerable improvement in EBIT. This is equivalent to an EBIT margin of 0.8% compared with -7.4% recorded in 2015. Adjusted for the effects of the purchase price allocation of €10.8 million (2015, €58.7 million) the margin was 2.6% (2015: 2.1% or, adjusted, 3.4%).

In keeping with the trend in EBIT, Group EBITDA (earnings before interest, taxes, depreciation and amortization) also fell to €205.3 million (2015: €259.1 million). Write-downs totaling €78.1 million were posted in the period under review (2015: €123.5 million). €22.5 million of this (2015: €25.9 million) was attributable to Robotics, €22.2 million (2015: €21.0 million) to Systems, €23.4 million (2015: €70.4 million) to Swisslog and €10.0 million (2015: €6.2 million) to other areas.

EBITDA was therefore lower for both the Robotics division at €123.2 million (2015: €126.1 million) and the Systems division at €113.5 million (2015: €135.6 million) and higher for Swisslog at €28.2 million (2015: €24.5 million) compared to the previous year. The Group EBITDA margin was 7.0% (2015: 8.7%). The EBITDA margin for Robotics was 12.4% (2015: 13.9%), for Systems 8.1% (2015: 9.2%) and for Swisslog 4.8% (2015: 3.9%). Disregarding the one-off effects of the Midea Group takeover bid, Group EBITDA was €233.3 million (2015: €259.1 million) and the Group EBITDA margin was 7.9% (2015: 8.7%).

#### Financial result further optimized

Net financial expenses amounted to €4.9 million in fiscal 2016. This is an improvement compared with the previous year when the financial result was -€7.4 million.

The interest income amounted to €8.1 million (2015: €8.3 million) and mainly included income from bank deposits, income from short-term liquid assets invested in commercial papers and income from financial leases.

<sup>1</sup> after Swisslog purchase price allocation and Midea one-off effects

The net balance of foreign exchange gains and losses in connection with financial assets led during the past financial year to an expenditure of €2.1 million (2015: €0.3 million). In the reporting period, interest expenditure totaled €13.0 million. Most of this relates to the promissory note loan placed in October 2015 with interest expenditure of €3.6 million (2015: €0.8 million) and the net interest expense for pensions of €2.2 million (2015: €2.5 million). Due to the conversions of the convertible bonds undertaken since October 2015 and completed in March 2016, interest expenditure on the convertible bond fell from €6.2 million in the previous year to €0.3 million. Expenditure on sureties and guarantees amounted to €1.1 million (2015: €0.7 million). Pursuant to the amendment to the syndicated loan agreement, there were expenses of €1.0 million in order to cover transaction costs.

Earnings before taxes (EBT) amounted to €122.3 million (2015: €125.6 million). The tax expense of KUKA Group totaled €36.1 million in 2016 (2015: €39.3 million). The tax rate amounted to 29.5% and was thus below the previous year (2015: 31.3%).

#### Proposed dividend of €0.50 per share

Earnings after taxes were positive for the sixth consecutive year and at €86.2 million were almost unchanged on the previous year's figure of €86.3 million. Earnings per share amounted to €2.19 in 2016 (2015: €2.39). This reduction results from the higher number of shares compared with 2015 due to the conversion of the convertible bonds in 2016.

There was also a dilution effect due to the reported conversion of the convertible bonds. Undiluted earnings per share stood at €2.19 (2015: €2.39 undiluted; 2015: €2.35 diluted).

The Executive Board is proposing to the Annual General Meeting that an unchanged dividend of €0.50 per share be paid for fiscal 2016.

#### Consolidated income statement (condensed)

in € millions	2012	2013	2014	2015	2016
Sales revenues	1,739.2	1,774.5	2,095.7	2,965.9	2,948.9
EBIT	109.8	120.4	141.8	135.6	127.2
EBIT adjusted <sup>1</sup>	109.8	120.4	141.8	135.6	155.2
EBITDA	138.5	158.4	185.3	259.1	205.3
EBITDA adjusted <sup>1</sup>	138.5	158.4	185.3	259.1	233.3
Financial result	-12.8	-20.0	-25.3	-7.4	-4.9
Taxes on income	-34.1	-35.4	-45.2	-39.3	-36.1
Earnings after taxes	55.6	58.3	68.1	86.3	86.2

<sup>1</sup> One-off effect due to the takeover bid by Midea Group

## Financial position

#### Principles and goals of financial management

KUKA Aktiengesellschaft is responsible for the central financial management of all KUKA Group companies. Acquired companies are successively included in the Group's financial management. Group financing and interest rate and currency risk management are controlled centrally via KUKA Aktiengesellschaft. The financing and investment needs of Group companies and hedging transactions for interest rate and currency management are bundled by KUKA Aktiengesellschaft, which concludes the necessary internal and external financial transactions with Group companies and banks. KUKA Aktiengesellschaft performs these tasks on the basis of a uniform planning and reporting system in which risks related to credit, liquidity, interest rates and exchange rates are recorded. The objective of interest rate and currency management is to minimize the risks involved. Only standard derivative financial instruments are used to hedge risk. The hedging transactions are concluded exclusively on the basis of the hedged item or expected transactions. KUKA has issued a standard set of guidelines for all Group companies for the purpose of managing financing risk. As in previous years, the guidelines were continuously reviewed and optimized during the financial year to ensure that they remained up to date and also transferred to the acquired companies.

#### Group financing and cash pooling

The Group's financing policy is aimed at securing not only sufficient liquidity reserves in the form of liquid assets and non-utilized, committed long-term working capital lines but also sufficient surety and guarantee lines at all times to be able to ensure the operating and strategic financing requirements of the Group companies and also to have sufficient reserves as a buffer against unforeseen events. The financing requirements of the Group companies are calculated on the basis of the multi-year budget and financial projections and monthly rolling liquidity forecasts over twelve months, each of which includes all the relevant companies consolidated in the Group accounts.

Payments received on the basis of operating activities of Group companies represent the Group's most important source of liquidity. KUKA AG's cash management uses the liquidity surpluses of individual Group companies to meet the liquidity requirements of other Group companies. This central, intra-Group cash pooling optimizes the Group's liquidity position and has a positive impact on net interest income.

## Components of the financing structure

### Promissory note loan

KUKA Aktiengesellschaft issued an unsecured promissory note loan with a total volume of €250.0 million on October 9, 2015. The total volume was placed in two separate tranches. Tranche 1 has a volume of €142.5 million with a term to maturity of five years; tranche 2 has a volume of €107.5 million and a term to maturity of seven years. Repayment shall occur at 100.0%, payable in one sum on maturity of each fixed-term tranche. The promissory note loan carries interest coupons of 1.15% for tranche 1 and 1.61% for tranche 2.

### Syndicated loan agreement

As part of a refinancing operation, in April 2015 KUKA AG entered into a syndicated loan agreement ("SFA - Syndicated Facilities Agreement") with an original term to March 30, 2020. This included two extension options each for one year. The first extension option was exercised in 2016 such that the SFA now ends on March 30, 2021. The second extension option available to KUKA would extend the term by a further year.

The SFA includes a surety and guarantee line ("guaranteed credit line") in the amount of €140.0 million and a working capital line ("cash line"), which can also be used for sureties and guarantees, in an original amount of €90.0 million. The syndicated loan agreement is unsecured and contains only the customary equal treatment clauses and negative pledges.

Financial covenants are agreed for the SFA with thresholds for leverage (net financial liabilities/EBITDA) and interest coverage (EBITDA/net interest expense).

The closing of the takeover bid by Midea would have created a change in control under the terms of the SFA and triggered the cancellation rights of the banking consortium. KUKA therefore agreed beforehand with the consortium of banks that the SFA should remain in existence after the completion of the closing of the takeover bid and that the business relations would be continued. In an amendment to the agreement, the consortium of banks waived their entitlement to cancellation.

In the same amendment the volume of the SFA was adjusted to meet the current planning requirements. Since the effective date of the amendment on November 28, 2016, KUKA has a guaranteed credit line of €200.0 million and a working capital line with the same volume of €200.0 million, which can also be used for guarantees as previously.

KUKA was therefore able to increase its liquidity provisions and take into account the increased guaranteed credit requirement due to the higher volume of business. In addition it was possible to adjust the conditions of the SFA to KUKA's improved credit rating and to the better market conditions compared with the time of the last refinancing operation.

### Cancellation of the convertible bond

In an announcement on February 18, 2016 KUKA Aktiengesellschaft irrevocably canceled the February and July 2013 convertible bonds as of March 24, 2016 (redemption date). By this date, further convertible bond units with a nominal value of €46.9 million were converted into 1,274,211 shares in the first quarter of 2016. The unconverted bonds with a nominal value of €0.3 million were repurchased from investors together with the interest accrued during the financial year.

### Guaranteed credit lines

In addition to the guarantee lines and the cash facilities which can be used for guarantees under the syndicated loan agreement there were also further guarantee line agreements in 2016 to support operating business. These guarantee facilities bilaterally agreed with banks and surety companies outside the syndicated loan agreement amounted as at December 31, 2016 to a commitment volume of €124.0 million (2015: €89.0 million) and in accordance with the rules applicable to the SFA may be utilized in a total volume of up to €100.0 million. None of these guarantee lines contains a change of control clause.

In total at December 31, 2016 KUKA therefore had credit lines to utilize for sureties and guarantees in an amount of €500.0 million (2015: €319.0 million). These were utilized in the amount of €258.1 million (2015: €148.0 million).

### Asset-backed securities program

The existing ABS program of €25 million also contains a change of control clause. It is not expected that the receivables purchaser will terminate the program due to the change of control.

KUKA Group's financing requirements are primarily covered by the following available elements:

- 1) The €400.0 million syndicated loan agreement amended in November 2016 with a term extending to March 2021. Cash drawings of up to a volume of €200.0 million are possible under this agreement.
- 2) Bilateral agreements with banks and surety companies for surety and guarantee lines in the amount of €124.0 million (as at December 31, 2016).
- 3) The promissory note loan with a nominal value of €250.0 million issued in October 2015 and maturing in October 2020 and October 2022.
- 4) The ABS program with a financing volume of €25.0 million (as at December 31, 2016).

From the perspective of the Executive Board, the measures taken ensure that KUKA Group has appropriate long-term financing and the necessary leeway to quickly implement important strategic decisions.



### Further improved assessment by rating agencies

The stable financial situation is also reflected in the fact that the two rating agencies Moody's and Standard & Poor's have raised the credit rating once again. Standard & Poor's maintained its rating in June 2016 at BB+ (2015: BB+), but raised the outlook from stable to positive. In September 2016 Moody's upgraded its rating from Ba2 (June 2015) to Ba1 and awarded a stable outlook to the share. Early in 2017, Moody's even raised the KUKA Group rating to investment grade and now rates KUKA as Baa3 with a stable outlook.

### Consolidated cash flow statement (condensed)

in € millions	2012	2013	2014	2015	2016
Cash earnings	92.4	115.3	181.3	260.8	203.9
Cash flow from current business operation	117.9	221.0	184.7	169.2	-9.6
Cash flow from investment activities	-40.8	-125.6	-356.9	-73.5	-97.2
Free cash flow	77.1	95.4	-172.2	95.7	-106.8

The cash earnings are an indicator derived from the earnings after taxes, adjusted for income taxes, net interest, cash-neutral depreciation on tangible assets, together with other non-cash income and expenses. The figure of €203.9 million in 2016 (2015: €260.8 million) indicates that the company is in an excellent economic position.

With comparable earnings after taxes, the lower amortization of intangible assets compared with the previous year, mainly due to write-downs connected with the purchase price allocation for Swisslog Group, resulted in lower cash earnings.

Cash flow from current business operations of KUKA Group dropped from €169.2 million in 2015 to -€9.6 million in 2016. This decline is primarily attributable to the increase in trade working capital. Overall, trade working capital has developed as follows:

### Trade Working Capital

in € millions	2012	2013	2014	2015	2016
Inventories less advance payments	126.9	133.9	194.1	225.3	223.2
Trade receivables and receivables from construction contracts	340.6	348.6	612.9	658.3	888.9
Trade payables and liabilities from construction contracts	231.7	304.4	522.2	619.0	683.0
<b>Trade working capital</b>	<b>235.8</b>	<b>178.1</b>	<b>284.8</b>	<b>264.6</b>	<b>429.1</b>

As stated, trade working capital increased from €264.6 million in 2015 to €429.1 million. Year-on-year it was primarily receivables which rose. This was firstly due to the numerous orders completed at the end of 2016 for which the payment of the outstanding receivables is not expected until the first quarter of 2017. Secondly there was a sharp rise in receivables from construction contracts. This also reflected the good position in the order backlog of the Systems and Swisslog segments. Inventories less advanced payments at €223.2 million remained at a similar level to the previous year (2015: €225.3 million), reflecting the high level of orders received with accompanying advance procurement measures. Trade payables on construction contracts increased by €64.0 million to €683.0 million.

### High level of investment continues

During the 2016 financial year, KUKA again made high investments in the future. In total, the volume of expenditure on intangible and tangible fixed assets amounted to €99.6 million (2015: €107.0 million). This included major capital expenditure in the research and development sector and increased investment in tangible assets. The carrying amount of the company's own development work and internally generated intangible assets totaled €54.0 million (2015: €38.1 million). (For information on the development focuses, see the "Research and development" section, page 7 et seq.)

### Investments in intangible assets and property, plant and equipment

in € millions	2012	2013	2014	2015	2016
Group	42.8	74.7	94.3	107.0	99.6
of which Robotics	30.1	30.8	30.4	39.4	29.4
of which Systems	9.6	15.2	28.7	23.5	23.9
of which Swisslog	-	-	-	22.2	20.0
of which others <sup>1</sup>	3.1	28.7	35.2	21.9	26.3

<sup>1</sup> incl. consolidation

Investments in intangible assets amounted to €49.1 million in fiscal 2016 (2015: €30.6 million) and were attributable to rights and assets in an amount of €14.5 million (2015: €11.7 million), internally produced software and development costs in an amount of €20.1 million (2015: €18.9 million) and advances paid of €14.5 million (2015: €0 million).

Investments in tangible assets amounted to €50.5 million in the year under review (2015: €76.4 million) and were attributable to land, property rights and buildings (including buildings on third party land) (2016: €6.3 million; 2015: €11.2 million), technical plant and machinery (2016: €19.5 million; 2015: €19.2 million), other plant /operating and office equipment (2016: €20.2 million; 2015: €30.1 million) and advances paid and construction in progress (2016: €4.5 million; 2015: €15.9 million).

Broken down by division, capital expenditure was as follows in 2016: in the Robotics division, the corresponding figure was €29.4 million (2015: €39.4 million). In addition to the capitalized development work, most of the investments were made in technical equipment and machinery, particularly for the optimization of production, but also for operating and office equipment. The Systems division registered additions of €23.9 million (2015: €23.5 million). Most of the investments were again made in technical equipment and machinery. Investments in the Swisslog division of €20.0 million (2015: €22.2 million) mainly concern investments in internally produced software and development costs to constantly improve the customer software, but primarily in the further development of individual products in the automation solutions for future-oriented warehouse and distribution centers and for hospitals. Investments in the "Other" segment amounted to €26.3 million (2015: €21.9 million) and, in addition to some follow-on investments in the Development and Technology Center in Augsburg completed in 2015, related mostly to advance payments for ongoing internal projects to harmonize, standardize and optimize processes and to introduce global IT platforms.

Spending on acquisitions of consolidated companies and other business units during the current fiscal year and spending on settling open purchase price liabilities from acquisitions in the previous years came to a total of €47.8 million (2015: €44.4 million) and were subdivided as follows:

in € millions	2015	2016
<b>Company acquisitions</b>		
Swisslog Holding AG, Buchs (AG) / Switzerland	17.5	–
Forte Industrial Equipment Systems Inc., Mason, Ohio / USA	11.4	1.6
UTICA Enterprises, Shelby Township, Michigan / USA	6.7	4.1
Reis Group Holding GmbH & Co. KG, Obernburg / Germany	–	30.8
Tecnilab S.p.A., Cuneo / Italy	–	6.0
Other	3.1	3.7
<b>Total</b>	<b>38.7</b>	<b>46.2</b>
<b>Investments accounted for at equity</b>		
Barrett Technology, LLC, Newton, Massachusetts / USA	2.7	–
KBee AG, Munich / Germany	3.0	1.6
<b>Total</b>	<b>5.7</b>	<b>1.6</b>
<b>Total payments</b>	<b>44.4</b>	<b>47.8</b>

The sale of business units in the Aerospace segment in connection with the MIDEA takeover bid contributed €33.5 million during the fiscal year. The optimization of the investment structure resulted in a total inflow of funds of €47.2 million for KUKA in fiscal 2015.

### Negative free cash flow

Cash flow from investment activities (2016: -€97.2 million; 2015: -€73.5 million) along with cash flow from current business operations resulted in a negative free cash flow of -€106.8 million. In the previous year the free cash flow had still been clearly positive at €95.7 million. This development is primarily due to the marked increase in trade working capital.

### Negative cash flow from financing activities

At year-end KUKA had a negative cash flow from financing activities amounting to -€26.4 million. This includes dividend payments to shareholders of €0.50 per share (2015: €0.40 per share) making a total of €19.3 million.

In the previous year cash flow from financing activities was still clearly positive at €204.1 million due to the inflows in 2015 from the promissory note loan placed by KUK for a nominal amount of €250.0 million at an effective interest rate of 1.24% (5-year tranche) and 1.67% (7-year tranche).

### Consolidated net liquidity

in € millions	2015	2016
Cash and cash equivalents	496.2	364.2
Current financial liabilities	2.1	1.6
<b>Non-current financial liabilities</b>	<b>294.2</b>	<b>249.6</b>
<b>Group net liquidity</b>	<b>199.9</b>	<b>113.0</b>
Cash and guarantee facilities from Syndicated Senior Facilities Agreement	230.0	400.0
Guarantee facility from banks and surety companies	89.0	124.0
ABS program line	25.0	25.0

KUKA had net liquidity of €113.0 million as at the end of the year (the balance of liquid assets and current and non-current financial liabilities) (2015: €199.9 million). Cash and cash equivalents available to KUKA Group at year-end 2016 totaled €364.2 million (2015: €496.2 million).

### Net worth

On the assets side, non-current assets rose to €838.1 million (December 31, 2015: €823.3 million). This increase is mainly due to the investments made during the financial year (please refer to notes on the financial position). Amortization of €10.8 million (2015: €58.7 million) on the purchase price allocation for the Swisslog acquisition had the opposite effect. A value of €257.5 million was recorded for goodwill (December 31, 2015: €254.9 million). The increase of €2.6 million resulted, in addition to the initial recognition of goodwill of €8.2 million for acquisitions during the current year, from disposals of €6.3 million and impairment charges of €1.4 million from exchange rate effects. The rise in tangible assets amounted to €2.2 million.



Amounts totaling €4.2 million were included for investments in associated companies and joint ventures (December 31, 2015: €6.6 million) and reported under "At equity financial assets". Deferred tax assets amounted to €48.8 million (December 31, 2015: €49.2 million), with €9.8 million being attributable to tax losses carried forward (December 31, 2015: €11.2 million).

The value of current assets was €1,705.8 million as at December 31, 2016 (December 31, 2015: €1,558.4 million). This value was impacted by the increases in trade receivables and receivables from construction contracts mentioned above.

### Group net worth

in € millions	2012	2013	2014	2015	2016
Balance sheet total	1,137.4	1,377.1	1,979.5	2,381.7	2,543.9
Equity	297.5	379.1	541.1	732.5	840.2
in % of balance sheet total	26.2	27.5	27.3	30.8	33.0
Net liquidity/debt	42.8	146.5	32.6	199.9	113.0

The balance sheet total of KUKA Group rose by €162.2 million from €2,381.7 million as at December 31, 2015 to €2,543.9 million as at December 31, 2016.

### Marked increase in equity ratio to 33.0%

Despite the growth of the balance sheet total, KUKA achieved an increase in the equity ratio from 30.8% in the previous year to 33.0%. As well as the net income figure of €86.2 million (2015: €86.3 million), the conversion of the remaining convertible bonds into new KUKA shares also contributed to this development. The conversions resulted in an increase of €44.6 million in equity. Differences due to currency translation, particularly from the Swiss franc, US dollar, Brazilian real and Chinese renminbi, have also had a positive effect of €8.1 million on equity. Actuarial losses from pension accounting, including the associated deferred taxes, totaled €8.5 million. Payment of the 2015 dividend to the shareholders of KUKA Aktiengesellschaft reduced equity capital by €19.3 million. Minority interests in equity capital were reduced by the share in the total result of -€0.4 million and by the successive acquisition of the remaining 49.0% of outstanding shares in Faude Automatisierungstechnik GmbH by €0.6 million to an amount of -€0.3 million (2015: -€0.5 million). Overall, equity capital rose by €107.7 million or 14.7% to €840.2 million as at December 31, 2016.

The non-current financial liabilities primarily relate to the promissory note loan placed in October 2015 with a nominal value of €250.0 million. The figure for the previous year also contained the outstanding convertible bonds with a nominal value of €47.2 million. Current financial liabilities included the utilization of cash lines by a foreign subsidiary and interest accruals for the promissory note loan (in the previous year interest accruals for the convertible bond were also recorded here).

Current liabilities increased from €1,160.6 million at December 31, 2015 to €1,258.1 million at December 31, 2016. The change in the liability-side trade working capital referred to above was the main reason for this. Other provisions (€157.9 million) and other liabilities and accruals (€280.0 million) are at approximately the same level as the previous year (2015: €433.6 million). Other liabilities include personnel costs of €142.1 million (2015: €134.6 million) and the contingent purchase price liabilities amounting to €23.1 million (2015: €58.5 million). These mainly relate to the acquisitions of Reis Group and UTICA Enterprises, Shelby Township, Michigan, USA in previous fiscal years.

### Group assets and financial structure

in € millions	2015	2016
Current assets	1,558.4	1,705.8
Non-current assets	823.3	838.1
<b>Assets</b>	<b>2,381.7</b>	<b>2,543.9</b>
Current liabilities	1,160.6	1,258.1
Non-current liabilities	488.6	445.6
Equity	732.5	840.2
<b>Liabilities</b>	<b>2,381.7</b>	<b>2,543.9</b>

### Increase in working capital and capital employed due to business performance

During fiscal 2016 the focus of KUKA Group was again on active management of the working capital and further optimization of supplier-side payment terms. Nevertheless due to the order situation and business performance, a considerable rise in working capital requirements at the end of 2016 could not be avoided. While a negative working capital of -€63.6 million was recorded in the previous year, the value rose to €118.3 million. This meant that in fiscal 2016 the current business operations had to be financed from the available net liquidity as well as from customer prepayments and supplier liabilities. In terms of the individual divisions, during the current reporting period both Robotics and Systems had a positive working capital (€115.5 million and €70.4 million in 2016 compared with €86.9 million and -€124.5 million in 2015 respectively) whereas Swisslog reported a negative working capital (2016: -€16.6 million; 2015: €5.3 million).

### Return on capital employed (ROCE)

An important key figure of KUKA Group is the return on capital employed (ROCE). This indicator describes how effectively and profitably KUKA uses its capital employed.

The capital employed is calculated as the average of capital employed at the beginning and end of the financial year. On average, KUKA Group's capital employed in 2016 and 2015 amounted to €783.0 million and €676.8 million respectively. The ROCE declined from 20.0% in 2015 to 16.2% in 2016.

The ROCE of the individual divisions was as follows: with average capital employed of €194.9 million (2015: €177.1 million) the Robotics division generated a ROCE of 51.7% and was thus unable to fully match the previous year's figure of 56.6%. The Systems division achieved a ROCE of 42.8% (2015: 87.9%) on an average capital employed of €213.1 million (2015: €130.5 million). With average capital employed of €318.0 million (2015: €315.9 million) the ROCE in the Swisslog division saw a significant improvement to 1.5% compared with the 2015 figure of -14.5%. Before amortization from purchase price allocation, Swisslog had a ROCE of 4.9% (2015: 4.1%).

### Return on Capital Employed (ROCE)

in % of Capital Employed	2012	2013	2014	2015	2016
Group <sup>1</sup>	32.3	36.9	28.8	20.0	16.2
of which Robotics	57.2	49.6	53.1	56.6	51.7
of which Systems	23.8	43.0	67.9	87.9	42.8
of which Swisslog <sup>2</sup>	-	-	-	-14.5	1.5

<sup>1</sup> incl. consolidation

<sup>2</sup> incl. amortization from purchase price allocation

## Notes to the financial statements of KUKA Aktiengesellschaft

KUKA Aktiengesellschaft acts as the Group's management holding company with central management responsibilities such as accounting and controlling, finance, human resources, legal, IT and financial communications. Its financial position is determined primarily by the activities of its subsidiaries, as illustrated by the direct allocation of the management companies of the Robotics division (KUKA Roboter GmbH), Systems division (KUKA Systems GmbH) and Swisslog division (Swisslog Holding AG).

KUKA Aktiengesellschaft prepares its annual financial statements in accordance with the provisions of the German Commercial Code (HGB) and the German Stock Corporation Act (AktG). The amendments arising from the Accounting Directive Implementation Act (BilRUG) for the individual financial statements of KUKA Aktiengesellschaft were implemented accordingly. This has led to changes in presentation, especially in the income statement (primarily regarding the sales revenues). To improve comparability, the corresponding changes in the following table were also applied to the comparative period. As a result of an amendment to section 253 of the German Commercial Code (HGB) there was a significant change in the valuation of pension commitments. With effect from 2016 the average 10-year German central bank interest rate is to be used for discounting instead of the 7-year interest rate. As a result, the value of the pension provisions recognized decreases by €0.8 million. The difference of €0.8 million (including the payout blocks of subsidiaries with a profit transfer agreement) is barred from distribution.

The company is registered in the commercial register of the Augsburg district court under HRB 22709 and its registered office is in Augsburg.

The financial statements of KUKA Aktiengesellschaft are published in the electronic Federal Gazette (Bundesanzeiger) and are also available on the company's website [www.kuka-ag.de](http://www.kuka-ag.de).

### Income statement of KUKA Aktiengesellschaft (HGB)

in € millions	2015	2016
Sales revenues	58.9	77.4
Other company-produced and capitalized assets	1.2	2.0
Other operating income	50.0	21.1
Cost of materials	-29.1	-40.8
Personnel expense	-38.8	-44.8
Depreciation and amortization of tangible and intangible assets	-6.3	-10.1
Other operating expenses	-57.7	-64.5
Income from equity investments	149.7	174.6
Other interest and similar income	5.2	6.3
Interest and similar expenses	-9.1	-7.0
Taxes on income	-8.2	-2.2
<b>Net profit</b>	<b>115.8</b>	<b>112.0</b>
Profit carryforward from the previous year	43.0	31.6
Transfer to retained earnings	-57.9	-56.0
<b>Balance sheet profit</b>	<b>100.9</b>	<b>87.6</b>

### KUKA Aktiengesellschaft balance sheet (HGB)

Assets in € millions	2015	2016
<b>Fixed assets</b>		
Intangible assets	2.1	20.1
Tangible assets	88.4	87.9
Financial investments	469.3	492.9
	<b>559.8</b>	<b>600.9</b>
<b>Current assets</b>		
Receivables from affiliated companies	233.8	414.6
Other receivables and assets	5.6	4.1
	<b>239.4</b>	<b>418.7</b>
<b>Cash and cash equivalents</b>	<b>330.2</b>	<b>150.4</b>
	<b>569.6</b>	<b>569.1</b>
<b>Prepaid expenses</b>	<b>0.6</b>	<b>1.4</b>
	<b>1,130.0</b>	<b>1,171.4</b>

	2015	2016
<b>Liabilities</b> in € millions		
<b>Equity</b>		
Subscribed capital	100.1	103.4
Capital reserve	262.2	305.8
Other retained earnings	148.2	254.3
Balance sheet profit	100.9	87.6
	<b>611.4</b>	<b>751.1</b>
<b>Provisions</b>		
Pension provisions	11.7	11.5
Provisions for taxes	15.0	8.8
Other provisions	31.2	45.6
	<b>57.9</b>	<b>65.9</b>
<b>Liabilities</b>		
Bonds	47.2	–
Liabilities due to banks	251.1	250.9
Trade payables	11.1	5.6
Accounts payable to affiliated companies	147.4	83.8
Liabilities to provident funds	2.6	2.6
Other liabilities	1.3	11.5
	<b>460.7</b>	<b>354.4</b>
	<b>1,130.0</b>	<b>1,171.4</b>

## Results of operations of KUKA Aktiengesellschaft

The earnings of KUKA Aktiengesellschaft are determined primarily by the earnings of its subsidiaries, its financing activities and the expenses and income relating to the company's holding function. Income before taxes amounted to €114.2 million and was therefore below the previous year's result (2015: €124.0 million).

Sales revenues (2016: €77.4 million; 2015: €58.9 million) mainly include cost allocations (2016: €54.9 million; 2015: €40.1 million), direct cost transfers, for example from facility management (2016: €13.9 million; 2015: €13.0 million) and income from the rental of buildings to KUKA Group companies (2016: €8.4 million; 2015: €5.5 million). The associated expenses are reported as cost of materials and services purchased. These amounted to €40.8 million during the year and to €29.1 million in the previous year.

Other operating income mainly includes currency translation gains, particularly from the US dollar and the Brazilian real, which were recognized in an amount of €15.6 million (2015: €34.7 million). The rise in other operating expenses results mainly from consultancy services in connection with the acquisition of a majority shareholding by Midea Group. There were also currency translation losses amounting to €22.5 million (2015: €34.2 million).

The increase in personnel expenditure from €38.8 million to €44.8 million is attributable not only to the increase in the number of employees but also to higher expenses for variable remuneration components, partly as a result of the increase in the share price. At this juncture it should be noted that there were additional unscheduled personnel costs for the existing phantom share programs for Executive Board members and senior management which arose in connection with the Midea takeover bid. The company had 512 employees on the balance sheet date (2015: 352 employees). This rise was mainly due to the takeover of the central IT department at the Augsburg site by KUKA Aktiengesellschaft.

Income from participations amounted to €174.6 million (2015: €149.7 million) and was therefore considerably above the previous year's value. This is in particular due to the higher dividend payment of the US subsidiary in the year under review (2016: €119.7 million; 2015: €40.6 million). Earnings contributions from the German companies allocated to KUKA Aktiengesellschaft via profit and loss transfer agreements are €54.9 million (2015: €109.1 million).

The net interest result amounted to -€0.7 million, which was considerably better than the previous year's value of -€3.9 million. This reduction is primarily due to the discontinuation of interest on the convertible bond (2016: €0.1 million; 2015: €2.2 million). Due to the stronger liquidity supply for subsidiaries, finance interest credited or charged to subsidiaries was higher compared to the previous year. In the previous year KUKA Aktiengesellschaft and its associated companies posted net interest income of €4.5 million – the value this financial year was €5.8 million.

KUKA Aktiengesellschaft as the controlling company of the German consolidated tax group recognizes the income taxes of the tax group in the income statement in an amount of €2.2 million (2015: €8.2 million). The development of income taxes depends on tax-deductible loss carryforwards, tax arrears and credits for past assessment periods and largely tax-free investment income among other factors.

Overall, net income of KUKA Aktiengesellschaft amounted to €112.0 million (2015: €115.8 million). After the transfer to revenue reserves and offsetting against the profit carried forward the balance sheet profit totals €87.6 million for fiscal 2016 (2015: €100.9 million).

## Financial position of KUKA Aktiengesellschaft

One of KUKA Aktiengesellschaft's most important tasks is to provide funds and guarantees for its subsidiaries' current operations. The resources used for external finance such as the promissory note loan and the syndicated loan agreement are described in detail in the section on the financial position of KUKA Group.

KUKA Aktiengesellschaft's financing role is reflected in its receivables from and liabilities to affiliated companies, which are predominantly the result of cash pooling accounts with subsidiaries and loans provided. The balance of these receivables and liabilities was a net receivables figure of €330.8 million (2015: €86.4 million). This rise in liquidity requirements by subsidiary companies was attributable, in addition to the result transfers during the financial year, to the considerable increase in the working capital due to the good course of business, in particular for the subsidiaries participating in the cash pooling arrangements.

Overall, the liquid assets of KUKA Aktiengesellschaft decreased from €330.2 million to €150.4 million. Financial liabilities amounted to €250.9 million on the balance sheet date compared with €298.3 million in the previous year. This decrease also reflects the conversion of the convertible bonds in the first quarter of 2016.

### Net assets of KUKA Aktiengesellschaft

The net assets of KUKA Aktiengesellschaft are impacted by the management of its equity investments as well as the way in which it executes its management function for the companies in KUKA Group. For information on receivables from and liabilities to affiliated companies and financial items, please refer to the information on KUKA Aktiengesellschaft's financial position.

Capital expenditure on intangible and tangible fixed assets amounting to €26.1 million (2015: €22.6 million) was accompanied by depreciation, amortization and write-downs amounting to €10.1 million (2015: €6.3 million). Investments during the financial year were mainly concentrated on IT-based projects to harmonize, standardize and optimize processes. KUKA Aktiengesellschaft is piloting these and will give strong support to the global roll-out in the coming years. KUKA Aktiengesellschaft's direct equity investments in its subsidiaries are reported under financial assets. Apart from a further milestone-based payment to KBee AG, Munich, additions during the financial year mainly included the now completed acquisition of the remaining shares in Reis Group. A payment of around €9.2 million was made in January 2017 such that the corresponding liability at the balance sheet date is shown under other liabilities.

Earnings for the financial year reflect the changes in equity as well as the remaining bond conversions described above. Dividend payments totaling €19.3 million for the 2015 financial year were deducted from equity capital. The equity ratio of KUKA Aktiengesellschaft amounted to 64.1% on December 31, 2016 (2015: 54.1%).

The €14.4 million rise in other provisions results mainly from the expenses connected with the acquisition of a majority shareholding by Midea Group.

The net impact of these changes on the balance sheet total of KUKA Aktiengesellschaft was an increase of €41.4 million to €1,171.4 million compared to the reporting date of the previous year.

## Non-financial key performance indicators

### Sustainability

#### Sustainability in KUKA Group

Sustainability is anchored in KUKA's corporate culture. As a forward-looking company, KUKA encourages sustainability in all its field of activity – for people, products, but also as regards society and the environment.

#### Working environment and health

As an automation group which is experiencing growth on a global scale, KUKA is reliant on a qualified, committed and efficient workforce. They form the basis of the company's success. To meet the rising demands and perform well, employees need a good working environment. KUKA therefore values a working environment which enables employees to promote their own health and work flexibly. For example, employees can work flextime hours and to some extent also in their own homes. The children's daycare center at the Augsburg site, sponsored by the non-profit association Orange Care e. V., a kid's holiday club and other benefits such as a weekly laundry service are designed to promote the compatibility of work and family life.

Within the company's health promotion scheme, KUKA offers its employees different focal themes each year. These mainly address the major causes of various lifestyle afflictions such as lack of exercise, incorrect diet, excess weight and stress. . Sporting activities such as taking part in the Augsburg corporate challenge run are part of the program as is preventive healthcare. In the year under review, the Corporate Medical Service unit was restructured and preventive occupational healthcare was enhanced. A wide-ranging vaccination campaign was organized, for example, based on travel-related medical counselling. Moreover the outpatient and medical emergency treatment services were revised and improved.

#### Key social figures

	2015	2016
Number of employees (Dec. 31)	12,300	13,188
of which apprentices	348	305
Average length of service (years)	7.6	7.9
Sick leave rate in %	3.2	3.7
Fluctuation in %	9.6	10.3
Accidents per 1,000 employees (Germany)	9.8 <sup>1</sup>	11.5 <sup>2</sup>

<sup>1</sup> Excl. Obernburg

<sup>2</sup> Incl. Obernburg

In the year under review, the Group-wide sick leave rate rose slightly from 3.2% to 3.7%. Compared with other companies in the same industry, this figure is relatively low. The average length of service was 7.9 years (2015: 7.6 years). This figure remains relatively stable and is similar to that found in other companies.

At 10.3%, staff turnover (fluctuation) appears to be relatively high for industry standards. However, this figure includes not only those leaving the company for other employment but also all internal transfers among the companies of KUKA Group.

Even though the workload at KUKA is high in comparison with other companies in the sector, the number of accidents reported is very low. In 2016, 11.5 accidents were recorded for every 1,000 employees. KUKA constantly endeavors to improve work safety so as to reduce the number of accidents further.

Details of the workforce and human resources policy can be found in the "Employees" section from page 29 on.

#### **Orange Care e. V. promotes assistance for young people and families**

KUKA colleagues accept social responsibility and get involved in the work of Orange Care e. V. This is an association set up by KUKA colleagues with the objective of supporting people in need, especially through the provision of assistance for young people and families. For instance, it promoted the "füreinanderda" (there for each other) project organized by the Prisma youth and family support scheme. Part of this project involved Orange Care providing financial support for shared activities for single mothers. This made it possible to organize a trip to an exhibition on the Vikings, for example. The organization also helped refugees. It helped a refugee assistance association in the Augsburg area acquire computers as a way of aiding the search for jobs and housing, these being the main requirements for successful integration. The Bavarian bone marrow donor campaign and St. Anna high school in Augsburg have been supporting people with leukemia by encouraging potential donors to register for marrow typing. With the campaign entitled "Anna typisiert" (Anna registers for typing) the association was bearing part of the expenses of the marketing measures for this important project. The association has also provided financial support for the therapeutic assistance of children and young people in the "Ziegelhof" project of the Martinschule, a school in Augsburg. This project deals with therapies involving animals. For example, the children were able to try out being sheep trainers, lama whisperers, dog walkers, rabbit tamers and donkey drovers. Orange Care has also provided a regular contribution to the financial support of Klinik Clowns e. V., which can be used by the clowns involved to cover their travel, material and fees. Members of Klinik Clowns visit the children's ward at the Josefinum Clinic in Augsburg for several hours each week. The association has also organized a furniture flea market and from the revenue has given support to the projects mentioned above, amongst others.

Orange Care is also the sponsor of the daycare center on the KUKA site in Augsburg where there are a total of 30 places for children less than three years old.

#### **Social engagement – apprentices at KUKA**

The KUKA training center welcomed a class of young refugees to KUKA during the year under review to give them an impression of day-to-day employment and the occupations for which there are apprenticeships. KUKA also issued invitations to Girls' Day 2016 with the idea of getting girls interested in taking up technical and industrial occupations in mechanical and electrical engineering, mechatronics and machining.

#### **Corporate responsibility action week**

In September 2016, KUKA participated in the action week on corporate responsibility instigated by the German Engineering Federation VDMA. During this week, the apprentices supported social institutions such as the food bank Augsburg Tafel e. V., the charitable department store Sozialkaufhaus Augsburg, and retirement homes.

#### **KUKA is a member of Blue Competence**

Blue Competence is the sustainability initiative of the VDMA and the European mechanical and systems engineering platform for issues relating to sustainability. KUKA has committed itself to compliance with the Blue Competence codex. Within the scope of this initiative, KUKA participated in the corporate responsibility action week.

KUKA is also a member of the Chamber of Industry and Commerce and the International Federation of Robotics (IFR). Both organizations have special working groups dealing with the topics of energy efficiency and sustainability.

#### **Safe, flexible and productive**

The demographic shift and the changes in the working and living environment have an impact on employee performance; this calls for forward-looking and sustainable solutions that help maintain health. Operations that are deemed not to be ergonomic have been automated in order to reduce the physical stresses on production employees. For example, some body assembly tasks were automated during the year under review. Production employees are now supported by a KR AGILUS when applying surface sealants. This ensures a high level of process reliability and reduces the risks to employee health. Employees are also offered training and upskilling, so as to enhance employee flexibility and minimize one-sided physical stresses. Certain logistics activities such as the transportation of completed robots to the calibration station have also been automated to reduce the burdens on employees and allow them to work on more challenging tasks.

#### **Sustainable site concept in Augsburg**

The establishment of the Development and Technology Center (DTC) has laid the foundation for the site concept finalized during 2016. This concept sees the site being developed still further in a number of stages which will lead to modern, flexible and dynamic employment. These include new production, administration and development premises, a training center, a medical center and a garage.

KUKA will continue to implement innovative environmental and energy concepts for all new construction, expansion and modernization projects at the Augsburg site.



### Promoting excellence in sports and culture

KUKA promotes top performance in sports and culture. This raises brand awareness for KUKA and is also a way for KUKA to take social responsibility. KUKA concentrates on local projects at its own locations. For instance, KUKA has supported the Bundesliga soccer team FC Augsburg and the first-division ice hockey team Augsburg Panthers for years. Cultural institutions in Augsburg such as the Textile and Industry Museum and specific art collections are also sponsored.

### Research partnerships to promote sustainability

KUKA is a partner in EU-funded projects that promote research activities in the field of sustainable, innovative technologies:

#### AREUS, an EU-funded project

During 2014-2016, KUKA was a partner in the European combined research project "AREUS – Automation and Robotics for EUropean Sustainable Manufacturing" which has now been completed successfully. Together with research partners from industry and science, KUKA advanced the development of energy-efficient robot-based solutions for the factories of the future. Optimized processes for robot movement were developed, affecting both the individual robot and groups formed of several robots. The power supply for the robot-based test installations was converted to direct current as a prototype development in order to collect initial experience for future regenerative power supplies and to allow the energy requirement in a system to be distributed better and for braking energy to be recovered. The new concepts were tested in a real production scenario at Daimler, a project partner. On completion of the project, the findings were presented at two trade fairs (ICRA 2016, Stockholm and Automatica 2016, Munich). This included presentation of a new form of energy-efficient path planning which can achieve savings of up to 30% in energy consumption and up to 60% in the peak demand for energy supply, depending on the type of task.

#### euRobotics AISBL

The European non-profit organization euRobotics AISBL (association internationale sans but lucratif) has agreed on a public-private partnership (PPP) with the European Commission for robotics in Europe. Its research and innovation program is receiving more than €700 million funding in 2014-2020. The sustainability targets are outlined in a joint road map. The development of sustainable industrial production methods is one of the objectives. See the "Research and development" section starting on page 7 for more information.

#### EFFRA

KUKA is also involved in a partnership with EFFRA (European Factories of the Future Research Association). Members make important contributions that influence the development of sustainable production and manufacturing processes, as for example in the saving of materials and reduction of waste (Road Map 2014 to 2020). KUKA's role is to advance key topics in robot-based automation.

### Sustainability and energy efficiency in friction welding

As well as aiming to improve welding processes and quality, KUKA focuses on optimizing energy consumption in particular. During the previous year KUKA had already launched the new MagnetArc power source, MagnetArc 620A, which uses up to 20% less energy, and this was installed in further welding systems during the year under review. The Genius friction welding machine was also equipped with a servo-controlled hydraulic system. This means that the hydraulic performance can be adapted to the actual demand, thus avoiding unnecessary losses.

### Energy optimization in the press shop

To reduce energy consumption by fast trimming presses, KUKA Industries also optimized the hydraulic drive when developing the new Dialog IV series. Through the optional use of a frequency inverter, the drive power of the hydraulic unit is matched to the required mechanical power. On the basis of the process cycle, the required hydraulic power and energy consumption can be determined beforehand by means of an amortization calculator. This allows a cost/benefit analysis to be made.

### KUKA showcases multi-functional cell at Augsburg Innovation Park – production of first test components for Ariane 6 booster

With reference to sustainability, lightweight construction is a key topic for the future of industrial manufacturing. Within the scope of a project at the Augsburg Innovation Park, experts from industry and the scientific community are working on the industrialization of carbon-reinforced components and taking human-robot interaction to the next level.

In collaboration with the German Aerospace Center (DLR), KUKA has been involved for years in researching and developing innovative processes and automation solutions. Industrial-scale production processes with lightweight materials are developed at the new location for aerospace applications. KUKA and the DLR installed a multi-functional cell (MFC) together that is 32.5 m long and 16 m wide. This enables aerospace research to be carried out on large components of lightweight materials on an industrial scale.

Within the Koffer (Kosten Optimierter Faserverbund Feststoff Raketentriebwerk – cost-optimized composite solid rocket motor) research project a wrapping and layup installation was incorporated into the MFC, enabling a first test component for booster housings on Ariane 6 to be built using a new fiber composite technology. This new technology was implemented with a CAD/CAM process chain and a Siemens machine tool controller. It was thus possible for the robots of the KR QUANTEC series to be controlled directly via the KUKA.CNC Sinumerik interface. The project was successfully completed at the end of 2016.

### KUKA partners with MAI Carbon – MAI ZPR research project

KUKA is active in the leading-edge cluster MAI Carbon. The cluster in the Munich-Augsburg-Ingolstadt triangle is directing its efforts toward developing carbon fiber-reinforced plastics (CFRP) technology for a variety of sectors in Germany by the year 2020. In the year under review the MAI ZPR project on CFRP machining via accurate robot processing sponsored by the Federal Ministry of Education and Research (BMBF) was successfully completed. Alongside partners from industry and research, with KUKA acting as project coordinator, manufacturing technologies using classic industrial robotics took a significant step forward.

The benefits for KUKA include technology modules to increase the precision of robot path processes and the use of integrated CAD/CAM process chains. The aim is also to achieve sustainable development in this business segment via technology transfer to other segments in addition to fiber composites. A robot test cell for the flexible processing of large components on an industrial scale is available for customer trials and is used for other technological developments.

### Energy efficiency in systems engineering

The catalog of measures drawn up by KUKA for energy-efficient production represents a guideline which is used for new systems. Quantitative evaluation of the measures is already possible during the planning phase of a system using the KUKA-produced calculation tool for energy and media consumption. KUKA has helped its customers in this way with achieving sustainable production. This approach can also be applied to existing facilities, meaning that sustainable production is also ensured in practice. For this to happen, consumption must be checked continuously and optimized as necessary. With these solutions the energy consumption can be recorded during planning as well as during subsequent operation, after which it can be compared with average values stored in the calculation tool. When the calculation tool reveals potential for optimization, KUKA offers to optimize energy consumption. A first project has already been carried out in which our trained specialists optimized an existing system on the basis of this catalog of measures.

### Recycling and retooling

The recycling concept for KUKA robots comprises a number of different aspects, including not just proper disposal and sustainable utilization. KUKA also focuses on recyclable materials as early as the parts selection phase.

KUKA offers customers refurbishing services for used robots, which can then be returned to customers for productive use (retooling). Ideas for replacing or optimizing components or giving robots a new coat of paint are discussed with the customer on a case-by-case basis. It is also possible to rent robots in order to test them or for short-term operation. As well as robots, used presses, tilt-turn positioners and friction welding machines are also available.

KUKA offers its customers a return program for robots that are no longer in use. The used robots are refurbished or retooled to meet new requirements. Then they are available again for purchase as used robots. KUKA uses environmentally compatible methods to disassemble and dispose of robots that can no longer be refurbished. All of KUKA's recycling partners must undergo a strict confirmation process.

### CO<sub>2</sub> emissions greatly reduced

CO<sub>2</sub> emissions have fallen steeply since the previous year. Their value was 2.2 (t/employee), which was 16% lower than the previous year's level (2015: 2.6). This reduction is largely due to the changeover from fossil resources to district heating at the Augsburg site. The reduced consumption of thermal energy and electricity also results from this changeover. The consumption of thermal energy was 85.88 kWh/m<sup>2</sup>, which was 10% lower than the previous year's level (2015: 85.88 kWh/m<sup>2</sup>). Power consumption fell by 4% from the year before (94.95 kWh/employee), reaching a value of 85.88 kWh/employee. Water consumption is relatively low overall and plays a less important role here because water is only available for normal daily use, with production only requiring a fraction of all the water consumed. Consumption of water during the year under review was 9,537.4 l/employee at the Augsburg site.

In switching over to district heating at the Augsburg site as early as September 2015, the stage was set for an energy-efficient, environmentally friendly and future-proof energy supply. The environmental impact from the increased use of the site is thus steadily being reduced and the requirements of the latest version of the Energy Saving Ordinance (EnEV) for energy efficiency for new and existing structures have been fulfilled.

### Strategic energy targets 2020

KUKA is committed to ensuring all the resources it uses are handled in a sustainable manner. To comply with this commitment, the 2020 strategic energy targets were defined in the year under review and declared binding:

- › Reduction of energy consumption per unit of revenue by 7.5% in Germany by 2020 compared with the baseline for energy consumption (December 31, 2014)
- › Reduction of CO<sub>2</sub> emissions per unit of revenue by 20% in Germany by 2020 compared with the baseline for energy consumption (December 31, 2014)
- › Raising of energy awareness and employee commitment through at least half-yearly campaigns/information
- › Expansion of energy consumption recording and analysis for each site with at least a quarterly presentation of suitable Energy Performance Indicators (EnPI).

## Certifications

At the sites in Germany as well as the global sites, KUKA holds numerous certificates which are issued and monitored by recognized, accredited certification institutions at regular intervals. ISO 9001, now the basic standard for a quality management system, should be mentioned in this context, on which VDA 6.4, the supplementary standard of the automotive industry, is based. Furthermore, management systems for the topics of environmental protection, occupational safety and energy have been certified with the ISO standards 14001, 18001 and 50001.

### KUKA is certified in accordance with ISO 50001 throughout Germany

In the year under review, KUKA introduced a Group-wide energy management system which has been certified by an accredited, independent inspection authority in several certification audits as being in conformity with the requirements of ISO 50001. The figures taken from 2014 were used as the basis for the energy evaluation. KUKA takes its guidance from the energy targets of the German Government and the EU. The efforts related to introduction of the energy management system supplement KUKA's existing environmental management system. Corresponding synergetic effects were achieved in the audits.

### Key ecology figures

	2015	2016
Number of locations worldwide	66	97
of which ISO 9001 certified	39	42
of which ISO 14001 certified	13	20
of which ISO 50001 certified <sup>1</sup>	–	20
<b>Consumption (Augsburg site)</b>		
Electric power (kWh)/employee	3,921.80	3,767.22
Heat (kWh)/m <sup>2</sup> heated area	94.95	85.88
Water (l)/employee	7,160.7	9,537.4
CO <sub>2</sub> (t)/employee	2.6	2.2

<sup>1</sup> Throughout Germany

### KUKA is certified in accordance with VDA 6.4 at the relevant sites

As a supplier to the automotive industry, product reliability and safety are the number one priority. The VDA 6.4 certification documents that processes have been implemented within the company to ensure that customers can rely on the high quality of their machines, systems, tools or inspection equipment from KUKA. One important aspect here is the efficiency of processes. The certificate is a supplement to ISO 9001.

## KUKA participates in Carbon Disclosure Project

KUKA Aktiengesellschaft has been part of the Carbon Disclosure Project since 2008. This organization publishes information on the life-cycle assessments of listed companies and on business prospects for sustainable products once a year. The Carbon Disclosure Project is supported by a number of investor groups ([www.cdproject.net](http://www.cdproject.net)). During 2016, in addition to Carbon Disclosure, KUKA also participated in various ratings relevant to sustainability, including those conducted by EIRIS and MSCI.

Further information can be found on our website [www.kuka.com](http://www.kuka.com) under "Guidelines for health, safety, sustainability and quality".

## Employees

### Global growth of KUKA Group

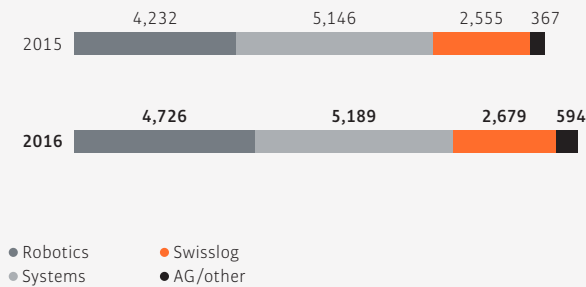
KUKA is transforming into a global group and operates in an international and dynamic competitive environment. As part of Industrie 4.0, KUKA is on a growth path worldwide as a technology leader with its solutions for the digitization of production. The number of employees increased in the year under review, primarily due to growth in the strategically important regions of Asia and Europe. The Group also continued to work on establishing the shared values and leadership principles relating to a consistent management and corporate culture. The personnel development team was selectively expanded and the work was focused on talent and cultural development. KUKA employees developed measures within orangeWIN (WIN standing for Women in Network) to pursue diversity within the Group and to promote the advancement of women. KUKA is also making itself more attractive as an employer by means of employer branding measures, as well as offering high-quality vocational training and a wide range of continuous professional development courses and cooperating with renowned universities. The focus is also on combining work and family life.

### Significant increase in personnel – Global presence enhanced

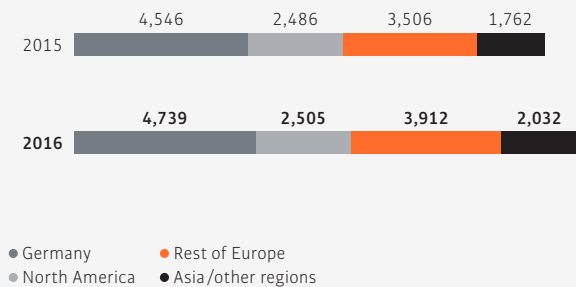
In the year under review, the Group's workforce has risen by 7.2% from a total of 12,300 at the end of 2015 to 13,188 at the end of 2016. Personnel has been increased, particularly in the strategically important regions of Asia, primarily in China, and Europe. The Robotics division recorded the greatest growth with a rise of 11.7% to 4,726 employees (2015: 4,232). The Systems division increased its workforce in the year under review by 42 employees from 5,146 to 5,188. The number of Swisslog employees rose by 4.9% from 2,555 (2015) to 2,679 (2016).



Employees  
by division (Dec. 31)



Employees  
by region (Dec. 31)



### Stable age structure

At 40.4 years, the average employee age throughout the Group was around the level of the previous year (2015: 40.7 years). 34 employees were honored for 25 years of service during the year under review, while three employees celebrated their 40<sup>th</sup> anniversary.

### Vocational training at a high level

At the end of 2016, KUKA Group was employing a total of 305 apprentices (FTE) (2015: 348). The process of centralizing apprentice training at KUKA Aktiengesellschaft, which was carried out in 2013, has proven to be a success. This ensures that apprentices are given more opportunities for their own development and teaches them to think and act globally on a Group-wide scale. KUKA attaches great importance to familiarizing apprentices with the internationalization strategy of the Group at an early stage. Apprentices gain experience abroad at other KUKA locations each year such as, for example, company sites in China and the USA. KUKA continues to maintain a high standard in the quality of training and the level of performance. This is repeatedly demonstrated by KUKA apprentice graduates finishing best in their year in their respective training occupation. In the year under review, the Swabian Chamber of Industry and Commerce honored two apprentices as the best in their year for the occupation of electronics technician for automation technology. 17 apprentices completed their examinations prematurely in summer 2016 – with an average grade of 1.62.

### Wide range of training and further education options

KUKA Group offers a variety of training programs covering both technical and commercial occupations:

- › Industrial mechanic and lathe/milling machine operator
- › Mechatronics technician
- › Electronics technician for automation technology
- › Industrial clerk
- › IT specialist
- › Technical product designer
- › Warehouse logistics specialist
- › Specialist for forwarding and logistics services

The share of female apprentices in technical professions has remained constant over the last few years at around 20%. This percentage is expected to increase, in particular thanks to the company's participation in the annual Girls' Day program, the offer of introductory apprenticeships for girls and cooperative partnerships with girls' schools. During the year under review, the company also intensified its contacts with schools in the region. Students at all forms of secondary schools can now learn more about work life at KUKA in a week-long work experience placement. Around 130 students took advantage of this opportunity at the company's site in Augsburg in 2016. Students were also given the chance to learn more about the company's training center on tours of the plant and during many other regional activity days.

In addition to the traditional apprenticeships, KUKA offers a dual, training-integrated degree course at the University of Augsburg with the aim of gaining a Bachelor's degree. In addition to the dual integrated study course for mechanical engineering, mechatronics and electrical engineering, the disciplines of business administration, information technology, technical information systems and business information systems are also available to choose from.

KUKA attaches great importance to the qualified advanced training of employees. Training sessions and workshops were carried out in personal development and in team and organizational development as part of internal training measures. All standard courses, such as computer and language courses, specific professional courses from the fields of sales, purchasing, business administration, strategic implementation and project management, are offered by KUKA Academy along with seminars for leadership, communication and change management. In 2016, a total of 3,387 employees took part in 125 seminars and 49 language groups at the Augsburg and Obernburg locations. The training portfolio and administration of KUKA Academy has been managed in Augsburg using a modern, user-friendly learning management system since the start of 2016, which is available to every employee on an e-self service basis. The global roll-out of this system has already been started.

#### **Cooperative partnerships with universities around the world**

KUKA has partnerships with universities all over the world, including Tongji University in Shanghai and TU Munich, and works together with renowned universities on a number of international research and development projects. The company also has close contacts in the region with the universities in Augsburg and Kempten. During the year under review, KUKA attended numerous university contact fairs and was the principal sponsor of the “Pyramid” fair in Augsburg. Pyramid is designed to establish contacts between companies and young professionals.

#### **KUKA values and leadership programs**

Work was continued on establishing the shared KUKA values and leadership principles relating to a consistent Group-wide management and corporate culture in the period under review. The personnel development team was selectively expanded and the work was focused on talent and cultural development. The leadership principles were linked to the head, hand and heart symbols in order to create a holistic reference for all employees. Internal workshops were launched for all employees and executives in relation to cultural development and strengthening with the aim of further consolidating the shared understanding of KUKA values and principles worldwide.

In addition to the programs for new executives, additional Group-wide leadership, team development and team strengthening programs and change management programs were designed and introduced. These programs were established for all management levels and focus on the successful implementation of the corporate strategy based on values. They support the executives worldwide in implementing changes positively, communicating and creating corresponding framework conditions in new structures of an agile and digital company on a collaborative partnership basis.

#### **Promoting diversity with orangeWIN – Network as a success factor**

KUKA employees introduced a diversity initiative with orangeWIN (WIN standing for Women in Network). Targets and measures were developed under the patronage of Jurate Keblyte, CFO at KUKA Roboter GmbH, at a launch event during the period under review with more than 100 female KUKA employees, primarily from MINT professions, in order to enhance diversity within the Group and promote the advancement of women. In addition to creating innovative and creative impetus, the program is primarily about identifying and supporting female talents within the company. The first projects introduced by orangeWIN in 2016 are a social network for professional and private exchange, regular quarterly events with podium discussions, specialist lectures and guest speakers as well as a specially developed mentoring program which establishes both internal and external networks.

#### **Strong employer brand**

The large-scale employer branding campaign introduced in 2013 for different target groups is still being pursued in order to enhance the public perception of KUKA as an attractive employer. The appeal of the work environment at KUKA is reflected in external reviews. In the 2016 trendence Graduate Barometer, which is based on a survey conducted among pupils, students and young professionals about their preferred employer, KUKA was ranked 27<sup>th</sup> in the Engineering Edition and occupied 53<sup>rd</sup> place in the IT Edition. In the Universum study of the top employers for young professionals, KUKA rose to 25<sup>th</sup> place. The number of applications was at a very high level at a solid 15,000 in 2016 (compared to 2011 with just over 5,000). The career page was also completely revised in 2016 as part of the new KUKA website. KUKA received the silver seal in the best recruiters study in 2016 for excellent recruitment quality and occupied 4<sup>th</sup> place out of 35 examined companies in the mechanical and systems engineering industry ranking. In addition, KUKA supported the “Fair Company” initiative in the year under review, which promotes fair internships and real opportunities for university graduates. This means, for example, that KUKA primarily offers internships geared towards providing career orientation and does not propose internships as alternatives to graduates seeking permanent employment.

#### **Employee share program**

KUKA employees identify with the company's success and are interested in the employee share program. 218 employees participated in the program during the year under review. 22,991 shares were transferred to employees.

## Forecast, opportunities and risk report

### Opportunities and risk report

#### Basic principles

KUKA Group is a global enterprise with international operations. Any entrepreneurial activity provides new business opportunities, but also involves many risks, especially technical ones. The Executive Board of KUKA Aktiengesellschaft aims to systematically and sustainably improve the value of the company for all stakeholders and shareholders by seizing potential opportunities and minimizing said risks.

To achieve this objective, the Executive Board has implemented a comprehensive corporate risk management system to systematically and consistently identify, evaluate, manage, monitor and report the internal and external risks to which its divisions and subsidiaries are exposed.

Group management regularly assesses the likelihood that identified risks will occur and their potential impact on expected earnings (EBIT). Risks are categorized according to worst, medium and best case scenarios including the expected impact of the occurrence of an event. Accruals and write-downs associated with these risks are recognized in the annual financial statements in accordance with applicable accounting principles. The unsecured residual risks, i. e. risks according to risk mitigation measures (net assessment), are therefore depicted as risks.

The risk management system is subject to a monthly reporting process (risk inventory) which involves identifying new risks and carrying out a follow-up assessment of existing risks. The information that has been collected in this way is summarized in a risk report that is also prepared each month and addressed to the Executive Board of KUKA Group. This report contains a top 10 risk assessment and a risk exposure assessment (overall risk situation) for the divisions, KUKA Aktiengesellschaft as the holding company and KUKA Group. The top 10 risks are also a fixed part of internal monthly management reporting and are discussed at monthly results discussions between the Executive Board of KUKA Group and the management of the divisions. The identified risks are additionally presented and explained in more detail to the Executive Board each quarter by the Risk Management Committee. The committee also determines whether any measures already implemented to minimize risk are adequate or whether further steps need to be initiated. These plenums also assess the plausibility of the reported risks and determine how to avoid similar risks in future. The risk report is also reviewed during Executive and Supervisory Board meetings, especially by the Audit Committee.

The managers of the divisions and subsidiaries are directly responsible for the early identification, control and communication of risks. Risk managers in the central and decentralized business units ensure that the reporting process is uniform with clearly defined reporting channels and reporting thresholds that are in line with the size of the company. Internal ad hoc announcements are mandatory whenever risks exceed the Group's defined reporting thresholds. The standard risk management procedures applied throughout the Group are efficient and effective. The head of risk management coordinates the risk management system. He compiles the individual risks identified into the aforementioned top 10 risk overviews or risk exposure overviews and communicates and monitors them. This role is based within KUKA Aktiengesellschaft's Group controlling department, which reports directly to the CFO of KUKA Aktiengesellschaft. This ensures that risk management is an integral component of KUKA Group's overall planning, control and reporting process.

The Group's risk management system enables the Executive Board to identify material risks at an early stage, initiate appropriate steps to counter these risks and monitor implementation of the steps. The internal audit department regularly monitors compliance with the risk management guideline of KUKA Group and therefore whether existing procedures and tools are effective. It also audits those responsible for the risks if this is relevant. The internal audit department also regularly audits the risk management process to ensure efficiency and continuous improvement. Furthermore, external auditors check that the early risk identification system is suitable for early identification of risks that could threaten the existence of the company as a going concern.

In addition to the risk management system, KUKA Group has an internal control system (see management report, "Internal control and risk management system" section, page 41 et seq.) above and beyond the risk management system, which it uses to continuously monitor the appropriateness of the corporation's business and accounting processes and identify potential improvements.

#### Strategic risks and opportunities

KUKA's business divisions aim to be among the technology and market leaders in their target markets. The key to achieving this is to consistently enhance their core technologies on the basis of coordinated innovation programs. One important task is to identify opportunities and risks associated with technical innovations early and to evaluate the innovations' manufacturability. The company mitigates the impact of faulty market assessments by conducting regular market and competitor analyses, some of which are decentralized. The risk of developing non-marketable products and systems is reduced through application-oriented development, partnerships with system integrators and alliances and cooperative research projects with, for example, the German Aerospace Center (DLR) in Wessling near Munich, the RWTH technical college in Aachen and several institutes of the Fraunhofer Society. Strategic risks and opportunities are not quantified.

## Operational risks and opportunities – KUKA Group

KUKA Group’s opportunities and risk-related controlling process ensures that the company’s managers take both opportunities and risks into consideration. The Group’s risk exposure, based upon evaluating operating risks according to the procedure outlined in the “Basic principles” section, is described below. The report includes the total aggregated maximum risk (worst case) and expected risk value, which are calculated on the basis of the various weighted scenarios and their respective likelihood of occurrence.

Opportunities are evaluated by the individual divisions and are not further aggregated. For this reason, the opportunities are dealt with in greater detail in the following sections on the divisions (Robotics, Systems, Swisslog).

### Group risk exposure

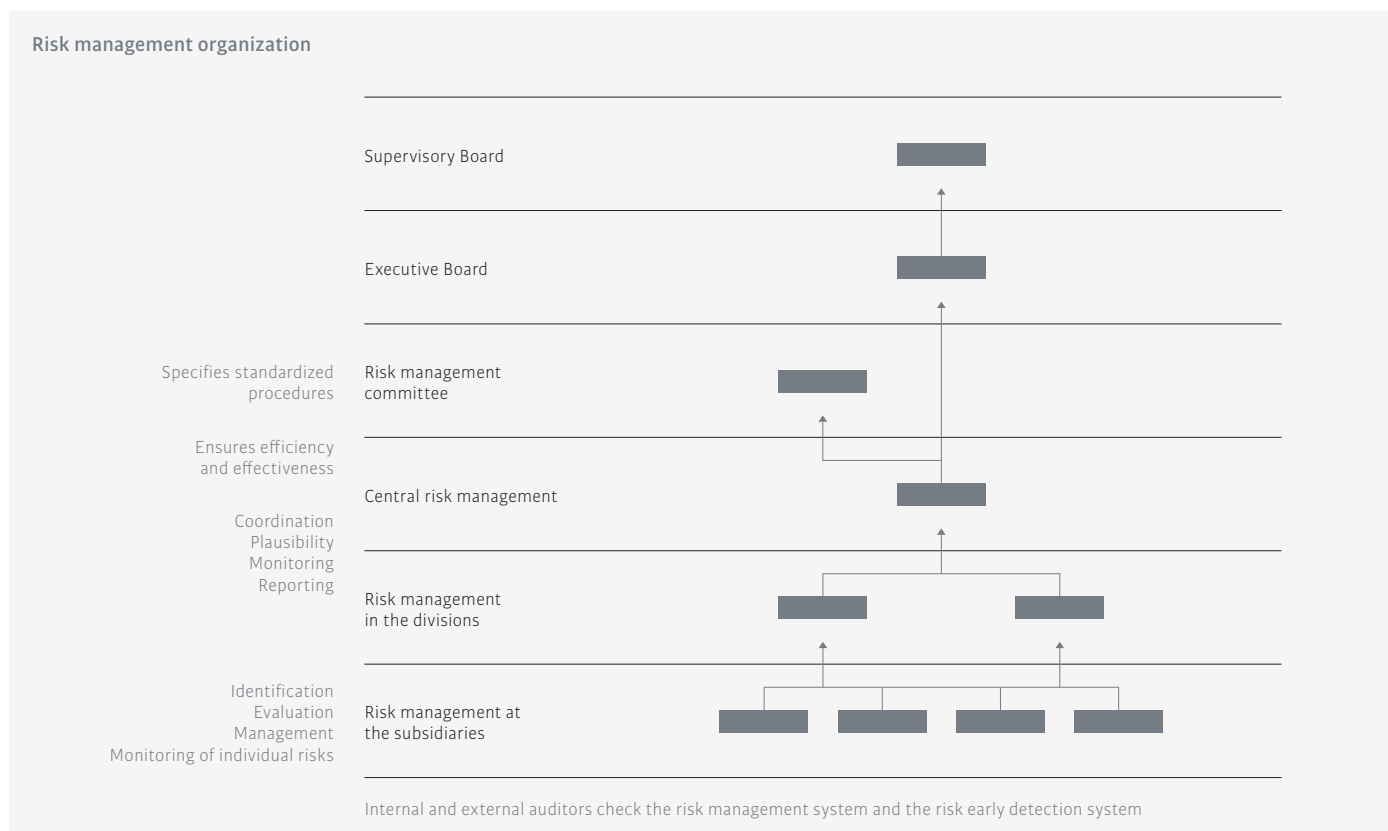
in € millions	Worst case		Expected risk value	
	2015	2016	2015	2016
Legal risks	6.5	6.1	0.4	-0.5
Economic risks	51.2	26.4	2.8	-3.8
<b>Total for the Group</b>	<b>57.7</b>	<b>32.5</b>	<b>3.2</b>	<b>-4.3</b>

Legal and economic risks occur primarily as a result of the activities of the Robotics, Systems and Swisslog divisions. The changes on the previous year can be explained in part by the positive development of business and also by intensified risk mitigation measures, which in some cases result in a theoretically negative expected risk value.

More detailed explanations of legal and economic risks can be found in this section with regard to cross-division risks that are managed at Group level or in the following sections with regard to the individual divisions (Robotics, Systems, Swisslog). We also evaluate the potential worst-case damage that could be caused by the individual risks and the likelihood that they will occur, categorized as follows:

	Maximum loss	Likelihood of occurrence
Low	to €5 million	to 10%
Medium	€5 to 10 million	10 to 25%
High	€10 to 20 million	25 to 40%
Very high	over €20 million	over 40%

Please refer to the notes, starting on page 54, for details regarding the precautionary balance sheet measures for the identified risks.



Cross-division opportunities and risks such as financing, personnel and IT are analyzed and managed at Group level, not by the individual divisions, which is why said risks are only addressed from the Group perspective in the opportunity and risk report.

Since KUKA conducts business around the world, it is obliged to comply with many international and country-specific laws and regulations issued by, for example, tax authorities. The company employs specialists familiar with the respective countries' laws on a case-by-case basis. Opportunities and risks arise as a result of changes to legal frameworks. For example, tax audits discovering non-compliance issues could negatively impact the Group in the form of payment of interest charges, penalties and back taxes. At the present time, there are no foreseeable tax or legal issues that could have a significant negative impact on KUKA Group. Appropriate provisions have been recognized for tax risks based on experience.

Standard general contracts are used whenever possible to cap legal risks. The Group's legal department supports the operating companies to help limit risks associated with in-house contracts, warranty obligations and guarantees as well as country-specific risks such as the lack of patent and brand protection in Asia. KUKA has developed an independent strategy to safeguard its intellectual property, which is primarily secured by patents and trademark rights.

In addition, Group-wide Directors' and Officers' (D&O) liability insurance policies are in place that cover the managing bodies (Executive Board and managing directors) and supervisory bodies (Supervisory Board, administrative and advisory boards) of the German and foreign subsidiaries. Existing insurance policies are reviewed annually in order to weigh the relationship between the insurance protection and deductible amount versus the risk premium.

There are no operating risks in existence for KUKA AG or other companies.

## Operational risks and opportunities in the divisions

KUKA is exposed to the cyclic investment behavior of its customers in the various market subsectors. A major portion of the Systems, Robotics and Swisslog divisions' business volume is in the automotive sector where oligopolistic structures and constant price pressure are ongoing concerns. Fluctuations in the industry's capital spending plans are also considered in the respective strategic and operative plans by analyzing public announcements and disclosures. The company continuously strives to be as flexible as possible with its own capacities and cost structure to address the cyclic nature of the business.

KUKA benefited from significant investment activities in both the automotive industry and the aircraft industry and general machinery and systems engineering sector throughout 2016. Additional opportunities arose because KUKA Group's key automotive customers enjoy an excellent competitive position in their markets. In comparison to its own competitors, KUKA Group sees business growth opportunities due to its customer portfolio, particularly with respect to the growth of its customers' market shares. Further opportunities arise due to the general trend toward greater automation in non-industrial sectors, such as

the long-term prospects associated with assisting an aging society. The acquisition of Swisslog Group in December 2014 reduced dependency on the cyclical automotive industry, as Swisslog implements automation solutions for hospitals, warehouses and distribution centers.

KUKA works with suppliers that focus on quality, innovative strength, continuous improvement and reliability so that it can supply its own customers with products of the highest possible quality. Generally, KUKA sources product components from several suppliers in order to minimize the risk of sharp price rises for key raw materials, but in a few cases, due to a lack of alternative sources, is dependent on single suppliers that dominate their markets.

### KUKA Robotics

Demands for continuous product innovation from international customers and unrelenting cost awareness are the key challenges for this division's product portfolio; especially when it comes to the automotive industry and its subsuppliers. The result is permanent price pressure and potentially longer life cycles for the robotic applications combined with demands for ever-improving quality and longer warranties.

KUKA Robotics responds to such trends by continually developing new products and applications that offer customers in existing markets quantifiable financial benefits driven by quick paybacks. Launching new products goes hand in hand with product performance risks and quality guarantees, which could generate additional costs if rework is required. KUKA employs a comprehensive quality management system that includes extensive validation and test processes to manage such risks or avoid them altogether.

KUKA sees an opportunity to continuously expand its customer base in general industry. One of the corporation's key strategic thrusts is to penetrate new, non-automotive markets. The aim is to penetrate the health care sector and other consumer-related markets in which human-machine collaboration will in future be essential. Systems used for human-machine collaboration can operate without protective barriers or similar safety measures. One of the division's sections, Advanced Robotics, focuses on developing and implementing the technology for such innovative products and applications. The company's profitability will become less and less dependent on exchange-rate fluctuations as it increasingly spreads its value added across different local currencies.

	Worst case	Expected risk value
Legal risks	0.0	0.0
Economic risks	12.1	0.0
<b>Total for Robotics</b>	<b>12.1</b>	<b>0.0</b>

The assessed potential damage associated with all individual risks is low (to €5.0 million) and the likelihood of occurrence is low to high (to 40.0%).

## KUKA Systems

This division's sales and profits are subject to general business risks due to the length in time it takes to process project orders, the revisions to the specifications that are often necessary while already processing the orders, the infrequency of the orders received and the price and competitive pressures. Other risks associated with these projects include inaccurate prediction of the actual costs as well as penalties for late deliveries. The division therefore uses appropriate risk checklists for individual orders in order to assess the associated legal, economic and technological risks prior to preparing a quotation or accepting a contract. One of the components of project execution is to monitor and track solvency risks and mitigate them using a strict project and receivables management process. Other risks are continuously monitored and if necessary accounted for by way of accruals or write-downs. Opportunities associated with the project business arise mainly when parts can be purchased at a lower cost than originally estimated and by invoicing the customer for any change orders received over the course of the project.

Major automakers throughout the world are currently feverishly expanding their global manufacturing capacities. KUKA increasingly works together with internal partners, whereby several of the division's regional subsidiaries collaborate on a project, especially in South America and Asia. In these situations, risks involve information exchange, the value-added process and the IT-based master project management system. There are also organizational risks associated with extraordinarily rapid and strong growth in business volume, particularly in emerging markets. KUKA mitigates these risks by harmonizing its global IT systems and deploying experienced internal and contract employees when establishing and expanding the local organizations.

The increasing variety of models offered by the automotive industry has a positive impact on the potential market volume, since this generates increasing demand for flexible manufacturing systems, which in turn spurs demand for new or revamped assembly lines. This creates new business opportunities for system providers and subsuppliers. Scarce resources are driving demand for smaller and more fuel-efficient vehicles that will use alternative energy sources. This means automakers, especially American manufacturers, will have to invest in new production lines or upgrade their existing assembly lines in the future.

Pay-on-production contracts such as KTPO's (KUKA Toledo Production Operations) offer additional opportunities, but also risks. The Jeep Wrangler brand continues to promise above-average growth prospects compared to other American car models. KUKA again participated in this growth during 2016. Here risks involve greater dependence on the volumes produced for the American car market.

Thorough market analyses have shown that KUKA Systems also has long-term business opportunities outside the automotive industry; namely, in general industry. The main risks here when tapping into new market potential relate to technical requirements, since customers in these sectors often have no experience with automated systems. The aforementioned checklists to review the technical risks associated with applying new automation techniques are therefore an especially important tool for mitigating risks.

## Systems risk exposure

	Worst case	Expected risk value
Legal risks	4.6	0.0
Economic risks	13.3	-4.3
<b>Total for Systems</b>	<b>17.9</b>	<b>-4.3</b>

The assessed potential damage associated with all individual risks is low to high (to €20.0 million) and the likelihood of occurrence is low to medium (to 25%). Intensified risk mitigation measures result in a theoretically negative expected risk value in individual cases.

## Swisslog

The division is subject to long-term investment cycles spread over various industries, such as hospitals, pharmaceuticals, food and e-commerce. The competition and the associated pressure on prices vary from one region to another. High investments in its own products to expand its range of solutions serve to strengthen the company's competitive position considerably. In addition to synergy effects, integration into KUKA enables expansion of the range of solutions by making it possible to offer customers integrated automation and robotics solutions.

In some cases, projects for the automation of warehouse and distribution centers are subject to long lead times which can give rise to financial risks resulting from miscalculations, failure to meet acceptance specifications or late deliveries. To counter this, regular project risk assessments are carried out at different stages of the projects by those responsible for project implementation in the relevant countries. Potential risks are regularly checked, new ones are added or existing ones eliminated, and measures for risk reduction are introduced and their progress documented. Projects requiring particular management attention are classified as "top attention projects" and their status is communicated monthly to the higher management levels.

Market data indicate that the increasing pressure on costs and the strict safety requirements for hospital logistics offer high growth potential for automation. Furthermore, consolidated service centers, in which hospitals standardize their logistics processes and achieve cost advantages, generate greater demand for automation solutions.

## Swisslog risk exposure

	Worst case	Expected risk value
Legal risks	1.5	-0.5
Economic risks	1.0	0.5
<b>Total for Swisslog</b>	<b>2.5</b>	<b>0.0</b>

The assessed potential damage associated with all individual risks is low (to €5.0 million) and the likelihood of occurrence is low to high (to 40.0%). Intensified risk mitigation measures result in a theoretically negative expected risk value in individual cases.



## Financial risks

KUKA Group is under the financial control of KUKA AG. The primary objectives of financial management are to secure the liquidity and creditworthiness of the Group, thus ensuring financial independence. Effective management of foreign exchange, interest rate and default risk also serves to reduce earnings volatility.

KUKA AG identifies, coordinates and manages the financial requirements of the Group companies and optimizes the financing of the Group. For this it employs a Group-wide standard treasury management and reporting system. KUKA AG normally procures finance centrally and distributes the funds among the Group companies. In addition, liquidity risk is reduced for KUKA Group by closely monitoring the Group's companies and their management of payment flows.

The significant improvement in the company's credit rating during recent years is a reflection of the positive development of KUKA Group and guarantees access to a broad investor base as a source of finance. Standard & Poor's awards KUKA Group a rating of BB+ along with a positive outlook. Early in 2017, Moody's even raised the KUKA Group rating to investment grade and now rates KUKA as Baa3 with a stable outlook.

KUKA pursues a conservative debt policy with a balanced funding portfolio. This is based on promissory note loans issued in 2015 with maturity dates up to 2022, an ABS program and a syndicated loan significantly extended and adapted in 2016 with a term until 2022. The usual financial covenants were agreed for the syndicated loan. KUKA monitors adherence to these covenants on a monthly basis; the covenants were complied with throughout fiscal 2016. As of December 31, 2016, all the covenants were well within the contractually defined limits. Please refer to the notes to the annual financial statements under number 15, for comprehensive details of the syndicated loan and the extent to which the agreed credit lines have been utilized.

KUKA hedges the risks from operations and financial transactions with financial derivatives. As a matter of principle, no hedging transactions are entered into without an underlying basic transaction. Whenever possible, KUKA AG is the central hedging partner of the Group companies, and it in turn hedges the Group's risks by concluding appropriate hedging transactions with banks. Internal guidelines govern the use of derivatives, which are subject to continuous internal risk monitoring. For a more precise description of our risk management objectives and the methods employed please refer to the notes on financial risk management and financial derivatives.

Currency translation risks, i. e. measurement risks associated with balance sheet and income statement items in foreign currencies, are not hedged, but are continuously monitored. The risk associated with the volatility of leading currencies and the resulting economic exchange risk (competitive risk) is mitigated by having production facilities in several countries (natural hedging).

## Personnel risks and opportunities

The success of KUKA Group, a high-tech enterprise, depends to a great degree on having qualified technical and management staff. Personnel risks arise mainly from employee turnover in key positions within the Group. Improvements in both business and economic prospects enable the company to strengthen the loyalty of its core personnel, train new, highly skilled employees and entice new recruits to join the Group. This applies to the traditional markets in Europe and the United States, but especially to recruiting employees in growth markets, where the need for skilled employees is growing steadily. Last but not least, in-house continuing education programs such as those offered by KUKA Academy or employee suggestion programs generate opportunities resulting from the improved motivation and qualification of the workforce.

## IT risks and opportunities

IT risks have risen over the past number of years, not least because of the importance of IT to business processes. These risks relate to both the frequency of viruses or hacking and the damage they could potentially cause. The existing IT security and business continuity management systems as well as guidelines and organizational structures are regularly optimized and reviewed in an effort to predict and minimize possible IT-related risks such as failure of computer centers or other IT systems. One way this is addressed is by continuously upgrading hardware and software. Furthermore, KUKA has launched several transformation projects which are currently running with the objective of harmonizing processes and the supporting IT application system architecture throughout the Group. This will generate long-term cost reduction potential and lead to continuous quality improvements. By systematically monitoring the processes concerned, the company reduces the risks associated with an increasing number of external threats as well as dependence on the ever-expanding digitization of business processes.

## Compliance risks

Compliance violations may lead to fines, sanctions, judicial orders regarding future conduct, forfeiture of profits, exclusion from certain transactions, loss of trade licenses or other restrictions. Furthermore, involvement in potential corruption proceedings could harm the overall reputation of KUKA Group and could have a negative impact on efforts to compete for business in both the public and private sectors. Such proceedings could also have a negative impact on the relationship KUKA Group has with business partners upon which it depends as well as its ability to find new business partners. They could furthermore negatively impact the company's ability to pursue strategic projects and transactions of potential importance for the business, such as joint ventures or other forms of cooperation. Ongoing or future proceedings could lead to the suspension of some existing contracts, and third parties, including competitors, could initiate legal proceedings against KUKA Group for substantial sums of money.

KUKA therefore rolled out a Corporate Compliance Program in early 2008 to make such risks transparent and controllable. The Compliance Committee established through this program meets at regular intervals and ad hoc and reports to KUKA Aktiengesellschaft's CEO, who in turn reports directly to the Supervisory Board's Audit Committee. The CEO is ultimately responsible for the Corporate Compliance Program, which is regularly updated and subject to strict internal controls. Moreover, mandatory training is organized for employees on compliance issues at regular intervals (most recently, the new Corporate Compliance e-learning program introduced in 2016). No substantial risks were identified in 2016 due to the active countermeasures taken to mitigate risk at an early stage and to eliminate risk sources, e. g. by realigning business processes.

## Other risks

KUKA Group continuously monitors other risks and mitigates these to the greatest extent possible. There is no evidence of environmental risks from operational activities, since the company does not use hazardous materials. The Group makes use of buildings and properties for its business operations, some of which it owns. As a result, the company is exposed to risks associated with any residual pollution, soil contamination or other damaging substances that may be discovered on its properties. There is currently no evidence of any situations that would have a negative impact on the measurement of balance sheet items. However, it cannot be ruled out that any such situations, which could, for example, require costly clean-up operations to be undertaken, will occur in the future. Please refer to page 46 for information about material agreements subject to conditions related to a change of control.

## Summary

Overall, KUKA Group's named risks relate to the business performance of the divisions and financial risks associated with currency exchange rate fluctuations and corporate financing. The Executive Board is not aware of any individual or aggregated risks that could threaten the company's existence. Strategically and financially, the company is positioned to be able to take advantage of business opportunities.

## Forecast

### General economic environment

Development of the global economy is generally positive with the growth trend continuing. According to the International Monetary Fund (IMF) the global economy grew 3.1% in the past year. Compared with growth in 2015 this represents a stable trend (2015: 3.1%).

The IMF expects the global economy to expand again more rapidly in 2017 and has forecast economic growth of 3.4%. This increase is likely to be driven by the higher growth in some major industrialized countries and specifically by economies which underwent a sharp decline during 2016.

According to the IMF, the overall economy in Europe is set to continue growing, although the rate of growth is expected to decrease slightly. Following a plus of 1.7% in 2016, growth of 1.6% is expected for 2017. Behind this development are deflationary general conditions and uncertainties in advance of elections in various member states. Moreover, the coming departure of the United Kingdom from the European Union makes economic planning difficult and thus hinders investment. The IMF is predicting the trend in Germany, the most important single market for KUKA, to be similar to that in the rest of Europe. Following an increase of 1.7% in 2016, growth of 1.5% is expected in 2017.

For the USA, the IMF has slightly raised its growth forecasts for 2016. According to the experts, the new US Government's announcements concerning lower corporate taxes and investment in the infrastructure should be a boost for the US economy. In actual figures, the IMF is anticipating 2.3% growth during 2017. The North American market is the second largest sales market worldwide for KUKA Group.

Among the larger economic markets, the IMF still regards China as likely to be one of the largest motors for growth of the global economy during 2017. However, in comparison to the year before, the pace of growth is anticipated to diminish further. The reasons lie in lower investment and the transition from an export-driven economy to demand supported to a greater extent by the internal market. The IMF forecasts growth of 6.5% for China in 2017 (2016: 6.7%). China was KUKA's third largest single market worldwide in 2016.



IMF expectations for the most significant global markets from KUKA's viewpoint:

### Economic growth

in %	2016	2017	2018
Germany	1.7	1.5	1.5
Eurozone	1.7	1.6	1.6
USA	1.6	2.3	2.5
China	6.7	6.5	6.0
Developing/emerging countries	4.1	4.5	4.8
World	3.1	3.4	3.6

Source: IMF, January 2017

### Global drivers of growth in robot-based automation

The growth prospects for automation and robotics remain high. In its most recent study, the International Federation of Robotics (IFR) anticipates corresponding expansion of the global robot market and greater investment in the automation of production systems. Efficiency increases, improved product quality, higher unit quantities, greater product diversity and flexibility in particular are decisive factors for manufacturing companies continuing to raise the level of automation.

### Growth opportunities for KUKA

#### 1) China and other emerging economies

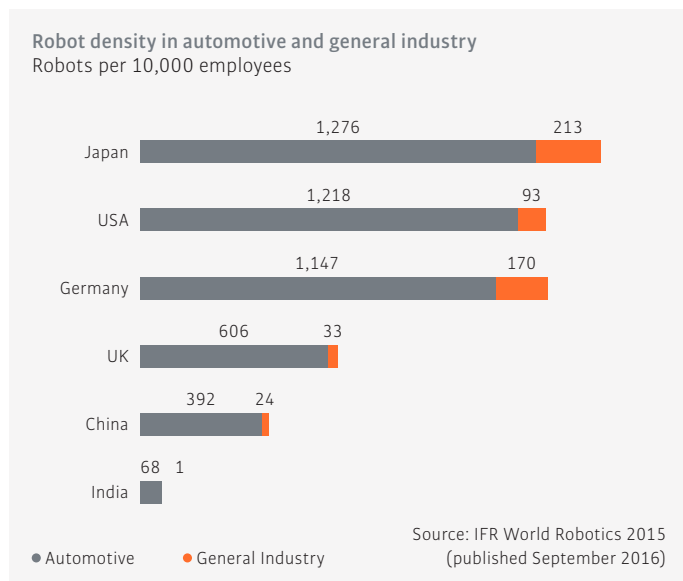
Robot density, and thus the degree of automation, is much higher in industrial countries than in the developing and emerging economies. In other words, the growth potential of robot-based automation on these markets is much higher than in the industrialized countries. The growth potentials in the emerging markets affect the automotive sector as well as the various segments of general industry. The international automotive industry is investing predominantly in these countries in order to profit from lower wage costs, but also in order to be able to react flexibly to local customer requirements. Another important element is robot-based automation. For decades it has been the standard for some production stages – body-in-white manufacture, for example. Local car manufacturers in the emerging markets are also investing in automation in order to match up to the rising quality requirements and to enable them to export more of their vehicles in the medium-term future.

At the same time, wages and salaries are sometimes rising by 10 percent or more each year in the emerging economies, and this generally poses great challenges to companies that manufacture locally. Automation solutions can assist in cushioning against this rise in costs. The growth of automation in general industry is exposed to the same factors as the automotive industry: increased cost pressure at the same time as rising product quality requirements. In recent years the Chinese robot market grew disproportionately and is now the world's largest sales market. According to the latest study by the IFR, the number of robots sold per year has risen by more than the factor 10, from just under 8,000 (2008) to approximately 90,000 in 2016. The robots installed in China are made almost exclusively by international manufacturers. However, according to the IFR, Chinese robot suppliers will become increasingly important and will increase their market share further in the coming years. The new market players are also supported by government programs.

KUKA sees the Chinese robot and automation market as a core element of its future growth strategy and is therefore expanding its market presence in China. At the end of 2013, a robot assembly plant was opened in the Greater Shanghai area, with production there now already meeting a large proportion of local demand. This plant is to increase its capacity in 2017. In addition, KUKA Group's workforce in China rose from 1,101 employees (December 31, 2015) to 1,289 (December 31, 2016). This has afforded KUKA greater local presence, increasing its proximity to the customer and allowing it to act with greater flexibility. The customers profit from much shorter delivery times and faster response times. Through Midea's support, KUKA expects to gain an even greater market presence in China over the coming years with positive stimuli for the Group's growth.

#### 2) General industry

Compared with the automotive industry, the robot density (number of robots per 10,000 employees) in general industry is still relatively low (see graphic on page 39). On average, the automotive industry's robot density is roughly eight times that found in general industry. Above all, it is high cost pressure, rapidly changing markets and customers' requirements as well as growing demands for quality which necessitate production that is flexible and efficient for companies to remain competitive. This is why the sales potential of the automation sector is very high. For the electronics (computers, communications and consumer goods), logistics/e-commerce, metal, machine tool and food industries in particular KUKA is expecting a significant increase in investment in automation solutions and robots in the coming years. KUKA is following a strategy of expanding its market shares in general industry overall and pushing expansion specifically in the sectors referred to above.



### 3) Automotive

The international automotive industry has a decisive impact on robot sales development, as it accounts for around 35 to 40% of the industrial robots sold annually. In the mature manufacturing regions such as Europe, the United States and Japan, growth potential is driven mainly by the need to modernize or upgrade existing production systems. Increasingly, however, production operations and processing stages are changing where at present there are relatively low numbers of robots being employed. Car manufacturing and sales volumes will continue to rise worldwide. According to estimates released in October 2016 by PWC/Autofacts, the annual number of cars manufactured will rise from some 88.2 million vehicles in 2015 to 107.3 million vehicles in 2020. KUKA is not directly dependent on the number of vehicles built, yet the range of models of the manufacturers is increasing with car sales. The manufacturers must therefore invest in new production systems and in making existing facilities more flexible in order to allow this growth to be generated in the most efficient way possible. KUKA is therefore expecting, as predicted by the IFR, that the investments of the car makers in automation will rise further, but accompanied by lower growth rates than in general industry. In addition to the continuing increase in model diversity, the drivers of this trend are the decrease in product life cycles of existing vehicle types and an increase in model platforms without the risk of forfeiting efficiency. Moreover, local car manufacturers from emerging and developing economies are increasingly investing in automation in order to raise the quality of their vehicles and so further their exports to the industrialized nations.

### 4) Digitization and Industrie 4.0

Industrie 4.0 is the next stage of industrialization, in which automated production technologies, mechanical engineering and intelligent IT systems are networked. This networking will lead to smart factories, characterized by versatility, resource efficiency, ergonomic design of workplaces and the integration of customers and business partners in business and value creation processes. As an automation company, KUKA is playing a central role in the practical implementation of Industrie 4.0. Industrie 4.0 is creating the basis for manufacturing high-quality one-off products with the advantages of series production. Traditional manufacturing is being superseded by the flexibility of new technologies. It is all about the interoperability of systems, one of KUKA's strengths: hardware and software all from one source. This is an important competitive advantage for our customers since production sequences can be better coordinated by networking. The robot is to serve as the link between IT and production and between humans and technology. The robot will assist them and take over the monotonous or physically demanding work, while the humans will perform challenging and creative tasks. In Austin, Texas, KUKA has set up a new IT site which connects robots and logistics solutions to the cloud, the web, mobile platforms and other IT technologies. This site is also concentrating on developing our software applications further and pushing ahead with the development of our skills in the area of data analytics. To further enhance KUKA's power of innovation, we have invested in start-ups such as Nebbiolo in Silicon Valley and Roboception in Munich, as well as setting up the software platform Connyun. We have also entered into strategic partnerships, for example with Salesforce (digitization of the value chain and improvement of all points of contact between companies and their customers).

### Company-specific factors

#### Summary

Given the current economic forecasts and general conditions, KUKA anticipates high demand in fiscal 2017, particularly from China and North America. A slight increase in demand is expected in Europe as a whole. From a sector perspective, a positive development is predicted for the general industry market. Demand in the automotive industry is expected to remain stable, now that customer investments have already risen considerably in recent years, with positive stimulus in the USA and China.

There is a detailed report on the currency influences in the notes, starting on page 54. In the case of Systems, a higher US dollar/euro exchange rate has a positive impact on the key financial indicators because the North American sales market is very important for this business division. For Robotics, the development of the yen/euro exchange rate is particularly important. A weaker yen/euro exchange rate has a negative effect on Robotics because the main competitors predominantly manufacture in Japan. For Swisslog, the appreciation of the Swiss franc will have a slightly adverse effect on operations, because the cost share of this division in Switzerland is slightly higher than the revenue share.

## Anticipated business development at KUKA

Summary	2016 result	2017 outlook
Sales revenues	€2,948.9 million <sup>1</sup>	~€3.1 billion
EBITDA margin	7.0%	virtually stable
EBIT margin	5.6% <sup>2</sup>	~5.5% <sup>4</sup> /4% <sup>3</sup>
Net income for the year	€86.2 million	virtually stable
Investments <sup>5</sup>	€99.6 million	rising
Free cash flow	-€106.8 million	rising
Dividend per share	0.50 €	constant to rising

<sup>1</sup> Including the divested Systems aerospace business segment in the USA (~€100 million)

<sup>2</sup> Before purchase price allocation for Swisslog (€10.8 million) and before extraordinary costs relating to the takeover by Midea (€28.0 million)

<sup>3</sup> Before purchase price allocation for Swisslog (around €10.0 million)

<sup>4</sup> Before purchase price allocation for Swisslog and investment into the future (e.g. Industrie 4.0)

<sup>5</sup> Before financial investments

### Definitions:

rising slightly/declining slightly: absolute change compared to prior year <10%

declining/rising: absolute change compared to prior year >10%

virtually stable: absolute change compared to prior year 0 – 5% or 50 basis points

### Sales and EBIT margin

On the basis of the current general conditions and exchange rates, KUKA is expecting sales revenues of around €3.1 billion in fiscal 2017. Based on the current economic environment and the anticipated development of sales, KUKA Group expects to achieve an EBIT margin of 5.5% before purchase price allocation for Swisslog and also before investment into the future amounting to about €45 million. Investment relates e.g. to Group-wide issues such as digitization, Industrie 4.0, general industry and China. KUKA is expecting these investments to open up additional areas of growth for the Group in the coming years, which should be reflected in higher sales revenues. The expenditure for purchase price allocation at Swisslog should amount to about €10 million in 2017 and thus remain at the level of the previous year.

### Net income

In the 2016 fiscal year, KUKA Group generated net income for the year of €86.2 million. In 2017, the envisaged rise in revenues should have a positive effect on net income, but the planned increase in growth investment should have a negative effect. KUKA is therefore expecting a relatively stable development of net income at Group level in 2017, as well as on AG level before growth investment.

KUKA Aktiengesellschaft's result in the separate financial statements depends primarily on the profit transfers of the German subsidiaries and on dividends from subsidiaries.

## Research and development/investments

The total expense of research and development (R & D) can chiefly be attributed to the Robotics division and, to an increasing extent, to topics concerning the whole Group. At Systems in particular, research and development activities are mainly conducted as part of customer projects. The high demand for our robots and solutions is based predominantly on their competitive advantages in terms of innovation, quality and benefit to customers. The spending on R & D is to rise in 2017 in order to safeguard and expand these competitive advantages in a sustainable way. Overall, KUKA plans to strengthen the R&D segment regionally. Correspondingly, new sites are being opened and existing sites expanded. Spending by the Robotics division will mainly focus on extending the product portfolio, developing applications, new software solutions and measures to boost the efficiency of existing products. We are planning to extend and broaden our product portfolio throughout the Group in the areas of digitization/Industrie 4.0 and mobility so as to remain a leading innovator in automation and be capable of serving the rising customer demand for such products. KUKA is budgeting for around 5% to be spent on research and development in 2017 (2016: €126.6 million).

### Free Cashflow

KUKA Group's free cash flow is primarily generated from operating profits and the development of working capital in the Robotics, Systems and Swisslog divisions. Based on the current general conditions and the budgeted sales growth, KUKA Group expects a significant improvement in free cash flow before financial investments in 2017.

### Dividend

The Executive and Supervisory Boards will recommend to shareholders at the Annual General Meeting on Wednesday, May 31, 2017 that a dividend of €0.50 per share be paid for 2016. KUKA's dividend policy is to pay out between 25 and 30% of net income to shareholders provided business performance is good and the general conditions are stable.

For fiscal 2017, KUKA plans to maintain its dividend and possibly increase it slightly, allowing for the general conditions at the time.

## Internal control and risk management system

### Basic principles

Pursuant to section 289 para. 5 and section 315 para. 2 no. 5 of the German Commercial Code (HGB), KUKA Aktiengesellschaft as a publicly traded parent company, must describe within the management report the key characteristics of its internal control and risk management system with regard to the accounting process. The description must include the accounting processes of the companies included in the consolidated financial statements.

The risk management system comprises all organizational rules and measures related to identifying risk and dealing with entrepreneurial risk (see “Opportunities and risk report” on page 32 et seq.). The internal control system is an integral part of the risk management system.

The internal control system (ICS) comprises all principles, processes and measures introduced to the company by management that result in systematic and transparent risk management. The internal control system focuses on organizational implementation of management decisions made to ensure the effectiveness and efficiency of business operations (including the preservation of assets, which includes preventing and exposing asset misappropriation), adherence to generally accepted accounting principles and the reliability of internal and external accounting and compliance with the legal provisions relevant to the company.

The objective of the ICS is to obtain sufficient certainty using the implemented controls and to be able to monitor and manage risks to ensure that the company’s goals can be achieved. Various monitoring measures – both integrated into and independent of the processes – contribute to the preparation of annual and consolidated financial statements that are in conformity with the legal provisions.

Regardless of its specific form, an ICS is unable to provide absolute certainty as to whether it will achieve its objectives. Taking this into account, the accounting-related ICS can only provide relative certainty rather than absolute certainty that material misstatements in accounting will be avoided or detected.

### Structures and processes

With regard to the accounting process, the structures and processes described below have been implemented in KUKA Group. The Executive Board of KUKA Aktiengesellschaft bears full responsibility for the scope and design of the ICS.

The system extends via clearly defined management and reporting structures to all subsidiaries that are included in the consolidated financial statements.

For the Group’s German companies, the Shared Service Center of KUKA Aktiengesellschaft is responsible at a central level for accounting and human resource operations.

Intra-group tasks such as treasury, legal services and taxes are also largely performed centrally by KUKA Aktiengesellschaft on the basis of uniform Group processes.

The principles, organizational structures and processes of the (Group) accounting-related internal control and risk management system are defined in guidelines and organizational procedures. Adjustments based on external and internal developments are integrated on a continuous basis and made available to all employees concerned.

### Characteristics of the internal control and risk management system

With respect to the accounting process, we regard those characteristics of the internal control and risk management system as material that can significantly impact the accounting and the overall presentation of the consolidated and annual financial statements, including the combined management report. At KUKA Group, these include, in particular:

- › Identifying the main areas of risk (see “Opportunities and risk report” on page 32 et seq.) and control that affect the (Group) accounting process;
- › Quality controls to monitor the (Group) accounting process and the accounting results at the level of the Group Executive Board, the management companies and individual reporting entities included in the consolidated financial statements;
- › Preventive control measures in the finance and accounting systems of the Group and the companies included in the consolidated financial statements as well as in operating business performance processes that generate key information for the preparation of the consolidated and annual financial statements and the combined management report, including a separation of functions of predefined approval processes in relevant areas;
- › Process-integrated monitoring measures such as the principle of dual control for which each material business transaction must be signed or otherwise authorized by at least two authorized persons;
- › Measures to ensure proper, IT-supported processing of (Group) accounting-related facts and data. These include, for example, central management of access rights to the bookkeeping systems and automated plausibility checks when data are recorded in the reporting and consolidation system;
- › Implementation of the control requirements to be met by the accounting-related ICS is defined and monitored by the central Group ICS department, which remains independent of the processes. By means of a defined procedure, the internal controls are documented by the responsible departments and then examined by independent parties – normally the Group ICS department – for functional capability and effectiveness. Any weak points in the control system are targeted through action plans, whose implementation is monitored. Significant control weaknesses and the implementation of action plans are reported to the Executive and Supervisory Boards.

Internal Audit constitutes an additional control entity that is independent of processes and regularly reviews the organizational structures, processes and orderliness in addition to the defined ICS requirements, thus contributing to compliance with the ICS and risk management system.

In addition, the CFOs of all subsidiaries must provide an internal responsibility statement in the context of external reporting every quarter, confirming that the data reported are correct. Only then do the members of the Executive Board of KUKA Aktiengesellschaft issue and sign a responsibility statement at mid-year and year-end (see page 87), by which they confirm that they have adhered to the prescribed accounting standards of KUKA Group and that their figures give a true and fair view of the Group's financial performance, financial position and cash flows.

The elements of the ICS relevant for financial reporting are evaluated by an auditor to determine their effectiveness as part of a risk-oriented audit approach.

In its meetings, the Audit Committee of the Supervisory Board regularly reviews the effectiveness of the accounting-related internal control system. The Supervisory Board therefore continuously obtains an appropriate view of the Group's risk situation and monitors ICS effectiveness. In so doing, the Executive Board of KUKA Aktiengesellschaft presents the risks associated with financial reporting at least once per year, outlines the control measures implemented, and monitors their correct execution.

## Summary

The structures, processes and characteristics of the internal control and risk management system that have been depicted ensure that the accounting processes of KUKA Aktiengesellschaft and KUKA Group are uniform and are implemented in accordance with the legal requirements, generally accepted accounting principles, international accounting standards and internal Group guidelines.

They also ensure that transactions are recognized and measured uniformly and accurately throughout the Group and that accurate and reliable information is therefore provided to the internal and external recipients of the information reported.

## Disclosures in accordance with section 289 para. 4 and section 315 para. 4 of the German Commercial Code (HGB) including accompanying explanations

The disclosures in accordance with takeover law required by sections 289 para. 4 and 315 para. 4 of the German Commercial Code (HGB) are presented as of December 31, 2016 and explained in the following.

### Composition of subscribed capital

As of December 31, 2016, the total share capital of KUKA Aktiengesellschaft amounted to €103,416,222.00 and consisted of 39,775,470 no-par-value bearer shares with pro rata share capital of €2.60 per share. The share capital is fully paid up. All shares have equal rights and each share guarantees its holder one vote at the Annual General Meeting. Shareholders are not entitled to have share certificates issued for their shares (section 4 para. 1 of the Articles of Association). When new shares are issued, the start of profit sharing may be established at variance with section 60 para. 2 of the German Stock Corporation Act (AktG) (section 4 para. 3 of the Articles of Association).

### Restrictions affecting voting rights or transfer of shares

KUKA Aktiengesellschaft has granted the company's Executive Board members and other selected executives from Group companies the right to participate in so-called "phantom share programs", i.e. virtual share programs, as per the terms of their individual contracts for the period up to and including 2016. The phantom share programs are part of the performance-based compensation system for executives and have been aimed at sustainably increasing the enterprise value. Each of the programs has a term of three years. The payout at the end of the term depends on the development of the share price and on the change in enterprise value during the term of the program. The phantom share programs stipulate that at the end of the term of the respective program, Executive Board members must apply 25% of the gross sum paid out toward the purchase of KUKA shares until a predetermined holding volume is reached. For the programs established to date, the holding volume amounts to 50% of the fixed annual remuneration of the executive in question. Shares acquired outside the phantom share program also count towards the holding target. The holding obligation of the Executive Board does not end until the participant leaves KUKA Group. In the context of the Midea takeover bid, the Executive Board was relieved of its holding obligation by the Supervisory Board on June 25, 2016 in relation to the shares currently held.

The Executive Board is not aware of any other restrictions that would affect voting rights or the transfer of shares.

## Shareholdings that exceed 10% of the voting rights

According to the German Securities Trading Act (WpHG), any investor who reaches, exceeds or falls below the voting rights threshold pursuant to section 21 of the WpHG through purchase, sale or by other means is obliged to report this to the company and the German Federal Financial Supervisory Authority (BaFin).

KUKA Aktiengesellschaft was informed of the following shareholdings of more than 10% of the voting rights by the following persons and companies until December 31, 2016 as follows:

### a) Swoctem GmbH – Notifications dated August 5, 2014

1.	Swoctem GmbH, Haiger/Germany	10.018%	held directly
2.	Dr. Friedhelm Loh/Germany	10.018%	allocated pursuant to section 22 para. 1 sentence 1 no. 1 of the WpHG

### b) J.M. Voith GmbH & Co. Beteiligungen KG – Notifications dated March 31, 2015 and April 1, 2015<sup>1</sup>

1.	J.M. Voith GmbH & Co. Beteiligungen KG, Heidenheim an der Brenz/Germany	25.10%	held directly
2.	J.M. Voith Verwaltungs GmbH, Heidenheim an der Brenz/Germany	25.10%	allocated pursuant to section 22 para. 1 sentence 1 no. 1 of the WpHG
3.	Voith GmbH, Heidenheim an der Brenz/Germany	25.10%	allocated pursuant to section 22 para. 1 sentence 1 no. 1 of the WpHG
4.	JMV GmbH & Co. KG Heidenheim an der Brenz/Germany	25.10%	allocated pursuant to section 22 para. 1 sentence 1 no. 1 of the WpHG
5.	JMV Verwaltungs GmbH, Heidenheim an der Brenz/Germany	25.10%	allocated pursuant to section 22 para. 1 sentence 1 no. 1 of the WpHG
6.	Voith Familien Verwaltung GmbH, Mannheim/Germany	25.10%	allocated pursuant to section 22 para. 1 sentence 1 no. 1 of the WpHG
7.	Familiengesellschaft J.M. Voith GbR, Mannheim/Germany	25.10%	allocated pursuant to section 22 para. 1 sentence 1 no. 1 of the WpHG

<sup>1</sup> Pursuant to the notifications of December 3, 2014 and December 12, 2014, the entire voting rights of J.M. Voith GmbH & Co. Beteiligungen KG already consisted of voting rights in accordance with sections 21, 22 WpHG (24.91%) and section 25a WpHG (0.19%) on these dates. Pursuant to the notifications of March 31, 2015 and April 1, 2015, the entire voting rights of J.M. Voith GmbH & Co. Beteiligungen KG consisted solely of voting rights in accordance with sections 21, 22 WpHG from that time on.

### c) Midea Group – Notification dated February 3, 2016

1.	MECCA International (BVI) Limited/ British Virgin Islands	10.22%	held directly
2.	Midea International Corporation Company Limited/China	10.22%	allocated pursuant to section 22 of the WpHG
3.	Midea Group Co., Ltd. Foshan/China	10.22%	allocated pursuant to section 22 of the WpHG

On May 18, 2016 MECCA International (BVI) Limited (the “bidder”) published its decision to submit a voluntary public takeover bid to acquire all no-par value bearer shares of KUKA Aktiengesellschaft. The bidder then published the bid document on June 16, 2016 within the meaning of section 11 of the WpÜG, which contained the specific conditions of the takeover bid.

The takeover was completed on January 6, 2017 once all the closing conditions for the takeover bid were met. KUKA Aktiengesellschaft was informed of the following shareholdings of more than 10% of the voting rights – as of January 6, 2017 – by the following persons and companies in January 2017:

### Midea Group – Notification dated January 9, 2017

1.	MECCA International (BVI) Limited/ British Virgin Islands	94.55%	held directly
2.	Midea International Corporation Company Limited/China	94.55%	allocated pursuant to section 22 of the WpHG
3.	Midea Group Co., Ltd. Foshan/China	94.55%	allocated pursuant to section 22 of the WpHG

Accordingly, Dr. Loh (SWOCTEM GmbH) as well as Voith Familien Verwaltung GmbH and Familiengesellschaft J.M. Voith GbR (for the entire Voith Group) reported their respective shareholdings in KUKA Aktiengesellschaft as 0%.

## Shares with special rights that confer powers of control

There are no shares with special rights conferring powers of control.

## Method of voting rights control when employees hold an interest in the share capital and do not directly exercise their rights of control

No employees hold an interest in the share capital within the meaning of section 289 para. 4 no. 5 and section 315 para. 4 no. 5 of the German Commercial Code (HGB).



## Legal provisions and provisions of the Articles of Association regarding the appointment and dismissal of Executive Board members and amendments to the Articles of Association

Pursuant to section 6 para. 1 of the Articles of Association, the company's Executive Board must consist of at least two persons. The Supervisory Board determines the number of Executive Board members (section 6 para. 2 of the Articles of Association). The appointment and dismissal of members of the Executive Board are governed in sections 84 and 85 of the Stock Corporation Act (AktG), section 31 of the Co-determination Act (MitbestG) and section 6 of the Articles of Association.

Pursuant to sections 119 para. 1 no. 5 and 179 para. 1 of the Stock Corporation Act (AktG), any changes to the Articles of Association require a resolution by the Annual General Meeting. Section 22 para. 1 of the Articles of Association states that a simple majority of the share capital represented at the Annual General Meeting is sufficient to pass a resolution, provided that a greater majority is not required by law. A greater majority is required in particular for resolutions concerning changes to the company's business purpose, reductions in the share capital and changes to the form of incorporation.

Pursuant to section 11 para. 3 of the Articles of Association, the Supervisory Board is authorized to make amendments to the company's Articles of Association that only affect the wording.

The resolution passed at the Annual General Meeting held on June 10, 2015 also authorized the Supervisory Board to amend the wording of section 4, para. 1 and 5 of the Articles of Association following complete (or partial) execution of the capital increase after Authorized Capital 2015 has been used and, if Authorized Capital 2015 has not been fully used by June 9, 2020, following expiration of the authorization.

With regard to the changes in the Authorized Capital and Conditional Capital 2010 and in the Conditional Capital 2013, the Supervisory Board was/is authorized by resolutions of the Annual General Meetings held on June 5, 2013 and May 28, 2014 to amend the wording of section 4 para. 1, 6 and 7 of the Articles of Association as per the respective issue of subscription shares and all other associated amendments to the Articles of Association that only affect the wording.

Furthermore, the Supervisory Board was authorized by resolution of the Annual General Meeting of May 28, 2014 to amend the wording of section 4 para. 1 and 8 of the Articles of Association after (fully or partially) increasing the share capital after utilizing Conditional Capital 2014 and, in the event this has not been (fully) utilized by May 25, 2016 or June 4, 2018, after expiry of the respective authorizations or deadlines for exercising conversion rights.

## Executive Board authorization to issue and buy back shares

### Authorized capital

As per the resolution of the Annual General Meeting on June 10, 2015 and section 4 para. 5 of the company's Articles of Association, which was added on the basis of this resolution, the Executive Board, subject to approval by the Supervisory Board, is authorized to increase the company's share capital on or before June 9, 2020 by up to €46,420,808.20 through the issue of new shares in exchange for contributions in cash or in kind on one or more occasions (Authorized Capital 2015). The shareholders shall be granted subscription rights. The new shares may also be underwritten by one or more financial institutions or by enterprises operating according to section 53 para. 1 sentence 1 or section 53b para. 1 sentence 1 or para. 7 of the German Banking Act, as specified by the Executive Board, subject to the obligation that they are offered to the shareholders for subscription (indirect subscription right). However, the Executive Board shall be authorized, subject to approval by the Supervisory Board, to exclude fractional amounts from shareholder subscription rights and to exclude shareholder subscription rights if a capital increase in exchange for contributions in kind takes place for the purpose of acquiring companies or parts of companies or interests in companies or other assets (including third-party claims against the company). Subject to approval by the Supervisory Board, the Executive Board shall be further authorized to exclude shareholder subscription rights in the event of Authorized Capital 2015 being used once or several times in exchange for cash contributions in an amount not exceeding 10% of the existing share capital at the time this authorization comes into effect and – if this value is lower – at the time this authorization is exercised, in order to issue the new shares at a price that is not significantly lower than the price of the company's shares already quoted on the stock exchange at the time the new share issue price is finalized. Shares sold as a result of, and during the term of, the authorization granted at the Annual General Meeting of May 28, 2014 in accordance with section 71 para. 1 no. 8 sentence 5 AktG in conjunction with section 186 para. 3 sentence 4 AktG shall count towards the aforementioned 10% threshold. Furthermore, this 10% threshold shall also include shares issued for the purpose of servicing warrant or convertible bonds, participation rights or participating bonds or a combination of these instruments, provided that these instruments were issued as a result of, and during the term of, an authorization granted at the Annual General Meeting of May 28, 2014 in accordance with the appropriate application of section 186 para. 3 sentence 4 AktG.

The Executive Board, subject to approval by the Supervisory Board, is only permitted to use the aforementioned authorization to exclude shareholder subscription rights to the extent that the pro rata amount of the total shares issued under exclusion of subscription rights does not exceed 20% of the share capital at the time the authorization becomes effective or of the existing share capital at the time this authorization is exercised, should this amount be less. The Executive Board is authorized, subject to approval by the Supervisory Board, to stipulate other details regarding the capital increase and its execution, in particular with regard to share rights and the terms and conditions relating to the issuance of shares.

### Conditional capital

Section 4 para. 8 of the Articles of Association stipulates a conditional increase in the company's share capital by up to €33,486,707.80, divided into up to 12,879,503 no-par-value bearer shares (Conditional Capital 2014). The conditional capital increase will only be carried out to the extent that holders or creditors of option or conversion rights or conversion or option obligations exercise their option or conversion rights in exchange for cash for options and or convertible bonds, participation rights or participating bonds (or combinations of these instruments), issued or guaranteed by KUKA Aktiengesellschaft or a dependent Group company of KUKA Aktiengesellschaft up to May 27, 2019 on the basis of the authorization granted to the Executive Board by shareholders at the Annual General Meeting of May 28, 2014, or, to the extent they were obligated to exercise their conversion or option rights, fulfill their conversion or option obligations, or to the extent that KUKA Aktiengesellschaft exercises its option to grant shares of KUKA Aktiengesellschaft wholly or partially instead of paying the monies due, provided no cash settlement or treasury shares or shares of another listed company are used to service the bonds. The new shares will be issued at the option or conversion price to be determined in accordance with the aforementioned authorization resolution. The new shares will participate in the profits as of the beginning of the financial year in which they are created. The Executive Board is authorized, subject to approval by the Supervisory Board, to define the further details of the execution of the conditional capital increase.

There was also Conditional Capital 2010 (section 4 para. 6 of the Articles of Association) and Conditional Capital 2013 (section 4 para. 7 of the Articles of Association) amounting to €2,958.80 and €25,789.40 respectively. This concerns the remaining amounts of the original Conditional Capital 2010 and 2013 after the complete service of convertible bonds issued on February 12, 2013 and July 26, 2013 with a total nominal amount of €150,000,000.00.

### Acquisition of treasury shares

As per the resolution passed by the Annual General Meeting on May 28, 2014, the company is authorized, until May 27, 2019, to buy back its own shares in an amount not to exceed 10% of the share capital existing at the time the resolution was passed via the stock market or in the form of a public purchase offer addressed to all shareholders by the company. In doing so, the purchase price (excluding transaction costs) may not be more than 10% higher or lower than the average stock market price defined in detail in the authorization.

The company may exercise this authorization in whole or partial amounts, once or several times; however, it may also be executed by dependent companies or companies in a majority holding of the company, or through a third party on behalf of the company or its dependants.

Pursuant to the above resolution, the Executive Board is also authorized, subject to approval by the Supervisory Board, to treat the treasury shares acquired subject to the exclusion of shareholder subscription rights on the basis of that and earlier authorizations as follows:

- (1) To sell the treasury shares acquired to third parties in connection with company mergers or the acquisition of companies, or parts of companies, or interests in companies, or for the purpose of acquiring other assets (including claims of third parties against the company);
- (2) To sell the treasury shares acquired by means other than via the stock exchange or an offer to all shareholders, provided the shares are sold for cash at a price that is not substantially lower than the quoted stock market price of treasury shares at the time of sale.

However, this authorization only applies subject to the proviso that the shares sold subject to the exclusion of subscription rights pursuant to section 186 para. 3 sentence 4 of the German Stock Corporation Act (AktG) may not, in total, exceed 10% of the share capital, whether on the effective date of the authorization or on the date on which it is exercised. The limit of 10% of the share capital is to include shares

- (a) that are issued to service bonds with warrants or convertible bonds, participation rights or participating bonds, or a combination of these instruments, provided the instruments were issued on the basis of an authorization resolved by the Annual General Meeting of May 28, 2014 pursuant to the corresponding application of section 186 para. 3 sentence 4 of the German Stock Corporation Act (AktG);
- (b) that are issued by exercising an authorization – in effect on the date on which the above authorization took effect or that was resolved by the Annual General Meeting of May 28, 2014, from authorized capital pursuant to section 186 para. 3 sentence 4 of the German Stock Corporation Act (AktG), under exclusion of subscription rights;
- (3) To use the treasury shares acquired to introduce the treasury stock on foreign stock exchanges on which they have not previously been admitted for trading.

Treasury shares acquired on the basis of this authorization or authorizations granted at an earlier time may be canceled without requiring a further resolution at the Annual General Meeting for the cancellation. Cancellation leads to reduction of the share capital. However, the cancellation can also be effected by means of a simplified process without the reduction of share capital by adjusting the proportionate amount of share capital of the remaining shares according to section 8 para. 3 of the German Stock Corporation Act (AktG). The Executive Board is in this case authorized to change the disclosure of the number of shares in the Articles of Association accordingly. This authorization for the acquisition of treasury shares, as well as the resale or cancellation of such shares, may be used once or several times, in whole or in part. Moreover, subject to approval by the Supervisory Board, the Executive Board is authorized to withdraw or resell the treasury shares acquired. Both the purchase and disposal authorization may be exercised in part on one or more occasions.

### Significant company agreements that are conditional upon a change of control, and the resulting impact

#### Employment contracts of Executive Board members

The employment contracts of the Executive Board members contain “change-of-control” clauses. In the event of a change of control within the company (sections 29 para. 2 and 30 of the German Securities Acquisition and Takeover Act (WpÜG)), the Executive Board members are entitled to terminate the employment contract within three months of the change in control occurring, subject to a notice period of three months. In the event of a termination, the Executive Board members will be entitled to a severance payment, which is measured against the compensation due for the remainder of their contract, but is restricted to twice the annual compensation at most.

#### Syndicated bank loan

On March 30, 2015, KUKA Aktiengesellschaft and its associated companies signed a syndicated loan agreement with a banking syndicate led by Commerzbank AG, Deutsche Bank AG Deutschlandgeschäft branch, Deutsche Bank Luxembourg S.A., UniCredit Bank AG, Landesbank Baden-Württemberg, BNP Paribas S.A. German branch and Credit Suisse AG, which has been amended in part through amendment agreements dated April 29, 2016 and November 28, 2016. According to the loan agreement, the creditors provide a credit volume of up to €400,000,000. The facility covers the main credit requirements of KUKA Group (including the furnishing of bank guarantees). The contract contains a change-of-control clause that is typical in the industry, under the terms of which the syndicated banks may demand repayment of the loan in the event that a shareholder (or group of shareholders acting in concert) acquires control of at least 30% of the voting rights of KUKA Aktiengesellschaft, or otherwise has the ability to control the operating policies of the company. An exception to this was the takeover bid of Midea Group already known at the time the amended loan agreement was concluded on November 28, 2016. The creditors may also declare the loan agreement due for repayment in the cases of a delisting, a squeeze-out or the conclusion of a control and/or profit transfer agreement with a company of Midea Group.

#### Promissory note loan 2015

KUKA Aktiengesellschaft issued a promissory note loan for €250,000,000 on October 9, 2015 led by Landesbank Baden-Württemberg and UniCredit Bank AG.

The terms and conditions of the promissory note loan contain a standard clause referring to a “change-of-control” provision. Accordingly, immediately it learns of a change of control, KUKA Aktiengesellschaft must disclose this in accordance with the terms and conditions of the loan. The lenders then have the right, within 30 days of receiving notification of a change of control, to demand repayment of their (pro rata) loan at the next interest due date after receipt of the request for repayment and the interest due up to the date of repayment. A “change of control” within the meaning of the terms and conditions of the loan is given if a person or persons acting in concert directly or indirectly (i) either hold more than 30% of the voting shares, (ii) hold more than 30% of the voting rights in the company and/or (iii) otherwise have the possibility of directing the company’s business policy. The creditors of the promissory note loan (“promissory note investors”) have not exercised their rights to early repayment of the loan within the contractually stipulated period.

#### Agreements concluded between the company and members of the Executive Board or employees governing compensation in the event of a takeover bid

No agreements have been concluded between the company and members of the Executive Board or employees governing compensation in the event of a takeover bid. The change-of-control clauses in the employment contracts of the Executive Board members do not constitute compensation clauses as defined in sections 289 para. 4 sentence 1 no. 9 and 315 para. 4 sentence 1 no. 9 of the German Commercial Code (HGB).

#### Declaration regarding corporate management

Reference is made to published information on the KUKA AG website for the declaration regarding corporate management pursuant to section 289a: <https://www.kuka.com/de-de/investor-relations/corporate-governance/unternehmensführung>.

#### Disclaimer

This management report contains forward-looking statements regarding expected developments. These statements are based on current estimates and are naturally exposed to risks and uncertainties. Actual results may differ from the statements contained herein.

# Compensation Report

The compensation report summarizes the basic principles used to determine the compensation of the Executive and Supervisory Boards of KUKA Aktiengesellschaft and describes the structure and compensation of the members of the Executive and Supervisory Boards. The compensation report is an integral part of the combined management report.

## Executive Board compensation

### 1. Compensation structure

KUKA Aktiengesellschaft's Executive Board compensation contains fixed and variable components. The latter consist of several variable compensation elements. The Executive Board compensation system thus conforms with section 87 of the German Stock Corporation Act (AktG) and the requirements of the GCGC regarding sustainable corporate performance. The variable components take into consideration both positive and negative business developments.

The fixed compensation consists of a base salary and payments in kind. The base salary is paid in twelve equal monthly installments. The payments in kind made to Executive Board members consist mainly of the non-cash benefits for the provision and use of a company vehicle.

One half of the variable compensation is based on the achievement of personal targets and the other half is dependent on the performance of KUKA Group's key indicators, EBIT and free cash flow. The associated details are agreed separately each year. The variable compensation component is capped (maximum target achievement of 200%) and achievement of the financial targets is linked to business performance over several years.

In addition, annual allocation volumes for participation in phantom share programs (hereinafter also referred to as the "programs") are stipulated for members of the Executive Board as a further variable compensation component designed to provide a long-term incentive for the period up to and including 2016. Phantom shares are virtual shares that grant the holder the right to a cash payment in the amount of the company's applicable share price. In contrast to stock options, the proceeds from phantom shares reflect not only the increase in share value, but also the full value of the stock. Moreover, a dividend equivalent that mirrors the actual dividend distributed on real KUKA shares is paid annually during the life of the plan for each virtual share held. There are no voting rights associated with phantom shares.

The programs each run for three calendar years. The allocation volume is either already contractually agreed or is set by the Supervisory Board before the respective three-year period commences. The allocation volume divided by a reference price for the KUKA share then results in a provisional number of phantom shares. The Supervisory Board has calculated the provisional number of phantom shares for the 2016 – 2018 program based on the average price of the KUKA share (opening price in XETRA trading on the Frankfurt Stock Exchange) between January 4, 2016 and March 7, 2016 (the last trading day prior to the Supervisory Board's financial review meeting). The relevant price thus determined for the KUKA share is €77.53.

The Supervisory Board also establishes an EVA (economic value added) for continuing operations (before taxes) at the beginning of the three-year performance period. The EVA is based on the operational planning for the three years of the program, which is geared towards the budget for the first financial year of the three-year period and the projections for the two subsequent financial years.

The cumulative EVA (actual EVA) for the three-year performance period is divided by the EVA for continuing operations in accordance with the operational planning for the three program years in order to determine a success factor. The success factor may fluctuate between 0 and 2.0. The final number of phantom shares depends on the success factor achieved, which is multiplied by the provisional number of phantom shares. The upper limit for the final number of phantom shares is capped at twice the number of provisional shares, which would constitute a success factor of 2.0. Payment is based on the final number of phantom shares at the final price of the KUKA share (average price of the KUKA share between January 2 of the year subsequent to the three reference years ("subsequent year") and the day prior to the financial review meeting of the Supervisory Board in the subsequent year).

In the event that an Executive Board member's contract is terminated – regardless of which party initiates the termination – all phantom shares allocated to that member expire. However, this does not apply if an Executive Board member uses their right to step down from their place on the Board owing to a change of control at the company. In this case, a proportionate payment is made in accordance with the terms and conditions of the phantom share program.

The relevant Executive Board member is obliged to purchase a certain number of KUKA shares from the gross proceeds paid out on the basis of the programs, in order to build up a holding volume of 50% of the annual base remuneration (fixed annual remuneration) in the year of allocation. Until the holding volume has been built up, 25% of the gross amount paid out for the relevant year must be spent on purchasing KUKA shares. The purchase amount is retained from the net proceeds. The obligation ends with the participant's departure from KUKA Group. In the context of the Midea takeover bid, the Executive Board was relieved of its holding obligation by the Supervisory Board on June 25, 2016 in relation to the shares currently held.

Unless fixed benefits have been contractually granted, the Supervisory Board decides each year on the amount of the Executive Board's share-based payments. The objective of the phantom share program and its configuration is to ensure that every member of KUKA's Executive Board is also a shareholder. The program promotes share ownership among members of KUKA's Executive Board and thereby ties the interests of these governing body members more closely to the interests of shareholders. The profit targets and comparative parameters may not be changed retroactively.

The payment amounts (to be paid out in 2018 and 2019 respectively) for the 2015 – 2017 and 2016 – 2018 phantom share programs were limited for the first time to an amount equal to three times the allocation volume. Future phantom share programs will also be limited correspondingly, so that the Executive Board compensation as of 2018 is therefore limited by the accumulation of caps on individual items (fixed annual salary, variable bonuses and payments from a phantom share program).

The amounts paid out from the 2014 – 2016 phantom share program still running are not yet subject to a limit. For this reason the total compensation of the Executive Board is currently not limited (the Executive and Supervisory Boards reported on the resulting divergence from the recommendation as per section 4.2.3 para. 2 sentence 6 of the GCGC in their joint declarations of compliance).

The employment contracts of Executive Board members contain "severance payment caps". This means that a restriction is agreed upon in the event of the employment contracts being terminated prematurely without good cause in relation to potential severance payments. The regulations specifically stipulate that the settlement shall not exceed the compensation value for the remaining term of the employment contract, restricted to twice the annual compensation.

The employment contracts of Executive Board members additionally contain "change-of-control" clauses. In the event of a change in control within the company (sections 29 para. 2 and 30 WpÜG), the Executive Board members are entitled to terminate the employment contract within three months of the change in control occurring, subject to a notice period of three months. In the event of a termination, the Executive Board members will be entitled to a severance payment, which is measured against the compensation due for the remainder of their contract, but is restricted to twice the annual compensation at most.

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

## 2. Compensation for 2016

Executive Board compensation for fiscal 2016 is disclosed for each individual member in accordance with the standardized reference tables recommended in the GCGC. Following this, the compensation is disclosed separately according to "granted benefits" (table 1) and "actual inflow" (table 2). The target values (payment for 100% target achievement) and the minimum and maximum values achieved are also disclosed for the benefits.

Payments granted to members of the Executive Board – taking into account the actual inflow – totaled €5,561,000 in fiscal 2016.

Table 1: Executive Board compensation for 2016 – Overview of benefits

in € thousands	Dr. Till Reuter CEO				Peter Mohnen CFO			
	FY 2015	FY 2016	FY 2016 (min)	FY 2016 (max)	FY 2015	FY 2016	FY 2016 (min)	FY 2016 (max)
Fixed compensation	600	600	600	600	425	425	425	425
Fringe benefits <sup>1</sup>	25	25	25	25	31	31	31	31
<b>Total</b>	<b>625</b>	<b>625</b>	<b>625</b>	<b>625</b>	<b>456</b>	456	456	456
One-year variable compensation <sup>2</sup>								
Bonus	350	350	0	700	225	225	0	450
Multi-year variable compensation								
Company targets bonus for 2015 <sup>3</sup>	350	–	–	–	225	–	–	–
Company targets bonus for 2016 <sup>3</sup>	–	350	0	700	–	225	0	450
Phantom share program 2015–2017 <sup>4</sup>	443	–	–	–	277	–	–	–
Phantom share program 2016–2018	–	452	0	1,200	–	283	0	750
<b>Total</b>	<b>1,768</b>	<b>1,777</b>	<b>625</b>	<b>3,225</b>	<b>1,183</b>	<b>1,189</b>	<b>456</b>	<b>2,106</b>
Pension cost	0	0	0	0	0	0	0	0
<b>Total compensation</b>	<b>1,768</b>	<b>1,777</b>	<b>625</b>	<b>3,225</b>	<b>1,183</b>	<b>1,189</b>	<b>456</b>	<b>2,106</b>

<sup>1</sup> The fringe benefits include expenses and non-cash benefits for the provision of company cars and insurance allowances. The premium for D&O insurance is included in the fringe benefits because, unlike the accident insurance, it cannot be allocated individually, as the company pays a lump-sum premium for the insured group of persons which goes beyond the members of the Executive Board.

<sup>2</sup> Proportion of variable bonus for achieving personal targets (with 100% target achievement) in the specified fiscal year (possible target achievement from 0 to 200%).

<sup>3</sup> Deferred percentage (50%) of variable bonus (with 100% target achievement) for the specified fiscal year.

<sup>4</sup> Allocation value on the date the phantom share program was established by the Supervisory Board. The price of the KUKA share on this date is multiplied by the provisional number of phantom shares. For the phantom share program 2015–2017 the share price was €72.14 at this time (Xetra closing price on March 24, 2015). For the phantom share program 2016–2018 the share price was €87.67 (Xetra closing price on March 8, 2016)



Table 2: Executive Board compensation for 2016 – Overview of inflow

in € thousands	Dr. Till Reuter CEO		Peter Mohnen CFO	
	FY 2015	FY 2016	FY 2015	FY 2016
Fixed compensation	600	600	425	425
Fringe benefits <sup>1</sup>	25	25	31	31
Other compensation <sup>2</sup>	131	156	0	0
<b>Total</b>	<b>756</b>	<b>781</b>	<b>456</b>	<b>456</b>
One-year variable compensation <sup>3</sup> :				
Bonus	640	542	408	439
Multi-year variable compensation:				
Company targets bonus for 2013 <sup>4</sup>	610	–	400	–
Company targets bonus for 2014 <sup>4</sup>	–	694	–	421
Phantom share program 2012 – 2014 <sup>5</sup>	3,082	–	1,541	–
Phantom share program 2013 – 2015 <sup>5</sup>	–	1,406	–	804
Other share-based compensation <sup>6</sup>	11	11	7	7
<b>Total</b>	<b>5,099</b>	<b>3,434</b>	<b>2,812</b>	<b>2,127</b>
Pension cost	0	0	0	0
<b>Total compensation</b>	<b>5,099</b>	<b>3,434</b>	<b>2,812</b>	<b>2,127</b>

<sup>1</sup> The fringe benefits include expenses and non-cash benefits for the provision of company cars and insurance allowances. The premium for D&O insurance is included in the fringe benefits because, unlike the accident insurance, it cannot be allocated individually, as the company pays a lump-sum premium for the insured group of persons which goes beyond the members of the Executive Board.

<sup>2</sup> Dr. Reuter received compensation of CHF 145,000 (2015 pro rata amount) in fiscal 2015 as President of the Administrative Board of Swisslog Holding AG (Buchs/Switzerland). In fiscal 2016, he received remuneration of CHF 170,000 for this activity. This results in an amount of €131,555 for 2015 at an exchange rate of €1 = CHF 1.1022 (average rate in 2015) and an amount of €155,935 for 2016 at an exchange rate of €1 = 1.0902 (average rate in 2016). These amounts are taken into account in the presentation of the inflow. The employment contracts with the Executive Board members stipulate that compensation granted on the basis of a Supervisory Board, Advisory Board or Administrative Board mandate in a company affiliated to KUKA Aktiengesellschaft shall be offset against the bonus payable to the member of the Executive Board. The compensation paid to Dr. Reuter by Swisslog Holding AG in fiscal 2016 amounting to €155,935 therefore counts towards his bonus for fiscal 2016 (to be disbursed in April 2017).

<sup>3</sup> Variable compensation paid out during the fiscal year.

<sup>4</sup> Deferred proportion of variable compensation from the 2013 and 2014 fiscal years, which was paid out in the 2015 and 2016 fiscal years.

<sup>5</sup> Phantom share program 2012 – 2014 payout at a final price of €65.10 (average KUKA share price (opening price in XETRA trading on the Frankfurt Stock Exchange) between January 2, 2015 and March 23, 2015). Phantom share program 2013 – 2015 payout at a final price of €77.53 (average KUKA share price (opening price in Xetra trading on the Frankfurt Stock Exchange) between January 4, 2016 and March 7, 2016). The amounts paid out each represent the gross proceeds. The net payout results from the gross proceeds less taxes and social contributions, other statutory levies and the purchase price for actual KUKA shares.

<sup>6</sup> Payout of dividend equivalents in 2015 of €0.40 per provisional share from the phantom share programs 2013 – 2015, 2014 – 2016, 2015 – 2017 and in 2016 of €0.50 per provisional share from the phantom share programs 2014 – 2016, 2015 – 2017, 2016 – 2018.

Provisions, which took the total expected expense from the phantom share programs into account, were recognized as of December 31, 2016 for all phantom share programs in effect on that date and that have yet to be paid out (i.e. the 2014–2016, 2015–2017 and 2016–2018 programs).

Apart from a few exceptions, former Executive Board members whose terms of office ended no later than 2008 were granted company pension benefits that included old age, professional and employment disability, widows' and orphans' pensions. The total sum for the provisions recognized in 2014 for current pensions and expected pension benefits for this group of persons totaled €10,041,000 (German Commercial Code) (2015: €10,018,000).

## Supervisory Board compensation

### 1. Compensation structure

Based on a resolution at the company's Annual General Meeting on January 1, 2006, the Articles of Association were amended to include fixed compensation for members of the Supervisory Board.

In addition to reimbursement of expenses, each member of the Supervisory Board is paid a fixed amount of €30,000, payable at the end of the fiscal year.

The chair of the Supervisory Board is paid four times that amount, and the deputy chair receives double the compensation. Supervisory Board members receive additional compensation of €30,000 for chairing the Annual General Meeting, provided this task is not fulfilled by the chair of the Supervisory Board, and for membership in any committee that is not of an interim nature, but at most for three committee memberships. A committee chairman also receives half the annual remuneration even if he chairs numerous committees. This does not apply to the committee pursuant to section 27, para. 3 of the German Act on Company Co-determination.

In addition, for each Supervisory Board meeting (including meetings of Supervisory Board committees), each Supervisory Board member is reimbursed for appropriate expenses incurred or is given a lump-sum payment of €450 per meeting (plus the applicable value added tax). The employee representatives on the Supervisory Board who are employed by KUKA Aktiengesellschaft or a KUKA Group company are still entitled to their regular salaries based on their employment contracts.

### 2. Compensation for 2015 and 2016

The following table compares the compensation paid to members of the Supervisory Board in the 2015 and 2016 financial years:

**Table 3: Supervisory Board compensation in 2016**

in € thousands	Payment in 2016 for 2015	Payment in 2017 for 2016
<b>Bernd Minning</b> Chairman of the Supervisory Board and Chairman of the Personnel Committee, Strategy and Development Committee, Mediation Committee and Nomination Committee	165	198
<b>Michael Leppek<sup>1</sup></b> Deputy Chairman of the Supervisory Board	90	123
<b>Prof. Dr. Dirk Abel</b>	60	60
<b>Wilfried Eberhardt</b>	30	30
<b>Siegfried Greulich<sup>1</sup></b>	60	93
<b>Thomas Knabel<sup>1</sup></b> (until May 27, 2016)	60	24
<b>Armin Kolb<sup>1</sup></b>	60	76
<b>Dr. Constanze Kurz<sup>1</sup></b> (from June 1, 2016)	0	35
<b>Carola Leitmeir<sup>1</sup></b>	60	76
<b>Dr. Hubert Lienhard</b> (from June 10, 2015)	34	60
<b>Dr. Friedhelm Loh</b> (from June 10, 2015)	34	60
<b>Prof. Dr. Uwe Loos</b> Chairman of the Technology and Production Committee	75	91
<b>Hans Ziegler</b> (from June 10, 2015 to December 1, 2016)	42	83

<sup>1</sup> The employee representatives on the Supervisory Board, who are also members of IG Metall, have declared that they shall pay their Supervisory Board compensation to the Hans Böckler foundation in line with the guidelines of the Federation of German Trade Unions.

# Balance sheet

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of KUKA Aktiengesellschaft as at December 31, 2016

## ASSETS

in € thousands	Notes	31.12.2015	31.12.2016
<b>Fixed assets</b>	(1)		
Intangible assets		2.073	20.075
Tangible assets		88.357	87.919
Financial investments		469.381	492.916
		<b>559.811</b>	<b>600.910</b>
<b>Current assets</b>			
Inventories	(2)	18	18
Receivables from affiliated companies	(3)	233.761	414.569
Other receivables and assets	(4)	5.625	4.125
		239.404	418.712
<b>Cash and cash equivalents</b>	(5)	330.241	150.440
		<b>569.645</b>	569.152
<b>Prepaid expenses</b>	(6)	558	1.360
		<b>1.130.014</b>	<b>1.171.422</b>

## EQUITY AND LIABILITIES

in € thousands	Notes	31.12.2015	31.12.2016
<b>Equity</b>			
<b>Subscribed capital</b>	(7)	100.103	103.416
<b>Capital reserve</b>	(8)	262.209	305.796
<b>Other retained earnings</b>	(9)	148.252	254.235
<b>Balance sheet profit</b>	(10)/(11)	100.878	87.611
		<b>611.442</b>	<b>751.058</b>
<b>Provisions</b>	(12)		
Pension provisions		11.746	11.519
Provision for taxes		14.953	8.832
Other provisions		31.183	45.573
		<b>57.882</b>	<b>65.924</b>
<b>Liabilities</b>	(13)		
Bonds	(14)	47.200	0
Liabilities due to banks	(15)	251.126	250.923
Trade payables		11.067	5.593
Accounts payable to affiliated companies	(16)	147.392	83.778
Liabilities to provident funds	(17)	2.603	2.635
Other liabilities	(18)	1.302	11.511
		<b>460.690</b>	<b>354.440</b>
		<b>1.130.014</b>	<b>1.171.422</b>

# Income statement

of KUKA Aktiengesellschaft for the period January 1 to December 31, 2016

in € thousands	Notes	2015	2016
Sales revenues	(19)	0	77.408
Other company-produced and capitalized assets	(20)	1.160	2.044
Other operating income	(21)	108.907	21.080
Cost of materials	(22)	0	-40.786
Personnel expense	(23)	-38.767	-44.838
Depreciation and amortization of tangible and intangible assets	(24)	-6.341	-10.056
Other operating expenses	(25)	-86.771	-64.492
Income from equity investments	(26)	149.678	174.643
Income from other securities	(27)	8	6
Other interest and similar income	(28)	5.201	6.301
Interest and similar expenses	(29)	-9.089	-7.109
Taxes on income	(30)	-8.193	-2.234
<b>Earnings after taxes</b>		<b>115.793</b>	<b>111.967</b>
<b>Net income for the year</b>		<b>115.793</b>	<b>111.967</b>
Profit carry-forward from the previous year		42.982	31.627
Transfer to retained earnings		-57.897	-55.983
<b>Balance sheet profit</b>	<b>(11)</b>	<b>100.878</b>	<b>87.611</b>

## **KUKA Aktiengesellschaft, Augsburg**

### **Notes to the financial statements for the financial year 2016**

#### **GENERAL INFORMATION**

##### **ACCOUNTING PRINCIPLES**

The 2016 annual financial statements of KUKA Aktiengesellschaft were prepared in accordance with the provisions of the German Commercial Code (HGB), taking into account the amendments of the Accounting Directive Implementation Act (BilRUG) and the German Stock Corporation Act (AktG). The figures for the previous years have not been adjusted.

KUKA Aktiengesellschaft is registered in the commercial register of the Augsburg district court under HRB 22709 and its registered office is in Augsburg.

To give a clearer presentation, the legal classification scheme of the balance sheet has been extended to include the item "Liabilities to provident funds".

The items which are combined in the balance sheet and the income statement plus the additional information are shown individually below.

The income statement is drawn up in euros and the amounts are shown in thousands of euros.

The accounting and valuation methods were unchanged compared with the financial statements as at December 31, 2016.

As a result of legal changes under the BilRUG, it is not always possible to make direct comparisons in the income statement. This is explained in more detail at the appropriate point in the Notes.

## ACCOUNTING AND VALUATION

### ASSETS

Purchased **intangible assets** are capitalized at cost. The amortization period is between three and five years depending on the anticipated useful life.

Internally generated intangible assets are not capitalized.

**Tangible fixed assets** are recognized at acquisition or production cost, less scheduled depreciation.

Scheduled depreciation is applied over a useful life of 25 to 50 years for buildings and over 3 to 15 years for other tangible fixed assets. Depreciation is applied solely on a straight-line basis. Technical progress and the economic efficiency of the usage are also taken into consideration accordingly. Since 2010, following the new regulation under the Growth Acceleration Act, the option has been taken to depreciate low-value assets with cost values of up to €410.00 in full at the time of acquisition and to show these as disposals.

**Financial assets** include holdings in affiliated companies and equity investments. They are recognized at cost. The subsequent valuation is at the lower of cost or fair value.

**Inventories** are valued at the lower of average cost or at market value. Where necessary, inventory risks are taken into consideration in the form of marketability discounts.

**Receivables and other assets** are recognized at nominal values after applying individual discounts for all recognizable risks. Long-term interest-free or low-interest receivables and other assets are shown at their cash values.

**Liquid assets** are shown at their nominal value.

**Prepaid expenses and accrued income** include costs before the cut-off date which represent expenditure for a specific later period.



## LIABILITIES

**Pension provisions** and similar obligations are created on the basis of actuarial calculations taking into consideration the 2005 G guideline tables of Prof. Dr. Heubeck using the projected unit credit method. When calculating the provisions, the market rate for the past ten years published by the German central bank as at October 31, 2016 with an assumed residual term of 15 years was applied. Other calculation parameters, as stated under point (12) of the Notes, are also adopted.

Assets which serve solely to meet pension obligations and are not accessible to all creditors are recognized at their fair value and offset against the corresponding obligations. The fair value is measured at the asset value.

The interest components of the allocations to pension provisions and comparable obligations are shown in order to give an economically correct presentation of the operating result not in personnel costs but in the net interest item.

Tax provisions and other provisions are created for all recognizable risks, uncertain obligations, impending losses and for all other future charges. Provisions are recognized at the settlement amounts deemed necessary on the basis of a reasonable commercial assessment. Provisions with a residual term of more than one year are applied with the average market interest published by the German central bank corresponding to their residual term.

**Liabilities** are recognized at the settlement amount.

**Deferred taxes** originate from the differences between corporate and taxation values which are reversed in subsequent years and from the offsettable loss as limited partner in accordance with section 15a of the Income Tax Act (EStG). Tax loss carryforwards are only taken into consideration if it is expected that the loss can be offset within five years. The tax regulations applicable or adopted on the balance sheet date are applied. Deferred taxes are ascertained based on a combined income tax rate of 32.0% for valuation differences or 15.8% of the offsettable loss in accordance with section 15a of the Income Tax Act (EstG). The resulting tax charges and tax relief amounts are netted off. After netting off, the option stated in section 274 para. 1 sentence 2 of the German Commercial Code (HGB) is exercised not to capitalize the remaining deferred tax assets.

An analysis of the differences existing between the commercial balance sheet and the tax balance sheet showed that the deferred tax assets are principally attributable to temporary differences in pension provisions, impending loss provisions as well as deferrals of the offsettable loss in accordance with section 15a of the Income Tax Act (EstG). Deferred tax liabilities are of minor importance.

The values for **contingent liabilities** from guarantees and warranty agreements are the amounts assessed at the balance sheet date.

## INCOME STATEMENT

The income statement is prepared in accordance with section 275 para. 2 of the German Commercial Code (HGB) using the total cost (nature of expense) method.

Redefinition in the BilRUG of the term sales revenues under section 277 HGB leads to a reclassification of the cost allocations in the income statement. Cost allocations were previously recorded as other operating income according to the contractual agreements and to the services provided. Due to the changes in legislation, they are shown as sales revenues with effect from fiscal 2016. Following this principle, expenses to provide these services are shown under cost of materials instead of under other operating expenses as in previous years.

**Taxes on income and profit** encompass the taxes paid or owed on income and profit. Taxes on income and profit consist of trade tax, corporation tax, solidarity surcharge and foreign income taxes for the current fiscal year and income taxes for previous years.

**Other taxes** are shown under other operating expenses.

Transactions with **related parties and companies** are conducted by KUKA Aktiengesellschaft under the same terms as for external third parties.

## TRANSLATION GAINS/LOSSES

Receivables and payables denominated in foreign currency are valued at the rate on the date of acquisition. The subsequent valuation is based on the average spot rate at the balance sheet date. Gains from foreign currency translations are only taken into consideration if they relate to receivables and liabilities with a residual term of up to one year.

The following conversion rates were applied:

Country	Currency	Balance sheet date	
		Dec. 31, 2015	Dec. 31, 2016
United Arab Emirates	AED	3.9876	3.8647
Australia	AUD	1.4897	1.4596
Brazil	BRL	4.3117	3.4305
China	CNY	7.0608	7.3202
China, Hong Kong	HKD	8.4376	8.1751
India	INR	72.0215	71.5935
Japan	JPY	131.0700	123.4000
Canada	CAD	1.5116	1.4188
Korea	KRW	1,280.7800	1,269.3600
Malaysia	MYR	4.6959	4.7287
Mexico	MXN	18.9145	21.7719
Norway	NOK	9.6030	9.0863
Romania	RON	4.5245	4.5411
Russia	RUB	80.6736	64.3000
Sweden	SEK	9.1895	9.5525
Switzerland	CHF	1.0835	1.0739
Singapore	SGD	1.5417	1.5234
Taiwan	TWD	35.7632	34.1403
Thailand	THB	39.2480	37.7260
Czech Republic	CZK	27.0230	27.0210
Hungary	HUF	315.9800	309.8300
USA	USD	1.0887	1.0541
UK	GBP	0.7340	0.8562

## NOTES TO THE BALANCE SHEET AND INCOME STATEMENT

### (1) FIXED ASSETS

Movements in the fixed assets of KUKA Aktiengesellschaft are shown in the following table of assets.

in € thousands	Acquisition / manufacturing costs					Status as of Dec. 31, 2016
	Status as of Jan. 1, 2016	Additions	Additions from trans- fers	Disposals	Reclassi- fications	
<b>I. Intangible assets</b>						
1. Purchased rights and similar assets	12.778	18.899	8.062	0	785	40.524
	<b>12.778</b>	<b>18.899</b>	<b>8.062</b>	<b>0</b>	<b>785</b>	<b>40.524</b>
<b>II. Tangible assets</b>						
1. Land, similar rights and buildings	110.665	1.818	0	0	5.189	117.672
2. Technical plant and equipment	6.785	5	0	0	0	6.790
3. Other equipment, factory and office equipment	17.727	3.932	312	1.174	1.203	22.000
4. Advances paid and construction in progress	7.313	1.396	0	0	-7.177	1.532
	<b>142.490</b>	<b>7.151</b>	<b>312</b>	<b>1.174</b>	<b>-785</b>	<b>147.994</b>
<b>III. Financial assets</b>						
1. Shares in affiliated companies	524.774	19.819	0	0	0	544.593
2. Equity investments	6.366	1.634	0	0	0	8.000
	<b>531.140</b>	<b>21.453</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>552.593</b>
<b>Summe</b>	<b>686.408</b>	<b>47.503</b>	<b>8.374</b>	<b>1.174</b>	<b>0</b>	<b>741.111</b>

<b>Depreciation</b>					<b>Book value</b>	
Status as of	Additions			Status as of	Status as of	Status as of
Jan. 1, 2016	Jan. 1, 2016	from trans-	Disposals	Dec. 31,	Dec. 31, 2015	Dec. 31, 2016
	Additions	fers		2016		
10.705	3.136	6.608	0	20.449	2.073	20.075
<b>10.705</b>	<b>3.136</b>	<b>6.608</b>	<b>0</b>	<b>20.449</b>	<b>2.073</b>	<b>20.075</b>
38.140	3.089	0	0	41.229	72.525	76.443
4.980	391	0	0	5.371	1.805	1.419
11.013	3.440	196	1.174	13.475	6.714	8.525
0	0	0	0	0	7.313	1.532
<b>54.133</b>	<b>6.920</b>	<b>196</b>	<b>1.174</b>	<b>60.075</b>	<b>88.357</b>	<b>87.919</b>
61.759	0	0	2.082	59.677	463.015	484.916
0	0	0	0	0	6.366	8.000
<b>61.759</b>	<b>0</b>	<b>0</b>	<b>2.082</b>	<b>59.677</b>	<b>469.381</b>	<b>492.916</b>
<b>126.597</b>	<b>10.056</b>	<b>6.804</b>	<b>3.256</b>	<b>140.201</b>	<b>559.811</b>	<b>600.910</b>

The focus of the investments made during the fiscal year can be found in the consolidated management report of KUKA Aktiengesellschaft and KUKA Group.

Shares in affiliated companies are those directly owned by KUKA Aktiengesellschaft. The main change compared with December 31, 2015 was due to the acquisition of the remaining 49% stake in Reis Group.

The addition shown under equity investments during the reporting year relates to additional payments to KBee AG, Munich.

A full list of KUKA Aktiengesellschaft's shareholdings can be found at the end of the Notes.

During the course of the transfer in functions from KUKA Roboter GmbH and KUKA Systems GmbH, assets were transferred to KUKA Aktiengesellschaft. The assets were received at their gross values.

## (2) INVENTORIES

Inventories include raw materials and supplies.

## (3) RECEIVABLES FROM AFFILIATED COMPANIES

Receivables from affiliated companies include receivables from financial resources and from cost allocations to Group companies. There were no long-term receivables from affiliated companies either at the balance sheet date or in the previous year.

## (4) OTHER ASSETS

Other assets mainly include amounts receivable from tax authorities. Of this amount k€ 1,753 (previous year: k€ 3,430) relates to a corporation tax credit in accordance with section 37 of the Corporation Tax Act (KStG). It is applied at the cash value with an interest rate of 4.25%. The corporation tax credit will be paid out in equal annual installments of k€ 1,804 until 2017.

In addition other assets include services provided in connection with KUKA Facility Management to external third parties.

Other assets include k€ 0 (previous year: k€ 1,625) with a residual term of more than one year.

## (5) CASH AND CASH EQUIVALENTS

In addition to balances at banks, this item includes checks and cash balances.

KUKA Aktiengesellschaft holds bank balances exclusively at financial institutions with an excellent credit rating. Furthermore, funds to be invested are distributed across several institutions in order to diversify risk.

## (6) PREPAID EXPENSES AND ACCRUED INCOME

Prepaid expenses and accrued income include costs before the cut-off date which represent expenditure for a specific later period.

## (7) SUBSCRIBED CAPITAL

### *Convertible bond*

As a result of the early redemption of the convertible bond issued in 2013, the holders of the convertible bond exercised their conversion rights in March 2016. Due to the conversion dec-

laration, new shares were created in accordance with the bond terms. Through the issue of new shares, the total number of KUKA shares has risen by 1,274,211, from 38,501,259 to 39,775,470 shares. The no-par-value bearer shares have a theoretical portion of the share capital amounting to €2.60.

Pursuant to section 200 of the German Stock Corporation Act (AktG), the issue of new shares caused the company's share capital to rise by €3,312,948.60, from €100,103,273.40 to €103,416,222.00. Each share carries one vote.

Regarding the authorized capital and conditional capital, please refer to the notes in the consolidated management report under "Disclosures in accordance with section 289 para. 4 and section 315 para. 4 of the German Commercial Code (HGB) including accompanying explanations".

#### **(8) CAPITAL RESERVE**

The change during the reporting year resulted from the conversion of units of the convertible bond in 2016 referred to above. This saw recognized liabilities of k€ 46,900 exchanged for subscribed capital (k€ 3,313) and capital reserve (k€ 43,587).

#### **(9) OTHER RETAINED EARNINGS**

50% or k€ 55,983 of the net income for fiscal 2016 was transferred to other retained earnings.

#### **(10) LIMITATION ON PROFIT DISTRIBUTION**

Pursuant to the new valuation regulations of section 253 of the German Commercial Code (HGB) when accounting for pension provisions and the related extension of the smoothing period when discounting the provision from an average 7-year interest rate to a 10-year interest rate, a limitation has been introduced on the distribution of positive balances. As a result KUKA AG has a balance of k€ 827 which is blocked for distribution.



**(11) BALANCE SHEET PROFIT**

<b>In € thousands</b>	
<b>Balance sheet profit at Jan. 1</b>	<b>100,878</b>
Transfer to revenue reserves as per section 58, para. 3 AktG	-50,000
Dividend paid for fiscal 2015	-19,251
<b>Retained earnings</b>	<b>31,627</b>
2016 net income	111,967
Transfer to revenue reserves as per section 58, para. 2 AktG	-55,983
<b>Balance sheet profit at Dec. 31</b>	<b>87,611</b>

**(12) PROVISIONS**

<b>In € thousands</b>	<b>Dec. 31, 2015</b>	<b>Dec. 31, 2016</b>
Pension provisions	11,746	11,519
Provision for taxes	14,953	8,832
Other provisions		
Provisions for impending loss	91	2,107
Personnel area	16,214	15,821
Miscellaneous provisions	14,878	27,645
<b>Total</b>	<b>57,882</b>	<b>65,924</b>

The amount of pension obligations (defined benefit obligation) was calculated using actuarial methods for which estimates are necessary. In addition to assumptions related to life expectancy, this involves the following significant premises:

	<b>Dec. 31, 2015</b>	<b>Dec. 31, 2016</b>
Actuarial interest rate	3.89%	4.01%
Salary trend	2.50 %	2.50%
Pension trend	1.00% - 2.50%	1.00% - 2.50%

In addition, deferred compensation models also exist within KUKA Aktiengesellschaft. These cover pension commitments for which the defined benefit obligation is measured exclusively by the fair value of a reinsurance claim. In this respect the commitments meet the conditions of a "value-based pension commitment". The obligations are therefore valued at the amount of the respective fair value of the insurance policies (as at December 31, 2016: k€ 745 previous year: k€ 635). As the assets are not available to all other creditors and serve exclusively to meet the debts arising from pension obligations, they are known as coverage assets. Ac-

Accordingly, pursuant to section 246 para. 2 sentence 2 of the German Commercial Code (HGB), the two amounts need to be netted off, which results in a balance sheet value of €0, as in the previous year. The acquisition costs of the assets to be offset correspond to the fair value.

Partial retirement obligations are valued on the basis of the actual agreements and probable future obligations as a shortfall in contribution at the cash value in accordance with the provisions of IDW RS HFA 3 based on an actuarial interest rate of 1.80% (previous year: 2.34%). The expected dynamic of the partial retirement obligation or its basis of measurement is taken into consideration by applying a salary trend of 2.50% (previous year: 2.50%). During the course of the partial retirement obligations shortfalls in contributions are covered by insurance companies. The value of these insurance policies is not available to all the other creditors and serves exclusively to fulfill the obligations from the partial retirement contracts, so there is an offset against the debts in this case too (section 246 para. 2 sentence 2 HGB). During the reporting year in accordance with this offsetting principle, obligations amounting to k€ 1,942 (previous year: k€ 1,412) were netted off against the corresponding coverage assets from the pension liability insurance in an amount of k€ 880 (previous year: k€ 579) and expenses amounting to k€ 38 (previous year: k€ 36) were netted off against income of k€ 1 (previous year: k€ 6). The asset value of the pension liability insurance corresponds to the amortized cost.

Other provisions include all the necessary amounts to allow for the risks of KUKA Aktiengesellschaft. This includes in particular outstanding bills, personnel expenses, Supervisory Board compensation, impending losses, other risks and other costs still due.

In an employee share program in 2016 the company acquired KUKA shares for KUKA employees in Germany (section 71 para. 1 no. 2 AktG) and resold these to employees at the weighted market price on the 3rd business day after the close of the program as the acquisition price. In total 4,430 bearer shares were purchased during the reporting year of KUKA Aktiengesellschaft. Employees of the company are also entitled to additional bonus shares based on the holding period of the shares. An amount of k€ 51 (previous year: k€ 207) is included in the other provisions for all employee share programs.

In addition to the employee share program, KUKA also has an annual phantom share program for the executive management team, which was introduced in 2012. The phantom share program is treated as a cash-settled, share-based compensation instrument using the fair value at the balance sheet date. The measurement parameters correspond to the phantom share program of KUKA Aktiengesellschaft's Executive Board. The entitlements are paid out at the end of the contractually agreed period. Early payment is possible only under certain conditions when leaving the Group. An amount of k€ 3,203 (previous year: k€ 2,885) was set aside at December 31, 2016 for future claims arising from the phantom share pro-

gram for the executive management team of KUKA Aktiengesellschaft. See the compensation report for further details about the structure of the phantom share program.

### (13) LIABILITIES

in € thousands	Remaining maturity			Dec. 31, 2015 Total	Remaining maturity			Dec. 31, 2016 Total
	up to 1 year	1-5 years	> 5 years		up to 1 year	1-5 years	> 5 years	
Bonds	-	47,200	-	47,200	-	0	-	0
Liabilities due to banks	1,126	142,500	107,500	251,126	923	142,500	107,500	250,923
Trade payables	11,067	-	-	11,067	5,593	-	-	5,593
Accounts payable to affiliated companies	147,392	-	-	147,392	83,778	-	-	83,778
Liabilities to provident funds (affiliated companies)	116	463	2,024	2,603	124	495	2,016	2,635
Other liabilities	1,302	-	-	1,302	11,511	-	-	11,511
<b>Total</b>	<b>161,003</b>	<b>190,163</b>	<b>109,524</b>	<b>460,690</b>	<b>101,929</b>	<b>142,995</b>	<b>109,516</b>	<b>354,440</b>

### (14) BONDS

#### Convertible bond

In February 2013, KUKA Aktiengesellschaft had issued a convertible bond with a nominal value of €58.8 million maturing in February 2018 (tranche 1) and increased the nominal volume by €91.2 million in July 2013 (tranche 2). The convertible bond thus had a total nominal value of €150.0 million.

In an announcement on February 18, 2016 KUKA Aktiengesellschaft had irrevocably canceled the February and July 2013 convertible bonds as of March 24, 2016 (redemption date). By this date, further convertible bond units with a nominal value of €46.9 million were converted into 1,274,211 shares in the first quarter of 2016. The non-converted bond units with a nominal value of €0.3 million were redeemed to the investors together with the interest accrued in the financial year.

## **(15) LIABILITIES DUE TO BANKS**

Liabilities to banks at the balance sheet date relate in particular to the promissory note loan issued in 2015 as well as liabilities from interest costs to be accrued in connection with the promissory note loan.

### **Promissory note loan**

KUKA Aktiengesellschaft had issued an unsecured promissory note loan with a total volume of €250.0 million on October 9, 2015. The originally planned volume of €150.0 million was increased because the issue was heavily oversubscribed.

The total volume of the loan was placed in two separate tranches. Tranche 1 has a volume of €142.5 million with a term to maturity of 5 years; tranche 2 has a volume of €107.5 million and a term to maturity of 7 years. The issue price was 100.0 % with a denomination per unit of at least €0.5 million or a multiple thereof. Repayment shall occur at 100.0 %, payable in one sum on maturity of each fixed-term tranche. The promissory note loan carries interest coupons of 1.15% for tranche 1 and 1.61 % for tranche 2. Interest payments are made at yearly intervals on October 9. Interest of €0.8 million was deferred as of the balance sheet date.

### **Syndicated loan agreement of KUKA Aktiengesellschaft**

In a refinancing transaction, a syndicated loan agreement ("SFA" - Syndicated Facilities Agreement) came into force in April 2015 which matures on March 30, 2020. The agreement includes options to extend by one year on two occasions. The agreement provided for a surety and guarantee line in the amount of €140.0 million and a working capital line, which can also be used for sureties and guarantees, in an amount of €90.0 million. The syndicated loan agreement is unsecured and contains only the customary equal treatment clauses and negative pledges.

Furthermore the SFA contains a change of control clause whereby each consortium bank is entitled in the event of a change of control to cancel its share in the guaranteed credit and cash line at 30 days' notice and to enforce all claims.

The closing of the takeover bid by Midea would have triggered such a change in control in accordance with the SFA. Therefore KUKA agreed beforehand with the consortium of banks that the SFA should remain in existence after the completion of closing of the takeover bid and that the business relations would be continued. At the same time that the consortium

banks waived their entitlement to the right of cancellation the volume was considerably increased. Since the effective date of the amendment on November 28, 2016, KUKA has a guaranteed credit line of €200.0 million and a working capital line of the same figure of €200.0 million, which can as previously be used also for guarantees. KUKA was therefore able to increase its liquidity provisions and take into account the increased guarantee requirement. The terms were also adjusted to the low market conditions.

The term of the €400.0 million syndicated loan agreement expires in March 2021. KUKA's second option to extend would increase the term of the SFA by one additional year.

As of the reporting date the utilization of the guarantee facility and cash credit line from the syndicated loan agreement of KUKA AG amounted to a total of €170.9 million (2015: €100.9 million).

### **Guarantee facilities from banks and surety companies**

The guarantee facilities promised by banks and surety companies outside the SLA total €124.0 million (previous year: €89.0 million) as of December 31, 2016, and can be utilized in full. At the end of the reporting year, the company had utilized €87.2 million (previous year: €47.1 million).

## **(16) ACCOUNTS PAYABLE TO AFFILIATED COMPANIES**

Accounts payable to affiliated companies relate solely to financial resources.

## **(17) LIABILITIES TO PROVIDENT FUNDS**

The liabilities to provident funds reported relate to KUKA Unterstützungskasse GmbH and to IWK Unterstützungseinrichtung GmbH.

## **(18) OTHER LIABILITIES**

Other liabilities include an amount of k€ 9,170 due to the acquisition of the remaining shares in Reis Group. In addition tax liabilities of k€ 782 (previous year: k€ 1,059) are also reported. As in the previous year there are no social security liabilities.

**(19) Sales revenues**

Sales revenues include proportionate charges to affiliated domestic and foreign companies for services which are recorded in line with the contractual agreements and the services provided. This also includes services provided in connection with KUKA Facility Management. Sales revenues additionally include rents and leasehold payments. Of the sales revenues 92 % was generated in Germany and 8 % was generated abroad.

After taking into consideration the changes under the BilRUG and the related reclassification of other operating income as sales revenues, the comparative figures for the previous year are as follows:

<b>in € thousands</b>	<b>2015</b>	<b>BilRUG 2015</b>	<b>2016</b>
Sales revenues	0	58,938	77,408

**(20) OTHER COMPANY-PRODUCED AND CAPITALIZED ASSETS**

This item relates to own work capitalized in connection with improvements and renewals in land and buildings and also the IT infrastructure.

**(21) OTHER OPERATING INCOME**

Other operating income includes a write-up of the shareholding in Reis Group Holding GmbH, Obernburg, Germany in an amount of k€ 2,082. In addition there were gains from foreign currency conversions in a total amount of k€ 15,621 (previous year: k€ 34,688). Income received during the fiscal year relating to other accounting periods amounted to k€ 3,107 (previous year: k€ 1,341). These mainly result from the release of provisions created in previous years. After taking into consideration the changes under the BilRUG and the related reclassification of other operating income as sales revenues, the comparative figures for the previous year are as follows:

<b>in € thousands</b>	<b>2015</b>	<b>BilRUG 2015</b>	<b>2016</b>
Other operating income	108,907	49,969	21,080

**(22) Cost of materials**

After taking into consideration the changes under the BilRUG and the reclassification of other operating expenses as cost of materials, the comparative figures for the previous year are as follows:

<b>in € thousands</b>	<b>2015</b>	<b>BilRUG 2015</b>	<b>2016</b>
Cost of raw materials and supplies and goods purchased	0	2,366	2,476
Cost of services purchased	0	26,700	38,310
<b>Total</b>	<b>0</b>	<b>29,066</b>	<b>40,786</b>

**(23) PERSONNEL EXPENSE / EMPLOYEES**

<b>in € thousands</b>	<b>2015</b>	<b>2016</b>
Wages and salaries	34,519	39,577
Social security payments and contributions for retirement benefits and provident funds	4,248	5,261
(of that for retirement benefits)	(995)	(462)
<b>Total</b>	<b>38,767</b>	<b>44,838</b>

Annual average number of employees of KUKA Aktiengesellschaft and number at the balance sheet date:

	<b>Annual average</b>		<b>Balance sheet date</b>	
	<b>2015</b>	<b>2016</b>	<b>2015</b>	<b>2016</b>
Salaried employees	254	344	266	388
Apprentices	60	99	86	124
<b>Employees</b>	<b>314</b>	<b>443</b>	<b>352</b>	<b>512</b>

**(24) DEPRECIATION**

Scheduled depreciation on intangible and tangible fixed assets amounts to k€ 10,056 (previous year: k€ 6,341). No unscheduled depreciation was recorded during the year under review.



**(25) OTHER OPERATING EXPENSES**

Other operating expenses of KUKA Aktiengesellschaft include material costs, losses on foreign currency items and allocations to provisions. Currency translation expenses amount to k€ 22,509 (previous year: k€ 34,186). Expenses charged during the fiscal year relating to other accounting periods amounted to k€ 62 (previous year: k€ 36). For reasons of materiality, other taxes are not shown separately and this item amounting to k€ 923 (previous year: k€ 726) is included under other operating expenses. See Group notes of KUKA Aktiengesellschaft regarding the fees for the auditor, KPMG AG, Wirtschaftsprüfungsgesellschaft, Munich, recognized as an expense in 2016.

After taking into consideration the changes under the BilRUG and the reclassification of other operating expenses as cost of materials, the comparative figures for the previous year are as follows:

in € thousands	2015	BilRUG 2015	2016
Other operating expenses	86,771	57,705	64,492

**(26) INCOME FROM EQUITY INVESTMENTS**

in € thousands	2015	2016
Income from holdings in affiliated companies	40,605	119,686
Income from profit transfer agreements with affiliated companies	109,101	64,770
Expenses from loss assumptions for affiliated companies	-28	-9,813
<b>Total</b>	<b>149,678</b>	<b>174,643</b>

The income from profit transfer agreements and expenses from loss assumptions contain the results of KUKA Industries GmbH, KUKA Roboter GmbH and KUKA Systems GmbH.

**(27) INCOME FROM OTHER SECURITIES**

The income originates from short-term securities. The resources were invested to optimize the liquid assets on a short-term basis.

**(28) OTHER INTEREST AND SIMILAR INCOME**

<b>in € thousands</b>	<b>2015</b>	<b>2016</b>
Other interest and similar income	5,201	6,301
(of that from affiliates)	(4,898)	(6,069)

**(29) INTEREST AND SIMILAR EXPENSES**

<b>in € thousands</b>	<b>2015</b>	<b>2016</b>
Interest and similar expenses	-9,089	-7,109
(of that to affiliates)	-(443)	-(280)

Interest costs of pension provisions and similar obligations amounting to k€ 622 (previous year: k€ 616) are included.

**(30) TAXES ON INCOME AND PROFITS**

As at the balance sheet date, after netting off the deferred tax assets and deferred tax liabilities, there is a net deferred tax asset balance. On this basis, the company exercises the option under section 274 para.1. sentence 2 HGB not to recognize deferred tax assets in the balance sheet.

Tax arrears of k€ 97 (previous year: k€ 50) and tax credits of k€ 396 (previous year: k€ 77) for past assessment periods were taken into consideration in the tax expense. In addition tax provisions established in previous years amounting to k€ 300 (previous year: k€ 1,610) were released.

Since fiscal 2014 there has been no apportionment of the tax expense to the companies controlled by KUKA Aktiengesellschaft.

**(31) CONTINGENT LIABILITIES**

<b>in € thousands</b>	<b>2015</b>	<b>2016</b>
Liabilities from guarantees	123,465	103,419
Liabilities from warranty agreements	14,847	84,948
<b>Total</b>	<b>138,312</b>	<b>188,367</b>

Guarantee obligations mainly relate to advance payment and warranty guarantees in favor of affiliated companies.

Obligations from warranty agreements originate mainly from the guaranteeing of leasing agreements and payment and contractual performance guarantees in favor of affiliated companies.

To our knowledge, the underlying obligations can be met in full by the relevant companies. We therefore do not anticipate any claims.

**(32) OTHER FINANCIAL COMMITMENTS**

<b>in € thousands</b>	<b>2015</b>	<b>2016</b>
<b>Commitments from rental and leasing agreements</b>		
Due within 1 year	993	889
(of that due to affiliates)	(307)	(364)
Due in 1 to 5 years	404	243
(of that due to affiliates)	(0)	(0)
<b>Total</b>	<b>1,397</b>	<b>1,132</b>
<b>Purchase commitments (discounted notes)</b>		
Total	1,313	351
(of that due to affiliates)	(0)	(0)
<b>Total</b>	<b>1,313</b>	<b>351</b>
<b>Other commitments</b>		
Due within 1 year	2,881	2,706
(of that due to affiliates)	(0)	(0)
Due in 1 to 5 years	696	322
<b>Total</b>	<b>3,577</b>	<b>3,028</b>

Commitments in connection with rental and leasing agreements include leases for passenger cars and office premises.

Other commitments relate in particular to flight services not yet provided, IT maintenance and insurance agreements as well acceptance obligations for marketing services to be provided. There are no further miscellaneous financial commitments which are not included in the balance sheet or listed above.

### **(33) DERIVATIVES**

The management and administration duties connected with interest rate and currency risks arising from operating business at KUKA Group are carried out primarily by KUKA Aktiengesellschaft. In their operational activities, KUKA Group companies are mainly exposed to currency risks. These risks are hedged using the usual market instruments such as forward exchange transactions and non-deliverable forwards in the form of OTC transactions. The transactions are subject to standard Group guidelines with a strict separation between trading, settlement and control.

To hedge against the risks of currency movements the hedging strategy aims for a general hedging of foreign currency amounts. KUKA Aktiengesellschaft acquires derivative financial instruments from its core banks for almost all Group companies. These hedging transactions are directly connected to the manufacture or sale of products and services. In addition the banking and hedging conditions obtained by KUKA Aktiengesellschaft are internally passed on unchanged to the companies. On regulated markets on which KUKA Aktiengesellschaft is unable to conduct reasonable collateral transactions for Group companies, the companies have direct relations with the banks.

KUKA Aktiengesellschaft normally only conducts its own foreign currency transactions in connection with the financing of foreign companies.

in € thousands	Nominal volume				Fair values			
	Dec. 31, 2015	Dec. 31, 2016	Maturing within 1 year	Maturing in 1 - 5 years	Dec. 31, 2015 Total	Maturing within 1 year	Maturing in 1 - 5 years	Dec. 31, 2016 Total
Forward exchange transac- tions								
with banks	201,377	526,193	-818	98	-720	-4,691	-339	-5,030
of which offsetting contracts with affiliated and other com- panies	152,280	414,696	885	-98	787	6,522	676	7,198
	<b>353,657</b>	<b>940,889</b>	<b>67</b>	<b>0</b>	<b>67</b>	<b>1,831</b>	<b>337</b>	<b>2,168</b>

The listed fair values correspond to the price at which external third parties would take on the rights or obligations of the derivative financial instruments. The mark-to-market valuation is obtained using the zero-coupon method.

The maximum default risk of derivative financial instruments is recognized as the sum of their positive fair values. As at December 31, 2016 the sum of the positive fair values of external derivative financial instruments amounted to k€ 3,705 (previous year: k€ 1,780) and the negative fair values to k€ 8,735 (previous year: k€ 2,500). A default can occur if individual business partners are unable to meet their contractual obligations and KUKA Aktiengesellschaft thus suffers a financial loss. To diversify the risk of default, hedging transactions are only entered into with various partners with an excellent credit rating.

For negative fair values relating to KUKA Aktiengesellschaft there is an impending loss provision of k€ 2,107 (previous year: k€ 91).

## OTHER NOTES

### EXECUTIVE BOARD AND SUPERVISORY BOARD COMPENSATION

No business subject to reporting rules was conducted between any KUKA Group companies and members of KUKA Aktiengesellschaft's Executive or Supervisory Boards with the exception of the legal transactions outlined in the compensation report.

The Executive Board of KUKA Aktiengesellschaft received total compensation of k€ 5,561 (previous year: k€ 7,911). Over the financial year, the Executive Board members received a fixed salary including payments in kind and other compensation of k€ 1,237 (previous year: k€ 1,212). Target achievement and performance-based compensation amounted to k€ 4,324 (previous year: k€ 6,699). k€ 2,210 (previous year: k€ 4,623) was paid out in compensation in accordance with the phantom share program.

With a few exceptions, former Executive Board members have been granted benefits from the company pension scheme, which include old-age, vocational and employment disability, widow's and orphan's pensions. The sum of the provisions recognized in 2016 for current pensions and vested pension benefits for this group of persons totals k€ 10,041 (previous year: k€ 10,018).

In fiscal 2016 the members of the Supervisory Board received a total of k€ 1,010 (previous year: k€ 840) for their activities as members of this body.

Please refer to the notes in the compensation report for further information and details about the compensation of individual Executive Board and Supervisory Board members. The compensation report is part of the corporate governance report and summarizes the basic principles used to establish the compensation of the Executive and Supervisory Boards of KUKA Aktiengesellschaft. The compensation report is an integral part of the management report.

### DECLARATION CONCERNING CORPORATE GOVERNANCE CODE

The identically worded declarations of conformity pursuant to section 161 of the German Stock Corporation Act (AktG) made by the Executive Board on February 8, 2017 and the Supervisory Board on February 8, 2017 can be accessed by any interested parties on the company's website ([www.kuka-ag.de](http://www.kuka-ag.de)).

## Notification on the existence of shareholdings pursuant to section 160 para. 1 no. 8 of the German Stock Corporation Act (AktG)

The notifications submitted during fiscal 2016 are listed below:

1. Sumitomo Mitsui Trust Holding, Inc. (Tokyo, Japan) notified us of the following in a letter dated January 26, 2016 pursuant to section 21 para. 1 of the German Securities Trading Act (WpHG):

“The share of the voting rights of Mitsui Trust Holding, Inc. (Tokyo, Japan) in KUKA Aktiengesellschaft, Zugspitzstrasse 140, 86165 Augsburg, exceeded the threshold of 3% of the voting rights on January 20, 2016 and as of this date comprises 3.09% (1,191,086 voting rights).

These voting rights are held directly by Nikko Asset Management Co., Ltd. and are allocated via Sumitomo Mitsui Trust Bank, Ltd. to Sumitomo Mitsui Trust Holding, Inc.

2. Midea Group Co. Ltd. (Foshan, China) notified us of the following in a (corrected) letter dated February 3, 2016 pursuant to section 21 para. 1 of the German Securities Trading Act (WpHG):

“The share of the voting rights of Midea Group Co. Ltd. (Foshan, China) in KUKA Aktiengesellschaft exceeded the threshold of 10% on February 1, 2016 and as of this date comprises 10.22% (3,935,553 voting rights).

These voting rights are held directly by MECCA International (BVI) Limited and are allocated via Midea International Corporation Company Limited to Midea Group Co., Ltd.

3. Sumitomo Mitsui Trust Holding, Inc. (Tokyo, Japan) notified us of the following in a letter dated May 10, 2016 pursuant to section 21 para. 1 of the German Securities Trading Act (WpHG):

“The share of the voting rights of Mitsui Trust Holding, Inc. (Tokyo, Japan) in KUKA Aktiengesellschaft, Zugspitzstrasse 140, 86165 Augsburg, fell below the threshold of 3% of the voting rights on April 29, 2016 and as of this date comprises 2.98% (1.184.094 voting rights).

These voting rights are held directly by Nikko Asset Management Co., Ltd. and are allocated via Sumitomo Mitsui Trust Bank, Ltd. to Sumitomo Mitsui Trust Holding, Inc.



## EVENTS AFTER THE BALANCE SHEET DATE

On June 16, 2016, MECCA International (BVI) Limited, a wholly-owned subsidiary of Midea Group Co. Ltd. (Midea) published the bid document for the public tender offer for KUKA Aktiengesellschaft (KUKA). The takeover bid was made in the form of a cash offer of €115.0 per KUKA share to all KUKA shareholders. At the end of June, based on the fairness opinion, the Executive Board recommended that KUKA shareholders accept the offer. KUKA shareholders were able to offer their shares to Midea up to August 3, 2016 during a grace period (due to the 30% minimum acceptance threshold being exceeded).

After the grace period expired, the stake held by MECCA in KUKA amounted to 94.55% taking into account the tendered shares.

Completion of the takeover was subsequently dependent on antitrust and regulatory authorizations in the various countries in which KUKA operates. Following the sale of the Aerospace operating division in mid-December 2016, the final outstanding condition was met in order to fulfill the security-related requirements of the US authorities CFIUS (Committee on Foreign Investment in the United States) and DDTC (Directorate of Defense Trade Controls). The takeover of KUKA Aktiengesellschaft by MECCA International (BVI) Limited was approved by the aforementioned US authorities on December 29, 2016. All the closing conditions of the takeover bid of June 16, 2016 have therefore been met.

Accordingly the final settlement of the takeover bid took place on January 6, 2017.

Bernd Minning resigned as a member of the Supervisory Board and thus also as its chairman with effect from February 1, 2017. Dr. Hubert Lienhard (as of January 10, 2017), Dr. Friedhelm Loh (as of January 27, 2017) and Professor Dr. Dirk Abel (as of January 31, 2017) had previously also resigned from their positions on the Supervisory Board. The role of Supervisory Board chairman was assumed by Dr. Yanmin Gu (Andy Gu) with effect from February 10, 2017 following his court appointment to the board. Min Liu (Francoise Liu) (as of February 10, 2017), Prof. Dr. Michèle Morner (as of February 10, 2017), Paul Fang (as of February 24, 2017) and Alexander Liong Hauw Tan (as of February 24, 2017) had previously been appointed as members of the Supervisory Board. The appointments are limited until the upcoming Annual General Meeting on May 31, 2017. These changes are taking place in connection with the takeover by Midea. The company wishes to be appropriately represented on the Supervisory Board.

The banks involved in the syndicated loan agreement (see note 15) agreed to the extension at the beginning of 2017. The new maturity date is March 30, 2022.

Apart from this there have been no events subject to reporting requirements that had an impact on the financial position and performance of the company since the balance sheet reporting date.

## **CORPORATE BODIES**

### **SUPERVISORY BOARD**

#### **Bernd Minning (until February 01, 2017)**

##### **Kaisheim**

Chairman of the Supervisory Board of KUKA Aktiengesellschaft  
President and CEO of WM Technologies GmbH, Kaisheim  
WM Technologies (Shanghai) Ltd., Shanghai, China\*\*  
KARL WÖRWAG Lack- und Farbenfabrik GmbH & Co. KG, Stuttgart\*\*

#### **Dr. Andy Gu (from February 10, 2017)**

##### **Panyu, Guangzhou/China**

Chairman of the Supervisory Board of KUKA Aktiengesellschaft  
Vice President Midea Group Co., Ltd, Foshan/China

#### **Michael Leppke\*\*\***

##### **Stadtbergen**

Deputy Chairman of the Supervisory Board  
1st Authorized Representative of IG Metall trade union, Augsburg branch  
MAN Diesel & Turbo SE\*  
SGL Carbon SE\*  
AIRBUS Helicopters Deutschland GmbH\*

#### **Prof. Dr. Dirk Abel (until January 31, 2017)**

##### **Aachen**

University professor  
Director of the Institute of Automatic Control at RWTH Aachen  
ATC GmbH (Aldenhoven Testing Center of RWTH Aachen University), Aachen\*\*

#### **Wilfried Eberhardt\*\*\***

##### **Aichach**

Chief Marketing Officer of KUKA Aktiengesellschaft, Augsburg

**Paul Fang (from February 24, 2017)**

**Foshan/China**

Chairman/CEO Midea Group Co., Ltd, Foshan/China

**Siegfried Greulich\*\*\***

**Augsburg**

Deputy Chairman of the Works Council of the KUKA Plants at Augsburg

**Thomas Knabel\*\*\* (until May 27,2016)**

**Augsburg**

Second authorized representative of IG Metall, Administrative authority Zwickau

**Armin Kolb\*\*\***

**Augsburg**

Chairman of the Works Council of the KUKA Plants at Augsburg

**Dr. Constanze Kurz\*\*\* (from June 01, 2016)**

**Frankfurt am Main**

Consultant of Group and General Works Councils of

Robert Bosch GmbH (from December 01, 2016)

SMS GmbH und der SMS group GmbH, Hilchenbach\*

DMG MORI AG, Bielefeld\*

Trade union secretary at board of IG Metall (until November 30, 2016)

SMS GmbH, Hilchenbach\*

DMG MORI AG, Bielefeld\*

**Carola Leitmeir\*\*\***

**Großaitingen**

Member of the Works Council of the KUKA Plants at Augsburg

**Francoise Liu (from February 10, 2017)**

**Deliang, Shunde/China**

Chief Operations Officer Midea Group Co., Ltd, Foshan/China

**Dr. Hubert Lienhard (until January 10, 2017)****Heidenheim**

CEO of Voith GmbH

EnBW\*

Heraeus Holding GmbH\*

SGL Carbon SE\*

SMS Holding GmbH\*

Voith Turbo Beteiligungen GmbH (Chairman)\*

Voith Hydro Holding GmbH & Co. KG (Chairman)\*\*

Voith Industrial Services Holding GmbH & Co. KG (Chairman)\*\*

Voith Paper Holding GmbH & Co. KG (Chairman)\*\*

Voith Turbo GmbH & Co. KG (Chairman)\*\*

**Friedhelm Loh (until January 27, 2017)****Dietzhöfztal**

Owner and CEO of the Friedhelm Loh Group, Haiger

Senator of Fraunhofer Gesellschaft

Deutsche Messe AG\*

Klöckner & Co. SE\*

Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V., Senator\*\*

Group mandates Friedhelm Loh Group:

Cito Benelux B.V., Zevenaar, Niederlande, Commissarissen

Cito Benelux (Onroerend Goed) B.V., Zevenaar, Niederlande, Commissarissen

Rittal Corporation, Urbana (OH), USA, Chairman of the Board

Rittal Electrical Equipment (Shanghai) Co. Ltd., Shanghai, China, Legal Representative and Chairman of the Board

Rittal Electro-Mechanical Technology (Shanghai) Co. Ltd., Shanghai, China, Legal Representative and Chairman of the Board

**Prof. Dr. Uwe Loos****Stuttgart**

Dorma Holding GmbH +Co.KGaA, Ennepetal\*

Bharat Forge Aluminiumtechnik, Brand-Erbisdorf\*\*

CDP Bharat Forge GmbH, Ennepetal\*\*

Richard Fritz Holding GmbH, Besigheim\*\*

**Prof. Dr. Michèle Morner (from February 10, 2017)**

**Rosengarten**

Incumbent of the Chair of Public Management and Leadership at the German University of Administrative Sciences in Speyer

**Hans Ziegler (until December 01, 2016)**

**Feusisberg, Switzerland**

Membership of different board of directors

OC Oerlikon Corporation AG, Pfäffikon SZ, Switzerland\*\*

Schmolz + Bickenbach Holding AG, Emmenbrücke, Switzerland\*\*

Credor Holding AG, Will SG, Switzerland\*\*

think & act AG, Feusisberg SZ, Switzerland\*\*

**Alexander Liong Hauw Tan (from February 24, 2017)**

**Guangzhou/China**

Deputy CFO Midea Group Co., Ltd., Foshan/China

\* Membership in other legally stipulated supervisory boards

\*\* Membership in comparable German and foreign controlling bodies of commercial enterprises

\*\*\* Employee Representative on Supervisory Board

## EXECUTIVE BOARD

**Dr. Till Reuter**

**Pfäffikon, Switzerland**

Chief Executive Officer

Dr. Steiner Holding AG, Berlin\*

Rinvest AG, Pfäffikon, Switzerland\*\*

Swisslog Holding, Buchs, Switzerland\*\*

**Peter Mohnen**

**Munich**

Chief Financial Officer

\* Membership in other legally stipulated supervisory boards

\*\* Membership in comparable German and foreign controlling bodies of commercial enterprises

\*\*\* Employee Representative on Supervisory Board



## SHAREHOLDINGS OF KUKA AKTIENGESELLSCHAFT

Name und Sitz der Gesellschaften	Währung	Anteil am Kapital %	Eigenkapital in Tausend Landes- währung	Jahres- überschuss in Tsd. Landes- währung	Art der Einbe- ziehung	Segm ent
<b>Deutschland</b>						
1 Bopp & Reuther Anlagen-Verwaltungsgesellschaft mbH, Augsburg	EUR	100,00	20.530	814	k	SO
2 connyun GmbH, Augsburg	EUR	100,00	24	-1 5)	k	SO
3 Faude Automatisierungstechnik GmbH, Gärtringen	EUR	100,00	-199	-2.563	k	SY
4 KUKA Industries GmbH & Co. KG, Obernburg*	EUR	100,00	-38.141	4.420	k	SY
5 KUKA Industries GmbH, Augsburg*	EUR	100,00	8.573	0 1)	k	SY
6 KUKA Roboter GmbH, Augsburg*	EUR	100,00	50.614	0 1)	k	RO
7 KUKA Systems GmbH, Augsburg*	EUR	100,00	23.794	0 1)	k	SY
8 Reis Asia Pacific GmbH, Obernburg	EUR	100,00	24	0	k	SY
9 Reis GmbH, Obernburg	EUR	100,00	71	0	k	SY
10 Reis Group Holding GmbH & Co. KG, Obernburg*	EUR	100,00	24.666	-892 5)	k	SY
11 Reis Holding GmbH, Obernburg	EUR	100,00	25	-7	k	SY
12 Swisslog (Deutschland) GmbH, Puchheim	EUR	100,00	-97.054	-6.363	k	SL
13 Swisslog Augsburg GmbH, Augsburg	EUR	100,00	529	0 1)	k	SL
14 Swisslog Automation GmbH, Ettingen	EUR	100,00	-1.358	-322	k	SL
15 Swisslog GmbH, Dortmund	EUR	100,00	-1.654	790	k	SL
16 Swisslog Healthcare GmbH, Westerstede	EUR	100,00	699	0 1)	k	SL
17 Verwaltungsgesellschaft Walter Reis GmbH, Obernburg	EUR	100,00	41	0	k	SY
18 Walter Reis GmbH & Co KG, Obernburg*	EUR	100,00	10.670	254	k	SY
19 WR Vermögensverwaltungs GmbH, Obernburg	EUR	100,00	1.911	-270	k	SY
20 KBee AG, München	EUR	40,00	2.430	-4.315 2)	at	SY
21 RoboCeption GmbH, München	EUR	25,10	132	-85 2)	b	SY
22 Freadix FryTec GmbH, Augsburg	EUR	100,00	20	-4	nk	RO
23 IWK Unterstützungseinrichtung GmbH, Karlsruhe	EUR	100,00	26	0	nk	RO
24 KUKA Unterstützungskasse GmbH, Augsburg	EUR	100,00	25	0	nk	SO
25 Schmidt Maschinentechnik GmbH i.L., Niederstotzingen	EUR	100,00	-	- 4)	nk	SO
<b>sonstiges Europa</b>						
26 KUKA Automatisering + Robots N.V., Houthalen / Belgien	EUR	100,00	3.221	745	k	SY
27 KUKA Automatismes + Robotique S.A.S., Villebon-sur-Yvette / Frankreich	EUR	100,00	1.913	612	k	RO
28 KUKA Industries ČR spol. s r.o., Chomutov / Tschechien	CZK	100,00	57.528	-38.289	k	SY
29 KUKA Nordic AB, Västra Frölunda / Schweden	SEK	100,00	2.985	-295	k	RO
30 KUKA Roboter CEE GmbH, Linz / Österreich	EUR	100,00	3.591	3.136	k	RO
31 KUKA Roboter Italia S.p.A., Rivoli / Italien	EUR	100,00	10.443	2.955	k	RO
32 KUKA Roboter Schweiz AG, Neuenhof / Schweiz	CHF	100,00	484	15	k	RO
33 KUKA Robotics Hungária Ipari Kft., Taksony / Ungarn	EUR	100,00	13.865	3.864	k	RO
34 KUKA Robotics Ireland LTD, Dublin / Irland	EUR	100,00	0	0 5)	k	RO
35 KUKA Robotics OOO, Moskau / Russland	RUB	100,00	16.303	-16.789	k	RO
36 KUKA Robotics UK LTD, Wednesbury / Großbritannien	GBP	100,00	867	22	k	RO
37 KUKA Robots IBÉRICA S.A., Vilanova i la Geltrú / Spanien	EUR	100,00	5.611	1.326	k	RO
38 KUKA S-BASE s.r.o. (in Liquidation), Roznov p.R. / Tschechien	CZK	100,00	922	-46 4)	k	SY
39 KUKA Sistemy OOO, Togliatti / Russland	RUB	100,00	19.054	-4.101	k	SY
40 KUKA Systems Aerospace SAS, Bordeaux-Merignac / Frankreich	EUR	100,00	11.233	4.381	k	SY
41 KUKA Systems France S.A., Montigny / Frankreich	EUR	100,00	37	36	k	SY
42 KUKA Systems Slowakei, spol. S r.o., Dubnica nad Váhom / Slowakei	EUR	100,00	875	104	k	SY
43 KUKA Systems SRL, Sibiu / Rumänien	RON	100,00	-4.044	-9.899	k	SY
44 KUKA Systems UK Ltd., Halesowen / Großbritannien	GBP	100,00	7.389	438	k	SY
45 Reis Espana S.L., Esplugues de Llobregat (Barcelona) / Spanien	EUR	100,00	151	0 4)	k	SY
46 Reis France SCI, Pontault Combault / Frankreich	EUR	100,00	501	13	k	SY
47 Reis Robotics Italia srl, Bellusco / Italien	EUR	100,00	180	1	k	SY
48 Swisslog (UK) Ltd., Redditch / Großbritannien	GBP	100,00	-7.943	-3.749	k	SL
49 Swisslog AB, Partille / Schweden	SEK	100,00	37.922	567	k	SL
50 Swisslog Accalon AB, Boxholm / Schweden	SEK	100,00	67.340	17.254	k	SL
51 Swisslog AG, Buchs / Schweiz	CHF	100,00	5.832	3.264	k	SL
52 Swisslog AS, Oslo / Norwegen	NOK	100,00	21.636	9.573	k	SL
53 Swisslog B.V., Culemborg / Niederlande	EUR	100,00	1.733	520	k	SL
54 Swisslog Ergotrans B.V., Apeldoorn / Niederlande	EUR	100,00	869	-76	k	SL
55 Swisslog Evomatic GmbH, Sipbachzell / Österreich	EUR	100,00	-10.442	2.758	k	SL
56 Swisslog France SAS, Saint-Denis / Frankreich	EUR	100,00	-1.638	667	k	SL
57 Swisslog Holding AG, Buchs / Schweiz	CHF	100,00	291.166	35.810	k	SL
58 Swisslog Italia SpA, Mailand / Italien	EUR	100,00	1.443	-987	k	SL
59 Swisslog Luxembourg S.A., Ell / Luxemburg	EUR	100,00	-963	161 4)	k	SL
60 Swisslog N.V., Wilrijk / Belgien	EUR	100,00	-566	-456	k	SL
61 Tecnilab S.p.A., Cuneo / Italien	EUR	100,00	8.275	-110	k	SL
62 Metaalwarenfabriek 's-Hertogenbosch B.V., s-Hertogenbosch / Niederlande	EUR	100,00	-1.042	-10 3)	nk	SO

Name und Sitz der Gesellschaften	Wahrung	Anteil am Kapital %	Eigenkapital in Tausend Landes- wahrung	Jahres- berschuss in Tsd. Landes- wahrung	Art der Einbe- ziehung	Segm ent
<b><u>Nordamerika</u></b>						
63 KUKA Assembly and Test Corp., Saginaw, Michigan / USA	USD	100,00	13.394	9.989	k	SY
64 KUKA de Mexico S.de R.L.de C.V., Mexico City / Mexiko	MXN	100,00	36.271	19.867	k	RO
65 KUKA Robotics Canada Ltd., Saint John NB / Kanada	CAD	100,00	1.392	6	k	RO
66 KUKA Robotics Corp., Sterling Heights, Michigan / USA	USD	100,00	2.117	-1.021	k	RO
67 KUKA Systems de Mexico S. de R.L. de C.V., Mexico City / Mexiko, einschlielich	MXN	100,00	24.304	24.304	k	SY
68 KUKA Recursos S. de R.L. de C.V., Mexico City / Mexiko	MXN	100,00	-	-	k	SY
69 KUKA Systems North America LLC., Sterling Heights, Michigan / USA, einschlielich	USD	100,00	44.406	76.928	k	SY
70 KUKA Aerospace Holdings LLC, Michigan / USA	USD	100,00	-	- 6)	k	SY
71 KUKA Toledo Production Operations, LLC., Toledo, Ohio / USA**	USD	100,00	104.136	32.954	k	SY
72 KUKA U.S. Holdings Company LLC., Shelby Township, Michigan / USA	USD	100,00	83.470	41.735	k	SO
73 Reis Robotics USA Inc., Elgin/Illinois / USA	USD	100,00	-68	107	k	SY
74 Swisslog Logistics, Inc., Newport News / USA	USD	100,00	11.518	5.644	k	SL
75 Swisslog USA Inc., City of Dover / USA	USD	100,00	-5.360	2.182	k	SL
76 Translogic Corp., Denver / USA	USD	100,00	36.503	6.986	k	SL
77 Translogic Ltd. (Canada), Mississauga / Kanada	CAD	100,00	2.714	422	k	SL
<b><u>Sd- und Mittelamerika</u></b>						
78 KUKA Industries Brasil Sistemas de Automocoo Ltda., Sao Paulo / Brasilien	BRL	100,00	72	-336	k	SY
79 KUKA Roboter do Brasil Ltda., Sao Paulo / Brasilien	BRL	100,00	-1.499	-2.429	k	RO
80 KUKA Systems do Brasil Ltda., Sao Bernardo do Campo SP / Brasilien	BRL	100,00	-28.634	-326	k	SY
81 Reis Robotics do Brasil Ltda., Sao Paulo / Brasilien	BRL	100,00	204	-153	k	SY
<b><u>Asien / Australien</u></b>						
82 KUKA Industries Automation (China) Co., Ltd., Kunshan / China	CNY	100,00	17.361	31.902	k	SY
83 KUKA Industries Singapore PTE. Ltd., Singapur / Singapur	SGD	100,00	1.757	381	k	SY
84 KUKA Management ( Shanghai) Co. Ltd., Shanghai / China	CNY	100,00	31.235	10.269	k	SY
85 KUKA Robot Automation Malaysia Sdn Bhd, Kuala Lumpur / Malaysia	MYR	100,00	6.213	0	k	RO
86 KUKA Robot Automation Taiwan Co. Ltd., Chung-Li City / Taiwan	TWD	99,90	-54.094	-53.873	k	RO
87 KUKA Robotics (China) Co. Ltd., Shanghai / China	CNY	100,00	226.395	42.540	k	RO
88 KUKA Robotics (India) Pvt. Ltd., Haryana / Indien	INR	100,00	119.470	35.386	k	RO
89 KUKA Robotics (Thailand) Co., Ltd., Bangkok / Thailand	THB	100,00	-36.190	-31.284	k	RO
90 KUKA Robotics Australia Pty. Ltd., Victoria / Australien	AUD	100,00	-190	-407	k	RO
91 KUKA Robotics Japan K.K., Tokyo / Japan	JPY	100,00	115.873	-35.293	k	RO
92 KUKA Robotics Korea Co. Ltd., Kyunggi-Do / Sdkorea	KRW	100,00	-704	-1.275	k	RO
93 KUKA Robotics Manufacturing China Co. Ltd., Shanghai City / China	CNY	100,00	165.801	79.045	k	RO
94 KUKA Systems (China) Co. Ltd., Shanghai / China	CNY	100,00	66.705	19.722	k	SY
95 KUKA Systems (India) Pvt. Ltd., Pune / Indien	INR	100,00	-43.270	-26.649	k	SY
96 Reis Robotics China Co. Ltd. (Shanghai), Shanghai / China	CNY	100,00	-4.102	-207	k	SY
97 Swisslog (Kunshan) Co. Ltd., Kunshan / China	CNY	100,00	6.469	-6.879	k	SL
98 Swisslog Asia Ltd., Hongkong / China	HKD	100,00	4.806	-131	k	SL
99 Swisslog Australia Pty Ltd., Sydney / Australien	AUD	100,00	-583	-2.120	k	SL
100 Swisslog Healthcare Trading MEA LLC., Emirate of Dubai / Vereinigte Arabische Emirate	AED	49,00	495	395	k	SL
101 Swisslog Korea Co. Ltd, Bucheon si, Kyeonggi-do, Sdkorea / Sdkorea	KRW	100,00	4	-196	k	SL
102 Swisslog Malaysia Sdn Bhd, Selangor Darul Ehsan / Malaysia	MYR	100,00	8.717	5.447	k	SL
103 Swisslog Middle East LLC., Dubai / Vereinigte Arabische Emirate	AED	49,00	-2.940	-1.267	k	SL
104 Swisslog Pte Ltd Singapur, Singapur / Singapur	SGD	100,00	4.266	1.840	k	SL
105 Swisslog Shanghai Co. Ltd., Shanghai / China	CNY	100,00	119.235	2.840	k	SL
106 Swisslog Singapore Pte Ltd., Singapur / Singapur	SGD	100,00	3.735	663	k	SL
107 Yawei Reis Robot Manufacturing (Jiangsu) Co. Ltd., Yangzhou City / China	CNY	49,00	40.942	3.893	at	SY
108 Chang'an Reis (Chongqing) Robotic Intelligent Equipment Co. Ltd, Chongqing / China	CNY	50,00	24.837	-3.162	at	SY

\*) Gesellschaften, die von der Befreiungsregelung des § 264 Abs. 3 HGB bzw. § 264 b HGB Gebrauch gemacht haben

\*\*) Principle place of business

- 1) Nach Ergebnisabfhrung
- 2) Jahresabschluss 31.12.2015
- 3) Jahresabschluss 30.06.2016
- 4) in Liquidation
- 5) Rumpfwirtschaftsjahr April 2016 - 31.12.2016
- 6) Grndung der Gesellschaft im Q4/2016

#### Art der Einbeziehung - per 31.12.2016

- k - vollkonsolidierte Gesellschaften
- nk - nicht konsolidierte Gesellschaften
- at - nach der Equity Methode bilanzierte Finanzanlage
- b - Beteiligung

#### Geschftsbereich

- RO - ROBOTICS
- SY - SYSTEMS
- SL - SWISSLOG
- SO - SONSTIGE

## PROPOSED APPROPRIATION OF PROFIT

One half or k€ 55,983 of the annual net income of KUKA Aktiengesellschaft of k€ 111,967 will be transferred to the other retained earnings. The Executive Board proposes to the Annual General Meeting that a dividend of €0.50 per share totaling k€ 19,888 should be paid from the remaining balance sheet profit of k€ 87,611 and that the remaining amount of k€ 67,724 should be carried forward.

## GROUP ACCOUNTS

KUKA Aktiengesellschaft prepares consolidated financial statements in accordance with IFRS and these are submitted to the electronic Federal Gazette and can be viewed on the central register of companies at [www.Unternehmensregister.de](http://www.Unternehmensregister.de).

Augsburg, February 28, 2017

KUKA Aktiengesellschaft

The Executive Board

Dr. Till Reuter

Peter Mohnen

## **RESPONSIBILITY STATEMENT**

“To the best of our knowledge, and in accordance with the applicable reporting principles, the financial statements give a true and fair view of the assets, liabilities, financial position and profit or loss of KUKA Aktiengesellschaft, and the management report includes a fair review of the development and performance of the business and the position of the company, together with a description of the principal opportunities and risks associated with the expected development of the company.”

Augsburg, February 28, 2017

KUKA Aktiengesellschaft

The Executive Board

Dr. Till Reuter

Peter Mohnen

## AUDIT OPINION

We have audited the annual financial statements, comprising the balance sheet, the income statement and the notes to the financial statements, together with the bookkeeping system, and the management report of KUKA Aktiengesellschaft, Augsburg for the business year from January 1 to December 31, 2016. The maintenance of the books and records and the preparation of the annual financial statements and management report in accordance with German commercial law (and supplementary provisions of the shareholder agreement/articles of incorporation) are the responsibility of the Company's management. Our responsibility is to express an opinion on the annual financial statements, together with the bookkeeping system, and the management report based on our audit.

We conducted our audit of the annual financial statements in accordance with § 317 HGB „Handelsgesetzbuch“: „German Commercial Code“ and German generally accepted standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Those standards require that we plan and perform the audit such that misstatements materially affecting the presentation of the net assets, financial position and results of operations in the annual financial statements in accordance with [German] principles of proper accounting and in the management report are detected with reasonable assurance. Knowledge of the business activities and the economic and legal environment of the Company and expectations as to possible misstatements are taken into account in the determination of audit procedures. The effectiveness of the accounting-related internal control system and the evidence supporting the disclosures in the books and records, the annual financial statements and the management report are examined primarily on a test basis within the framework of the audit. The audit includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the annual financial statements and management report. We believe that our audit provides a reasonable basis for our opinion.

Our audit has not led to any reservations.

In our opinion, based on the findings of our audit, the annual financial statements comply with the legal requirements (and supplementary provisions of the shareholder agreement/articles of incorporation) and give a true and fair view of the net assets, financial position and results of operations of the Company in accordance with [German] principles of proper accounting. The management report is consistent with the annual financial statements, complies with the German statutory requirements, and as a whole provides a suitable view of the Company's position and suitably presents the opportunities and risks of future development.

Munich, February 28, 2017

**KPMG**

**Aktiengesellschaft**

**Wirtschaftsprüfungsgesellschaft**

Karl Braun  
Auditor

Rainer Rupprecht  
Auditor