KUKA AKTIENGESELLSCHAFT

SUPERVISORY BOARD REPORT

CONSOLODATED FINANCIAL REPORT and ANNUAL FINANCIAL STATEMENTS 2017

DISCLOSURES IN ACCORDANCE WITH PAY TRANSPARENCY ACT

SUPERVISORY BOARD REPORT

CONSOLODATED FINANCIAL REPORT OF KUKA AKTIENGESELLSCHAFT

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DISCLOSURES IN ACCORDANCE WITH PAY TRANSPARENCY ACT

Supervisory Board report

Dear Shareholders,

The past fiscal year was characterized by the increase in revenues and thus the continued growth of the company. Within the scope of its control and advisory function, the Supervisory Board assisted the Executive Board in moving the company forward. The Supervisory Board was able to play an active part in fundamental decisions regarding the company's future course. These also included strategically important company acquisitions, especially with a view to Industrie 4.0. The strategic alignment of the company constituted a general focus of the Supervisory Board's work. Cooperation between the Supervisory Board and the Executive Board was always constructive and based on mutual trust.

The Supervisory Board fulfilled its duties in plenary meetings, committee work, conference calls and in circular resolutions. Talks were also regularly held with the Executive Board, especially by the Chairman of the Supervisory Board and the chairs of its committees. The key performance indicators of the Group (e.g. orders received, sales revenues, EBIT, staff levels) were discussed in detail at every Supervisory Board meeting in connection with the Management Report of the Executive Board. Deviations of the business performance from the plans and targets or from the budgets were discussed in detail in the Supervisory Board and examined by it on the basis of the documents submitted. The Supervisory Board was thus continuously aware of the company's economic situation.

Questions regarding Executive Board remuneration were prepared in the Personnel Committee, with subsequent decisions being made at the plenary meetings of the Supervisory Board.

Changes to the Executive Board and Supervisory Board

No changes occurred in the Executive Board. The company is still managed by Dr. Till Reuter as CEO and Mr. Peter Mohnen as CFO. The appointments of Dr. Till Reuter and Mr. Peter Mohnen last until March 31, 2022. In view of these terms in office, the Supervisory Board has set the quota for female Executive Board members at 0% for the time being.

The Supervisory Board underwent numerous personnel changes. The following board members resigned from office: Dr. Hubert Lienhard as of January 10, 2017, Dr. Friedhelm Loh as of January 27, 2017, Prof. Dr. Dirk Abel as of January 31, 2017 and Mr. Bernd Minning also as of January 31, 2017, Prof. Dr. Uwe Loos as of February 28, 2017 as well as Dr. Constanze Kurz as of November 14, 2017. The new members were initially appointed by court order: Dr. Yanmin (Andy) Gu, Ms. Min (Francoise) Liu and Prof. Dr. Michèle Morner since February 10, 2017 and Mr. Hongbo (Paul) Fang and Mr. Alexander Liong Hauw Tan since February 24, 2017. These Supervisory Board representatives of the shareholders, Mr. Hongbo (Paul) Fang, Dr. Yanmin (Andy) Gu, Ms. Min (Francoise) Liu, Prof. Dr. Michèle Morner and Mr. Alexander Liong Hauw Tan, were then also elected to the Supervisory Board by the Annual General Meeting on May 31, 2017 following expiry of their court appointment. Furthermore, Prof. Dr. Henning Kagermann was also appointed to the Supervisory Board at this Annual General Meeting. Lastly, Ms. Tanja Smolenski has been a member of the Supervisory Board since December 14, 2017 by court appointment. All mandates last until the end of the 2018 General Meeting which is scheduled for June 6, 2018.

The members newly appointed to the Supervisory Board also took on the following functions in the committees: Dr. Yanmin (Andy) Gu as Chairman of the Personnel Committee, Chairman of the Mediation Committee, member of the Nomination Committee, Audit Committee and member of the Strategy and Technology Committee, Mr. Hongbo (Paul) Fang as member of the Nomination Committee, Ms. Min (Francoise) Liu as member of the Personnel Committee, Mediation Committee, Nomination Committee as well as the Strategy and Technology Committee, Prof. Dr. Michèle Morner as member of the Audit Committee, Mr. Alexander Liong Hauw Tan as Chairman of the Audit Committee and member of the Strategy and Technology Committee, Prof. Dr. Henning Kagermann as Chairman of the Strategy and Technology Committee.

The Supervisory Board extends its great thanks to the former members Dr. Constanze Kurz, Prof. Dr. Dirk Abel, Dr. Hubert Lienhard, Dr. Friedhelm Loh, Prof. Dr. Uwe Loos and Mr. Bernd Minning for their dedicated work on the board.

With four females out of a total of twelve acting members, the proportion of women on the Supervisory Board amounted to 30% at the end of the year under review.

The Supervisory Board convened six plenary meetings. It met three times for telephone conferences and reached two resolutions passed by written circulatory procedure.

An extraordinary Supervisory Board meeting on February 13, 2017 was the first of these meetings. Dr. Yanmin (Andy) Gu, the member appointed to the Supervisory Board by court order as of February 10, 2017, was elected as Chairman of the Supervisory Board at this meeting. Pursuant to section 7 para. 4 of the rules of procedure of the Supervisory Board, this meant that Dr. Yanmin (Andy) Gu also became a member of the Audit Committee and chairman of the other committees with equal representation. Prof. Dr. Michèle Morner, likewise a Supervisory Board member as of February 10, 2017, was also appointed as a member of the Audit Committee.

In addition to Dr. Yanmin (Andy) Gu, who as Chairman of the Supervisory Board already became an ex officio member of the Personnel Committee pursuant to section 7 para. 4 of the rules of procedure of the Supervisory Board, Ms. Min (Francoise) Liu, who had also been appointed as a Supervisory Board member on February 10, 2017, was elected as a member of the Personnel Committee at another extraordinary meeting of the Supervisory Board held in the form of a conference call on March 15, 2017. Furthermore, Ms. Min (Francoise) Liu, Mr. Hongbo (Paul) Fang and Ms. Yanmin (Andy) Gu were newly appointed to the Nomination Committee.

Dr. Yanmin (Andy) Gu
Chairman of the Supervisory Board

The first ordinary Supervisory Board meeting took place on March 21, 2017, when the topic of the budget for 2017, which had already been discussed on December 15, 2016, was re-examined. On this occasion, the EBIT value planned for the Group in 2017 was addressed again. The Supervisory Board then focused on the annual financial statements of KUKA Aktiengesellschaft and the Group prepared by the Executive Board for 2016. In its role as auditor, KPMG presented a report and the Chairman of the Audit Committee made a statement. Both sets of annual accounts were approved by the Supervisory Board, which meant that the annual financial statements of KUKA Aktiengesellschaft were thereby adopted. The Supervisory Board also had to reach a decision on the proposal to the Annual General Meeting regarding appropriation of the 2016 balance sheet profit of KUKA Aktiengesellschaft. The Executive Board had raised the prospect of paying a dividend of €0.50/share and carrying forward the remaining profit. The Supervisory Board concurred in this proposal. Furthermore, the Supervisory Board approved not only the Corporate Governance report but also the Supervisory Board report for 2016. The board dealt with the other proposed resolutions for the Annual General Meeting planned for May 31, 2017. The acquisition project "Talyst" in Swisslog's Healthcare segment was then also discussed. The Supervisory Board gave its assent. In addition, the Augsburg site concept was addressed at this meeting along with the change in KUKA Group's organizational structure to a customer centric organization. The declaration of compliance had to be changed in view of Mr. Alexander Liong Hauw Tan taking over the chair in the Audit Committee in a "non-independent" capacity according to section 5.3.2 para. 3 of the German Corporate Governance Code (GCGC). Lastly, issues relating to Executive Board compensation, such as the extent to which the targets stipulated for the Executive Board members for 2016 had been achieved and the 2016 success factor for the variable bonus relating to the company's financial targets, were also on the agenda. Moreover, the success factor for settlement of the phantom share program (PSP) for 2014 to 2016 was defined and a new arrangement was made for the closing price of the KUKA share. Another key topic of this meeting was the reappointment of Dr. Till Reuter and Mr. Peter Mohnen as CEO and CFO respectively. The current appointments were repealed by mutually agreed resignation as of March 31, 2017 and the Executive Board members were reappointed from April 1, 2017 to March 31, 2022, with Dr. Till Reuter being appointed Chairman of the Executive Board (CEO) and at the same time Labor Relations Director pursuant to section 33 of the Co-Determination Act, and Mr. Peter Mohnen being appointed CFO. With regard to these new appointments, the employment contracts of the Executive Board members also had to be revised and newly resolved. Finally, Ms. Min (Francoise) Liu was appointed to the Mediation Committee, and the previous Technology and Production Committee and Strategy and Development Committee were combined to form a Strategy and Technology Committee. Ms. Carola Leitmeir and Ms. Min (Francoise) Liu and Messrs Michael Leppek, Alexander Liong Hauw Tan, Siegfried Greulich and Armin Kolb were newly elected to this new committee. Dr. Yanmin (Andy) Gu became a member of this committee due to his role as Chairman of the Supervisory Board.

The Supervisory Board met before and after the Annual General Meeting held on May 31, 2017. First of all, the Supervisory Board prepared for the Annual General Meeting; it also decided to support the nomination proposal from the shareholder MECCA International (BVI) Limited for Prof. Dr. Henning Kagermann to be elected to the Supervisory Board by the Annual General Meeting.

Following the Annual General Meeting, Dr. Yanmin (Andy) Gu was – after his election as a Supervisory Board member by the Annual General Meeting – again elected Chairman of the Supervisory Board. While Dr. Yanmin (Andy) Gu, as Chairman of the Supervisory Board, is an ex officio member in the committees with equal representation pursuant to section 7 para. 4 of the rules of procedure and – except for the Audit Committee – is also their chairman, the members now elected to the Supervisory Board by the Annual General Meeting had to be elected to the committees again. Dr. Yanmin (Andy) Gu became a member of the Nomination Committee. Ms. Min (Francoise) Liu became a member of the Mediation Committee, Personnel Committee, Nomination Committee and Strategy and Technology Committee, Prof. Dr. Michèle Morner became a member of the Audit Committee,

Mr. Alexander Liong Hauw Tan became a member of the Audit Committee and Strategy and Technology Committee, Mr. Hongbo (Paul) Fang became a member of the Nomination Committee and Prof. Dr. Henning Kagermann became a member of the Strategy and Technology Committee. In derogation from the rules of procedure, the decision was then taken that Dr. Yanmin (Andy) Gu would not chair the Strategy and Technology Committee, but that this position would be vacated for Prof. Dr. Henning Kagermann who was then elected by the committee as chairman. The 2016 ICS report and a status report on the customer centric organization were on the agenda, as was Executive Board compensation again. The personal targets for 2017, the calculation basis for the company's financial targets in 2017 and the long-term incentive plan for 2017 – 2019 as a replacement for the previous phantom share programs were agreed upon for the Executive Board members. A decision was also made on an advisory board membership of Dr. Till Reuter and a status report on the investments and contractual relationships of KUKA companies in and with KBee AG. Another matter for resolution was the target quota for women in the Executive Board which – in view of the two-member Executive Board and the ongoing appointments – was set at 0 until May 31, 2022 (fulfillment deadline). However, the Supervisory Board was strongly in favor of diversity in its resolution. The Supervisory Board also had to address matters relating to the board itself, namely its skills profile and the change in the rules of procedure, which had to take into account the merger of the Strategy and Development Committee and the Technology and Production Committee into a Strategy and Technology Committee.

Members were invited to another Supervisory Board meeting by way of a conference call on July 19, 2017. The only item on the agenda was the significant new investment in the KUKA Toledo Production Operations (KTPO) factory in the USA, a body-in-white production plant for Fiat/Chrysler vehicles.

On September 29, 2017, a strategy meeting was held at the Midea site in Shunde. The Executive Board explained the strategic goals of the Group, notably safeguarding and expanding the Group's leadership in innovation and leveraging potential in the Chinese medium segment. In this connection, the focal topics for 2018 to 2020 were addressed, such as securing KUKA's leading position and the growth in general industry. Particular attention was paid to Swisslog's WDS and Healthcare segments. Associated risks and opportunities were considered in greater detail, for example, and a portfolio outlook was discussed. Two acquisition projects were also on the agenda, namely the full acquisition of the company Visual Components OY in Finland and the investment in Device Insight GmbH in Munich. Both projects were approved. Lastly, the potential KUKA activities at the Midea site in Shunde were presented.

The concepts of forming joint ventures with Midea companies by integrating Swisslog HCS China and Swisslog WDS China and by way of a robotics joint venture (Industries in China) were discussed at an extraordinary Supervisory Board meeting held on November 15, 2017 in the form of a conference call. Initial plans for a robotics technology park in Shunde were also presented.

The budget for 2018 and the medium-term planning up to 2020 were the focus of the last Supervisory Board meeting on December 12, 2017. The committees also reported on their work at this meeting. Another report was presented to the Supervisory Board on the customer centric organization. The Executive Board additionally reported on the situation at KUKA Systems Augsburg. As a further item on the agenda, the Executive Board outlined the status of the post-merger integration for each of the recent acquisitions. This Supervisory Board meeting was continued in another session on December 19, 2017, when the budget for 2018 and medium-term planning up to 2020 were again up for discussion.

The written resolutions related to the original declaration of compliance and the declaration regarding corporate governance, and – after his court appointment as a member of the Supervisory Board – the appointment of Mr. Alexander Liong Hauw Tan to the Audit Committee.

All members of the Supervisory Board except Mr. Hongbo (Paul) Fang and Ms. Tanja Smolenski participated in more than half of the plenary and committee meetings (German Corporate Governance Code, section 5.4.7) in the year under review. Unless indicated otherwise, the Supervisory Board met in the presence of the Executive Board except when matters of its remuneration were on the agenda (German Corporate Governance Code, section 3.6, para. 2).

Further aspects of corporate governance can be found in the report of the same name which forms part of the annual report.

The Supervisory Board has the following committees: Personnel Committee (chaired by Dr. Yanmin (Andy) Gu), Audit Committee (chaired by Mr. Alexander Liong Hauw Tan), Strategy and Technology Committee (chaired by Prof. Dr. Henning Kagermann) and Mediation Committee pursuant to section 27 para. 3 of the German Co-Determination Act (chaired by Dr. Yanmin (Andy) Gu). A Nomination Committee has also been established in accordance with section 5.3.3 of the German Corporate Governance Code.

The Personnel Committee met twice. Both meetings addressed the Executive Board's compensation. One of the meetings also involved a discussion about the reappointment of the Executive Board members and the reorganization of their employment contracts.

The Audit Committee had six meetings. The financial statements of KUKA Group and KUKA AG were discussed regularly. The audit plan for 2017 and the risk atlas were also addressed. Another subject of the discussions was the new CSR reporting. The company's Chief Compliance Officer also reported to the Audit Committee.

The Nomination Committee held one meeting and discussed the nomination for the Supervisory Board's shareholder representative candidates to be elected by the Annual General Meeting.

There was no occasion to convene the Mediation Committee.

The Strategy and Technology Committee was convened four times. Topics relating to Industrie 4.0 such as the KUKA Connect roadmap as well as human-robot collaboration and service/consumer robotics were on the agenda. The LBR iisy was a subject of discussion once again.

Independence and conflicts of interest, declaration of compliance

In the past, a report was presented at this point on the Supervisory Board members Dr. Hubert Lienhard, Dr. Friedhelm Loh and Mr. Bernd Minning in the context of their other relationships to KUKA shareholders and/or the business relationships of their companies with KUKA companies. On the one hand, there have been no more relevant shareholdings in KUKA Aktiengesellschaft since the completion of the Midea takeover bid on January 6, 2017 and, on the other hand, the aforementioned gentlemen resigned from their offices in January 2017, as stated above.

The Supervisory Board members Dr. Yanmin (Andy) Gu, Mr. Hongbo (Paul) Fang, Ms. Min (Francoise) Liu and Mr. Alexander Liong Hauw Tan have employment contracts with Midea Group, which holds a 94.5% stake in KUKA. Dr. Yanmin (Andy) Gu and Mr. Hongbo (Paul) Fang also hold positions on boards within this group.

No conflicts of interest were reported in the year under review.

The Supervisory Board and the Executive Board submitted identical declarations in accordance with section 161 of the German Stock Corporation Act (AktG). The resolutions were initially made by the Executive Board and the Supervisory Board on February 8, 2017. An amended declaration of compliance was issued by the Executive Board on March 20, 2017 and by the Supervisory Board on March 21, 2017. The declarations of compliance were made permanently available to shareholders on the company's website.

Work with the auditors

The annual financial statements of KUKA Aktiengesellschaft as of December 31, 2017 and the consolidated financial statements of KUKA Group as of December 31, 2017, as well as the consolidated Management Report of KUKA Aktiengesellschaft and KUKA Group, including the bookkeeping, were audited by auditors KPMG Aktiengesellschaft, Wirtschaftsprüfungsgesellschaft, Berlin, which issued an unqualified audit opinion in each case on February 23, 2018. The auditors also checked the monitoring system as per section 91 para. 2 of the German Stock Corporation Act (AktG), the purpose of which is the early detection of developments that could threaten the company's existence. KUKA Group's mid-year report dated June 30, 2017 was also reviewed by the auditors. KUKA Aktiengesellschaft's consolidated statements were prepared in accordance with section 315a of the German Commercial Code (HGB) based on the International Accounting Standards (IFRS) as adopted by the European Union.

The Supervisory Board's Audit Committee appointed the external auditors, KPMG, as per the resolution at the Annual General Meeting of May 31, 2017. During the course of appointing the auditors of the financial statements of the company and the Group, the chair of the Audit Committee and the Chairman of the Supervisory Board conducted a review with the auditors regarding key audit issues, scope and fees. The auditors agreed to immediately inform the chair of the Audit Committee about any disqualification or bias issues encountered during the audit, provided such disqualification or bias issues could not immediately be resolved. The auditors also agreed to report on an ongoing basis during the audit all material findings and developments arising during the audit that were within the scope of the Supervisory Board's responsibilities. Furthermore, the auditors were instructed to inform the Supervisory Board, or note in the audit report, if information was encountered during the audit that was contrary to the declarations released by the Executive Board and Supervisory Board as per section 161 para. 1 sentence 1 of the German Stock Corporation Act (AktG).

Finally, the Audit Committee obtained the arm's length declaration of the auditors in accordance with section 7.2.1 para. 1 of the GCGC and monitored the auditors' independence.

As was the case in previous years – always in respect of different matters – focal points were defined for the audit in the 2017 fiscal year, namely, in relation to the consolidated financial statements, the assessment and completeness of the information pursuant to IFRS 3 from business transactions in 2017, the capitalization of internally generated intangible assets, especially software, the recognition, valuation and disclosure of finance leases in which KUKA is the lessor, the valuation, disclosure and completeness of long-term personnel provisions such as pensions, partial retirement, etc., the internal (risk) reporting and evaluation of toxic projects, the Group tax rate, the forecast report of KUKA Group as well as, in relation to the individual statements of KUKA AG, the valuation of investments and the forecast report of KUKA Aktiengesellschaft. The auditors found no major issues regarding these items.

Because they had been contracted to review the June 30, 2017 mid-year financial report, the auditors attended the Audit Committee meeting on July 31, 2017.

In a joint meeting with the auditors on March 7, 2018, the Audit Committee reviewed the two sets of financial statements for fiscal 2017, taking into consideration the auditors' reports. The Executive Board and the auditors presented the highlights of the financial reports to the panel. The Audit Committee members reviewed, discussed and checked in detail the documentation relating to the financial statements and discussed the audit report in depth with the auditors. The auditors answered the questions posed by the Audit Committee members. The Audit Committee reported to the Supervisory Board on the results of its discussions during the board's meeting on March 21, 2018 and recommended that the board approve KUKA Aktiengesellschaft's annual financial statements and KUKA Group's consolidated annual financial statements for fiscal 2017.

The full Supervisory Board reviewed the draft annual financial statements and the Executive Board's recommendation on appropriation of net income on March 21, 2018. The auditors, KPMG, attended the Supervisory Board meeting in order to report on material findings in the audit and to provide additional information. All members of the Supervisory Board were in possession of the audit reports provided by the auditors. KPMG explained in detail the financial position and performance of the company and the Group. The auditors also reported that there are no material weaknesses in the internal controlling of the accounting system or the risk early detection system. The board and the auditors jointly reviewed and discussed the financial statements and KPMG answered all questions posed by the Audit Committee. The audits of the KUKA Aktiengesellschaft and KUKA Group annual financial statements for 2017 were thus fully comprehensible.

Furthermore, in the meeting on March 21, 2018, the Sustainability Report for 2017 pursuant to section 315b para. 3 of the German Commercial Code (HGB), prepared for KUKA Group for the first time, was examined by the plenum following discussion by the Audit Committee. There were no objections.

Finally, in view of Midea's shareholder status (94.55%), the Supervisory Board had to address the dependency report for 2017 prepared by the Executive Board pursuant to section 312 of the German Stock Corporation Act (AktG). This report was also reviewed by KPMG in its role as auditor. Following preparatory discussion by the Audit Committee, the Supervisory Board conducted a further review. All reviews confirmed the Executive Board's final declaration that, with regard to the business relationships with Midea companies in the 2017 fiscal year, appropriate compensation was received and KUKA companies did not suffer any disadvantages therefrom.

2017 financial statements adopted

After completing its own review of the financial statements for 2017 for KUKA Aktiengesellschaft and KUKA Group, and with full knowledge and consideration of the Audit Committee report, the auditors' reports and the explanations provided, the Supervisory Board raised no objections to the results and concurred with the auditors' findings at its meeting on March 21, 2018. In the opinion of the Supervisory Board, the auditors' reports comply with the legal requirements stipulated in sections 317 and 321 of the German Commercial Code (HGB).

The Supervisory Board is satisfied that the combined Management Report compiled for KUKA Aktiengesellschaft and KUKA Group is complete. The assessments made by the Executive Board in the Management Report are in agreement with its reports to the Supervisory Board, and the statements made in the combined Management Report are also in agreement with the Supervisory Board's own evaluations. At the conclusion of its review, the Supervisory Board found no cause to raise objections to the combined Management Report. The Supervisory Board also reviewed the Group's Sustainability Report at its plenary meeting and did not raise any objections.

In its financial statements meeting on March 21, 2018, the Supervisory Board therefore approved KUKA Aktiengesellschaft's financial statements for fiscal 2017 as prepared by the Executive Board. The annual financial statements are thereby adopted.

The Supervisory Board also approved KUKA Aktiengesellschaft's consolidated financial statements and the Corporate Governance report for the 2017 fiscal year as prepared by the Executive Board.

The Executive Board recommended that a dividend of €0.50 per common share entitled to dividends be paid from the balance sheet profit and the balance be carried forward. We reviewed this recommendation and endorsed it.

Thanks to the staff

2017 was another year characterized by significant growth for KUKA in which the ambitious budget value for revenues was exceeded and a solid EBIT was achieved. As a result, the dividend can remain unchanged this year. This is attributable not just to the Executive Board, but to all KUKA Group employees.

The Supervisory Board is therefore especially grateful to all staff of KUKA companies for their outstanding commitment. The employees worked hard to achieve a positive business performance in 2017 and prepared the company for the future. However, the Supervisory Board also extends its thanks to the members of the Executive Board, the CEOs of the Group companies and the employee representatives. All have contributed impressively to the success of the company through their efforts and to the welfare of its customers and shareholders.

Augsburg, March 21, 2018
The Supervisory Board

Dr. Yanmin (Andy) Gu
Chairman

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 logistics solutions, as well as 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. The focus is on major projects for the automotive industry and production-intensive 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 manufacturing processes is provided by the Robotics division, which produces industrial robots together with controllers 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. Most robot models are developed, assembled, tested and shipped in Augsburg. The control cabinets are produced in two Hungarian plants, in Taksony and Füzesgyarmat. For the Asian market, KUKA also 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.

Open networking and collaboration are the core ideas of Industrie 4.0, the production of the future. This paradigm shift is already underway today, indeed the company is consciously forcing the pace. After all, robots will play the key role in the factory of the future. By taking these measures, industrial nations will be able to expand their competitiveness and, at the same time, counteract demographic change. Industrie 4.0 is neither a Big Bang nor a buzzword that is devoid of meaning; instead, it is a sustainable investment in our future.

With a focus on digital business transformation, the KUKA Marketplace offers customers a Zero Touch IoT solution for smart production – KUKA Connect. KUKA Connect is a cloud-based software solution, enabling users to access and analyze their KUKA robots at any time and from anywhere. KUKA Connect allows customers to bring their product to market faster, adapt to regulatory requirements, increase efficiency and, even more importantly, introduce innovations quickly. The KUKA Marketplace enables customers to not only search for and buy the latest KUKA products, it also makes available user manuals and videos for additional information.

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, consumer goods and healthcare in the field of intralogistics. Based in Buchs, Aarau/Switzerland, Swisslog serves customers in over 50 countries worldwide. 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. The hospital staff can thus dedicate more of their time to personal patient care. At the same time, medication errors in the medical field are demonstrably reduced through automation.

The Warehouse and Distribution Solutions (WDS) unit implements integrated automation solutions for forward-looking warehouses and distribution centers. As a general contractor, WDS offers complete turnkey solutions, from planning through to implementation and service, employing data-controlled and robot-based automation in particular. Swisslog has an Industrie 4.0 portfolio comprising the latest intralogistics technologies, innovative software and a variety of services tailored to customers, 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. By digitizing their manufacturing processes, companies increase their flexibility and can react to changing market conditions.

In 2017 the automotive segment achieved about 50% of total revenues and therefore remains a key pillar in KUKA Group's success. The company is the 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, KUKA has been successfully building up its business in this sector to reduce its dependence on automotive customers. General industry and the automotive industry contributed about equally to overall sales revenues during the year under review. In 2017, KUKA continued to focus on the strategic market segments of automotive, aerospace, electronics, consumer goods, metal industry, healthcare and e-commerce.

KUKA has a strong position on the European market. The Asia region shows considerable growth potential, particularly on the Chinese market. KUKA has been represented for years in Asia by several subsidiaries. Its Asian headquarters is in Shanghai. Robots are shipped to the Asian market from this location. According to a forecast from the international robotics association IFR, sales of robot units in China are set to increase by an average of 20% per year between 2017 and 2019.

KUKA Robotics

Core competencies of the Robotics division are the development, production and sale of industrial robots, controllers and software along with the analysis and use of big data in production operations. 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.

KUKA Systems

KUKA Systems offers its customers tailor-made solutions for automating production processes. Systems plans and implements automated systems, and converts existing systems. The company is also active in 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

Swisslog supplies customers in more than 50 countries. Healthcare Solutions implements automation solutions for forward-looking hospitals in order to sustainably increase efficiency and improve patient care. The Warehouse and Distribution Solutions division operates throughout the world and is a leading supplier of automated robotic and data-controlled intralogistics systems in the logistics segment. As a general contractor, WDS offers complete turnkey solutions for its customers.

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.

Industrie 4.0, the digital networking of automated production, is gaining ever more importance. KUKA's 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 continuously supplementing its automation expertise with know-how in relation to cloud-based networking of machines and systems as well as data analytics. This is one of the topics addressed by the US development site in Austin, Texas. KUKA also enters into partnerships with start-ups and established companies, such as Roboception or Device Insight, to strengthen its own ability to innovate.

An important aspect in the course of digitization is working on new business models. The KUKA start-up subsidiary connyun is developing a platform that is designed to offer customers an entire ecosystem for new business models. These models will fundamentally and permanently transform not only production in the future, but also the value creation process as a whole. In addition, an Industrie 4.0 team supports customers with their digitization tasks and in doing so is leveraging the potential of digitization for KUKA.

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, and structures and processes are being harmonized worldwide in the context of global business process management.

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, thereby promoting global cooperation.

Important foundations were also laid for a strongly customer-oriented organization in the year under review. KUKA is increasingly positioning itself as a solution provider for robot-based automation with this customer-centric organization. KUKA supports its customers on the road to automation and digitization with the relevant expertise spanning from components, cells and systems or logistics solutions to their integration into the world of IT. Corporate management and reporting are being adapted in accordance with the new organizational structure in the new fiscal year.

KUKA's website presents this structure to the outside world, providing customers and visitors with an overview of the entire company's comprehensive expertise. Via the KUKA Marketplace developed and introduced during the year under review, customers set out on their own "customer journey". This enables them to become part of the digital KUKA world and to procure products and services from KUKA through the Internet.

KUKA is focusing on three strategic initiatives to ensure its long-term success:

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.

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 with mobility and autonomous navigation, robots are being transformed into flexible production assistants that are becoming more and more intelligent. The trend is towards robots that are simple to program, flexible to deploy and easily integrated and networked. In KUKA Connect, KUKA has placed 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. With the start-up subsidiary connyun, KUKA is developing a platform that is designed to help partner companies to collaborate in creating an ecosystem. Digitization is paving the way for new business models that KUKA is developing together with its customers.

The Industrie 4.0 team advises and supports customers on the way to digitization with the aim of establishing 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 many opportunities to expand business in sectors outside the automotive industry, 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 optimizes 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 2017, KUKA further intensified its focus on the following strategic market segments with the customer-centric organization:

Automotive
The automotive industry has always been of great significance for KUKA. It is a very important driver of technology and innovation. The German premium brands in particular play a key role here. The automotive segment currently accounts for about 50% of revenues. KUKA will continue to grow around the world with its automotive customers and support them as a partner in automation and digitization.

Electronics
The electronics industry is one of the most versatile sectors of modern industries. It embraces not only the production of electrical household appliances, so-called white goods, but also cutting-edge technologies such as solar cells, precision medical equipment or electronic automotive and aerospace components. And of course industrial electronics, such as chip production or display manufacture, is also a major part of the electronics sector. The most important submarket with the highest revenues is the 3C market (computers, communications and consumer electronics). The electronics industry will experience a significant rise in the number of new robots deployed in the coming years. The trend of recent years will thus continue unabated.

Metal industry
KUKA can draw on many 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.

Consumer goods
Robots have been efficiently and successfully supporting the production of fast-moving consumer goods (FMCG) for many years, especially in the food and beverage industry, but also in shoe or textile production, cosmetics and pharmaceuticals. New generations of robots that are sensitive and mobile, and thus able to work hand in hand with humans, are opening up new applications along the process chain.

E-commerce
Electronic commerce results in large quantities of varied goods being sent to consumers via goods distribution centers – volumes 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.

Healthcare
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 other healthcare facilities with efficient material transport and management of medicines.

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 more than 20% per year between 2018 and 2020.

China is already the largest growth market worldwide. This is an opportunity which KUKA has been able to grasp during the year under review. Midea, the new majority shareholder, supports this strategic approach and is smoothing the way by facilitating KUKA's access to the Chinese market.

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.

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 procedures, organization and relevant company software across all divisions and core functions. This included a current release of the enterprise resource planning (ERP) system SAP S/4 HANA being introduced in two operating companies at the Augsburg site, in our headquarters and in the Romanian plant at Sibiu during the year under review. The Group's own warehouse management system "WM6" from Swisslog, a new project lifecycle management (PLM) system and a business warehouse (BW) system were implemented at the same time. A new ERP system based on these globally harmonized processes was also launched at the sales companies in Mexico, Malaysia and Thailand and at our Internet of Things subsidiary connyun. Further roll-outs are also scheduled for several locations in 2018.

In the course of the system roll-outs, the organization in the affected companies was adapted to the new processes, and new functions were introduced. These include the Data Steward Organization and the Project Management Office. It is our declared goal to maintain the high data quality that has been reached in the long term so as to further enhance the level of efficiency and to create new business models (such as in customer service or in the context of Industrie 4.0).

The global implementation of our new customer relationship management (CRM) system was completed in the year under review. As a result, all customers worldwide are administered on a single platform and can be served from a single source and in the best quality very much in line with the philosophy of ONE KUKA.

This makes Power ON an important basis for the new customer-centric organization (CCO) and our sustainable growth strategy.

Financial control system and objectives

The Group's strategy is aimed at sustainably increasing the enterprise value. The internal Group management and monitoring of the business performance is based on various key financial performance indicators. KUKA Group's financial targets are also 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 10 and under "Financial position and performance" from page 12. Earnings before interest and taxes (EBIT) are compared to sales revenues to determine return on sales. This results in the EBIT margin. EBIT is compared to average capital employed to determine the return on capital employed. This results in the ROCE (return on capital employed). 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. Please see the glossary in the annual report for definitions of key performance indicators.

In the medium term, in other words between three and five years, KUKA is planning with revenues of between €4 – 4.5 billion and a target EBIT margin in excess of 7.5%. Currently, the largest share of revenues of around 40% is generated in Europe. KUKA plans to further expand activities in Asia and expects about 30% of revenues to be generated there 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 the volume of 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	2013	2014	2015	2016	2017
Sales revenues	1,774.5	2,095.7	2,965.9	2,948.9	3,479.1
EBIT	120.4	141.8	135.6	127.2	102.7
ROCE (in %)	36.9	28.9	20.0	16.2	10.9
Free cash flow	95.4	-172.2	95.7	-106.8	-135.7

Achievement of targets

In its outlook in the 2016 annual report and at the annual results press conference on March 22, 2017, the Executive Board forecast sales revenues for 2017 of around €3.1 billion and an EBIT margin in excess of 5.5% before purchase price allocations and growth investments.

KUKA Group was able to surpass the forecast revenue target for 2017. Exceptional costs amounting to almost €40 million at KUKA Systems meant that it was not possible to achieve the planned EBIT margin.

Good levels of demand were expected for 2017 overall, especially from China and North America. A slight increase in demand was anticipated for Europe as a whole. From a sector perspective, a positive development was predicted for the general industry market. Demand in the automotive industry was expected to remain stable.

On publication of the results for the first half of 2017, the revenue target for 2017 was raised to about €3.3 billion on account of the positive business development in the first six months of the year.

The forecast for sales revenues in 2017 was increased to around €3.45 billion in January 2018. The expectation for the EBIT margin (before purchase price allocations and growth investments) was reduced to approximately 4.3%. In connection with individual projects in the Systems division and with measures for increasing profitability at KUKA Systems, an impact on earnings in the order of around €40 million was expected for the 2017 fiscal year.

2017 target values

	Sales revenues	EBIT margin
Annual results press conference for the full year 2016	~ €3.1 billion	> 5.5% [1]
1st quarter 2017	~ €3.1 billion	> 5.5% [1]
2nd quarter 2017	~ €3.3 billion	> 5.5% [1]
3rd quarter 2017	~ €3.3 billion	> 5.5% [1]
Ad hoc January 2018	~ €3.45 billion	~ 4.3% [1]

[1] Before purchase price allocations and growth investments amounting to approximately €45 million

In the year under review, the target value forecast for sales revenues and increased in January 2018 was met. The Group generated sales revenues of €3,479.1 million (2016: €2,948.9 million). All three divisions were able to increase their revenues. The EBIT margin before purchase price allocations and growth investments was 4.3%. The operational objective for 2017 was not achieved due to the aforementioned impact on earnings.

The Robotics division reported an EBIT of €133.1 million in 2017, thus exceeding the previous year's level of €100.7 million. The EBIT margin was 11.1% compared with 10.1% in 2016. Particularly the improved cost allocation due to the increase in revenues had a positive effect here.

The EBIT margin in the Systems division declined from 6.5% in 2016 to 1.1%. Individual projects subject to losses and measures for increasing profitability in the Systems division produced an impact on earnings amounting to around €40 million.

Swisslog recorded an EBIT margin of 1.4% compared to the 2016 result of 0.8%. Adjusted for the effects of purchase price allocation, the margin was 2.9%.

In the year under review, KUKA generated net income of €88.2 million, higher that of the previous year (2016: €86.2 million). Capital expenditure was €138.8 million (2016: €99.6 million). This reflects the continuing high level of investment in research and development to lay the groundwork for future growth.

Free cash flow in the 2017 fiscal year was negative, amounting to -€135.7 million. An improvement in free cash flow before financial investments was forecast compared to the previous year's value of -€106.8 million. The development is primarily attributable to the increase in the cash flow from investment activities.

For detailed information, please refer to the chapter "Financial position and performance" from page 12 onwards.

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 heavily in this area once again in the year under review. Research and development expenditure amounted to €128.7 million in 2017, higher than the value for the same period of the previous year (2016: €126.6 million).

R & D expenditure is attributable predominantly to the Robotics division. In the year under review, a total of 160 patent applications were filed by Robotics, and 154 patents were granted. Swisslog filed 12 patent applications and 15 patents were granted. Systems mainly carries out research and development activities within the framework of customer projects. A total of 33 patent applications were filed and 99 granted here.

During the year under review, KUKA focused on key technologies for Industrie 4.0 such as human-robot collaboration and mobility. At the major flagship industrial fairs, KUKA showcased digitization solutions and application examples for networking in the cloud, big data and the smart factory.

Corporate research

KUKA's Corporate Research is active on a Group-wide scale and develops technologies for future-proof products and solutions of the Group companies. Corporate Research focuses on the areas of intuitive operation and programming; algorithms, sensor technology and geometry as well as on the fields of mechatronics, safety, energy efficiency and smart data/infrastructure. The integration of technology developments into demonstrators allows for customer-focused evaluation. In research cooperation projects, Corporate Research works closely with universities and renowned institutions around the world to jointly implement ground-breaking ideas in the fields of automation technology and robotics.

Five teams of finalists in the "KUKA Innovation Award", an innovation competition initiated by KUKA, demonstrated their "Advanced Mechatronics" applications with the LBR iiwa at the KUKA booth at Hannover Messe 2017. Dr. Bernd Liepert, KUKA Chief Innovation Officer and patron of the competition, handed over the prize of 20,000 euro to the winners at the KUKA booth. The winning team impressed the panel with an airbag system for human-robot collaboration. Furthermore, in May entries were invited for the KUKA Innovation Award 2018 addressing the topic "Real-World Interaction Challenge".

KUKA presented innovative applications along with research partners at both the IEEE International Conference on Robotics and Automation (ICRA) in Singapore and the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), demonstrating the potential of the open hardware and software platforms from KUKA. The sensitive lightweight robot LBR iiwa provides dedicated interfaces for research which offer direct low-level access in real time to the KUKA robot controller with high clock rates of up to 1 kHz. This open hardware and software platform allows researchers to realize their ideas.

Robotics division

Volkswagen Corporate Research and KUKA are strengthening their strategic partnership in the field of service concepts for vehicles of the future. A cooperation agreement provides for joint development of robot-based innovation concepts relating to electrically powered and self-driving cars. The cooperation ties in with an existing joint research project dealing with human-robot collaboration. The "e-smart Connect" project that has now been launched consists of a practical and user-friendly solution for charging the high-voltage batteries of the electric vehicles from the Volkswagen Group. A KUKA robot independently connects the vehicle to a charging station in a specially developed application, thereby relieving the driver of this activity.

The small robots from the KR AGILUS series offer impressive speed, extreme agility in confined spaces, short cycle times and maximum precision. With effect from the end of 2017, the next generation of the KR AGILUS replaced all standard variants of the small robot. Each of the new KR AGILUS generation robots meets the requirements of protection rating IP67 and is thus protected against water spray. For applications with lubricants or coolants, there will still be a special Waterproof (WP) variant. The other variants, such as Cleanroom, Atex protection – for potentially explosive environments – and Hygienic Machine are also still available.

KR Cybertech is suitable for a wide variety of applications with a payload of 8 – 22 kg. Due to its reach of 1600 – 2000 mm, the industrial robot can produce in smaller spaces and cover greater distances. It can be mounted on the floor, wall or ceiling, or at another desired angle.

The KUKA LBR Med lightweight robot is the first robotic component worldwide to be certified for integration into a medical product. The LBR Med thus enjoys a unique selling point in medical robotics. The certification is based on the internationally recognized "ECEE CB Scheme".

The KMR iiwa is a mobile robot system that combines the strengths of the sensitive lightweight robot LBR iiwa and a mobile, autonomous platform. The KMR iiwa can thus be deployed in a highly flexible manner at many locations in a factory – an ideal basis for meeting the requirements of Industrie 4.0. The serial product replaced the previous prototype at the end of 2017, which has already been tested by several customers. The KMP 600 and 1,500 products newly developed in 2017 constitute transport vehicles (AGVs) with payloads of 600 and 1,500 kg that can be used for logistics applications in all areas.

Applications give the robot the skills required for a wide range of different tasks. The next evolutionary step in spot welding technology was accomplished with KUKA.ServoGun BASIC. The start-up process has been made considerably easier and shortened by automatic procedures. The target forces which must be built up for the process are achieved with high repeat accuracy without an additional force sensor being required and with external influences such as temperatures or aging barely having any impact.

The KUKA.ArcSense software option is used to enhance the portfolio in the arc welding segment to include functions for sensor-guided path correction as required to ensure the joining quality predominantly in thick plate welding. The new version mainly pursues the aim of simplifying operator control of the software and extending the range of welding tasks that can be performed with it.

The KUKA.PickControl system enables the camera-supported pick & place of unsorted components on conveyor belts with one or more robots and is intended primarily for use in the consumer goods market segment. The focus here is also chiefly on a simple start-up procedure using assistants and simulations.

Dürr and KUKA have jointly developed the integrated "ready2_spray" solution for the automated application of paint. The small robot is from the KR AGILUS series and Dürr provides the application technology. The pre-installed, "ready-to-paint" robot with coordinated and tested components is fully tailored to the requirements of general industry. Areas of application include the painting of wood, plastic, glass and metal. The system with its components is completed at Dürr and pre-commissioned. This means that it is ready for paint application and can be quickly installed at the customer's premises.

With a networked robotic cell featuring two integrated Heller machining centers, KUKA connects the analog and digital worlds. The cell demonstrates how a robot collaborates with two machining centers to produce robot parts. All relevant components are networked with one another and with the KUKA Cloud. The data are collected in the KUKA Connectivity Box and sent to the KUKA Cloud. This was developed by connyun, a start-up and subsidiary of KUKA. Services such as authentication, management of access rights, data storage and processing, component management, predictive maintenance, and evaluation, processing and signaling of events are performed in the cloud. All data are displayed in clearly structured dashboards. In this way, operators, maintenance personnel and management have a complete overview of the production process as well as full control – at any time and from any location.

Swisslog division

Swisslog presented a system for fully-automated mixed carton picking and palletizing to a specialist audience for the first time at LogiMAT. Swisslog has introduced ACPaQ to help automate one of the key areas of intralogistics for successful trading enterprises: the process involves assembling mixed pallets tailored to store requirements from unmixed pallets. The innovative palletizing system combines robotics solutions for depalletizing and palletizing with the light goods warehouse technology CycloneCarrier and uses a fully-automated process controlled by the warehouse management software SynQ to ensure that cartons can be picked in the distribution centers in accordance with the store layout, product groups or classes two to three times quicker than with conventional methods.

"Synchronized Intelligence", or SynQ for short, is the new software platform from Swisslog. It controlled and monitored all of the logistics work steps of the KUKA Smart Factory at Hannover Messe 2017. To do so, SynQ made use of an interface to communicate with the machinery and robots and also communicated with each customer by e-mail. The software created replenishment orders, arranged the delivery of materials and produced statistics for all of the automated processes. This ensured that the processes were transparent and verifiable.

Systems division

KUKA showcased the latest applications in the laser industry at the Laser World of Photonics and demonstrated the benefits of processing with lasers. The process is precise, wear-free and clean. That is why laser processing is firmly established in metalworking. With a wavelength of 10.6 micrometers, CO_2 lasers are suitable for processing non-metallic materials and most plastics. For this reason, CO_2 laser robots from KUKA Industries are primarily used in the automotive, consumer goods and aerospace industries for cutting and perforating thermoplastic materials, glass and carbon fiber-reinforced plastics and carbons as well as wood and other materials. New developments in laser technology also call for new safety approaches. KUKA has developed the TÜV-certified laser safety sensor LaserSpy which monitors the laser protection wall actively and electronically.

At the flagship trade fair Schweissen & Schneiden, KUKA showcased a comprehensive selection of robot components, welding robots, software packages and solutions. Welding expertise was demonstrated to visitors by means of an exemplary smart factory involving a simulated manufacturing scenario, the KUKA ready2_spot package for spot welding applications, and the software technology package KUKA.ServoGun BASIC.

Awards for KUKA products and solutions

Three KUKA products received the Red Dot Design Award in 2017. The KR 20 CYBERTECH industrial robot, the KR 3 AGILUS small robot and the VRS 30 vertical friction welding system came out on top against the competition with their first-class design.

Swisslog won the "Best Product 2017" prize in the "Software, Communications, IT" category with Condition Monitoring at LogiMAT 2017. The solution concept impressed the jury of scientists and specialist journalists, as it makes a significant contribution towards rationalizing, saving costs and increasing productivity in internal logistics. Condition Monitoring is a user-friendly plug-in for the intelligent software SynQ and a component of the Cockpit Manager. Critical elements can be identified precisely and in a targeted manner in the warehouse and unexpected wear-induced system failures can be prevented. The modern data analysis offers important impetus for intralogistics towards the goal of a service-driven industry with performance-related pay-per-use business models.

The Industrie 4.0 solution KUKA SmartConnect.frictionwelding impressed the jury of VDE Verlag and Zentralverband Elektrotechnik- und Elektroindustrie e.V. (ZVEI) in 2017. The jury presented KUKA with the Industrie 4.0 Innovation Award. The software package enables the networked KUKA Genius friction welding machine to communicate in the cloud. This ensures that users have access to the machine's data worldwide – through their laptop, tablet or smartphone.

Procurement

The global Travel and Expense Management project was launched at the beginning of 2017. Its purpose is to harmonize the procedures for travel applications, approvals, bookings and expense reporting across the entire KUKA Group. This enables significant cost reductions with regard to indirect materials to be achieved.

Procurement at Robotics

The procurement situation at Robotics is characterized in the reporting year by a substantial increase in quantities compared to the previous year. Commensurate price negotiations and volume bundling made up for the price increases caused by markedly higher raw material costs among other factors. As a result, procurement at Robotics was once again able to realize savings in the double-digit million euro range. In order to best safeguard the availability of materials, specific monitoring measures were introduced and an increased logistics effort was implemented across the entire supply chain. This enabled us to address the risk associated with the increasing number of capacity bottlenecks at both suppliers and sub-suppliers. There was also a significant increase in localization in China and the supplier base was expanded considerably.

Procurement at Systems

The all-time high of the previous year (procurement volume +30%) was again achieved in the year under review. The increased capacity utilization of suppliers was taken into account through stricter deadline management.

Simultaneously, preparations were made towards the end of the year for the changeover to SAP 4/Hana. Procedures were further optimized, interfaces simplified and transparency increased, resulting in an improvement of the organization's efficiency.

The procurement organization in Romania was reinforced in an effort to improve the cost structure. The objective is to expand sourcing and local manufacturing on site.

Strategic purchasing was further expanded with an employee for the processes and tools area. Tendering schemes pursuant to game-theory approaches strengthen negotiation skills and cooperation within the Group.

Procurement at Swisslog

Swisslog Warehouse and Distribution Solutions (WDS) has further intensified the cooperation it started in 2017 with the two locations of KUKA Industries in Kunshan (China) and Chomutov (Czech Republic). The ProMove product line (pallet conveyor systems) is manufactured at both locations according to Swisslog WDS specifications. In addition, the CycloneCarrier (light goods shuttle), a product developed at the Technology Center site in Sipbachzell (Austria), is manufactured in Chomutov for the global market.

The savings targets formulated for the project business of the WDS unit were surpassed. Further improvements were achieved through standardizations and supplier agreements with four evaluated suppliers for light-goods racking solutions used in connection with the CycloneCarrier system.

Economic report

Macroeconomic and industry conditions

Global economic growth set to continue in 2018

According to the International Monetary Fund (IMF) the global economy grew 3.7% in the past fiscal year. This means an increase of 0.5 percentage points for 2017 compared to the previous year (2016: 3.2%). The global economy is expected to grow 3.9% in 2018 and 2019. The IMF considers the planned tax reform in the USA to be the key influencing factor that will have a positive effect on the growth prospects of the USA, Germany and the entire global economy. The expectations for the USA are 2.7% for 2018 and 2.5% for 2019. The tax relief for the companies would result in rising investments and the trading partners of the USA would benefit from this. Economic growth of 2.3% in 2018 and 2.0% in 2019 is anticipated for Germany. The eurozone is also expected to develop positively as a whole. The IMF is forecasting growth of 2.2% in 2018 and 2.0% in 2019 here. The IMF attributes this to the loose monetary policy of the European Central Bank and stronger support for the economy worldwide through fiscal policy.

However, the IMF warned in its forecast of January 2018 that the global recovery could soon come to an end, as the current acceleration in growth is largely attributable to a combination of factors that is not of an enduring nature. The end of the loose monetary policy pursued by the central banks, for example, is looming. The IMF advises governments to make use of the currently advantageous framework conditions for reforms. This includes addressing structural deficiencies quickly, investing in growth-enhancing infrastructure and achieving a fairer distribution of wealth. Given the improved growth outlook, financial policy should focus more on medium-term objectives such as sustainability and an increase in potential growth.

Growth of 6.6% in 2018 and 6.4% in 2019 is expected for China. However, according to the IMF, there is likely to be a decline in growth there as soon as the government reduces its stimulus packages due to the high level of debt.

German industry has also benefited from the international upturn. The Business Climate Index of the Institute of Economic Research (ifo) is regarded as an early indicator of economic development in Germany. Registering 117.6 points last November, the ifo index reached not only the highest level in 2017 but also the highest value since reunification. Companies are therefore optimistic about the future business performance over the course of the next six months.

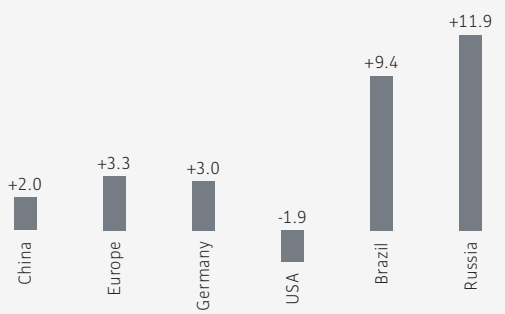
Significant sales growth in the automotive markets of Germany and China

According to the German Automotive Industry Association (VDA), the automotive business developed positively in 2017. Car sales in Europe increased by 3% to 15.6 million units. The improved economic situation had a positive impact here and is a reason for the increase. Car sales in Germany rose 3% to a good 3.4 million cars. This means that the German car market grew for the fourth time in succession, reaching the highest volume of this decade. The German manufacturers produced 5.6 million cars in 2017. This corresponds to a decline of 2% on the previous year. 77.4% of all cars made in Germany were exported, which is a new record value.

Sales in China increased by 2% to 24.2 million new vehicles compared to the previous year.

Sales figures in the USA dropped slightly by almost 2% to 17.1 million new vehicles. While car sales were down slightly, the sales of light trucks experienced an increase of 2%. However, German manufacturers saw their US sales rise by 1% compared to the previous year. They increased their shares in both the car and light truck segments. The market share of German manufacturers for electric cars even amounts to over a third. The US market is not only a strategically important market for German manufacturers but also an increasingly significant production location. The trend is moving towards local production, and German manufacturers are strengthening their presence in the world's large markets.

2017 car sales by region/country
Change year-on-year in %



Source: IMF, January 2018

Mechanical and systems engineering report growth

According to the German Engineering Federation (VDMA), the revenues in mechanical engineering will surpass the 220 billion euro mark in 2017 for the first time. The export segment made the most substantial contribution to this dynamic growth. Goods worth 124.4 billion euro were shipped abroad in the first nine months – an increase of 6.2% on the previous year in real terms – with the EU remaining by far the largest sales region. The VDMA considers the USA and China to be the largest single export markets for this period. The increase in exports to China was particularly substantial at 24%. A decline of 4.5% was recorded in the first nine months of 2017 for exports to the United Kingdom, the fourth largest single export market. This was caused by the developments relating to Brexit. The VDMA is predicting production growth of 3% and expecting an increase in revenues to more than 230 billion euro for the 2018 fiscal year. According to the VDMA, there was a 10% increase in orders in the robotics and automation sectors over the period from January to December 2017.

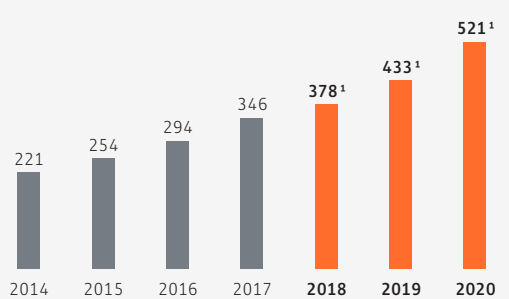
Growth potential in robotics and automation due to Industrie 4.0

The worldwide trend to robot-based automation of manufacturing processes continued to gather pace in 2017. 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) estimates worldwide sales of 347,000 industrial robots for 2017. This corresponds to an increase of 18% on the previous year with 294,000 units. The IFR anticipated 230,000 industrial robots sold in 2017 for Asia/Australia, of which 115,000 are accounted for by China alone. This corresponds to a rise of 21% in Asia and an increase of even 32% in China. For 2018 to 2020, the IFR forecasts annual average growth of at least 15% worldwide. The Americas and Asia/Australia will each record growth at 15% followed by Europe with 11%. At the end of 2019 about 2.6 million industrial robots are expected to be deployed in factories worldwide, with an estimated 750,000 units used in China.

The automotive and electronics industries were among the world's largest sales markets in 2016. While 35% of the industrial robots sold worldwide were installed in the automotive industry, the electronics industry has made further advances to 31%.

Global sales of industrial robots
in thousands of units



[1] IFR forecast in 2017

Source: IFR World Robotics 2017

Business performance

Orders received

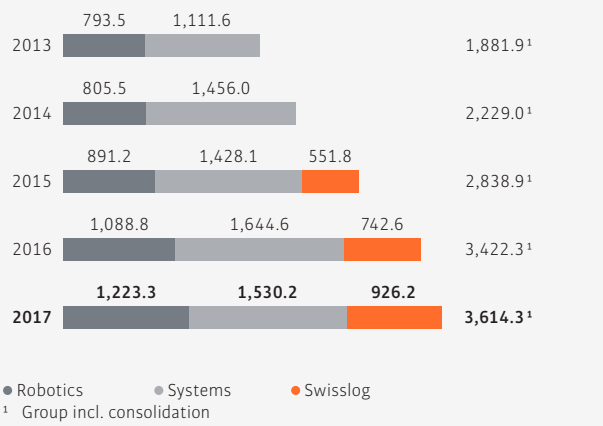
During the year under review, KUKA Group recorded orders received totaling €3,614.3 million. This is equivalent to a 5.6% increase on the previous year (2016: €3,422.3 million). KUKA was thus able to surpass the record set in the previous year.

Robotics increased orders received by 12.4% from €1,088.8 million (2016) to €1,223.3 million (2017). In particular, the customer segments General Industry and Service recorded an increase in orders received. The Automotive segment registered a slight decline. From a regional perspective, Asia and North America have seen continued strong development. China, in particular, showed strong growth. Compared with 2016, the share increased by 7% in the year under review. In 2017, the share in General Industry rose from €444.7 million to €572.1 million. This corresponds to an increase of 28.6%. These orders are smaller orders that come from different sectors and tend to offer higher margins. Continued expansion of General Industry business remains one of the main strategic objectives of the Robotics division. In the Service segment too, orders received rose 11.4% to €224.8 million (2016: €201.8 million). This development is attributable to the high demand for industrial robots. In the Automotive sector, orders received reached a value of €426.4 million and were thus slightly below the previous year's level of €442.4 million. This is a decline of 3.6%.

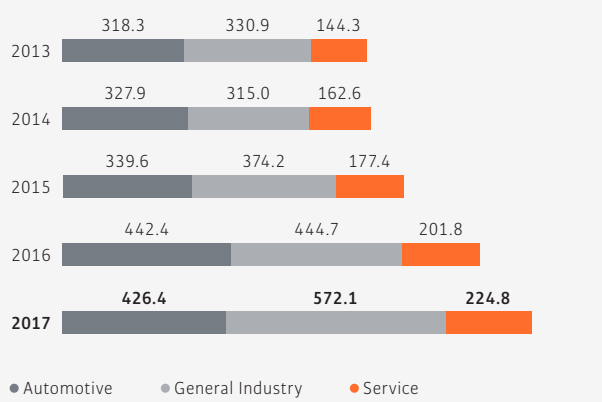
During the past financial year, **Systems** generated orders received totaling €1,530.2 million (2016: €1,644.6 million). Compared with the previous year, this represents a decrease of 7%. One reason for this is that orders received in the Systems division fluctuate greatly. They are dependent on the time at which major contracts are awarded. Furthermore, unlike the previous year, no orders were received in the US Aerospace segment, as this business unit has been sold. In other regions such as Germany and China, orders were received from leading automobile manufacturers. In particular, the areas of Body Structure, Assembly & Test and KUKA Industries developed positively.

Orders received at **Swisslog** reached a value of €926.2 million in 2017 (2016: €742.6 million), thus increasing for the second year running. This corresponds to an increase of 24.7%. The Warehouse and Distribution Solutions (WDS) division achieved a share of 74% and the Healthcare Solutions (HCS) division 26%. WDS benefited primarily from the high rates of growth in the e-commerce segment and the relatively low degree of automation in logistics warehouses.

Orders received
KUKA Group, Robotics, Systems, Swisslog in € millions



Orders received – Robotics
Automotive, General Industry, Service in € millions



Sales revenues

In 2017, the sales revenues of KUKA Group rose from €2,948.9 million (2016) to €3,479.1 million. This corresponds to an increase of 18.0% on the previous year.

The **Robotics** division reported sales revenues of €1,200.6 million (2016: €993.5 million) and was thus able to increase the value by a further 20.8%. This means that KUKA Robotics has posted an increase in revenues for eight successive years. Business development in China continues to ensure high capacity utilization, with the result that the KUKA management has decided to expand production capacities there.

Systems managed to expand sales revenues from €1,395.5 million to €1,579.2 million in 2017. Despite the missing Aerospace business in the USA, Systems was thus able to achieve a significant increase of 13.2% on the previous year. The Body Structure segment in particular contributed to this.

The **Swisslog** division generated sales revenues of €763.7 million in 2017. This is an increase of 28.7% after €593.5 million in 2016.

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 1.04 at Group level (2016: 1.16). Values around 1 represent good capacity utilization and values above 1 signify an increased volume of business. In 2017, all three business divisions achieved good figures: Robotics 1.02 (2016: 1.10), Swisslog 1.21 (2016: 1.25) and Systems 0.97, thus virtually 1 (2016: 1.18).

KUKA Group's order backlog amounted to €2,157.9 million at year-end 2017. This was an increase of 5.3% compared to the prior-year value (2016: €2,048.9 million). The persistently high order backlog represents around two thirds of annual sales revenues and will thus ensure good capacity utilization during fiscal 2018 and to some extent, in the case of long-term contracts, already for 2019 as well.

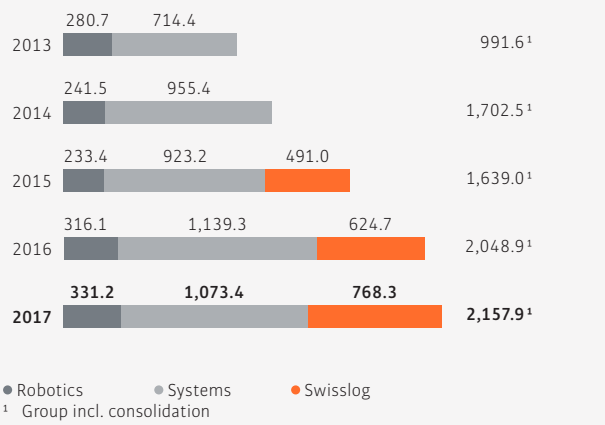
In the **Robotics** division, the end-of-year order backlog (not including master contracts with the automotive industry) totaled €331.2 million and was thus higher than the previous year's value of €316.1 million.

The order backlog at **Systems** totaled €1,073.4 million as at the balance sheet date (2016: €1,139.3 million).

Swisslog recorded an end-of-year order backlog totaling €768.3 million and was thus 23.0% higher than the comparable figure from the previous year (2016: €624.7 million).

in € millions	2016 Orders received	2016 Sales revenues	2016 Book-to-bill ratio	2017 Orders received	2017 Sales revenues	2017 Book-to-bill ratio
Group	3,422.3	2,948.9	1.16	3,614.3	3,479.1	1.04
Robotics	1,088.8	993.5	1.10	1,223.3	1,200.6	1.02
Systems	1,644.6	1,395.5	1.18	1,530.2	1,579.2	0.97
Swisslog	742.6	593.5	1.25	926.2	763.7	1.21

Order backlog (Dec. 31)
KUKA Group, Robotics, Systems, Swisslog in € millions



[1] Group incl. consolidation

EBITDA and EBIT

EBITDA, in other words earnings before interest, taxes, depreciation and amortization, totaled €180.2 million, after €205.3 million in the previous year. The EBITDA margin in the year under review was thus 5.2%, having been 7.0% in 2016.

Before depreciation for purchase price allocations and before growth investment, EBIT stood at €148.3 million in 2017. This corresponds to an EBIT margin of 4.3%. The value for the previous year was €138.0 million with a margin of 4.7%.

The decline was attributable to impacts on earnings of the Systems division in the order of around €40 million in the 2017 financial year in connection with individual projects and also measures for increasing profitability at KUKA Systems GmbH.

Taking into consideration all expenditure in 2017, the earnings before interest and taxes (EBIT) for KUKA Group totaled €102.7 million (2016: €127.2 million). The corresponding EBIT margin was 3.0% in 2017 (2016: 4.3%). Expenditure for purchase price allocations totaled €13.7 million and expenditure for growth investments amounted to €31.9 million.

In 2017, EBIT at **Robotics** increased significantly to €133.1 million (2016: €100.7 million). Compared with the value for the previous year, this represents an increase of 32.2%. The EBIT margin was up correspondingly to 11.1% (2016: 10.1%).

Systems achieved an EBIT of €17.8 million in fiscal 2017. This was a considerable drop of 80.5% from the previous year's value of €91.3 million. At the same time, the EBIT margin fell from 6.5% in 2016 to 1.1% in 2017. The reasons for this were impacts on earnings in connection with individual projects and also measures for increasing profitability at KUKA Systems GmbH.

In fiscal 2017, **Swisslog** attained an EBIT of €10.4 million compared to €4.8 million in the previous year. This resulted in an EBIT margin of 1.4% in 2017, after a figure of 0.8% in 2016. Before the depreciation on the purchase price allocation, Swisslog achieved an EBIT of €22.2 million in 2017 (margin: 2.9%) after €15.6 million in 2016 (margin: 2.6%).

Financial position and performance

Summary

2017 was a satisfactory year overall for KUKA Group. On the one hand, it did not prove possible to meet the earnings targets, due in particular to considerable deterioration of individual projects in the Systems division and recognition in the income statement of measures to increase the profitability of KUKA Systems GmbH, Augsburg. On the other hand, however, the revenue target, which had already been raised to €3.3 billion, was surpassed by almost €200 million and the planned investments of over €30 million in areas of future growth were carried out. The order backlog of around €2.1 billion also indicates further growth in 2018.

The Swisslog division made another positive contribution to EBIT in 2017 including the negative effects of the purchase price allocation. The Robotics division achieved an absolute increase in EBIT of over 30%, thereby surpassing the previous year's record value. These two divisions were unable, however, to compensate fully for the decline in EBIT of the Systems division and the growth investments of €31.9 million made during the financial year. KUKA thus achieved an EBIT of €102.7 million (2016: €127.2 million).

Fiscal 2017 can still be regarded as a positive year on the whole for KUKA Group.

Earnings

KUKA Group posted orders received amounting to €3,614.3 million in the year under review – another significant increase over the previous year's level (2016: €3,422.3 million). KUKA has thus managed to exceed the prior-year figures now for the fourth time running, setting a new record value in 2017.

Sales revenues up by around €200 million

Sales revenues totaled €3,479.1 million and were therefore approximately €200 million higher than the target of €3.3 billion.

in € millions	2013	2014	2015	2016	2017
Orders received	1,881.9	2,229.0	2,838.9	3,422.3	3,614.3
Order backlog	991.6	1,702.5	1,639.0	2,048.9	2,157.9
Sales revenues	1,774.5	2,095.7	2,965.9	2,948.9	3,479.1
EBIT	120.4	141.8	135.6	127.2	102.7
in % of revenues	6.8	6.8	4.6	4.3	3.0%
in % of Capital Employed (ROCE)	36.9	28.8	20.0	16.2	10.9
Growth investments and extraordinary expenses[1]	–	–	–	28.0	31.9
EBIT adjusted[1]	120.4	141.8	135.6	155.2	134.6
EBIT adjusted[1] in % of revenues	6.8	6.8	4.6	5.3	3.9
EBIT adjusted[1] in % of capital employed (ROCE)	36.9	28.8	20.0	19.8	14.2
EBITDA	158.4	185.3	259.1	205.3	180.2
in % of revenues	8.9	8.9	8.7	7.0	5.2%
Growth investments and extraordinary expenses[1]	–	–	–	28.0	31.9
EBITDA adjusted[1]	158.4	185.3	259.1	233.3	212.1
EBITDA adjusted[1] in % of revenues	8.9	8.9	8.7	7.9	6.1
(Average) capital employed	326.2	492.0	676.8	783.0	950.4
Employees[2] (Dec. 31)	7,990	12,102	12,300	13,188	14,256

[1] 2016: Extraordinary effect due to the takeover bid by Midea Group
2017: Growth investments

[2] Figures for employees are based on the full-time equivalent throughout the annual report.

Since 2009, the Robotics division has reported annual increases in sales revenues and this trend continued in 2017. The average annual growth rate since 2009 has been 17.5%. It was possible to achieve a further 20.8% increase on the very high level of the previous year from €993.5 million to €1,200.6 million. The division's revenues thus topped the billion euro mark for the first time. This gratifying development has been achieved in part as a result of the generally positive market environment for robotics and also by systematically focusing sales on particular customer-oriented market segments and intensifying the service business. Measures such as developing products which are specifically aimed at certain geographical markets or customer groups are proving successful. All in all, orders received in the three segments – automotive, general industry and service – rose in comparison with the previous year and now total €1,223.3 million (2016: €1,088.8 million).

The Systems division registered a new sales record of €1,579.2 million in the past fiscal year. This is 13.2% above the previous year's figure. Considering that the value for the previous year still included sales revenues from the US Aero sector, this represents an increase in sales of 19.6%. Orders received are also at an impressive level, totaling €1,530.2 million, even though this represents a fall compared with the previous year. All in all, the order backlog at Systems as at the balance sheet date is thus theoretically equivalent to about 68.0% (2016: about 81.6%) of annual revenues and thus allows a high level of capacity utilization to be anticipated for 2018 as well.

The Swisslog division achieved revenues amounting to €763.7 million and thus considerably higher than in the previous year (2016: €593.5 million), with about two thirds in Warehouse & Distribution Solutions and one third in Healthcare Solutions.

KUKA saw gross earnings fall slightly by 1.6% on the previous year to €754.3 million (2016: €766.5 million). With increased sales revenues, the gross margin was thus 21.7% (2016: 26.0%). This decline is primarily due to the – in some cases considerable – deterioration in projects, particularly in the German systems engineering sector, and the corresponding measures taken to increase the profitability of KUKA Systems GmbH, Augsburg (totaling around €40 million). The measures are currently being implemented and will lead back to adequate margins in subsequent years – in 2017, however, they still have a negative impact on results. Furthermore, all divisions recorded an increase in the cost-of-materials ratios in the financial year, exceeding the efficiency improvements achieved by all divisions in the deployment of personnel.

The gross margin in the Robotics division decreased slightly from 37.0% in the previous year to 34.7% in 2017 with gross earnings of €367.5 million in 2016 and €417.0 million in 2017. Swisslog also recorded a slight decrease in the gross margin from 26.9% to 23.8% (gross earnings: 2017: €181.8 million; 2016: €159.6 million). Despite increased sales revenues, the Systems division saw a substantial decline in gross earnings from sales (2017: €154.4 million; 2016: €242.4 million), due particularly to the aforementioned project deterioration and profitability measures, and thereby achieved a gross margin of 9.8% (2016: 17.4%).

The key figures for the individual divisions were as follows:

Key figures Robotics

in € millions	2013	2014	2015	2016	2017
Orders received	793.5	805.5	891.2	1,088.8	1,223.3
Order backlog	280.7	241.5	233.4	316.1	331.2
Sales revenues	754.1	834.6	909.6	993.5	1,200.6
EBIT	77.1	88.9	100.2	100.7	133.1
in % of revenues	10.2	10.7	11.0	10.1	11.1
in % of Capital Employed (ROCE)	49.6	53.1	56.6	51.7	56.4
EBITDA	101.9	112.0	126.1	123.2	157.2
in % of revenues	13.5	13.4	13.9	12.4	13.1
Capital employed	155.6	167.3	177.1	194.9	235.9
Employees (Dec. 31)	3,416	3,644	4,232	4,726	5,010

Key figures Systems

in € millions	2013	2014	2015	2016	2017
Orders received	1,111.6	1,456.0	1,428.1	1,644.6	1,530.2
Order backlog	714.4	955.4	923.2	1,139.3	1,073.4
Sales revenues	1,045.9	1,285.6	1,471.7	1,395.5	1,579.2
EBIT	60.8	80.2	114.7	91.3	17.8
in % of revenues	5.8	6.2	7.8	6.5	1.1
in % of Capital Employed (ROCE)	43.0	67.9	87.9	42.8	6.3
EBITDA	71.0	97.4	135.6	113.5	34.5
in % of revenues	6.8	7.6	9.2	8.1	2.2
Capital employed	141.5	118.1	130.5	213.1	281.9
Employees (Dec. 31)	4,362	5,810	5,146	5,189	5,459

Key figures Swisslog

in € millions	2014[1]	2015	2016	2017
Orders received	–	551.8	742.6	926.2
Order backlog	517.2	491.0	624.7	768.3
Sales revenues	–	620.8	593.5	763.7
EBIT	–	-45.9	4.8	10.4
in % of revenues	–	-7.4	0.8	1.4
in % of Capital Employed (ROCE)	–	-14.5	1.5	3.0
EBITDA	–	24.5	28.2	36.8
in % of revenues	–	3.9	4.8	4.8
Capital employed	154.6	315.9	317.4	346.8
Employees (Dec. 31)	2,369	2,555	2,679	2,904

[1] 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 €622.7 million (2016) to €646.8 million (2017). These overhead costs amounted to 18.6% of sales revenues, which was considerably below the previous year's level of 21.1%.

The increase in selling expenses (2016: €267.9 million; 2017: €306.7 million) was partly attributable to the strengthening of the sales team in all segments. KUKA had 1,690 sales employees as at December 31, 2017 – 9.8% more than at the previous year-end, when the number was 1,539. The increase is slightly greater in more product-oriented areas than in systems engineering. All in all, this planned expansion demonstrates the strategic implementation of increased market penetration and the tapping of new markets. Another step towards this goal is the optimization and technical support of communication with customers and partners. By investing in a Group-wide Customer Relationship Management System, KUKA is managing to achieve close interaction of customers and partners with sales, service and marketing employees along the entire value chain.

The effectiveness of these measures is also indicated by the ratio of sales expenditure to sales revenues, the so-called selling expenses ratio. This was down year-on-year from 9.1% in 2016 to 8.8%.

A drop of €16.8 million in administrative expenses was recorded. It must be taken into consideration here that the previous year's figure was impacted negatively by one-off effects of the takeover by Midea Group (e.g. unplanned consultancy expenses and additional personnel costs for the existing phantom share programs) totaling around €28.0 million.

During the financial year, KUKA also invested in ongoing internal projects, particularly at the Augsburg location, relating to the harmonization, standardization and optimization of processes as well as global IT platforms. The planned roll-out of these projects to other companies in the Group is expected to result in further optimization of the administrative expenses in subsequent years. Already in 2017, it was possible to improve the ratio of administrative expenses to sales revenue from 7.7% (or 6.7% when adjusted to include the one-off effects in the previous year) to 6.1%.

The expenses for research and development shown on the income statement for 2017 totaled €128.7 million. The increase of €2.1 million on the previous year is the result of ongoing investments in products, solutions and future-oriented technologies as well as investments in start-up companies and strategic business partners. The investments in research and development range from the upgrading of existing products and solutions to new developments and internal Group projects.

KUKA stands for Industrie 4.0 made in Germany and is a driving force behind the associated digitization of production processes with its products and key technologies. The networking of automated manufacturing technologies with traditional mechanical engineering and intelligent IT systems lays the foundation for combining high-quality single-piece production with the benefits of series production. Complex process steps are optimized and dovetailed with a focus on flexibility and cost-efficiency.

The approaches on which KUKA focuses for Industrie 4.0 – and which result in expenditure and growth investments in the R & D, sales and administration areas – are just as diverse as the innovations in other technologies. The following projects, implemented in fiscal 2017, are worthy of mention at this point by way of example:

- IT networking in Industrie 4.0: through KUKA Connect, a cloud-based software platform that allows customers to view the data of their robots from anywhere in the world and thus to increase the performance and effectiveness of their production operations.
- Further development of human-robot collaboration (HRC): sensitive systems make it possible for safety fences between the human operator and the robot to be made smaller or dispensed with entirely. This enables the installation of cells on an area up to 1/4 smaller than that for designs without HRC capability. In the course of the KUKA Innovation Award research competition, the winning team additionally developed an airbag system intended to further improve personnel safety in human-robot collaboration.
- Investment in companies in the cloud technology and Internet of Things (IoT) sector: the company Visual Components specializes in software solutions for 3D simulation in factory planning and thus adds solutions based on KUKA's simulation ecosystem to the KUKA product portfolio. Together with the subsidiary connyun, which joined the Group in 2016, the company Device Insight, specializing in IoT platforms, enables progress to be made in the field of I4.0.
- Cooperative ventures with partners from both inside and outside the industry: together with VINCI Energies Deutschland, we intend to develop and implement applications for the Industrial Internet of Things (IIoT) and digital services. In the past year, KUKA additionally intensified the strategic partnership with Volkswagen Corporate Research for joint development of robot-based innovation concepts for vehicles of the future. Furthermore, the "ready2_spray" solution for automated paint jobs was developed jointly with Dürr AG.

Another main focus of research and development is on the further development of existing robot series. The KR AGILUS small robot series has been convincing customers since 2017, due to its extreme agility in confined spaces, short cycle times and maximum precision; moreover, following further development, it is now also protected against water spray. This robot series, with a payload capacity of six to ten kilograms, now meets the requirements of protection rating IP67. The LaserSpy laser safety sensor was successfully upgraded in the Laser Industry department, a competence center of the Systems (Industries) division, and showcased at the Laser World of Photonics. The TÜV-certified enclosure with improved monitoring sensors meets the highest safety standards. Linking to Smart Device enables users to access permanent condition monitoring at any time and from any place. Attention is also paid to the optical appearance and design, which are custom-tailored for the customer.

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 components. Also, the existing solutions are being developed further, particularly in the hospital pharmacy area.

In the field of industrial warehouse automation, investments were made this year in new palletizing solutions ("Automated Case Picking" and "Automated Item Picking") as well as automated guided vehicles. In addition to this, the existing software has been expanded further to include future-oriented technologies; these solutions enable Swisslog customers to achieve even greater gains in efficiency in the automation of their warehouses.

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

The employees in this field are of vital importance for active exploitation of the possibilities opened up by Industrie 4.0 and for safeguarding competitive advantages in innovation, quality and customer benefits: at the reporting date, the Group had 1,027 employees (2016: 855 employees) in the field of research and development – this corresponds to 7.2% (2016: 7.0%) of the workforce.

The costs of €31.7 million (2016: €20.1 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 €11.3 million (2016: €8.3 million) and mainly included research and development expenditure.

Other expenses and income amounted to a balance of -€2.6 million (2016: -€11.6 million). They include expenses for other taxes (2017: €5.6 million; 2016: €6.8 million), income from subsidies (2017: €2.3 million; 2016: €1.9 million) and income from the release of provisions that are not required (2017: €3.9 million; 2016: €0.0 million).

EBIT margin of 3.0%

Earnings before interest and taxes (EBIT) totaled €102.7 million over the past financial year compared with €127.2 million in 2016. The EBIT margin for the 2017 reporting period decreased to 3.0% compared to the figure of 4.3% for the previous year. As mentioned earlier, the pressure on earnings resulting from project deteriorations in the Systems division and the measures totaling around €40 million to boost profitability had a considerable impact on the EBIT. Nevertheless, KUKA invested €31.9 million in areas of future growth. The focus here was on Industrie 4.0, mobile robotics and human-robot collaboration as well as expenditure relating to the complete restructuring of the overall organization with a consistent customer focus across all KUKA companies, which is being implemented as of the following financial year.

Eliminating the effects of the scheduled amortization relating to the purchase price allocation in connection with corporate acquisitions totaling €13.7 million (2016: purchase price allocation for Swisslog €10.8 million) as well as the one-off effects from the previous year relating to the takeover by Midea Group (€28.0 million) and the growth investments made in 2017 (€31.9 million) results in an EBIT of €148.3 million for 2017 and €166.0 million for 2016 with an EBIT margin of 4.3% for the year under review and 5.6% for the previous year.

	2016	2017
EBIT (in € millions)	127.2	102.7
EBIT margin (in %)	4.3%	3.0%
EBIT adjusted[1] (in millions)	166.0	148.3
EBIT adjusted[1] (in %)	5.6%	4.3%
EBITDA (in € millions)	205.3	180.2
EBITDA margin (in %)	7.0%	5.2%
EBITDA adjusted[1] (in millions)	244.1	225.8
EBITDA adjusted[1] (in %)	8.3%	6.5%

[1] 2016: Elimination of effects due to the takeover by Midea Group (€28.0 million) and purchase price allocation (€10.8 million)
2017: Growth investments (€31.9 million); purchase price allocation and purchase price allocations (€13.7 million)

The Robotics division achieved an EBIT amounting to €133.1 million in 2017, clearly exceeding the previous year's level of €100.7 million by 32.2%. What is particularly noticeable here is the improved cost distribution due to the increased sales revenues.

Systems merely achieved an EBIT of €17.8 million in 2017, significantly below the corresponding figure of €91.3 million in the previous year. The EBIT margin decreased accordingly from 6.5% to 1.1%. Omitting the expenditure for the measures to improve profitability at the Augsburg location totaling around €15.0 million, the EBIT margin would have been 2.1%.

At €10.4 million, (2016: €4.8 million), Swisslog once again saw a considerable improvement in EBIT. This is equivalent to an EBIT margin of 1.4% compared with 0.8% recorded in 2016. Adjusted for the effects of purchase price allocation, the margin is 2.9% (2016: 2.6%).

In keeping with the trend in EBIT, Group EBITDA (earnings before interest, taxes, depreciation and amortization) also fell to €180.2 million (2016: €205.3 million). Write-downs totaling €77.5 million were posted in the period under review (2016: €78.1 million). €24.1 million of this (2016: €22.5 million) was attributable to Robotics, €16.7 million (2016: €22.2 million) to Systems, €26.4 million (2016: €23.4 million) to Swisslog and €10.3 million (2016: €10.0 million) to other areas.

There was therefore an increase in EBITDA for the Robotics division with €157.2 million (2016: €123.2 million) and Swisslog with €36.8 million (2016: €28.2 million) compared to the previous year. Systems finished the financial year with an EBITDA of €34.5 million (2016: €113.5 million). The Group EBITDA margin was 5.2% (2016: 7.0%). The EBITDA margin for Robotics was 13.1% (2016: 12.3%), for Systems 2.2% (2016: 8.1%) and for Swisslog 4.8% as in the previous year. Disregarding the one-off effects of the Midea Group takeover bid in the previous year and the growth investments carried out in the year under review, Group EBITDA was €233.3 million in 2016 and €212.1 million in 2017; i.e. the adjusted Group EBITDA margin was 6.1% in the year under review and 7.9% in the previous year.

Financial result below that of previous year, primarily due to currency effects

The net expenses and income in the financial result equated to an expense of €9.2 million in the 2017 fiscal year. This is a decline compared with the previous year when the financial result was -€4.9 million.

The interest income amounted to €6.2 million (2016: €8.1 million) and mainly included income from bank deposits, income from short-term liquid assets invested in commercial papers and income from financial leases.

The net balance of foreign exchange gains and losses in connection with financial assets led during the past financial year and the previous year to a foreign currency loss (2017: -€5.8 million; 2016: -€2.1 million). In the reporting period, interest expenditure totaled €15.2 million. Most of this relates to the promissory note loan placed in October 2015 with interest expenditure of €3.6 million (2016: €3.6 million) and the net interest expense for pensions of €1.9 million (2016: €2.2 million). Expenditure on sureties and guarantees amounted to €1.3 million (2016: €1.1 million).

Pursuant to the amendment to the syndicated loan agreement, there were additional expenses of €1.0 million in fiscal 2016 in order to cover transaction costs.

Earnings before taxes (EBT) amounted to €93.5 million (2016: €122.3 million). The tax expense of KUKA Group totaled €5.3 million in 2017 (2016: €36.1 million). The tax rate therefore only amounted to 5.7%, and was thus considerably below the previous year (2016: 29.5%). The effects of the US tax reform, including the rebates for research and development expenditure, and the earnings development in the German consolidated tax group are having a particularly noticeable impact.

Proposed dividend of €0.50 per share

Earnings after taxes of KUKA Group were positive for the seventh year in a row and a slight rise to €88.2 million was recorded (2016: €86.2 million). Earnings per share amounted to €2.22 in 2017 (2016: €2.19).

The Executive Board is proposing to the Annual General Meeting that a dividend of €0.50 per share be paid once again for fiscal 2017.

Consolidated income statement (condensed)

in € millions	2013	2014	2015	2016	2017
Sales revenues	1,774.5	2,095.7	2,965.9	2,948.9	3,479.1
EBIT	120.4	141.8	135.6	127.2	102.7
EBIT adjusted[1]	120.4	141.8	135.6	155.2	134.6
EBITDA	158.4	185.3	259.1	205.3	180.2
EBITDA adjusted[1]	158.4	185.3	259.1	233.3	212.1
Financial result	-20.0	-25.3	-7.4	-4.9	-9.2
Taxes on income	-35.4	-45.2	-39.3	-36.1	-5.3
Earnings after taxes	58.3	68.1	86.3	86.2	88.2

[1] 2016: One-off effect due to the takeover bid by Midea Group
2017: Growth investments

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 credit lines but also sufficient guarantee facilities 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 Aktiengesellschaft'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 AG 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 at the balance sheet date, there is an SFA (Syndicated Facilities Agreement) that includes a surety and guarantee line ("guaranteed credit line") in the amount of €200.0 million and a working capital line ("cash line"), which can also be used for sureties and guarantees, likewise in the amount of €200.0 million. The syndicated loan agreement is unsecured and contains only the customary equal treatment clauses and negative pledges.

After the end of the financial year, KUKA AG concluded a new syndicated loan agreement with a bank consortium on February 1, 2018 with a volume of €520.0 million and in doing so replaced and refinanced the existing credit facility of €400.0 million. The new agreement includes a surety and guarantee line ("guaranteed credit line") in the amount of €260.0 million and a working capital line ("cash line"), likewise in the amount of €260.0 million, which can also be used for sureties and guarantees.

The term of the new loan agreement is five years with two one-year extension options additionally agreed. This gave the Group considerably extended leeway for financing further growth until 2025. The syndicated loan agreement remains unsecured as before and contains only the customary equal treatment clauses and negative pledges. Unchanged financial covenants were agreed with thresholds for leverage (net financial liabilities/EBITDA) and interest coverage (EBITDA/net interest expense).

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 2017 to support operating business. These guarantee facilities bilaterally agreed with banks and surety companies outside the syndicated loan agreement amounted as at December 31, 2017 to a commitment volume of €118.0 million (2016: €124.0 million) and in accordance with the rules applicable to the SFA in effect on the balance sheet date, and also to the SFA newly agreed in 2018, may be utilized up to a total volume of €100.0 million. None of these guarantee lines contains a change of control clause.

In total at December 31, 2017 KUKA therefore had credit lines available for sureties and guarantees in an amount of €620.0 million (2016: €500.0 million). These were utilized in the amount of €255.7 million (2016: €258.1 million).

Asset-backed securities program

Alongside this is an unchanged ABS program in the amount of €25 million.

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

1) The €520.0 million syndicated loan agreement signed in February 2018 with a term extending to February 2023. Cash drawings up to a volume of €260.0 million are possible under this agreement.

2) Bilateral agreements with banks and surety companies for surety and guarantee lines in the amount of €118.0 million.

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.

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.

Assessment by rating agencies

The stable financial situation is also reflected in the good credit rating given by the two rating agencies Moody's and Standard & Poor's. Since January 2017, Moody's has rated KUKA as Baa3 with a stable outlook. The latest assessment by Standard & Poor's dates from March 2017 and indicates a rating of BBB with a stable outlook.

Consolidated cash flow statement (condensed)

in € millions	2013	2014	2015	2016	2017
Cash earnings	115.3	181.3	260.8	203.9	184.6
Cash flow from current business operation	221.0	184.7	169.2	-9.6	92.0
Cash flow from investment activities	-125.6	-356.9	-73.5	-97.2	-227.7
Free cash flow	95.4	-172.2	95.7	-106.8	-135.7

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 €184.6 million in 2017 (2016: €203.9 million) indicates that the company is in a good economic position.

With comparable, slightly higher, earnings after taxes, the higher non-cash earnings compared with the previous year, mainly due to the considerable change in deferred taxes (see "Net worth" for further details), resulted in lower cash earnings.

Cash flow from current business operations of KUKA Group rose from -€9.6 million in 2016 to €92.0 million in 2017. This improvement is primarily due to the development of the trade working capital over the course of 2016 and 2017. In fiscal 2016, an increase of €164.5 million in trade working capital (December 31, 2016: €429.1 million) had to be financed. In fiscal 2017, on the other hand, the trade working capital only rose by a moderate €24.8 million and thus had a considerably lower impact on the cash flow from current business operations. As at the balance sheet date of the financial year, trade working capital amounts to €453.9 million (December 31, 2016: €429.1 million).

Overall, trade working capital has developed as follows:

Trade Working Capital

in € millions	2013	2014	2015	2016	2017
Inventories less advance payments	133.9	194.1	225.3	223.2	293.4
Trade receivables and receivables from construction contracts	348.6	612.9	658.3	888.9	923.8
Trade payables and liabilities from construction contracts	304.4	522.2	619.0	683.0	763.3
Trade working capital	**178.1**	**284.8**	**264.6**	**429.1**	**453.9**

Year-on-year, it was primarily receivables which rose. This is primarily due to deliveries and orders completed in the Swisslog division at the end of 2017 for which the payment of the outstanding receivables is not expected until the first quarter of 2018. Inventories less advanced payments at €293.4 million are at a considerably higher level than the previous year (2016: €223.2 million), reflecting the high level of orders received with accompanying advance procurement measures. Trade payables increased by €89.9 million to €549.2 million.

High level of investment continues

During the 2017 financial year, KUKA again made high investments in the future. In total, the volume of expenditure on intangible and tangible fixed assets amounted to €138.8 million (2016: €99.6 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 €72.1 million (2016: €54.0 million). (For information on the development focuses, see the "Research and development" section, page 6 et seq.).

Investments in intangible assets and property, plant and equipment

in € millions	2013	2014	2015	2016	2017
Group	74.7	94.3	107.0	99.6	138.8
of which Robotics	30.8	30.4	39.4	29.4	39.9
of which Systems	15.2	28.7	23.5	23.9	53.9
of which Swisslog	–	–	22.2	20.0	21.6
of which others[1]	28.7	35.2	21.9	26.3	23.4

[1] incl. consolidation

Investments in intangible assets amounted to €53.3 million in fiscal 2017 (2016: €49.1 million) and were attributable to rights and assets in an amount of €9.1 million (2016: €14.5 million), internally produced software and development costs in an amount of €31.7 million (2016: €20.1 million) and advances paid of €12.5 million (2016: €14.5 million).

Investments in tangible assets amounted to €85.5 million in the year under review (2016: €50.5 million) and were attributable to land, property rights and buildings (including buildings on third party land) (2017: €3.2 million; 2016: €6.3 million), technical plant and machinery (2017: €12.9 million; 2016: €19.5 million), other plant/operating and office equipment (2017: €18.4 million; 2016: €20.2 million) and advances paid and construction in progress (2017: €51.0 million; 2016: €4.5 million).

Broken down by division, capital expenditure was as follows in 2017: in the Robotics division, the corresponding figure was €39.9 million (2016: €29.4 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 €53.9 million (2016: €23.9 million). This is primarily due to the system currently being built for production of the new Jeep Wrangler JT in Toledo, USA (for further details please refer to the "Events after the balance sheet date" section). Here also, most of the investments were again made in technical equipment and machinery. Investments in the Swisslog division of €21.6 million (2016: €20.0 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 €24.0 million (2016: €26.3 million) and related mostly to advance payments. These were made for ongoing internal projects relating to the harmonization, standardization and optimization of processes as well as the introduction of global IT platforms and the construction of a new production facility and parking garage at the Augsburg location.

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 €97.0 million (2016: €47.8 million) and were subdivided as follows:

Company acquisitions

in € millions	2016	2017
Company acquisitions		
Talyst Systems LLC, Delaware/USA	–	25.7
Visual Components Oy, Espoo/Finland	–	19.9
Device Insight GmbH, Munich/Germany	–	18.9
Reis Group Holding GmbH & Co. kg, Obernburg/Germany	30.8	9.1
UTICA Enterprises, Shelby Township, Michigan/USA	4.1	6.6
Forte Industrial Equipment Systems Inc., Mason, Ohio/USA	1.6	–
Tecnilab S.p.A., Cuneo/Italy	6.0	–
Other	3.7	1.9
Total	**46.2**	**82.1**
Investments accounted for at equity		
Pipeline Health Holdings LLC, San Francisco/USA	–	13.9
KBee AG, Munich/Germany	1.6	1.0
Total	**1.6**	**14.9**
Total payments	**47.8**	**97.0**

The sale of business units in the Aerospace segment in connection with the MIDEA takeover bid contributed €33.5 million during the previous year.

Negative free cash flow

Cash flow from investment activities (2017: -€227.7 million; 2016: -€97.2 million) along with cash flow from current business operations resulted in a negative free cash flow of -€135.7 million. In the previous year the free cash flow had also been negative at -€106.8 million. This development is primarily due to the heavy investment activities.

Negative cash flow from financing activities

At year-end KUKA had a negative cash flow from financing activities amounting to -€10.7 million. This includes dividend payments to shareholders of €0.50 per share (2016: €0.50 per share) making a total of €19.9 million.

Consolidated net liquidity

	2016	2017
Cash and cash equivalents	364.2	223.6
Current financial liabilities	1.6	19.1
Non-current financial liabilities	249.6	249.7
Group net dept (previous year: Group net liquidity)	**113.0**	**-45.2**
Cash and guaranteed facilities from Syndicated Senior Facilities Agreement[1]	400.0	520.0
Guaranteed facility from banks and surety companies	124.0	118.0
ABS program line	25.0	25.0

[1] The 2017 figure includes the changes from the new syndicated loan agreement (see "Events after the balance sheet date")

As a result of the cash flows described above, KUKA had a net debt of €45.2 million at the end of the financial year (the balance of liquid assets and current and non-current financial liabilities). As at the balance sheet date of the previous year, KUKA had a net liquidity of €113.0 million. The cash and cash equivalents of the Group at year-end 2017 totaled €223.6 million (2016: €364.2 million).

Net worth

On the assets side, non-current assets rose to €977.4 million (December 31, 2016: €838.1 million). This increase is mainly due to the investments made during the financial year (please refer to notes on the financial position). Amortization of €13.7 million (2016: €11.9 million) on the purchase price allocation for corporate acquisitions had the opposite effect. A value of €300.1 million was recorded for goodwill (December 31, 2016: €257.5 million). The following table shows the change in goodwill:

Change in goodwill

in € millions	
As of Jan. 1, 2017	**257.5**
Additions	
Talyst Systems LLC, Delaware/USA	11.2
Device Insight GmbH, Munich/Germany	30.5
Visual Components Oy, Espoo/Finland	15.5
Exchange rate effects and other acquisitions	-14.6
As of Dec. 31, 2017	**300.1**

The increase in tangible assets amounted to €34.8 million.

Amounts totaling €15.7 million were included for investments in associated companies and joint ventures (December 31, 2016: €4.2 million) and reported under "At equity financial assets". This increase results from the acquisition of a 25.0% share in Pipeline Health Holdings LLC, San Francisco/USA, for €13.9 million.

Deferred tax assets amounted to €79.6 million (December 31, 2016: €48.8 million). Of this, €20.7 million is attributable to losses carried forward (December 31, 2016: €9.8 million), particularly for capitalizations during the financial year for the German consolidated tax group.

The value of current assets amounted to €1,662.7 million as at December 31, 2017 (December 31, 2016: €1,705.8 million). The rises in inventories and trade receivables mentioned above had an increasing effect on this value. However, these rises were more than offset by the reduction in cash and cash equivalents, particularly resulting from investment activities.

Group net worth

in € millions	2013	2014	2015	2016	2017
Balance sheet total	1,377.1	1,979.5	2,381.7	2,543.9	2,640.1
Equity	379.1	541.1	732.5	840.2	866.6
in % of balance sheet total	27.5	27.3	30.8	33.0	32.8
Net liquidity/debt	146.5	32.6	199.9	113.0	-45.2

The balance sheet total of KUKA Group rose by €96.2 million from €2,543.9 million as at December 31, 2016 to €2,640.1 million as at December 31, 2017.

Capital ratio of 32.8%

Following the growth of the balance sheet total, KUKA had to accept a slight decline in the equity ratio from 33.0% in the previous year to 32.8%. Altogether, equity capital increased by €26.4 million to €866.6 million. While the net income of €88.2 million was up slightly year-on-year (2016: €86.2 million) and had the effect of increasing equity capital, the currency effects recorded in 2017 were highly negative and totaled -€40.9 million. Particularly affected were the Swiss franc, US dollar, Brazilian real and Chinese renminbi. Payment of the 2016 dividend to the shareholders of KUKA Aktiengesellschaft reduced equity capital by €19.9 million. Actuarial losses from pension accounting, including the associated deferred taxes, totaled €0.6 million. Minority interests in equity capital were reduced through the share in the total result of -€0.3 million by -€0.2 million to an amount of -€0.5 million.

Financial liabilities mainly relate to the promissory note loan of nominally €250.0 million placed in October 2015 as well as the corresponding interest accruals and the short-term utilization of cash lines in the low double-digit million euro range.

The fall in deferred tax liabilities from €45.3 million to €27.5 million is strongly influenced by the expected change in the tax rate in the USA.

The current liabilities increased from €1,258.1 million as at December 31, 2016 to €1,357.9 million as at December 31, 2017. The change in the liability-side trade working capital referred to above was the main reason for this. Other provisions (€132.5 million) and other liabilities and accruals (€297.7 million) are at approximately the same level as the previous year (2016: €437.9 million). Other liabilities include personnel costs of €155.0 million (2016: €142.1 million) and the contingent purchase price liabilities amounting to €37.4 million (2016: €23.1 million). These mainly relate to the acquisitions of the financial year as well as UTICA Enterprises, Shelby Township, Michigan, USA in previous fiscal years.

Group assets and financial structure

in € millions	2016	2017
Current assets	1,705.8	1,662.7
Non-current assets	838.1	977.4
Assets	**2,543.9**	**2,640.1**
Current liabilities	1,258.1	1,357.9
Non-current liabilities	445.6	415.6
Equity	840.2	866.6
Liabilities	**2,543.9**	**2,640.1**

Slight increase in working capital and capital employed due to business performance

KUKA continues to focus on active management of the working capital and, in particular, further optimization of supplier-side payment terms. Nevertheless due to the order situation and business performance, a slight rise in working capital requirements at the end of 2017 could not be avoided. The working capital increased once again during the financial year from €118.4 million at the start of the year to €158.9 million. This meant that in the financial year under review the current business operations had to be financed from the available liquidity of the Group as well as from customer prepayments and supplier liabilities. As far as the individual divisions are concerned, all divisions had a positive working capital in the current reporting period (Robotics: 2017: €129.4 million; 2016: €115.5 million; Systems: 2017: €18.0 million; 2016: €70.4 million; Swisslog: 2017: €54.2 million; 2016: -€16.6 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 2017 and 2016 amounted to €950.4 million and €783.0 million respectively. The ROCE declined from 16.2% in 2016 to 10.9% in 2017.

The ROCE of the individual divisions was as follows: with average capital employed of €235.9 million (2016: €194.9 million) the Robotics division generated a ROCE of 56.4% and was thus slightly above the previous year's figure of 51.7%. Due to the impacts on earnings in the financial year, the Systems division achieved a ROCE of 6.3% (2016: 42.8%) on an average capital employed of €281.9 million (2016: €213.1 million). With average capital employed of €346.8 million (2016: €317.4 million) the ROCE in the Swisslog division saw a significant improvement to 3.0% compared with the 2016 figure of 1.5%.

Return on Capital Employed (ROCE)

in % vom Capital Employed	2013	2014	2015	2016	2017
Group[1]	36.9	28.8	20.0	16.2	10.9
of which Robotics	49.6	53.1	56.6	51.7	56.4
of which Systems	43.0	67.9	87.9	42.8	6.3
of which Swisslog	–	–	-14.5	1.5	3.0

[1] incl. consolidation

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 financial statements of KUKA Aktiengesellschaft are published in the electronic Federal Gazette (Bundesanzeiger) and are also available on the company's website www.kuka.com.

Events after the balance sheet date

As far as events after the balance sheet date are concerned, in particular the new syndicated loan agreement and the agreement with Fiat Chrysler Automotive for the production of vehicle bodies for the new Jeep Wrangler JT, we refer you to the "Events after the balance sheet date" section in the Group notes.

Income statement of KUKA Aktiengesellschaft (HGB)

in € millions	2016	2017
Sales revenues	77.4	99.4
Other company-produced and capitalized assets	2.0	0.4
Other operating income	21.1	36.2
Cost of materials	-40.8	-54.7
Personnel expense	-44.8	-56.4
Depreciation and amortization of tangible and intangible assets	-10.1	-10.1
Other operating expenses	-64.5	-70.1
Income from equity investments	174.6	20.9
Income from other securities	0.0	–
Other interest and similar income	6.3	11.3
Depreciation of long-term investments	–	-9.0
Interest and similar expenses	-7.0	-6.5
Taxes on income	-2.2	-0.1
Net loss/net profit for the year	**112.0**	**-38.7**
Profit carry-forward from the previous year	31.6	67.7
Transfer to retained earnings	-56.0	–
Balance sheet profit	**87.6**	**29.0**

KUKA Aktiengesellschaft balance sheet (HGB)

Assets in € millions	2016	2017
Fixed assets		
Intangible assets	20.1	30.5
Tangible assets	87.9	90.2
Financial investments	492.9	493.9
	600.9	**614.6**
Current assets		
Receivables from affiliated companies	414.6	481.3
Other receivables and assets	4.1	17.3
	418.7	**498.6**
Cash and cash equivalents	**150.4**	**7.8**
	569.1	**506.4**
Prepaid expenses	**1.4**	**1.7**
	1,171.4	**1,122.7**

Liabilities in € millions	2016	2017
Equity		
Subscribed capital	103.4	103.4
Capital reserve	305.8	305.8
Other retained earnings	254.3	254.3
Balance sheet profit	87.6	29.0
	751.1	**692.5**
Provisions		
Pension provisions	11.5	11.5
Provisions for taxes	8.8	7.0
Other provisions	45.6	31.5
	65.9	**50.0**
Liabilities		
Liabilities due to banks	250.9	269.1
Trade payables	5.6	18.5
Accounts payable to affiliated companies	83.8	88.7
Liabilities to provident funds	2.6	2.7
Other liabilities	11.5	1.2
	354.4	**380.2**
	1,171.4	**1,122.7**

Results of operations of KUKA Aktiengesellschaft

The earnings of KUKA Aktiengesellschaft are determined primarily by the earnings of its (direct) subsidiaries, its financing activities and the expenses and income relating to the company's holding function. Earnings before taxes amounted to -€38.6 million and were therefore considerably below the previous year's result (2016: €114.2 million).

Sales revenues (year under review: €99.4 million; previous year: €77.4 million) mainly include cost allocations and cost transfers to subsidiaries (2017: €89.3 million; 2016: €68.8 million) and income from the rental of buildings to KUKA Group companies (2017: €10.0 million; 2016: €8.4 million). The associated expenses are reported as cost of materials and services purchased. These amounted to €54.7 million during the financial year (previous year: €40.8 million).

The main item under "other operating income" is currency translation gains, particularly from the US dollar, Swiss franc and Brazilian real, which were recognized in an amount of €33.9 million (2016: €15.6 million). The rise in other operating expenses results particularly from the considerably higher currency translation losses in the year under review (2017: €35.3 million; 2016: €22.5 million). These are set against higher comparative figures for the previous year for consultancy services in connection with the acquisition of a majority shareholding by Midea Group.

The increase in personnel expenditure from €44.8 million to €56.4 million is primarily attributable to the increase in the number of employees. The average number of employees of the company increased from 443 in the previous year to 512. This rise was mainly due to the takeover in the previous year of the central IT department at the Augsburg site by KUKA Aktiengesellschaft which has now taken full effect in the year under review. Furthermore, the workforce was also expanded as planned in 2017 in the fields of research and development as well as developments for the Internet of Things.

Income from participations amounted to €20.9 million (2016: €174.6 million) and was therefore considerably below the previous year's value. This is due to two effects. Firstly, KUKA AG recorded a very high dividend payment of €119.7 million from the US subsidiary in the previous year, which comprised the accumulated result of several years. In the year under review, this dividend payment was €29.4 million. Secondly, at -€8.5 million, the earnings contributions from the German companies allocated to KUKA Aktiengesellschaft via profit and loss transfer agreements were considerably down on the previous year (2016: €54.9 million), particularly due to the project deteriorations in systems engineering and the restructuring measures at KUKA Systems GmbH.

The net interest result amounted to €4.8 million, which was significantly better than the previous year's value (2016: -€0.7 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 €5.8 million – the value this financial year was €10.7 million.

The amortization of financial assets relates to the complete valuation adjustment of the investment in KBee AG, Munich.

Due to the negative earnings before taxes, KUKA Aktiengesellschaft as the controlling company of the German consolidated tax group recorded no income taxes for the tax group in the income statement for 2017 (2016: €2.2 million). The reported sum of +€0.1 million relates to capital gains taxes and tax credits for past assessment periods.

Overall, the net loss for the year of KUKA Aktiengesellschaft amounted to €38.7 million (2016: net profit of €112.0 million). After offsetting against the profit carried forward, the balance sheet profit totals €29.0 million for fiscal 2017 (2016: €87.6 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, including the changes made to it after the balance sheet date, 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 €392.6 million (2016: €330.8 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 €150.4 million to €7.8 million. Financial liabilities amounted to €269.1 million as at the balance sheet date compared with €250.9 million in the previous year and relate primarily, in addition to cash withdrawals, to the promissory note loan and the associated interest accruals.

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 €22.8 million (2016: €26.1 million) was accompanied by depreciation, amortization and write-downs amounting to €10.1 million (2016: €10.1 million). Investments during the financial year were mainly concentrated on IT-based projects started in previous years to harmonize, standardize and optimize processes as well as on the construction work at the Augsburg plant, where an additional parking garage and a new production facility are currently being built.

KUKA Aktiengesellschaft's direct equity investments in its subsidiaries are reported under financial assets. Additions during the financial year mainly included the capitalization of connyun GmbH. The value of the shares of KBee AG, Munich, was written down.

The increase in other assets (2017: €17.3 million; 2016: €4.1 million) is primarily due to higher receivables from tax authorities for the sales tax group of KUKA AG and from increased income tax receivables.

The changes in equity chiefly reflect the earnings for the financial year. Dividend payments totaling €19.9 million for the 2016 financial year also had the effect of reducing equity. The equity ratio of KUKA Aktiengesellschaft amounted to 61.7% as at December 31, 2017 (2016: 64.1%).

Other provisions were particularly high in the previous year due to expenses connected with the acquisition of a majority shareholding by Midea Group. Other provisions as at the balance sheet date totaled €31.5 million (December 31, 2016: €45.6 million).

In 2016, KUKA acquired the remaining shares in the Reis Group. Particularly due to the settlement in 2017 of the corresponding payment obligation of around €9.2 million, other liabilities were reduced from €11.5 million to €1.2 million.

The net impact of these changes on the balance sheet total of KUKA Aktiengesellschaft was a decrease of €48.7 million to €1,122.7 million compared to the reporting date of the previous year.

Dependency report

The Executive Board has prepared a report on relationships with affiliated companies in the period under review pursuant to section 312 of the German Stock Corporation Act (AktG), concluding with the following declaration:

"We declare that for each legal transaction in relation to the legal transactions and measures listed in the report on relationships with affiliated companies, the company received appropriate compensation according to the circumstances known to us at the time the legal transaction was performed or the measure was taken and was not put at a disadvantage as a result of the measure being taken. There were no omitted measures."

Non-financial key performance indicators

Sustainability at KUKA

At KUKA, sustainability is embedded in the corporate culture and stands for responsible business practices aimed at protecting the environment and resources. KUKA bears responsibility for people and products, but also for society and the environment.

In order to align its corporate strategy with this, KUKA has identified the following topics to be addressed within a materiality analysis:

- Digitization/automation
- Leadership and culture
- Training and further education
- Diversity
- Product safety
- Employment
- Procurement
- Anti-corruption and fair competition
- Sustainable/efficient products
- Human rights
- Occupational health and safety
- Resource-saving production
- Social commitment

A detailed report on these focal points can be found in the Sustainability Report for the 2017 fiscal year.

Resource-saving production

KUKA products and systems stand for innovation and quality. This is the result of high standards in our own production processes. KUKA contributes to protecting the environment by minimizing pollution and the use of raw materials.

Most of our production locations work according to internationally recognized management systems in the areas of quality (ISO 9001), environment (ISO 14001), energy (ISO 50001) and other industry-specific norms in order to create high-quality and environmentally compatible standards. These standardized management approaches are implemented in accordance with the specific circumstances at the individual plants. The "KUKA guidelines for health, safety, sustainability and quality" serve as an umbrella policy. They apply to both the KUKA Group and the entire supply chain.

External certifications according to ISO 14001 are already performed on a regular basis by an accredited certification body at several locations. KUKA is currently working on introducing the environmental standard ISO 14001 at a number of locations such as in China.

Conserving energy

As the Swisslog and Systems divisions are primarily active in systems engineering without their own significant energy-intensive production, the topic of environmental protection in terms of energy savings in production mainly affects the Robotics division. Our production locations for robots are in Augsburg/Germany in Füzesgyarmat and Taksony/Hungary and in Shanghai/China. The power consumption is regularly evaluated across Germany using a software tool. Detailed analyses, for example of the paint shop or individual assembly areas, help us to initiate improvements according to our requirements. The data are collected by means of a meter installation that currently has 450 measurement points and will be further expanded. The data are collected centrally by KUKA AG and made available to the locations for further optimization. This allows us to identify approaches for further enhancement of the underlying processes. Further measures for reducing our power consumption include:

- ongoing conversion of lighting to LED
- automatic switch-off of machines and lighting in defined breaks and idle times
- modern, energy-efficient air compressors and cooling systems
- annual generation of an average of 35,000 kWh of solar power at the Augsburg site.

Strategic energy targets 2020 [1]

E1
Reduction of final energy consumption in relation to revenues by 7.5%

E2
Reduction of CO_2 emissions in relation to revenues by 20%

E3
Raising of energy awareness and employee commitment through initiatives and information campaigns at least every six months

E4
Expansion of energy consumption recording and analysis for each location with presentation of relevant energy performance indicators (EnPIs) at least every quarter

[1] Baseline: December 31, 2014. Applies to KUKA Germany.

In the year under review, the targets were extended to the KUKA locations in France in the course of implementing an energy management system.

Reducing environmental impacts

Every form of industrial activity impacts the environment in one way or another through either energy consumption or the consequences of production such as emissions, waste and effluents. However, with our certified environmental management systems, we are ensuring that these impacts are kept as low as possible.

We also consider the development of emissions and the volume of waste and effluents to be components of the environmental management system, even if they are less significant than energy consumption. Production waste is separated and disposed of or recycled expertly by trained personnel.

At KUKA Robotics, water is only used to a limited extent in the paint shop and in cooling processes. At our largest production locations, water consumption amounted to 104,360 m^3 in 2017 (2016: 109,191 m^3).

CO_2 emissions at our largest production locations totaled 35,209 tonnes in 2017 (2016: 34,522 tonnes). The increase is primarily attributable to the higher production volume as compared to the previous year.

Energy efficiency in systems engineering

As system integrators, the Systems and Swisslog divisions are also committed to improving energy efficiency, thus benefiting customers through lower power consumption and cost reductions.

KUKA Systems has developed an energy calculation tool, for example. This tool can be used to continuously monitor the consumption of electrical energy, compressed air, cooling water, lighting and air conditioning in a system. If necessary, the consumption of systems, the CO_2 emissions and the operating costs can be optimized.

Swisslog too helps to save energy and reduce CO_2 emissions by using "green" technologies and products. The starting point was the recovery of braking energy from mobile machines several years ago by feeding this energy back into the power circuit. This is now the core of its own energy efficiency label GreenLog.

Recycling and retooling

We offer our customers a retooling service for older robots. We also provide the option of recycling or disposing of used robots. Robots that are no longer in use are taken back by KUKA and refurbished. They are placed on the market again as used machines. Together with our customers, we thus strive to achieve a closed-loop materials cycle.

The Used Machines business model was introduced in the Customer Service division in the year under review. This involves old systems being bought back and refurbished to conserve resources and improve the ecological balance. Another positive environmental aspect is accomplished by using innovative technologies such as energy-efficient motors and control variants in the systems.

Corporate social responsibility

Social commitment of Orange Care e.V.

Orange Care was actively involved in a wide range of initiatives in 2017. One example is the financial support provided to KlinikClowns e.V. The KlinikClowns regularly visit the pediatric ward in the Josefinum Hospital in Augsburg and help children and their families deal with their illness by distracting them from their worries. In the past year, the organization was also involved with the Regens Wagner Foundation in Holzhausen, one of eight church foundations of the same name in Bavaria. The foundation offers people with disabilities broad support for school, training, employment and daycare. A KUKA employee has initiated the project "Children helping children in Kosovo". This initiative supports the country's only workshop for the handicapped, in addition to training young people.

Outside of the organization in Augsburg, KUKA is promoting social involvement worldwide with the aim of living out its social responsibility. In the USA, for example, all activities and initiatives for society and healthcare take place under the motto "KUKA Cares". KUKA employees raised a total of 13,000 US dollars in 2017 for the disaster region after the devastating Hurricane Harvey and donated the money to the Hurricane Relief Fund.

Helping children learn more about technology

KUKA is also committed to social issues beyond the charitable initiatives. The main focus here is on promoting young talent in the fields of robotics and automation. In 2017, for instance, research and technology institutions were supported, including Starkstrom e.V. at Augsburg University or the Aerospace LAB (Jugendforschungszentrum Herrenberg Gäu e.V.).

European Robotics Week was initiated by the European robotics association euRobotics and takes place every year in November. KUKA employees increase the public's awareness of robotics over the course of this week. Children's lectures on robotics were offered in schools and kindergartens in the year under review along with tours for school classes through KUKA's production facilities.

KUKA Robotics also invited interested children in China to learn more about future technologies such as human-robot interaction and robotics.

Occupational health and safety further advanced

Occupational health and safety are an essential requirement for ensuring that business operations run smoothly in manufacturing companies like KUKA. Appropriate management systems and the general awareness of occupational health and safety serve to protect the health of employees. Occupational health and safety is therefore firmly embedded in management systems and supported in some cases by external certifications at the major locations of KUKA Group.

In order to advance the topic of occupational health and safety even further in the future, we began to introduce Group-wide safety performance indicators (SPIs) in 2017. The awareness of employees is also enhanced by means of specific campaigns. A special campaign on preventing accidents caused by stumbling and falling was launched at the Augsburg location to reduce this frequent cause of accidents as far as possible.

Employees

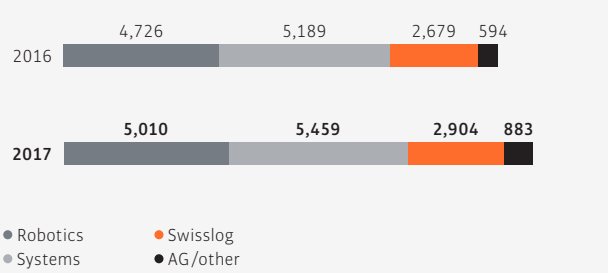
Global growth

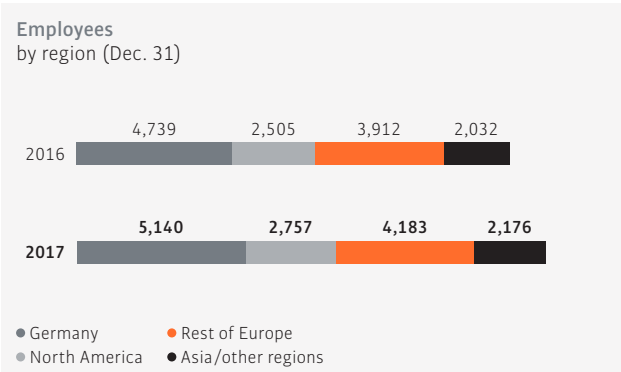
As a global provider of intelligent automation solutions, KUKA is continuing on its growth path. Our employees are the pillars of this expanding business. KUKA therefore places great importance on further enhancing its appeal as an employer. This includes a pleasant working environment, promoting diversity, high-quality vocational training and a wide range of further education and training courses.

Significant increase in personnel throughout the Group

In the year under review, the Group's workforce rose from 13,188 in 2016 to a total of 14,256 in 2017. This is an increase of 8.1%. The workforce was expanded worldwide. The Americas, in particular, recorded strong growth. The Robotics division increased its headcount by 6.0% to 5,010 employees (2016: 4,726). The number of employees in the Systems division rose by 5.2% to 5,459 (2016: 5,189). Swisslog recorded the largest increase with a rise of 8.4% to 2,904 employees (2016: 2,679).

Employees
by division (Dec. 31)





Vocational training at a high level

At the end of 2017, KUKA Group was employing a total of 296 apprentices (FTE) (2016: 305). Apprentices at KUKA are given opportunities for their own development, learning to think and act globally on a Group-wide scale. 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 five apprentices as the best in their year for the occupation of electronics technician for automation technology, industrial clerk, IT specialist and industrial mechanic. 24 apprentices completed their examinations prematurely in summer 2017 – with an average grade of 1.64. The best industrial mechanic in Germany completed his training at KUKA in the year under review. He prevailed against 20,000 competitors and won the award of "Germany's best apprentice".

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
- Safety and security specialist

KUKA offers training in line with its requirements and provided 50 apprenticeships in Germany in 2017.

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 offers all employees a wide range of courses within the framework of the technical, methodical and personal professional development in the KUKA Academy. These include standard courses, such as computer and language courses, specific professional courses from the fields of sales, purchasing, business administration, strategic implementation and project management, along with seminars for leadership, communication and change management.

KUKA stands for diversity and tolerance

At KUKA, diversity involves promoting and benefiting from the diversity of our employees as a source of creativity, innovation and business success. We need a larger talent pool and are working on further increasing our appeal for employees, especially with a view to the skills shortage forecast for the future. In this regard, we take into account individual life concepts as well as social changes and the zeitgeist. Our employees are given the opportunity to develop on a personal level through flexible and mobile working conditions and models. Accepting and promoting diversity to benefit from different experiences and talents is part of the corporate culture at KUKA. We are convinced that the appreciation of our diversity has a positive effect on KUKA as a company, on how we deal with our customers and on our role in society.

Our aim is to create a working environment that is free of prejudice and characterized by acceptance and tolerance. All employees should be valued – regardless of their ethnicity, origin, gender, religion or religious views, disability, age and sexual orientation. To guarantee equal treatment for everybody, it is also important that there is no distinction between males and females in our remuneration system. At the end of 2017, KUKA signed the "Charta der Vielfalt" (diversity charter) in Germany, making a clear commitment to diversity.

Promoting networks

These measures reflect an understanding of diversity that has been established for years and which is evident in the existence of various networks and initiatives. For instance, we support the internal KUKA women's network orangeWIN that helps to identify and promote female talents, we have been involved in the Augsburg cross mentoring program since 2011, which is committed to gender equality at work, and we participate in MigraNet with the aim of achieving the professional integration of people from a migrant background.

Employee share program

An employee share program was not launched in 2017 due to the takeover by MIDEA and the associated major change to the ownership structure.

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 35 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. Application-related developments, system partnerships and cooperative ventures reduce the risk of development work not conforming to market requirements. 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 and risks are assessed at division level 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

	Worst case		Expected risk value	
in € millions	2016	2017	2016	2017
Legal risks	6.1	7.7	-0.5	-0.5
Economic risks	26.4	27.3	-3.8	1.6
Total for the Group	**32.5**	**35.0**	**-4.3**	**1.1**

Legal and economic risks occur primarily as a result of the activities of the Robotics, Systems and Swisslog divisions. The changes compared to the previous year are mainly attributable to the Robotics and Systems divisions. The Robotics division has registered an improvement to the risk situation on account of the systematic implementation of measures. The difficult business development in 2017 compared to the previous year has led to increased damage potential for Systems. Intensified risk mitigation measures result in a theoretically negative expected risk value in individual cases.

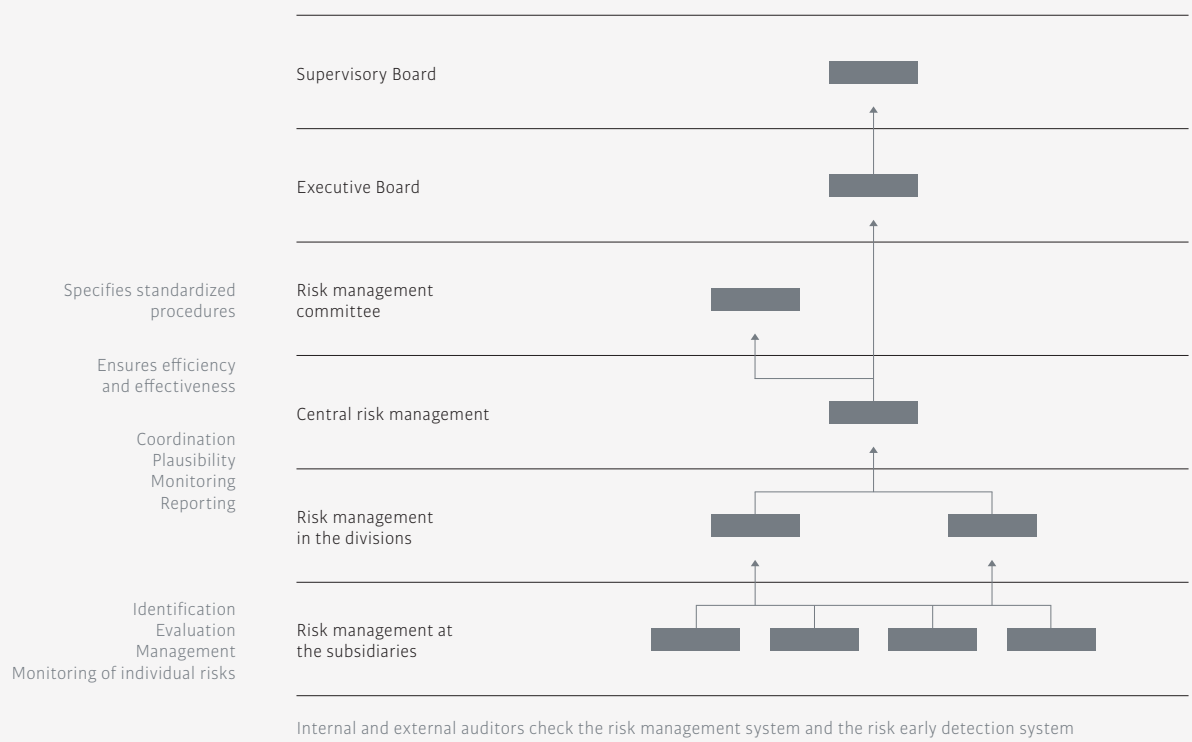
More detailed explanations of legal and economic risks can be found in this section with regard to cross-division risks that are managed at Group level or in the following sections with regard to the individual divisions (Robotics, Systems, Swisslog). We also evaluate the potential worst-case damage 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 Group notes in the annual report 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.

Risk management organization



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 general machinery and systems engineering sector throughout the 2017 fiscal year. The fact that KUKA Group's key automotive customers enjoy an excellent competitive position in their markets gives rise to additional opportunities. 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. KUKA Group improved its depth of value added and continued to implement the digitization strategy with the acquisitions made in 2017.

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 with a focus on electronics. One of the company's key strategic thrusts is to penetrate new, non-automotive markets. 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.

Robotics risk exposure

in € millions	Worst case	Expected risk value
Legal risks	2.6	0.0
Economic risks	4.6	0.0
Total for Robotics	**7.2**	**0.0**

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%).

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. There were capacity bottlenecks and delays with numerous projects in Europe in 2017, which resulted in considerable additional costs. Significantly more external resources had to be obtained than planned to address

the bottlenecks and make up for the delays. Services in the robot programming sector, in particular, are currently hard to come by on the European market and are subject to considerably higher prices. These effects have been taken into account in the amended project calculation and are already included in earnings for 2017 through provisions for impending losses.

Major automakers throughout the world are currently expanding their global manufacturing capacities with a high level of dynamism. KUKA increasingly works together with internal partners, with several of the division's regional subsidiaries collaborating on a customer project. In these situations, there are risks involved in information exchange, the value-added process and project management across various IT systems. 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 soon have to invest in new production lines or upgrade their existing assembly lines.

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 2017. 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

in € millions	Worst case	Expected risk value
Legal risks	3.6	0.2
Economic risks	22.0	1.0
Total for Systems	**25.6**	**1.2**

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 high (to 40%). 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. The Swisslog segment broadens KUKA's product portfolio and makes a decisive contribution to independence from the automotive industry.

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

in € millions	Worst case	Expected risk value
Legal risks	1.5	-0.7
Economic risks	0.8	0.5
Total for Swisslog	**2.3**	**-0.2**

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%). 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 while also supporting the Group companies in their negotiations with customers, suppliers and service providers. Both Moody's and Standard & Poor's, the two rating agencies which KUKA works with, raised the KUKA Group rating to investment grade in 2017 and now rate KUKA as Baa3 and BBB- respectively with a stable outlook.

KUKA pursues a conservative financing policy with a balanced funding portfolio. This is essentially based on the promissory note loans issued in 2015 with maturity dates up to 2022 and a syndicated loan extended and adapted again at the start of 2018 with a term until 2023 and two one-year extension options. Two standard financial covenants (leverage and interest coverage ratio) have been agreed for the syndicated loan. KUKA monitors adherence to these covenants based both on the current figures and on planning; the covenants were complied with throughout the 2017 fiscal year. As at December 31, 2017, both covenants were well within the contractually defined limits. Beyond these two financing agreements, additional financing options are available to KUKA within an ABS and factoring program. Please refer to the notes to the annual financial statements, "Financial liabilities/Financing", 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, especially currency risks, and risks from financial transactions with financial derivatives. Transactions in financial derivatives are only entered into for hedging purposes, i.e. solely with reference to and for hedging underlying transactions. 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 continuously 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 (as too in 2017, including an e-learning program). No substantial risks were identified in 2017 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 39 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 and the upturn is continuing. According to the International Monetary Fund (IMF) the global economy grew 3.7% in the past year. Compared with growth in 2016, this represents an increase of 0.5 percentage points.

For 2018, the IMF expects the global economy to expand again more rapidly and has forecast economic growth of 3.9%. The IMF therefore increased its outlook for global economic growth by 0.2 percentage points. It sees the reasons for this increase in the generally stronger momentum of global growth and the US tax reform. The tax breaks for companies will result in rising investments, from which the trading partners of the USA are also likely to benefit from. The North American market is one of the most important sales markets for KUKA Group. For the USA, the Fund specified a growth forecast of 2.7% in its outlook for 2018. However, the IMF warns that a slowdown is to be expected when government incentives for investments are phased out and the rising national debt gradually necessitates appropriate measures.

According to the IMF, the economy has picked up in many eurozone countries. The experts forecast growth of 2.2% in the eurozone for 2018 after an estimated 2.4% in 2017. Demand has increased both domestically and internationally. They expressed slight concern about Spain given the calls for independence of Catalonia. The forecast was reduced here from 2.5% to 2.4%. The experts increased their outlook for Germany in 2018 by half a percentage point to 2.3%. The fund was skeptical about the United Kingdom in view of the planned exit from the EU. Growth of 1.5% is expected here in 2018.

The IMF is anticipating 6.6% growth in China during 2018. This is 0.1 percentage points more than was forecast in the autumn. There are signs of weaker growth in China according to the IMF, as the government's financial incentives of the last few years are to be reduced and lending criteria tightened in order to strengthen the financial system. However, the IMF still sees China as a major driver of global growth. China is an important growth market for KUKA Group.

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

Economic growth

in %	2016	2017	2018
Germany	1.9	2.5	2.3
Eurozone	1.8	2.4	2.2
USA	1.5	2.3	2.7
China	6.7	6.8	6.6
Developing/emerging economies	4.4	4.7	4.9
World	3.2	3.7	3.9

Source: IMF, January 2018

Robotics and automation continue to grow worldwide

The forecast for further growth in robot-based automation remains high. Demand for automation solutions is growing worldwide. The International Federation of Robotics (IFR) is expecting an average global growth rate between 2018 and 2020 of more than 15%. Industrie 4.0 solutions will continue to gain in significance. Connection of the real world to the virtual world allows new business models to be implemented. This makes production more flexible. Efficiency enhancements, quality improvements, higher quantities, rising product diversity and increasing flexibility continue to drive automation.

Growth opportunities for KUKA

1) China

The demand for automation solutions is continuing to increase in China. China is now not only the world's largest, but also the fastest-growing market. According to the IFR, the annual sales figure of 57,100 in 2014 increased to a record high of 87,000 units in 2016. Such a significant rise in such a short space of time is unique in the history of robotics. Robot density, and thus the degree of automation, is significantly lower in developing and emerging countries than in industrialized nations. This applies to both the automotive and the general industry segments. The growth potential of robot-based automation in these markets is therefore much higher than in the industrialized countries, which is why above-average growth rates are forecast, especially for China.

The main reason for the high growth rates in China is the demographic development, which poses new challenges for the country. The percentage of the working population is stagnating, while wages are rising. Automation solutions can help to absorb the increasing cost pressure and to meet the growing quality requirements for the products. The Chinese government is therefore pushing ahead with the automation of its industry. The modernization plan "Made in China 2025" was launched with the aim of improving the international competitiveness of Chinese industry.

KUKA sees the Chinese robot and automation market as a core element of its future growth strategy. For this reason, KUKA is expanding in China and increasing its market presence. The production capacity of the robot assembly facility in Greater Shanghai will be doubled by the beginning of 2018. The number of employees in China rose to 1,373 in 2017 and corresponds to around 10% of the total workforce. This means that KUKA has an even stronger local presence. In addition, KUKA will be actively involved in establishing the planned Technology Park in Shunde. A regional center of excellence for robot-based automation solutions is to be created there. 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

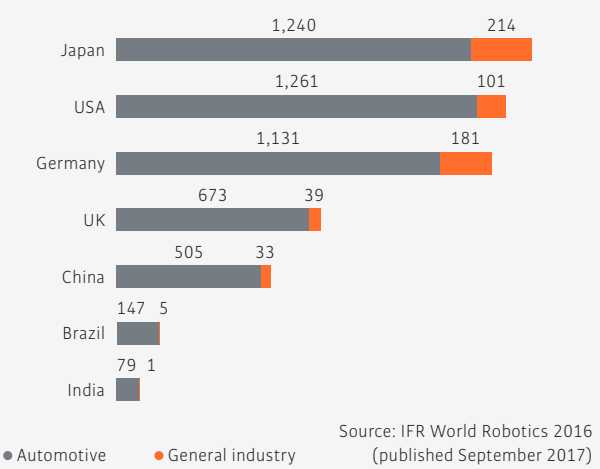
The robot density (number of robots per 10,000 employees) in general industry is still at a relatively low level compared to the automotive industry. According to the IFR, growth potential is mainly expected in the Asian market, especially in the electronics industry (computers, communications and consumer goods). Significant potential is also forecast for the logistics/e-commerce, metal, machine tools and food industries.

This is partly due to the challenges facing manufacturing companies in general industry. These include the ever shortening product life cycles, the desire of consumers for customized products, increasing competitive pressure and the pressure to further reduce emissions. The automation of production processes can assist in overcoming these challenges. This is why the sales potential in the automation sector is high.

Digitization will play an increasingly important role in enabling companies to produce flexibly. The right technologies are required here, such as human-robot collaboration, cloud technologies and mobility. Companies can make their production more efficient and flexible with the digital factory.

KUKA is therefore expecting the demand for automation solutions in general industry to be considerably higher over the next few years and is pursuing the strategy of further expanding its market shares in this segment.

Robot density in automotive and general industry
Robots per 10,000 employees



Source: IFR World Robotics 2016 (published September 2017)

3) Automotive

Investments of the automotive industry to further expand production capacities and modernize existing plants have increased since 2010. Further investments are anticipated from car manufacturers in the coming years and the IFR therefore expects the environment to remain positive for automation companies.

The automotive industry has the highest level of automation worldwide and is a technology leader in this respect. Declining product life cycles and simultaneously increasing model diversity require flexible production systems in order to avoid the risk of efficiency losses. Despite the already high level of automation in the automotive industry, growth potential is therefore mainly expected for applications involving human-robot collaboration. This allows robots to work together directly with people and to support them flexibly with their tasks.

KUKA is working in close cooperation with its customers to shape future technologies such as autonomous driving and e-mobility. For example, the company has planned and set up a production system for manufacturing battery modules and high-voltage batteries for use in electric vehicles for a leading European manufacturer in the automotive industry. The system has a high level of automation and a modular design, allowing for the integration of additional press modules. A cooperation agreement was also concluded between KUKA and Volkswagen Corporate Research for jointly developing robot-based innovation concepts for vehicles of the future. Here too, KUKA expects significant market potential.

4) Digitization and Industrie 4.0

The production landscape is being fundamentally transformed by Industrie 4.0: automated manufacturing technologies, mechanical engineering and intelligent IT systems are being networked to create smart factories. These smart factories are characterized by their versatility, flexibility, resource efficiency and ergonomic workplace design. Customers and business partners are integrated into business and value creation processes. As an automation company, KUKA is actively shaping the transformation of industrial production and is playing a central role in the practical implementation of Industrie 4.0.

The robot serves as the link between the digital and real worlds in Industrie 4.0 and between humans and technology. The robot provides assistance and takes over the monotonous, dangerous or physically demanding work, while the humans can perform more complex and challenging tasks.

Intelligent and flexible manufacturing makes high-quality one-off production possible with the benefits of serial production such as low unit costs. Traditional manufacturing is being superseded by the flexibility of new technologies. An important basis for this is the interoperability of systems, which is where one of KUKA's strengths lies: the automation specialist offers hardware and software from a single source. This is an important competitive advantage for our customers since production sequences can be better coordinated by networking.

In order to further strengthen KUKA's ability to innovate, the company invested in technologies for the factory of the future in the past fiscal year. For example, KUKA invested in Device Insight, a Munich-based IoT company. Device Insight's IoT platform networks machines, vehicles, systems and devices. KUKA also acquired Visual Components, a company offering software solutions for 3D simulation in factory planning. KUKA is thus stepping up its endeavors to automate production processes and make them more flexible, while also enhancing its own IoT expertise.

Company-specific factors

Summary

Given the current economic forecasts and general conditions and taking into consideration the existing risk and opportunity potential, KUKA anticipates rising demand in the 2018 fiscal year, particularly from North America and Asia. A slight increase in demand is expected in Europe as a whole. In this region, KUKA will now be more selective when it comes to accepting new projects in systems engineering, which may also lead to a decline in the level of orders in this segment. From a sector perspective, KUKA expects a positive development for the sales markets in general industry. Demand in the automotive industry is anticipated to remain stable, now that customer investments have risen considerably in recent years.

KUKA operates globally and is subject to the impact of exchange rate fluctuations. The US market contributes to approximately one third of worldwide Group revenues and is therefore one of the most important regions. A higher US dollar/euro exchange rate has a positive impact on the key financial indicators for KUKA Group. A weaker US dollar compared to the previous year is likely to have an adverse effect. As KUKA's main competitors largely produce in Japan, the development of the yen/euro exchange rate is also relevant. A weaker yen/euro exchange rate has a negative impact. The currency effects are described in detail in the notes.

Anticipated business development at KUKA

Summary	2017 result	2018 outlook
Sales revenues	€3,479.1 million	>€3.5 billion
EBIT margin	4.3% [1]	~ 5.5% [2]
Net income for the year	€88.2 million	rising
Investments [3]	€138.8 million	rising
Free cash flow	€-135.7 million	at prior-year level
Dividend per share	€0.50	at prior-year level

[1] Before purchase price allocations (€13.7 million) and before growth investments (€31.9 million)

[2] Before purchase price allocations, before growth investments and before reorganization expenditure (€30 million)

[3] Before financial investments

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

Sales revenues and EBIT margin

On the basis of the current general conditions and exchange rates, KUKA is expecting sales revenues of more than €3.5 billion in the 2018 fiscal year. Based on the current economic environment and the anticipated business development, KUKA Group expects to achieve an EBIT margin of ~ 5.5% before purchase price allocations, investments in growth and reorganization expenditure amounting to about €30 million. The investments relate, for example, to Group-wide issues such as digitization, Industrie 4.0, mobility, 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 the amortization of the purchase price allocations should amount to about €15 million in 2018.

KUKA AG acts as the Group's management holding company with central management responsibilities. The income situation of KUKA AG depends on the results of subsidiaries, its financing activities and the expenditure and income relating to the holding function. This includes, for example, income from the rental of buildings to the KUKA companies at the Augsburg location. A forecast for revenues and the EBIT margin is specified exclusively at Group level due to the purely holding function of KUKA AG.

Net income

In the 2017 fiscal year, KUKA Group generated net income for the year of €88.2 million. The targeted increase in revenues is likely to have a positive effect on net income for 2018. The purchase price allocations, the expenditure for reorganization and the planned investments in growth will have a negative impact on the result. However, KUKA is expecting an overall increase in the net income at Group level for 2018. KUKA Aktiengesellschaft too is anticipating a further significant improvement in earnings within the range of the previous years.

KUKA AG'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

KUKA operates in a highly dynamic, innovation-driven market environment. With the aim of securing the long-term success of the company, KUKA is continuing to invest in solutions for the factory of the future. The R & D investment will therefore be further increased in 2018. The expenditure primarily focuses on software solutions and on the enhancement of existing products in terms of performance, costs and customer benefits. KUKA is also investing in digitization/Industrie 4.0, mobility and human-robot collaboration. KUKA plans to invest around 5% of the expected revenue volume in research and development in 2018 (2017: €128.7 million).

Free cash flow

KUKA Group's free cash flow is primarily generated from operating profits and the development of working capital. Based on the current general conditions and the planned revenue growth, KUKA Group expects a free cash flow in 2018 that will be at the level of the previous year.

Dividend

The Executive and Supervisory Boards will recommend to shareholders at the Annual General Meeting on June 6, 2018 that a dividend of €0.50 per share be paid for the 2017 fiscal year.

For the 2018 fiscal year, KUKA plans to maintain its dividend, allowing for the general conditions at the time.

Internal control and risk management system

Basic principles

Pursuant to section 289 para. 4 and section 315 para. 4 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 27 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 the Opportunities and Risk Report on page 27 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 approved 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 year-end, 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 sections 315 b, 315 c, 289 c, sections 315 d, 289 f and section 315 a para. 1 of the German Commercial Code (HGB) including accompanying explanations

The disclosures in accordance with takeover law required by sections 315 d, 289 f and 315 a para. 1 of the German Commercial Code (HGB) are presented as of December 31, 2017 and explained in the following.

Composition of subscribed capital

As of December 31, 2017, 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

There are no restrictions affecting voting rights or 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, 2017 as follows:

Midea Group – Notification dated January 9, 2017

1.	MECCA International (BVI) Limited	94.55%	held directly
2.	Midea International Corporation Company Limited	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

Midea Group communicated the following change to the investment of 94.55% on September 1, 2017 due to internal reallocations within the Group:

Midea Group – Notification dated September 1, 2017

1.	Midea Electric Netherlands (I) BV	94.55%	in part held directly and allocated pursuant to section 22 of the WpHG
2.	MECCA International (BVI) Limited	94.55%	in part held directly and allocated pursuant to section 22 of the WpHG
3.	Midea International Corporation Company Limited	94.55%	allocated pursuant to section 22 of the WpHG
4.	Guangdong Midea Electric Co., Ltd.	94.55%	allocated pursuant to section 22 of the WpHG
5.	Midea Group Co., Ltd. Foshan, China	94.55%	allocated pursuant to section 22 of the WpHG

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 a para. 1 no. 5 and section 315 a para. 1 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 cancelation. Cancelation leads to reduction of the share capital. However, the cancelation 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 cancelation 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 two amendment agreements dated April 29, 2016 and November 28, 2016. According to the terms of the loan agreement, the creditors provided working capital and guarantee lines of up to €400,000,000.

Within the scope of refinancing, KUKA Aktiengesellschaft and its associated companies signed a new syndicated loan agreement on February 1, 2018 with a banking syndicate led by Commerzbank AG, Deutsche Bank AG Deutschlandgeschäft branch, Deutsche Bank Luxembourg S.A., UniCredit Bank AG, Landesbank Baden-Württemberg, Bayerische Landesbank, BNP Paribas S.A. German branch, DZ Bank AG Deutsche Zentral-Genossenschaftsbank (Frankfurt am Main) and Credit Suisse AG. According to the terms of the loan agreement, the creditors provide working capital and guarantee lines of up to €520,000,000. Upon conclusion of the new loan agreement, the aforementioned loan agreement for €400,000,000 was canceled.

The new loan agreement 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. A change of the direct owner within the Midea Group is not affected by this provision as long as Midea Group Co., Ltd. directly or indirectly holds 100% of the shares and voting rights. 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. The syndicated banks had waived their rights of termination in advance of the change of control that took place on January 6, 2017 through the closing of the Midea Group's takeover bid.

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. None of the creditors of the promissory note loan ("promissory note investors") exercised their rights to repayment of their (pro rata) loan within the contractually stipulated period following the closing of the Midea Group's takeover bid on January 6, 2017, which constituted such a change of control.

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 a para. 4 sentence 1 no. 9 and 315 a 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 289 f HGB: www.kuka.com/en-de/investor-relations/corporate-governance/corporate-management.

Non-financial declaration

Please refer to the website at www.kuka.com for the non-financial declaration pursuant to sections 315b, 315c, 289c of the German Commercial Code (HGB).

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. The Executive Board members also receive fixed compensation – not deductible from the compensation paid by KUKA Aktiengesellschaft – for their activities as members of the administrative board of Swisslog Holding AG as of April 1, 2017. This is paid out by Swisslog Holding AG pro rata at the end of each quarter.

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 financial 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 last program, covering the years 2016 – 2018, 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 in relation to the shares currently held. Furthermore, following the Midea takeover bid the Supervisory Board also relieved the Executive Board of its holding obligation relating to the 2014 – 2016 phantom share program.

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.

In place of the previous phantom share programs, the members of the Executive Board have been entitled to participate in long-term incentive plans (hereinafter "LTIPs") with annual allocation volumes since 2017. The LTIPs are variable compensation components with long-term incentives.

The LTIPs cover a period of three financial years. The allocation volume is either already contractually agreed or is set by the Supervisory Board before the respective three-year period commences.

At the start of the three-year performance period, the Supervisory Board also determines the key indicators and specifications for the target values of the success factors for the LTIP concerned. The relevant factors are (i) the performance factor and (ii) the strategy factor.

The key indicator for the performance factor is the EVA over the performance period. The EVA in this context is the Group EBIT (on a consolidated basis) less minimum interest (9%) on the Group's capital employed. The Supervisory Board stipulates the target values at its discretion, divided into (i) minimum target, (ii) target and (iii) maximum target. The minimum target corresponds to a performance factor of 0.50, the target to a performance factor of 1.00 and the maximum target to a performance factor of 1.50.

The relevant key indicators for the strategy factor are determined by the Supervisory Board at its discretion. The Supervisory Board also defines the target values for each key indicator. The minimum target corresponds to a strategy factor of 0.00, the target to a strategy factor of 1.00 and the maximum target to a strategy factor of 2.00.

The gross disbursement amount is calculated by multiplying the individual allocation value, performance factor and strategy factor for the performance period.

Under specific conditions defined in the LTIP, entitlement to payment of the gross disbursement amount may be waived in full or limited pro rata temporis.

Both the phantom share programs still in effect and the LTIP are limited in terms of amount, with the effect that the total Executive Board compensation (fixed annual salary, variable bonuses and payments from a phantom share program or LTIP) is limited as of 2018 by the accumulation of caps on individual items.

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 2017

Executive Board compensation for fiscal 2017 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 €6,690,000 in fiscal 2017.

Table 1: Executive Board compensation for 2017 – Overview of benefits

	Dr. Till Reuter CEO				Peter Mohnen CFO			
in € thousands	FY 2016	FY 2017	FY 2017 (min)	FY 2017 (max)	FY 2016	FY 2017	FY 2017 (min)	FY 2017 (max)
Fixed compensation	600	775	775	775	425	575	575	575
Fringe benefits [1]	25	25	25	25	31	31	31	31
Other compensation [2]		300	300	300	–	150	150	150
Subtotal	**625**	**1,100**	**1,100**	**1,100**	**456**	**756**	**756**	**756**
One-year variable compensation [3]								
Bonus	350	475	0	950	225	288	0	575
Multi-year variable compensation								
Company targets bonus for 2016 [4]	350	–	–	–	225	–	–	–
Company targets bonus for 2017 [5]	–	475	0	950	–	288	0	575
Phantom share program 2016 – 2018 [6]	452	–	–	–	283	–	–	–
Long-term incentive plan 2017 – 2019 [7]	–	500	0	1,500	–	300	0	900
Total	**1,777**	**2,550**	**1,100**	**4,500**	**1,189**	**1,631**	**756**	**2,806**
Pension cost	0	0	0	0	0	0	0	0
Total compensation	**1,777**	**2,550**	**1,100**	**4,500**	**1,189**	**1,631**	**756**	**2,806**

[1] 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.

[2] Compensation for activities as administrative board members of Swisslog Holding AG

[3] Variable compensation paid out during the fiscal year

[4] Proportion of variable bonus for achieving personal targets (with 100% target achievement) in the specified fiscal year (possible target achievement from 0 to 200%).

[5] Deferred percentage (50%) of variable bonus (with 100% target achievement) for the specified fiscal year.

[6] 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. The share price for the phantom share program 2016-2018 was €87.67 (XETRA closing price on March 8, 2016).

[7] Allocation values for the long-term incentive plan 2017-2019

Table 2: Executive Board compensation for 2017 – Overview of inflow

	Dr. Till Reuter CEO		Peter Mohnen CFO	
in € thousands	FY 2016	FY 2017	FY 2016	FY 2017
Fixed compensation	600	775	425	575
Fringe benefits [1]	25	25	31	31
Other compensation [2]	156	340	0	150
Subtotal	**781**	**1,140**	**456**	**756**
One-year variable compensation [3]				
Bonus	542	392	439	383
Multi-year variable compensation				
Company targets bonus for 2014 [4]	694	–	421	–
Company targets bonus for 2015 [4]	–	452	–	290
Phantom share program 2013 – 2015 [5]	1,406	–	804	–
Phantom share program 2014 – 2016 [5]	–	1,928	–	1,339
Other share-based compensation [6]	11	6	7	4
Total	**3,434**	**3,918**	**2,127**	**2,772**
Pension cost	0	0	0	0
Total compensation	**3,434**	**3,918**	**2,127**	**2,772**

[1] 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.

[2] Compensation for activities as administrative board members of Swisslog Holding AG. In fiscal 2016, Dr. Reuter received compensation in the amount of CHF 170,000 (at an exchange rate of €1 = CHF 1.0902 (average rate in 2016) this amounted to €155,935 for 2016). The compensation paid to Dr. Reuter by Swisslog Holding AG in fiscal 2016 amounting to €155,935 counted towards his bonus for fiscal 2016 (disbursed in April 2017).
For his activities on the administrative board of Swisslog Holding AG, Dr. Reuter received compensation of CHF 42,500 at the end of the first quarter of fiscal 2017 (at an exchange rate of €1 = CHF 1.0707 at March 31, 2017 this corresponds to €39,694), which counts towards his bonus for fiscal 2017 (to be disbursed in April 2018). Furthermore, for their membership in the administrative board of Swisslog Holding AG, Dr. Reuter received compensation of €300,000 and Mr. Mohnen compensation of €150,000 which will not be offset against other payments.

[3] Variable compensation paid out during the fiscal year

[4] Deferred proportion of variable compensation from the 2014 and 2015 fiscal years, which was paid out in the 2016 and 2017 fiscal years.

[5] 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). In the payout for the phantom share program 2014-2016, the final price was set at €115.00 on account of the takeover bid of Midea Group and the obligations to purchase KUKA shares were lifted.). 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.

[6] Payout of dividend equivalents in 2016 of €0.50 per provisional share from the phantom share programs 2014-2016, 2015-2017, 2016-2018 and in 2017 of €0.50 per provisional share from the phantom share programs 2015-2017 and 2016-2018.

Provisions taking the relevant total expected expense into account were recognized as at December 31, 2017 for all phantom share programs in effect on that date and that have yet to be paid out (i.e. the 2015 – 2017 and 2016 – 2018 programs) and for the ongoing LTIP (2017 – 2019) that has yet to be paid out.

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 2017 for current pensions and expected pension benefits for this group of persons totaled €9,824 (German Commercial Code) (2016: €10,041). The retirement benefits paid in this connection amounted to €0.9 million (2016: €0.8 million).

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 and for membership in any committee that is not of an interim nature, but at most for three committee memberships. A committee chairman additionally receives half the annual compensation even if he chairs more than one committee. 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 2016 and 2017

The following table compares the net compensation paid to members of the Supervisory Board in the 2016 and 2017 financial years:

Table 3: Supervisory Board compensation in 2017

in € thousands	Payment in 2017 for 2016[1]	Payment in 2018 for 2017
Dr. Andy Gu Chairman of the Supervisory Board Chairman of the Personnel Committee, Mediation Committee and Nomination Committee (from February 10, 2017)	0	199
Bernd Minning Chairman of the Supervisory Board and Chairman of the Personnel Committee, Strategy and Development Committee, Mediation Committee and Nomination Committee (until February 1, 2017)	198	19
Michael Leppek[1] Deputy Chairman of the Supervisory Board	123	150
Prof. Dr. Dirk Abel (until January 31, 2017)	60	5
Wilfried Eberhardt	30	30
Hongbo (Paul) Fang (from February 24, 2017)	0	26
Siegfried Greulich[1]	93	96
Prof. Dr. Henning Kagermann Chairman of the Strategy and Technology Committee (from May 31, 2017)	0	44
Thomas Knabel[1]	24	0
Armin Kolb[1]	76	90
Dr. Constanze Kurz[1] (from May 27, 2016 to November 14, 2017)	35	33
Carola Leitmeir[1]	76	90
Dr. Hubert Lienhard (until January 10, 2017)	60	2
Min (Francoise) Liu (from February 10, 2017)	0	74
Friedhelm Loh (until January 27, 2017)	60	4
Prof. Dr. Uwe Loos Chairman of the Technology and Production Committee (until February 28, 2017)	91	17
Prof. Dr. Michèle Morner (from February 10, 2017)	0	53
Tanja Smolenski (from December 14, 2017)	0	1
Alexander Liong Hauw Tan (from February 24, 2017)	0	86
Hans Ziegler (until December 1, 2016)	83	0

[1] 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

of KUKA Aktiengesellschaft as of December 31, 2017

ASSETS

in € thousands	Notes	Dec. 31, 2016	Dec. 31, 2017
Fixed assets	(1)		
Intangible assets		20,075	30,504
Tangible assets		87,919	90,190
Financial investments		492,916	493,891
		600,910	**614,585**
Current assets			
Inventories	(2)	18	17
Receivables from affiliated companies	(3)	414,569	481,325
Other receivables and assets	(4)	4,125	17,341
		418,712	**498,683**
Cash and cash equivalents	(5)	150,440	7,792
		569,152	**506,475**
Prepaid expenses	(6)	1,360	1,685
		1,171,422	**1,122,745**

EQUITY AND LIABILITIES

in € thousands	Notes	Dec. 31, 2016	Dec. 31, 2017
Equity			
Subscribed capital	(7)	103,416	103,416
Capital reserve		305,796	305,796
Other retained earnings		254,235	254,235
Balance sheet profit	(8)/(9)	87,611	29,027
		751,058	**692,474**
Provisions	(10)		
Pension provisions		11,519	11,457
Provision for taxes		8,832	7,051
Other provisions		45,573	31,527
		65,924	**50,035**
Liabilities	(11)		
Liabilities due to banks	(12)	250,923	269,071
Trade payables		5,593	18,536
Accounts payable to affiliated companies	(13)	83,778	88,665
Liabilities to provident funds	(14)	2,635	2,676
Other liabilities	(15)	11,511	1,288
		354,440	**380,236**
		1,171,422	**1,122,745**

Income statement

of KUKA Aktiengesellschaft for the period January 1 to December 31, 2017

in € thousands	Notes	2016	2017
Sales revenues	(16)	77,408	99,353
Other company-produced and capitalized assets	(17)	2,044	431
Other operating income	(18)	21,080	36,226
Cost of materials	(19)	-40,786	-54,713
Personnel expense	(20)	-44,838	-56,439
Depreciation and amortization of tangible and intangible assets	(21)	-10,056	-10,078
Other operating expenses	(22)	-64,492	-70,173
Income from equity investments	(23)	174,643	20,922
Income from other securities	(24)	6	0
Other interest and similar income	(25)	6,301	11,295
Depreciation of financial investments	(26)	0	-9,000
Interest and similar expenses	(27)	-7,109	-6,448
Taxes on income	(28)	-2,234	-72
Earnings after taxes		**111,967**	**-38,696**
Net income for the year/net loss for the year		**111,967**	**-38,696**
Profit carry-forward from the previous year		31,627	67,723
Transfer to retained earnings		-55,983	0
Balance sheet profit	**(9)**	**87,611**	**29,027**

KUKA Aktiengesellschaft, Augsburg

Notes to the financial statements for the financial year 2017

GENERAL INFORMATION

ACCOUNTING PRINCIPLES

The 2017 annual financial statements of KUKA Aktiengesellschaft were prepared in accordance with the provisions of the German Commercial Code (HGB) 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 (k€).

The accounting and valuation methods were unchanged compared with the financial statements as at December 31, 2017.

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, 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 if the impairment is likely to be permanent.

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 average market rate for the past ten years published by the German central bank as at October 31, 2017 with an assumed residual term of 15 years was applied. Other calculation parameters, as stated under point (10) 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.

Pursuant to section 277 of the German Commercial Code (HGB), **cost allocations** are recorded as sales revenue according to the contractual agreements and to the services provided. Following this principle, expenses to provide these services are shown under cost of materials.

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:

			Balance sheet date
Country	**Currency**	**Dec. 31, 2016**	**Dec. 31, 2017**
United Arab Emirates	AED	3.8647	4.3743
Australia	AUD	1.4596	1.5346
Brazil	BRL	3.4305	3.9729
China	CNY	7.3202	7.8044
China, Hong Kong	HKD	8.1751	9.3720
India	INR	71.5935	76.6055
Japan	JPY	123.4000	135.0100
Canada	CAD	1.4188	1.5039
Korea	KRW	1,269.3600	1.279.6100
Malaysia	MYR	4.7287	4.8536
Mexico	MXN	21.7719	23.6612
Norway	NOK	9.0863	9.8403
Poland	PLN	4.4103	4.1770
Romania	RON	4.5411	4.6597
Russia	RUB	64.3000	69.3920
Sweden	SEK	9.5525	9.8438
Switzerland	CHF	1.0739	1.1702
Singapore	SGD	1.5234	1.6024
Taiwan	TWD	34.1403	34.1922
Thailand	THB	37.7260	39.1210
Czech Republic	CZK	27.0210	25.5350
Hungary	HUF	309.8300	310.3300
USA	USD	1.0541	1.1993
UK	GBP	0.8562	0.8872

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.

	Acquisition / manufacturing costs				
in € thousands	Status as of Jan. 1, 2017	Additions	Disposals	Reclassi-fications	Status as of Dec. 31, 2017
I. Intangible assets					
1. Purchased rights and similar assets	40,524	14,767	51	-13	55,227
	40,524	**14,767**	**51**	**-13**	**55,227**
II: Tangible assets					
1. Land, similar rights and buildings	117,672	301	0	306	118,279
2. Technical plant and equipment	6,790	224	0	-1,396	5,618
3. Other equipment, factory and office equipment	22,000	2,419	319	2,604	26,704
4. Advances paid and construction in progress	1,532	5,118	0	-1,501	5,149
	147,994	**8,062**	**319**	**13**	**155,750**
III. Financial assets					
1. Shares in affiliated companies	544,593	8,975	0	0	553,568
2. Equity investments	8,000	1,000	0	0	9,000
	552,593	**9,975**	**0**	**0**	**562,568**
Total	**741,111**	**32,804**	**370**	**0**	**773,545**

Depreciation					Book value	
Status as of Jan. 1, 2017	Additions	Disposals	Reclassi-fications	Status as of Dec. 31, 2017	Status as of Dec. 31, 2016	Status as of Dec. 31, 2017
20,449	4,287	0	13	24,723	20,075	30,504
20,449	**4,287**	**0**	**13**	**24,723**	**20,075**	**30,504**
41,229	2,760	0		43,989	76,443	74,290
5,371	125	0	1,276	4,220	1,419	1,398
13,475	2,906	319	-1,289	17,351	8,525	9,353
0	0	0		0	1,532	5,149
60,075	**5,791**	**319**	**-13**	**65,560**	**87,919**	**90,190**
59,677	0	-		59,677	484,916	493,891
0	9,000	0		9,000	8,000	0
59,677	**9,000**	**-**	**-**	**68,677**	**492,916**	**493,891**
140,201	**19,078**	**319**	**0**	**158,960**	**600,910**	**614,585**

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, 2016 was due to the additional payments to the subscribed capital and capital reserve of connyun GmbH, Augsburg.

The addition shown under equity investments for the reporting year relates to corporate shares of KBee AG, Munich. During the fiscal year, KUKA AG repurchased shares in the company which up to then had been held by the members of the executive management team of KUKA Group. There are currently significant differences in opinion between the parties regarding the interpretation of certain elements of the contract in respect of the stage of development and series maturity of the robot developed by KBee AG and the arrangements for further collaboration, including the associated company and licensing agreements. As a result, the shareholding was fully written off at the end of the fiscal year, in accordance with section 252 para. 4 no. 4 of the German Commercial Code (HGB).

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

(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€8,266 (previous year: k€1,753) relates to income tax receivables. In addition there were receivables from the sales tax group of KUKA AG in the amount of k€8,543 (previous year: k€0).

As in the previous year, other assets have a residual term of less 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

As in the previous year, the total number of KUKA shares is 39,775,470. The no-par-value bearer shares have a theoretical portion of the share capital amounting to €2.60. The company's total share capital amounted to €103,416,222.00, as in the previous year. Each share carries one vote.

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.

(8) LIMITATION ON DISTRIBUTIONS

Pursuant to the 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 difference of k€929 (previous year: k€827) which is blocked for distribution.

(9) BALANCE SHEET PROFIT

In € thousands	
Balance sheet profit at Jan. 1	**87,611**
Dividend paid for fiscal 2016	-19,888
Retained earnings	**67,723**
2017 net loss	-38,696
Balance sheet profit at Dec. 31	**29,027**

(10) PROVISIONS

In € thousands	Dec. 31, 2016	Dec. 31, 2017
Pension provisions	11,519	11,457
Provision for taxes	8,832	7,051
Other provisions		
Provisions for impending loss	2,107	1,305
Personnel area	15,821	15,958
Miscellaneous provisions	27,645	14,264
Total	**65,924**	**50,035**

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:

	Dec. 31, 2016	Dec. 31, 2017
Actuarial interest rate	4.01%	3.68%
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, 2017: k€955; previous year: k€745). 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. 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 1.43% (previous year: 1.80%). 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€2,245 (previous year: k€1,942) were netted off against the corresponding coverage assets from the pension liability insurance in an amount of k€1,129 (previous year: k€880) and expenses amounting to k€27 (previous year: k€38) were netted off against income of k€1 (previous year: k€1). 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) for the last time. Employees of the com-

pany are entitled to bonus shares based on the holding period of the shares. An amount of k€37 (previous year: k€51) is included in the other provisions for all employee share programs.

KUKA has an annual phantom share program for the executive management team, which was introduced in 2012. A phantom share program of this nature was launched for the last time for the period 2016 – 2018. 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€1,551 (previous year: k€3,203) was set aside as at December 31, 2017 for future claims arising from the phantom share program for the executive management team of KUKA Aktiengesellschaft.

2017 saw the introduction of a so-called "long-term incentive program" (LTIP) for the executive management team. This is scheduled to cover the period 2017 to 2019. The LTIP is structured as a value-based system of compensation. Depending on the achievement of certain three-yearly performance indicators and certain – also three-yearly – strategic success factors, a payment is made at the end of the term. Early payment is possible only under certain conditions when leaving the Group. An amount of k€146 was set aside as at December 31, 2017 for future claims arising from the long-term incentive program for the executive management team of KUKA Aktiengesellschaft.

See the compensation report for further details about the structure of the phantom share program and LTIP.

(11) LIABILITIES

in € thousands	Remaining maturity up to 1 year	1-5 years	> 5 years	Dec. 31, 2016 Total	Remaining maturity up to 1 year	1-5 years	> 5 years	Dec. 31, 2017 Total
Liabilities due to banks	923	142,500	107,500	250,923	19,071	250,000	0	269,071
Trade payables	5,593	-	-	5,593	18,536	-	-	18,536
Accounts payable to affiliated companies	83,778	-	-	83,778	88,665	-	-	88,665
Liabilities to provident funds (affiliated companies)	124	495	2,016	2,635	118	470	2,088	2,676
Other liabilities	11,511	-	-	11,511	1,288	-	-	1,288
Total	**101,929**	**142,995**	**109,516**	**354,440**	**127,678**	**250,470**	**2,088**	**380,236**

(12) 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 and short-term utilization of the working capital line under the syndicated loan agreement.

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 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 minimum denomination per unit of €0.5 million. 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 at the balance sheet date.

Syndicated loan agreement of KUKA Aktiengesellschaft

In April 2015 KUKA Aktiengesellschaft had agreed with a banking consortium on a syndicated loan of €230 million with an original term to maturity of 5 years. After an amendment in November 2016, lines for €400 million were available to KUKA. The guarantee facility increased from €140 million to €200 million; the working capital line permitting cash and guarantee utilization rose from €90 million also to €200 million. After drawing the two contractually

defined extension options, the term of the syndicated loan agreement was extended until March 2022.

As at the reporting date, utilization of the guarantee facility and working capital line amounted to a total of €182.5 million (2016: €170.9 million).

The loan agreement existing at year-end was refinanced as of February 1, 2018, being replaced by new syndicated finance of €520 million. Of this, half each is available for guarantee line and cash drawings. As before, the cash line can also be used as a guarantee facility.

The expansion of credit volume has accommodated the extra requirement for working capital and, in particular, for guarantees and has increased the liquidity reserve.

There were no major structural changes in the design of the agreement compared with the previous syndicated loan agreement. The current agreement also includes the customary equal treatment clauses and negative pledges as well as financial covenants. It is unsecured and has a term to maturity of 5 years with two extension options, as previously.

Guarantee facilities from banks and surety companies

The guarantee facilities promised by banks and surety companies outside the syndicated loan agreement totaled €118.0 million as at December 31, 2017 (previous year: €124.0 million). €73.6 million had been utilized as at the end of the reporting period (previous year: €87.2 million).

(13) ACCOUNTS PAYABLE TO AFFILIATED COMPANIES

Accounts payable to affiliated companies relate primarily to financial resources.

(14) LIABILITIES TO PROVIDENT FUNDS

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

(15) OTHER LIABILITIES

Tax liabilities of k€952 (previous year: k€782) are reported in other liabilities. As in the previous year there are no social security liabilities.

(16) 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 85% relate to Germany and 15% to abroad.

(17) 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.

(18) OTHER OPERATING INCOME

Other operating income includes gains from foreign currency conversions in a total amount of k€33,940 (previous year: k€15,621). Income received during the fiscal year relating to other accounting periods amounted to k€2,119 (previous year: k€3,107). These mainly result from the release of provisions created in previous years.

(19) COST OF MATERIALS

in € thousands	2016	2017
Cost of raw materials and supplies and goods purchased	2,476	2,558
Cost of services purchased	38,310	52,155
Total	**40,786**	**54,713**

(20) PERSONNEL EXPENSE / EMPLOYEES

in € thousands	2016	2017
Wages and salaries	39,577	50,226
Social security payments and contributions for retirement benefits and provident funds	5,261	6,213
(of that for retirement benefits)	(462)	(228)
Total	**44,838**	56,439

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

	Annual average		Balance sheet date	
	2016	2017	2016	2017
Salaried employees	344	434	388	481
Apprentices	99	126	124	141
Employees	**443**	**560**	**512**	**622**

(21) DEPRECIATION

Scheduled depreciation on intangible and tangible fixed assets amounts to k€10,078 (previous year: k€10,056). Unscheduled depreciation on intangible and tangible fixed assets was not applied during the year under review.

(22) 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€35,280 (previous year: k€22,509). Expenses charged during the fiscal year relating to other accounting periods amounted to k€2 (previous year: k€62). For reasons of materiality, other taxes are not shown separately and this item amounting to k€884 (previous year: k€923) 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 2017.

(23) INCOME FROM EQUITY INVESTMENTS

in € thousands	2016	2017
Income from holdings in affiliated companies	119,686	29,431
Income from profit transfer agreements with affiliated companies	64,770	78,616
Expenses from loss assumptions for affiliated companies	-9,813	-87,125
Total	**174,643**	**20,922**

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.

(24) INCOME FROM OTHER SECURITIES

The income in the previous year originated from short-term securities. The resources were invested to optimize the liquid assets on a short-term basis.

(25) OTHER INTEREST AND SIMILAR INCOME

in € thousands	2016	2017
Other interest and similar income	6,301	11,295
(of that from affiliates)	(6,069)	(11,119)

(26) DEPRECIATION OF FINANCIAL INVESTMENTS

This item relates to the effects on net income of the valuation of the shareholding in KBee AG, Munich.

(27) INTEREST AND SIMILAR EXPENSES

in € thousands	2016	2017
Interest and similar expenses	-7,109	-6,448
(of that to affiliates)	-(280)	-(402)

Interest costs of pension provisions and similar obligations amounting to k€625 (previous year: k€622) are included.

(28) 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€4 (previous year: k€97) and tax credits of k€517 (previous year: k€396) for past assessment periods were taken into consideration in the tax expense.

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

(29) CONTINGENT LIABILITIES

in € thousands	2016	2017
Liabilities from guarantees	103,419	97,406
Liabilities from warranty agreements	84,948	116,234
Total	**188,367**	**213,640**

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.

(30) OTHER FINANCIAL COMMITMENTS

in € thousands	2016	2017
Commitments from rental and leasing agreements		
Due within 1 year	889	609
(of that due to affiliates)	(364)	(63)
Due in 1 to 5 years	243	222
(of that due to affiliates)	(0)	(0)
Total	**1,132**	**831**
Purchase commitments (discounted notes)		
Total	351	5,389
(of that due to affiliates)	(0)	(0)
Total	**351**	**5,389**
Other commitments		
Due within 1 year	2,706	3,487
(of that due to affiliates)	(0)	(0)
Due in 1 to 5 years	322	1,142
Total	**3,028**	**4,629**

Commitments in connection with rental and leasing agreements include leases for passenger cars and office premises. Purchase commitments mainly relate to the construction of a new production building and a multi-story car park in Augsburg.

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.

(31) 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.

	Nominal volume				Fair values			
in € thousands	**Dec. 31, 2016**	**Dec. 31, 2017**	**Maturing within 1 year**	**Maturing in 1 - 5 years**	**Dec. 31, 2016 Total**	**Maturing within 1 year**	**Maturing in 1 - 5 years**	**Dec. 31, 2017 Total**
Forward exchange transactions								
with banks	526,193	502,538	-4,691	-339	-5,030	2,067	621	2,688
of which offsetting contracts with affiliated and other companies	414,696	398,599	6,522	676	7,198	-1,085	-534	-1,619
	940,889	**901,137**	**1,831**	**337**	**2,168**	**982**	**87**	**1,069**

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, 2017, the sum of the positive fair values of external derivative financial instruments amounted to k€7,769 (previous year: k€3,705) and the negative fair values to k€5,081 (previous year: k€8,735). 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€1,305 (previous year: k€2,107).

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€6,690 (previous year: k€5,561). Over the financial year, the Executive Board members received a fixed salary including payments in kind and other compensation of k€1,896 (previous year: k€1,237). Target achievement and performance-based compensation amounted to k€4,794 (previous year: k€4,324). This amount includes payments under the phantom share program of k€3,267 (previous year: k€2,210).

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 2017 for current pensions and vested pension benefits for this group of persons totals k€9,824 (previous year: k€10,041).

In fiscal 2017 the members of the Supervisory Board received a total of k€1,020 (previous year: k€1,010) 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 and the Supervisory Board can be accessed by any interested parties on the company's website (www.kuka.com) Investor Relations / Corporate Governance section.

NOTIFICATION ON THE EXISTENCE OF SHAREHOLDINGS PURSUANT TOSECTION 160 PARA. 1 NO. 8 OF THE GERMAN STOCK CORPORATION ACT (AKTG)

The notifications submitted during fiscal 2017 are listed below:

1. Midea Group Co., Ltd. (Foshan, China) notified us of the following in a letter dated January 9, 2017 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, Zugspitzstrasse 140, 86165 Augsburg, exceeded the threshold of 75% of the voting rights on January 6, 2017 and as of this date comprises 94.55% (37,605,732 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.”

2. Dr. Friedhelm Loh (Germany) notified us of the following in a letter dated January 10, 2017 pursuant to section 21 para. 1 of the German Securities Trading Act (WpHG):

   “The share of the voting rights of Dr. Friedhelm Loh (Germany) in KUKA Aktiengesellschaft, Zugspitzstrasse 140, 86165 Augsburg, fell below the threshold of 10% of the voting rights on January 6, 2017 and as of this date comprises 0.0% (0 voting rights).”

3. Voith Familien Verwaltung GmbH (Mannheim, Germany) and Familiengesellschaft J.M. Voith GbR (Mannheim, Germany) notified us of the following in a letter dated January 10, 2017 pursuant to section 21 para. 1 of the German Securities Trading Act (WpHG):

   “The share of the voting rights of Voith Familien Verwaltung GmbH (Mannheim, Germany) and Familiengesellschaft J.M. Voith GbR (Mannheim, Germany) in KUKA Aktiengesellschaft, Zugspitzstrasse 140, 86165 Augsburg, fell below the threshold of 25% on January 6, 2017 and as of this date comprises 0.0% (0 voting rights).”

4. Midea Group Co., Ltd. (Foshan, China) notified us of the following in a letter dated August 21, 2017 pursuant to section 21 para. 1 and section 25 para. 1(1) of the German Securities Trading Act (WpHG):

   "The share of Midea Group Co., Ltd. (Foshan, China) in financial instruments pursuant to section 25 para. 1(1) of the German Securities Trading Act (WpHG) which are geared towards the acquisition of shares in KUKA Aktiengesellschaft, Zugspitzstrasse 140, 86165 Augsburg, exceeded the threshold of 75% on August 18, 2017 and as of this date comprises 81.04% (32,233,536 voting rights).

   These financial instruments are held directly by Midea Electric Netherlands (I) B.V. and are allocated via Guangdong Midea Electric Company Limited to
   Midea Group Co., Ltd."

5. Midea Group Co., Ltd. (Foshan, China) notified us of the following in a letter dated January 9, 2017 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, Zugspitzstrasse 140, 86165 Augsburg, exceeded the threshold of 75% of the voting rights on August 30, 2017 and as of this date comprises 94.55% (37,605,732 voting rights).

   These voting rights are held directly by Midea Electric Netherlands (I) B.V. (allocation via Guangdong Midea Electric Company Limited to Midea Group Co., Ltd.) as well as MECCA International (BVI) Limited (allocation via Midea International Corporation Company Limited to Midea Group Co., Ltd.)."

EVENTS AFTER THE BALANCE SHEET DATE

KUKA AG concluded a new syndicated loan agreement with a bank consortium on February 1, 2018 with a volume of €520.0 million and in doing so replaced and refinanced the existing credit facility of €400.0 million. The new agreement includes a surety and guarantee line ("guaranteed credit line") in the amount of €260.0 million and a working capital line ("cash line"), likewise in the amount of €260.0 million, which can also be used for sureties and guarantees. The term of the new loan agreement is five years with two one-year extension options additionally agreed. This gave the Group considerably extended leeway for financing further growth until 2025. The syndicated loan agreement remains unsecured as before and contains only the customary equal treatment clauses and negative pledges. Unchanged financial covenants were agreed with thresholds for leverage (net financial liabilities/EBITDA) and interest coverage (EBITDA/net interest expense).

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

Dr. Yanmin (Andy) Gu (since February 10, 2017)
Panyu, Guangzhou, China
Chairman of the Supervisory Board of KUKA Aktiengesellschaft
Board Director, Vice President Midea Group

Membership in comparable controlling bodies of business enterprises in Germany and abroad:

- Guangdong Midea Refrigeration Equipment Co. Ltd., Foshan /China
- Guangdong Midea Commercial Conditioning Equipment Co. Ltd., Foshan /China
- Midea Group Wuhan Refrigeration Equipment Co. Ltd., Wuhan /China
- Guangdong Midea Group Wuhu Refrigeration Equipment Co. Ltd., Foshan /China
- Guangdong Midea Household Appliances Import and Export Trade Co., Ltd., Foshan /China
- Foshan Midea Carrier Air-Conditioning Equipment Co. Ltd., Foshan /China
- Guangdong Midea Intelligent Technologies Co. Ltd., Foshan /China
- Midea Investment (Asia) Company Limited, Hong Kong /China
- Midea Electric Trading (Singapore) Co. Pte. Ltd. /Singapore
- Midea Electrics Netherlands B.V., Amsterdam /Netherlands
- Midea Intelligent Technologies (Singapore) Pte. Ltd. /Singapore
- Midea Italia S.R.L.; Milan /Italy
- Midea Electric Espana S.R.L., Madrid /Spain
- Servotronix Motion Control Ltd. /Israel

Bernd Minning (until February 1, 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

Michael Leppek

Stadtbergen

Deputy Chairman of the Supervisory Board of KUKA Aktiengesellschaft

Employee representative on the Supervisory Board

1st Authorized Representative of IG Metall trade union, Augsburg branch

Membership in other statutory supervisory boards

- 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

Membership in comparable controlling bodies in Germany and abroad:

- ATC GmbH (Aldenhoven Testing Center of RWTH Aachen University), Aachen

Wilfried Eberhardt

Aichach

Employee representative

Chief Marketing Officer of KUKA Aktiengesellschaft

Hongbo (Paul) Fang (since February 24, 2017)

Foshan, China

Chairman and CEO Midea Group

Siegfried Greulich

Augsburg

Employee representative

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

Armin Kolb

Augsburg

Employee representative

Chairman of the Works Council of the KUKA Plants at Augsburg

Prof. Dr. Henning Kagermann (since May 31, 2017)

Königs Wusterhausen

President of Acatech – German Academy of Science and Engineering

Membership in other statutory supervisory boards

- Deutsche Bank AG
- Deutsche Post AG
- Munich Reinsurance Company

Dr Constanze Kurz (until November 14, 2017)

Frankfurt am Main

Employee representative on the Supervisory Board

Union Secretary to the Executive Committee of the IG Metall trade union

Membership in other statutory supervisory boards

- SMS GmbH and SMS group GmbH, Hilchenbach (until November 30, 2017)
- DMG MORI AG, Bielefeld (until November 30, 2017)

Carola Leitmeir

Großaitingen

Employee representative

Member of the Works Council of the KUKA Plants at Augsburg

Min (Francoise) Liu (since February 10, 2017)
Deliang, Shunde, China
HR Director Midea Group

Membership in comparable controlling bodies of business enterprises in Germany and abroad:

- Guangdong GMCC Refrigeration Equipement Co. Ltd., Foshan /China
- Midea Smart Home Technology Co. Ltd., Shenzhen /China
- Guangdong Midea Smart Link Home Technology Co. Ltd., Foshan /China
- Midea Electric Espana S.R.L., Madrid /Spain
- Midea Polska SP.Z.O.O, Warsaw /Poland

Dr Hubert Lienhard (until January 10, 2017)
Heidenheim
CEO of Voith GmbH & Co. KGaA

Membership in other statutory supervisory boards:

- EnBW AG
- Heraeus Holding GmbH
- SGL Carbon SE
- SMS Holding GmbH
- Voith Turbo Beteiligungen GmbH (Chairman)

Membership in comparable controlling bodies in Germany and abroad:

- Voith Hydro Holding GmbH & Co. KG (Chairman)
- Voith Digital Solutions Holding GmbH (Chairman)
- Voith Turbo GmbH & Co. KG (Chairman)

Friedhelm Loh (until January 27, 2017)
Dietzhölztal
Owner and CEO of the Friedhelm Loh Group, Haiger
Senator of Fraunhofer Gesellschaft

Membership in statutory supervisory boards:

- Deutsche Messe AG
- Klöckner & Co SE, Member of the Supervisory Board

Membership in comparable controlling bodies of business enterprises in Germany and abroad:

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

Group mandates of Friedhelm Loh Group:

- Cito Benelux B.V., Zevenaar, Niederlande, member of Supervisory Board
- Cito Benelux (Onroerend Goed) B.V., Zevenaar, Niederlande, member of Supervisory Board
- 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 (until February 28, 2017)
Stuttgart
Industrial Consultant

Membership in other statutory supervisory boards:

- Dorma Holding GmbH + Co. KGaA, Ennepetal

Membership in comparable controlling bodies in Germany and abroad:

- Bharat Forge Aluminiumtechnik, Brand-Erbisdorf
- CDP Bharat Forge GmbH, Ennepetal

Prof. Dr. Michèle Morner (since February 10, 2017)

Rosengarten

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

Scientific Director at the Institute of Corporate Management and Governance in Berlin [wifucg]

Membership in other statutory supervisory boards:

- Storch-Ciret Holding GmbH

Alexander Tan (since February 24, 2017)

Guangzhou, China

Deputy CFO Midea Group

Membership in comparable controlling bodies of business enterprises in Germany and abroad:

- Misr Refrigeration and Air Conditioning Manufacturing Company, S.A.E., Giza /Egypt

Tanja Smolenski, (since December 14, 2017)

Berlin

Employee representative

Political Secretary to the Executive Committee of the IG Metall trade union

Head of the Fundamental Issues and Social Policy department of the Executive Committee of the IG Metall trade union, Berlin office

EXECUTIVE BOARD

Dr. Till Reuter
Pfäffikon, Switzerland
Chief Executive Officer

Membership in other statutory supervisory boards:

- Dr. Steiner Holding AG

Membership in comparable controlling bodies of business enterprises in Germany and abroad:

- Rinvest AG, Pfäffikon /Switzerland
- Midea Group Executive Committee, Foshan/China

Peter Mohnen
Munich
Chief Financial Officer

SHAREHOLDINGS OF KUKA AKTIENGESELLSCHAFT

	Name and registered office of the company	Currency	Share of euqity in %	Equity in thousands local currency	Net income in thousands local currency		Method of conso-lidation	Seg-ment
	Germany							
1	Bopp & Reuther Anlagen-Verwaltungsgesellschaft mbH, Augsburg	EUR	100.00	19,271	-1,260		k	SO
2	connyun GmbH, Augsburg	EUR	100.00	6,764	-2,235	6)	k	SO
3	Device Insight GmbH, München	EUR	50.01	2,879	-47	4)	k	SO
4	Faude Automatisierungstechnik GmbH, Gärtringen	EUR	100.00	-1,067	-868		k	SY
5	KUKA Industries GmbH, Augsburg (1)	EUR	100.00	8,573	-	1)	k	SY
6	KUKA Industries GmbH & Co. KG, Obernburg (1)	EUR	100.00	190	-	1)	k	SY
7	KUKA Roboter GmbH, Augsburg (1)	EUR	100.00	50,614	-	1)	k	RO
8	KUKA Systems GmbH, Augsburg (1)	EUR	100.00	23,794	-	1)	k	SY
9	Reis Asia Pacific GmbH, Obernburg	EUR	100.00	24	0		k	SY
10	Reis GmbH, Obernburg	EUR	100.00	73	2		k	SY
11	Reis Group Holding GmbH & Co. KG, Obernburg (1)	EUR	100.00	26,891	-	1)	k	SY
12	Reis Holding GmbH, Obernburg	EUR	100.00	2	-23		k	SY
13	Swisslog (Deutschland) GmbH, Puchheim	EUR	100.00	-103,617	-6,563	2)	k	SL
14	Swisslog Augsburg GmbH, Augsburg	EUR	100.00	563	534	2)	k	SL
15	Swisslog GmbH, Dortmund	EUR	100.00	1,438	0	2)	k	SL
16	Swisslog Healthcare GmbH, Westerstede	EUR	100.00	699	0	2)	k	SL
17	Verwaltungsgesellschaft Walter Reis GmbH, Obernburg	EUR	100.00	43	2		k	SY
18	Visual Components GmbH, München / Deutschland	EUR	100.00	72	35	5)	k	RO
19	Walter Reis GmbH & Co KG, Obernburg (1)	EUR	100.00	11,546	-	1)	k	SY
20	WR Vermögensverwaltungs GmbH, Obernburg	EUR	100.00	1,849	-63		k	SY
21	KBee AG, München	EUR	45.00	2,430	-4,315	2)	at	RO
22	RoboCeption GmbH, München	EUR	25.10	141	8	2)	b	RO
23	Freadix FryTec GmbH, Augsburg	EUR	100.00	20	0		nk	SO
24	IWK Unterstützungseinrichtung GmbH, Karlsruhe	EUR	100.00	26	0		nk	SO
25	KUKA Unterstützungskasse GmbH, Augsburg	EUR	100.00	25	0		nk	SY
26	Schmidt Maschinentechnik GmbH i.L., Niederstotzingen	EUR	100.00	-	-	7)	nk	SY
	Other Europe							
27	Easy Conveyors B.V. , Nuenen / Netherlands	EUR	100.00	747	97	2)	k	SL
28	KUKA Automatisering + Robots N.V., Houthalen / Belgium	EUR	100.00	2,661	560	2)	k	SY
29	KUKA Automatisme + Robotique S.A.S., Villebon-sur-Yvette / France	EUR	100.00	1,548	-407	2)	k	RO
30	KUKA Industries ČR spol. s r.o., Chomutov / Czech Republic	CZK	100.00	57,529	-38,287	2)	k	SY
31	KUKA Industries Italia srl , Bellusco / Italy	EUR	100.00	180	1	2)	k	SY
32	KUKA Nordic AB, Västra Frölunda / Sweden	SEK	100.00	3,205	-330	2)	k	RO
33	KUKA Roboter CEE GmbH, Linz / Austria	EUR	100.00	3,591	3,141	2)	k	RO
34	KUKA Roboter Italia S.p.A., Rivoli / Itlay	EUR	100.00	10,434	2,946	2)	k	RO
35	KUKA Roboter Schweiz AG, Neuenhof / Switzerland	CHF	100.00	484	15	2)	k	RO
36	KUKA Robotics Hungária Ipari Kft., Taksony / Hungary	EUR	100.00	13,865	3,864	2)	k	RO
37	KUKA Robotics OOO, Moskau / Russia	RUB	100.00	32,071	-1,020	2)	k	RO
38	KUKA Robotics UK LTD, Wednesbury / United Kingdom	GBP	100.00	859	599	2)	k	RO
39	KUKA Robotics Ireland LTD, Dublin / Irland	EUR	100.00	0	0	2)	k	RO
40	KUKA Robots IBÉRICA S.A., Vilanova i la Geltrú / Spain	EUR	100.00	5,611	1,326	2)	k	RO
41	KUKA S-BASE s.r.o. (in Liquidation), Roznov p.R. / Czech Republic	CZK	100.00	922	-46	2) 7)	k	SY
42	KUKA Sistemy OOO, Togliatti / Russia	RUB	100.00	19,052	-7,857	2)	k	SY
43	KUKA Systems Aerospace SAS, Bordeaux-Merignac / France	EUR	100.00	13,543	6,691	2)	k	SY
44	KUKA Systems France S.A., Montigny / France	EUR	100.00	-37	-36	2)	k	SY
45	KUKA Systems Slowakei, spol. S r.o., Dubnica nad Váhom / Slovakia	EUR	100.00	892	1,046	2)	k	SY
46	KUKA Systems SRL, Sibiu / Romania	RON	100.00	4,853	-5,539	2)	k	SY
47	KUKA Systems UK Ltd., Halesowen / United Kingdom	GBP	100.00	7,472	3,043	2)	k	SY
48	Reis Espana S.L. , Esplugues de Llobregat (Barcelona) / Spain	EUR	100.00	-	-	7)	k	SY
49	Reis France SCI, Pontault Combault / France	EUR	100.00	855	-20	2)	k	SY
50	Swisslog (UK) Ltd., Redditch / United Kingdom	GBP	100.00	-7,896	-3,072	2)	k	SL
51	Swisslog AB, Partille / Sweden	SEK	100.00	12,292	9,229	2)	k	SL
52	Swisslog Accalon AB, Boxholm / Sweden	SEK	100.00	31,664	21,039	2)	k	SL
53	Swisslog AG, Buchs / Switzerland	CHF	100.00	5,642	1,226	2)	k	SL
54	Swisslog AS, Oslo / Norway	NOK	100.00	38,304	949	2)	k	SL
55	Swisslog B.V., Culemborg / Netherlands	EUR	100.00	1,733	520	2)	k	SL
56	Swisslog Ergotrans B.V., Apeldoorn / Netherlands	EUR	100.00	901	-76	2)	k	SL
57	Swisslog Evomatic GmbH, Sipbachzell / Austria	EUR	100.00	-11,469	-2,227	2)	k	SL
58	Swisslog France SAS, Saint-Denis / France	EUR	100.00	-574	-525	2)	k	SL
59	Swisslog Holding AG, Buchs / Switzerland	CHF	100.00	383,100	35,810	2)	k	SL
60	Swisslog Italia SpA, Mailand / Italy	EUR	100.00	1,401	-1,000	2)	k	SL
61	Swisslog Luxembourg S.A., Ell / Luxembourg	EUR	100.00	-963	161	2) 7)	k	SL
62	Swisslog N.V., Wilrijk / Belgium	EUR	100.00	-640	-776	2)	k	SL
63	Tecnilab S.p.A., Cuneo / Italy	EUR	100.00	405	-2,187	2)	k	SL
64	Visual Components Oy, Espoo / Finland	EUR	100.00	4,190	1,074	5)	k	RO
65	Metaalwarenfabriek 's-Hertogenbosch B.V., s-Hertogenbosch / Netherlands	EUR	100.00	-1,041	-11	3)	nk	SO

	Name and registered office of the company	Currency	Share of euqity in %	Equity in thousands local currency	Net income in thousands local currency		Method of conso-lidation	Seg-ment
	North America							
66	KUKA Assembly and Test Corp., Saginaw, Michigan / USA	USD	100.00	14,106	9,989	2)	k	SY
67	KUKA de Mexico S.de R.L.de C.V., Mexico City / Mexico	MXN	100.00	38,241	21,837	2)	k	RO
68	KUKA Robotics Canada Ltd., Saint John NB / Canada	CAD	100.00	1,381	6	2)	k	RO
69	KUKA Robotics Corp., Sterling Heights, Michigan / USA	USD	100.00	2,117	-1,021	2)	k	RO
70	KUKA Systems de Mexico S. de R.L. de C.V., Mexico City / Mexico	MXN	100.00	81,245	-985	2)	k	SY
71	KUKA Recursos S. de R.L. de C.V., Mexico City / Mexico	MXN	100.00	-	-	2)	k	SY
72	KUKA Systems North America LLC., Sterling Heights, Michigan / USA,	USD	100.00	44,406	76,928	2)	k	SY
73	KUKA Aerospace Holdings LLC, Michigan / USA	USD	100.00	-	-	2)	k	SY
74	KUKA Toledo Production Operations, LLC., Toledo, Ohio / USA (2)	USD	100.00	62,616	24,387	2)	k	SY
75	KUKA U.S. Holdings Company LLC., Shelby Township, Michigan / USA	USD	100.00	104,182	152,129	2)	k	SO
76	Reis Robotics USA Inc. , Elgin/Illinois / USA	USD	100.00	400	106	2)	k	SY
77	Swisslog Logistics, Inc., Newport News / USA	USD	100.00	26,253	3,495	2)	k	SL
78	Swisslog USA Inc., City of Dover / USA	USD	100.00	-5,360	2,182	2)	k	SL
79	Translogic CORPORATION, Denver / USA	USD	100.00	47,187	5,404	2)	k	SL
80	Translogic Ltd. (Canada), Mississauga / Kanada	CAD	100.00	2,687	395	2)	k	SL
81	Visual Components North America Corporation, Michigan / USA	USD	100.00	-84	77	5)	k	RO
82	Pipeline Health Holdings LLC., Delaware / USA	USD	25.00	17,823	-6,745		at	SL
	Latin America							
83	KUKA Industries Brasil Sistemas de Automoção Ltda., Sao Paulo / Brazil	BRL	100.00	72	-336	2)	k	SY
84	KUKA Roboter do Brasil Ltda., Sao Paulo / Brazil	BRL	100.00	-1,499	-2,429	2)	k	RO
85	KUKA Systems do Brasil Ltda., Sao Bernardo do Campo SP / Brazil	BRL	100.00	-37,740	7,590	2)	k	SY
86	Reis Robotics do Brasil Ltda., Sao Paulo / Brazil	BRL	100.00	204	-153	2)	k	SY
	Asia/Australia							
87	KUKA Industries Automation (China) Co., Ltd., Kunshan / China	CNY	100.00	21,130	-24,507	2)	k	SY
88	KUKA Industries Singapore PTE. Ltd., Singapur / Singapore	SGD	100.00	1,422	495	2)	k	SY
89	KUKA Management (Shanghai) Co. Ltd., Shanghai / China	CNY	100.00	30,652	9,686	2)	k	SY
90	KUKA Robot Automation Malaysia Sdn BhD, Kuala Lumpur / Malaysia	MYR	100.00	7,360	1,113	2)	k	RO
91	KUKA Robot Automation Taiwan Co. Ltd., Chung-Li City / Taiwan	TWD	99.90	-54,094	53,873	2)	k	RO
92	KUKA Robotics (China) Co. Ltd., Shanghai / China	CNY	100.00	223,678	37,808	2)	k	RO
93	KUKA Robotics (India) Pvt. Ltd., Haryana / India	INR	100.00	103,437	24,127	2)	k	RO
94	KUKA Robotics (Thailand) Co., Ltd., Bangkok / Thailand	THB	100.00	59,274	-31,861	2)	k	RO
95	KUKA Robotics Australia Pty. Ltd., Victoria / Australia	AUD	100.00	-190	-407	2)	k	RO
96	KUKA Robotics Japan K.K., Tokyo / Japan	JPY	100.00	151,166	-35,293	2)	k	RO
97	KUKA Robotics Korea Co. Ltd., Kyunggi-Do / South Korea	KRW	100.00	-512	-1,499	2)	k	RO
98	KUKA Robotics Manufacturing China Co. Ltd., Shanghai City / China	CNY	100.00	171,073	81,285	2)	k	RO
99	KUKA Systems (China) Co. Ltd., Shanghai / China	CNY	100.00	66,207	19,224	2)	k	SY
100	KUKA Systems (India) Pvt. Ltd., Pune / India	INR	100.00	-43,270	-26,649	2)	k	SY
101	Reis Robotics China Co. Ltd. (Shanghai), Shanghai / China	CNY	100.00	-6,734	-1,701	2) 7)	k	SY
102	Swisslog (Kunshan) Co. Ltd. , Kunshan / China	CNY	100.00	22,245	1,653	2)	k	SL
103	Swisslog Asia Ltd., Hongkong / China	HKD	100.00	4,937	-151	2)	k	SL
104	Swisslog Australia Pty Ltd., Sydney / Australia	AUD	100.00	-1,371	-795	2)	k	SL
105	Swisslog Healthcare Trading MEA LLC., Emirate of Dubai / United Arab Emirates	AED	49.00	495	395	2)	k	SL
106	Swisslog Korea Co. Ltd, Bucheon si, Kyeonggi-do, Südkorea / South Korea	KRW	100.00	382	-129	2)	k	SL
107	Swisslog Malaysia Sdn Bhd, Selangor Darul Ehsan / Malaysia	MYR	100.00	9,150	5,420	2)	k	SL
108	Swisslog Middle East LLC., Dubai / United Arab Emirates	AED	51.00	-2,940	-1,267	2)	k	SL
109	Swisslog Pte Ltd Singapur, Singapur / Singapore	SGD	100.00	4,895	2,071	2)	k	SL
110	Swisslog Shanghai Co. Ltd., Shanghai / China	CNY	100.00	116,208	1,801	2)	k	SL
111	Swisslog Singapore Pte Ltd., Singapur / Singapore	SGD	100.00	3,837	613	2)	k	SL
112	Yawei Reis Robot Manufacturing (Jiangsu) Co. Ltd., Yangzhou City / China	CNY	49.00	40,942	-3,893	2)	at	SY
113	Chang'an Reis (Chongqing) Robotic Intelligent Equipment Co. Ltd, Chongqing / China	CNY	50.00	24,538	-3,162	2)	at	SY

*) Companies that have made use of the exemption pursuant to section 264 para. 3 or section 264 b of the German Commercial Code

**) Principle place of business

1) After profit transfers
2) Annual financial statements as of December 31, 2016
3) Annual financial statements as of June 30, 2016
4) Abbreviated financial year from January 01 2017 to October 31, 2016
5) Interim financial statement July 01, 2017 to December 19, 2017 change of controll
6) Abbreviated financial year from May 03, 2016 to December 31
7) In liquidation

PROPOSED APPROPRIATION OF PROFIT

The net loss for the fiscal year 2017 amounting to k€38,696 is carried forward in the balance sheet profit. 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€29,027 and that the remaining amount of k€9,139 should be carried forward.

GROUP ACCOUNTS

KUKA Aktiengesellschaft prepares consolidated financial statements in accordance with IFRS and these are submitted to the Federal Gazette and can be viewed on the central register of companies at (www.Unternehmensregister.de). The consolidated financial statements include all direct and indirect shareholdings of KUKA Aktiengesellschaft.

KUKA Aktiengesellschaft is a 94.55% indirect subsidiary of Midea Group Co. Ltd., Foshan City, Guangdong Province, China. KUKA Aktiengesellschaft is incorporated in the consolidated financial statements of Midea Group Co. Ltd., Foshan City, Guangdong Province, China, which are available from the website www.cninfo.com.cn or directly on the website of Midea Group Co. Ltd. at www.midea.com/global/investors/financial_statements.

Augsburg, February 23, 2018

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 23, 2018

KUKA Aktiengesellschaft

The Executive Board

Dr. Till Reuter Peter Mohnen

INDEPENDENT AUDITOR'S REPORT

To KUKA Aktiengesellschaft, Augsburg

Report on the Audit of the Annual Financial Statements and of the Management Report

Opinions

We have audited the annual financial statements, which comprise the balance sheet, the income statement and the notes to the financial statements, including the recognition and measurement policies presented therein. In addition, we have audited the combined management report of KUKA AG and the KUKA Group for the financial year from January 1 to December 31, 2017.

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

- the accompanying annual financial statements comply, in all material respects, with the requirements of German commercial law applicable to business corporations and give a true and fair view of the assets, liabilities and financial position of the Company as at December 31, 2017 and of its financial performance for the financial year from January 1, 2017 to December 31, 2017 in compliance with German Legally Required Accounting Principles, and
- the accompanying management report as a whole provides an appropriate view of the Company's position. In all material respects, this management report is consistent with the annual financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development.

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

Basis for the Opinions

We conducted our audit of the annual financial statements and of the management report in accordance with Section 317 HGB and the EU Audit Regulation No. 537/2014 (referred to subsequently as "EU Audit Regulation") and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer

[Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the “Auditor’s Responsibilities for the Audit of the Annual Financial Statements and of the Management Report” section of our auditor’s report.
We are independent of the Company in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Article 10 (2) point (f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Article 5 (1) of the EU Audit Regulation. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinions on the annual financial statements and on the management report.

Key Audit Matters in the Audit of the Annual Financial Statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the annual financial statements for the financial year from January 1, 2017 to December 31, 2017. These matters were addressed in the context of our audit of the annual financial statements as a whole, and in forming our opinion thereon, we do not provide a separate opinion on these matters.

Recoverability of shares in affiliated companies

Please refer to the section “Accounting and Valuation” of the notes for further information on applied accounting and valuation principles.

THE FINANCIAL STATEMENT RISK
In the annual financial statements of KUKA AG as of December 31, 2017, shares in affiliated companies are shown in the amount of EUR 494 million. The shares in affiliated companies comprise 44 % of the total assets and thereby have significant effect on the net asset position of the Company.
The shares in affiliated companies are carried at cost or, in the case of expected permanent impairment, at the lower fair value. The Company determines fair value with the help of the discounted cash flow method.
The cash flows utilized for the discounted cash flow method are based on investment-specific planning for the next three years, which are rolled forward and adjusted using assumptions regarding the long-term growth rates. The respective capitalization rate is derived from the return on an alternative investment with comparable risk. If the fair value is lower

than the carrying amount, then it is investigated based on qualitative and quantitative criteria whether the impairment is expected to be permanent.
The calculation of the fair value according to the discounted cash flow method is complex and, with respect to the assumptions made, is to a large extent dependent on estimates and judgments of the Company. This applies in particular to the estimate of the future cash flows and long-term growth rates, the determination of the capitalization rate and the assessment of the permanence of the impairment.
The risk exists for the financial statements that the shares in affiliated companies are not recoverable.

OUR AUDIT APPROACH
We have performed our audit using a risk-based approach. On the basis of the information obtained in connection with our audit, we initially assessed for which investments there are indications for a required write-down. Subsequently, with the involvement of our valuation specialists we assessed the appropriateness of the significant assumptions as well as the Company's valuation model. For this purpose, we discussed the expected cash flows and the assumed long-term growth rates with individuals responsible for the planning. In addition, we made comparisons with other available forecasts, for example, for tax purposes and the budget approved by management. Furthermore, we assessed the consistency of the assumptions with external market forecasts.
In addition, we convinced ourselves as to the previous forecast quality of the Company by comparing planning of earlier financial years with the actually realized results and by analyzing variances.
We have compared the assumptions and parameters underlying the capitalization rate, especially the risk-free interest rate, the market risk premium and the beta factor with our own assumptions and publicly available data. In order to account for the existing forecast uncertainty, we additionally investigated potential changes in capitalization rate and the long-term growth rates on the fair value by calculating alternative scenarios and comparing these with the valuation results of the Company (sensitivity analysis). To ensure the computational correctness of the valuation model utilized, we developed an understanding of the Company's calculations on the basis of a risk-oriented selection of elements.

OUR OBSERVATIONS

The underlying procedure for the impairment test of the shares in affiliated companies is appropriate and is in line with the valuation principles. The assumptions and parameters of the Company are appropriate.

Responsibilities of Management and the Supervisory Board for the Annual Financial Statements and the Management Report

Management is responsible for the preparation of the annual financial statements that comply, in all material respects, with the requirements of German commercial law applicable to business corporations, and that the annual financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Company in compliance with German Legally Required Accounting Principles. In addition, management is responsible for such internal control as they, in accordance with German Legally Required Accounting Principles, have determined necessary to enable the preparation of annual financial statements that are free from material misstatement, whether due to fraud or error.
In preparing the annual financial statements, management is responsible for assessing the Company's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting, provided no actual or legal circumstances conflict therewith.

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

Auditor's Responsibilities for the Audit of the Annual Financial Statements and of the Management Report

Our objectives are to obtain reasonable assurance about whether the annual financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the management report as a whole provides an appropriate view of the Company's position and, in all material respects, is consistent with the annual financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our opinions on the annual financial statements and on the management report.
Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Section 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these annual financial statements and this management report.

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

- identify and assess the risks of material misstatement of the annual financial statements and of the management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.
- obtain an understanding of internal controls relevant to the audit of the annual financial statements and of arrangements and measures (systems) relevant to the audit of the management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems.
- evaluate the appropriateness of accounting policies used by management and the reasonableness of estimates made by management and related disclosures.

- conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the annual financial statements and in the management report or, if such disclosures are inadequate, to modify our respective opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to be able to continue as a going concern.
- evaluate the overall presentation, structure and content of the annual financial statements, including the disclosures, and whether the annual financial statements present the underlying transactions and events in a manner that the annual financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Company in compliance with German Legally Required Accounting Principles.
- evaluate the consistency of the management report with the annual financial statements, its conformity with [German] law, and the view of the Company's position it provides.
- perform audit procedures on the prospective information presented by management in the management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by management as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.
We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, the related safeguards.
From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the annual financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

Other Legal and Regulatory Requirements

Further Information pursuant to Article 10 of the EU Audit Regulation

We were elected as auditor by the annual general meeting on May 31, 2017. We were engaged by the Supervisory Board on January 19, 2018. We have been the auditor of the KUKA AG without interruption since the financial year 2011.
We declare that the opinions expressed in this auditor's report are consistent with the additional report to the Audit Committee pursuant to Article 11 of the EU Audit Regulation (long-form audit report).
The fee for auditing services conducted by KPMG AG Wirtschaftsprüfungsgesellschaft [Public Audit Firm] was due mainly to the audit of the financial statements and management report of KUKA AG as well as several annual audits of affiliated companies of KUKA AG including legal extensions of contracts and key audit areas agreed with the Supervisory Board. Moreover, a integrated audit review of half-year financial statements has taken place.
In fiscal year 2017 we rendered tax advisory services for employees delegated abroad by KUKA AG or affiliated companies in connection with their income tax return. In addition we rendered consulting services within a Software Asset Management Project. All services were approved by the audit committee. The services had neither individually nor together an impact on the audited statement.

German Public Auditor Responsible for the Engagement

The German Public Auditor responsible for the engagement is Rainer Rupprecht.

Munich, February 23, 2018

KPMG AG
Wirtschaftsprüfungsgesellschaft
[original German version signed by:]

(Signature) Rupprecht	(Signature) Krucker
Wirtschaftsprüfer	Wirtschaftsprüfer
[German Public Auditor]	[German Public Auditor]

Disclosures in accordance with pay transparency act

Promoting diversity in KUKA Group

KUKA promotes diversity among its employees, as we need a larger talent pool, especially considering the skills shortage forecast for the future. Living and promoting diversity and benefiting from different experiences and talents is part of the corporate culture at KUKA. We are convinced that the appreciation of our diversity has a positive effect on KUKA as a company, on how we deal with our customers and on our role in society.

Our aim is to create a working environment that is free of prejudice and characterized by acceptance and tolerance. KUKA therefore supports the internal KUKA "Women in Network" orangeWIN to pursue diversity within the Group and to promote the advancement of women. The orangeWIN women's network organized 21 different event formats during the year under review with some 360 women taking part. KUKA has also been involved in the Augsburg cross mentoring program since 2011, which is committed to gender equality at work and is involved in MigraNet that aims to achieve the professional integration of people from a migrant background.

Measures for ensuring equal pay for women and men

Application of collective wage agreements

At its Bavarian locations covered by collective bargaining, KUKA continues to consistently apply the regional collective agreements for the Bavarian metal and electrical industry, especially the collective wage agreement and the framework remuneration agreement. In some instances, in-company wage agreements are in place for locations outside of Bavaria. The employees are always allocated to groups on a gender-neutral basis according to the requirements of the work assignment as a whole and the knowledge and skills required to complete the requested work assignment. The payment of all variable components of remuneration is based solely on the collective agreements without a gender-specific distinction.

Gender-neutral job descriptions

Internal and external advertisements for positions to be filled are always neutral in terms of gender.

Personnel selection with headhunters

When working together with external headhunters, we always take great care to ensure we have an application from at least one woman among the top 3 candidates for a position to be filled.

Agreement of targets and profit sharing

The remuneration for corporate success through employee profit sharing is paid regardless of the number of working hours. In particular, this prevents indirect discrimination of female employees, for example, who more frequently work part time.

Consistent regulations and approaches are employed for both genders in the agreement of targets for non pay-scale employees.

The average number of full-time employees in Germany in 2016 was 4,717 while part-time employees numbered 356. Broken down by gender, there were 864 female and 4,209 male employees in Germany in 2016 on average. The average number of employees in total was thus 5,072.

Full-time and part-time employees in Germany

Gender	Full-time	Part-time	Ø employees[1] 2016
female	633	231	864
male	4,084	125	4,209
Total	**4,717**	**356**	**5,072**

[1] Reporting period in accordance with pay transparency act