

KUKA



H1/17
INTERIM REPORT

Developments in the second quarter of 2017

Orders received increase by 12.8% to a record level of 1,007.5 million euro in Q2/17.

Sales revenues grow by 43.1% to a record level of 1,007.7 million euro.

The **EBIT margin** reaches 5.4% before purchase price allocation for Swisslog and before growth investment.

Earnings after taxes stand at 33.6 million euro after 9.5 million euro in Q2/16.

Guidance increased: sales revenues of about 3.3 billion euro and EBIT margin of more than 5.5% before purchase price allocation for Swisslog and before growth investment.



Key figures

in € millions	H1/16	H1/17	Change in %
Orders received	1,639.9	1,974.8	20.4
Order backlog (June 30)	1,923.0	2,237.4	16.3
Sales revenues	1,333.2	1,798.5	34.9
Gross profit	361.9	404.6	11.8
in % of sales revenues	27.1	22.5	-
Earnings before interest and taxes (EBIT)	46.7	82.4	76.4
in % of sales revenues	3.5	4.6	-
Earnings before interest, taxes, depreciation and amortization (EBITDA)	81.5	119.1	46.1
in % of sales revenues	6.1	6.6	-
Earnings after taxes	30.4	60.2	98.0
Earnings per share (undiluted) in €	0.78	1.52	94.9
Capital expenditure	41.0	40.9	-0.2
Equity ratio in % (June 30)	32.7	33.1	-
Net liquidity/debt (June 30)	122.2	-100.0	>-100
Employees (June 30)	12,675	13,755	8.5

in € millions	Q2/16	Q2/17	Change in %
Orders received	893.4	1,007.5	12.8
Order backlog (June 30)	1,923.0	2,237.4	16.3
Sales revenues	704.1	1,007.7	43.1
Gross profit	185.3	209.3	13.0
in % of sales revenues	26.3	20.8	-
Earnings before interest and taxes (EBIT)	15.3	45.5	>100
in % of sales revenues	2.2	4.5	-
Earnings before interest, taxes, depreciation and amortization (EBITDA)	32.9	63.6	93.3
in % of sales revenues	4.7	6.3	-
Earnings after taxes	9.5	33.6	>100
Earnings per share (undiluted) in €	0.24	0.85	>100
Earnings per share (diluted) in €	0.24	0.85	-
Capital expenditure	22.0	25.6	16.4

Foreword

Dear Shareholders,

With orders received totaling €1,007.5 million, KUKA once again achieved a record result in the second quarter. Sales revenues also rose to €1,007.7 million, constituting an increase of no less than 43.1% on the prior-year quarter. The EBIT margin for KUKA Group in the second quarter was 5.4% before purchase price allocation for Swisslog and before growth investments.

Major orders from growth industries, such as for the battery production of a major automotive manufacturer or the construction of a logistics center for a major drugstore chain, underscore this result. KUKA continues to enjoy high-level growth. There is global demand for technology made in Germany. Our brand stands for cutting-edge technologies and innovation leadership.

Due to this positive development, we shall be increasing our guidance for sales revenues to around €3.3 billion for the full year 2017.

Our success is founded on our innovative drive, which we intend to strengthen further in the coming years. That is why we are investing in technologies, partnerships and our employees. The focus of our technological investments is on Industrie 4.0, software and mobility.

Now that our robots are sensitive and work together with humans in a team, they are also becoming mobile and aware of their surroundings. They will increasingly enter people's domestic sphere.

We are also investing in new and existing partnerships. The latest example is a cooperation agreement that we have entered into with Volkswagen in order to expand our strategic collaboration in the field of service robotics for vehicles. The new cooperation ties into a joint research project which deals with human-robot collaboration. The "e-smart Connect" project consists of a practical and user-friendly solution for charging the batteries of electric vehicles.

In the future, robots will support people in many day-to-day activities. Daily life without driverless vehicles will also become unthinkable. Together, we are working on innovative concepts to shape this future.

Investments are important for driving technological developments forward. We will only be able to harvest the fruits of our success if we are prepared to stay true to our ideas and invest in their implementation. In order to have creative ideas and turn them into reality, however, people require the right working environment. That is why we are investing in our company's most important capital – our employees.

KUKA has grown immensely in recent years. Over 13,000 people work for us, including around 3,500 at our home location in Augsburg alone.

By 2025, a campus is to be set up at the KUKA site in Augsburg's Lechhausen district, enabling our employees to be creative in a modern working atmosphere and providing space for partner companies and start-ups to grow with us.

Our employees are the basis for our success, and I would like to thank them for this successful quarter.

Sincerely,



Dr. Till Reuter

KUKA and the capital market

KUKA share rises 20.8% during the first half of 2017

Global equity markets performed positively overall in the first half of 2017. An optimistic economic outlook and persistently low interest rates were reasons for investors to continue to buy shares. The German share index DAX increased by 7.4% in the first six months to 12,325 points and reached a record high of around 12,950 points on June 20. The mid-cap index rose by 10.2% to 24,452 points.

The KUKA share outperformed the MDAX. Its value rose from €88.55 to €107.00, a gain of 20.8%. The share reached a high of €120.75 on May 2. The share price continues to benefit from a generally favorable stock market climate, the good financial results and the positive outlook of the company for 2017.

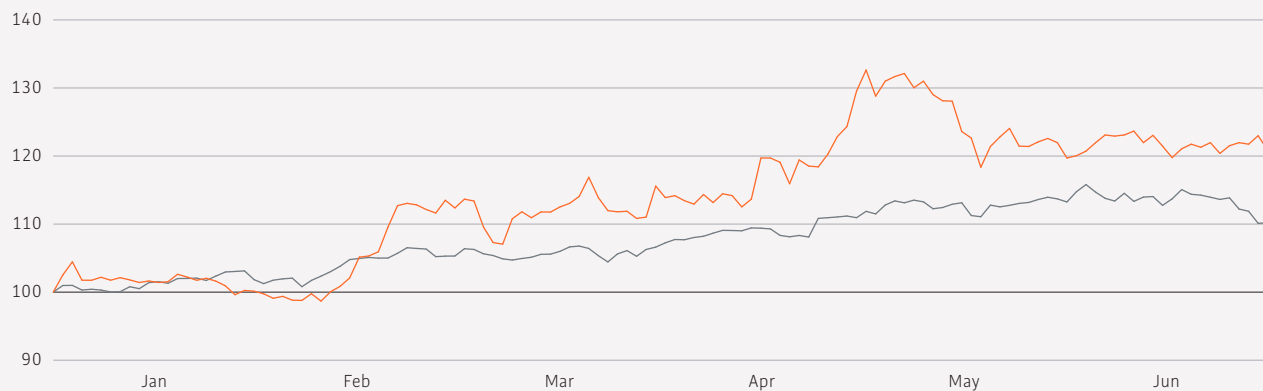
Share prices developed within a range of -6.3% to 36.3% in KUKA's peer group (companies that have a similar business base and are of a comparable size).

KUKA 2017 Annual General Meeting

The ordinary Annual General Meeting was held at the Kongress am Park congress center in Augsburg on May 31, 2017. The shareholders of KUKA AG ratified the actions of the members of the Executive Board and Supervisory Board for the 2016 financial year with a great majority. The Annual General Meeting elected Dr. Andy Gu (Vice President Midea Group), Paul Fang (Chairman/CEO Midea Group), Françoise Liu (HR Director Midea Group), Alexander Tan (Deputy CFO Midea Group), Prof. Michèle Morner (incumbent of the Chair of Public Management and Leadership at the German University of Administrative Sciences in Speyer) and Prof. Dr. Henning Kagermann as members of the Supervisory Board.

A dividend of €0.50 per entitled no-par-value share was approved and paid for the 2016 financial year.

KUKA's share price performance
January 1 to June 30, 2017¹



● KUKA ● MDAX

¹ December 30, 2016 = 100, share price performance indexed, prices: Xetra

Consolidated management report

Economic environment

Demand for cars

Positive development in the first half of 2017

The global car markets experienced a largely positive trend in the first six months of 2017 according to the German Automotive Industry Association (VDA). The European car market saw sales increase by 5% to 8.5 million newly-registered vehicles compared to the previous year. The Chinese market also increased by 3%, reaching a volume of more than 10.9 million newly-registered vehicles. The US market, on the other hand, experienced a decline of 2% since the beginning of the year and reached a level of 8.4 million new registrations. A significant decline was predominantly recorded in the conventional car sector. New registrations dropped by 12% year-on-year. However, pick-ups and other light trucks showed an increase of 5%.

The number of new registrations in Germany rose by 3% to 1.8 million cars. The expectations for the German market for the whole of 2017 are slightly below the level of the previous year at -2%. The VDA is anticipating a total of 84.5 million cars for the global car market, which corresponds to an increase of 2% on the previous year.

Besides the forecasts, however, we are also keeping an eye on the current developments in the automotive industry and here above all on the discussion about diesel exhaust emissions.

In view of the general conditions, the markets are on the one hand continuing to benefit from low interest rates and the low oil price. On the other hand, political risks such as Brexit and trade policy issues between Europe and the USA are dampening the mood. The German automotive industry is well-positioned in the increasingly challenging environment with production sites in 22 countries outside Germany. According to VDA, German car manufacturers produced 15.8 million vehicles in 2016, 10.1 million of these abroad. The international automotive supplier locations have also recorded an increase of more than 40% since the beginning of the decade and now total more than 2,200.

The German automotive industry is continuing its efforts to promote digitization and aims to remain at the cutting edge of technology worldwide. German car manufacturers are therefore planning to invest another €16 to 18 billion in technology and digitization over the next three to four years.

Forecast raised for German machinery production in 2017

The outlook for German industry is positive for 2017. This is also evident from the most recent forecasts of Ifo and OECD. The Ifo business climate index increased to a record value of 115.1 points in June. The

Ifo institute raised its growth forecast for 2017 from 1.5% to 1.8%. The German Engineering Association (VDMA) also confirms this trend. The German mechanical engineering industry increased the volume of orders received in May 2017 by 17% year-on-year in real terms. It surpassed the new orders figures by 4% from March to May in real terms compared to the previous year. As a result of the positive development, the VDMA raised its previous forecast for 2017 from plus 1% to plus 3%. Domestic business is set to increase by a greater degree than previously anticipated. Business with Asia and especially with China is also developing better than expected. The risks seen by the VDMA are mainly those resulting from the current developments in the USA and the UK.

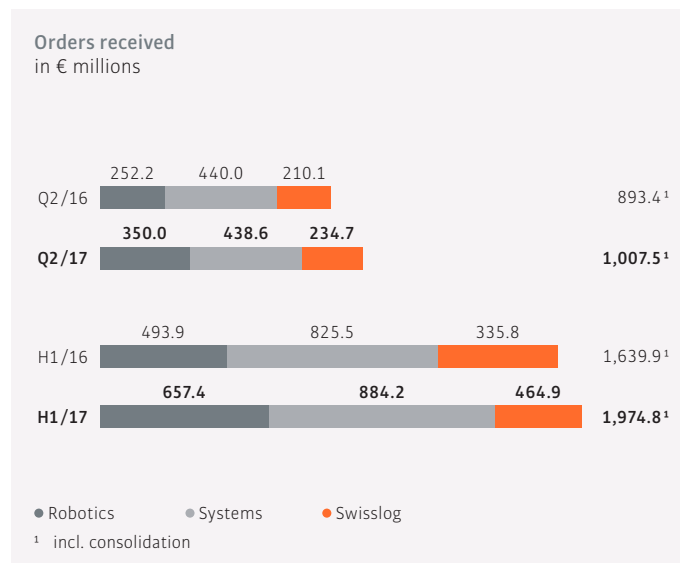
Business performance

Orders received

KUKA Group

KUKA Group reported orders received valued at €1,007.5 million in the past quarter. Compared with the same quarter last year (Q2/16: €893.4 million), this represents growth of 12.8%. This meant that the record set by KUKA in the third quarter of 2016 (Q3/16: €987.5 million) was significantly exceeded. The Robotics (38.8%) and Swisslog (11.7%) divisions were the main contributors to this positive result with double-digit growth rates. The strong demand was supported by both the Automotive and the General Industry segments.

In the first half of 2017, KUKA posted orders received amounting to €1,974.8 million. This corresponds to a 20.4% increase on the result for the first half of 2016 (H1/16: €1,639.9 million).



KUKA Robotics

In the second quarter of 2017, the Robotics division generated orders received totaling €350.0 million, surpassing the 300 million euro mark for the third time in a row. Compared with the value for the previous year (Q2/16: €252.2 million), this represents an increase of 38.8%. The reasons for this encouraging development included, in particular, strong demand in the General Industry and Automotive customer segments. From a regional perspective, China and the USA were the main drivers behind these good results.

Orders received were up from €493.9 million (H1/16) to €657.4 million in the first half of 2017 – an increase of 33.1%. This meant that the record from the first half of 2016 was exceeded once again.

In the second quarter of 2017 the Automotive segment received new orders amounting to €122.1 million. Compared with the same value last year (Q2/16: €98.0 million), this represents growth of 24.6%. The orders were placed primarily by German car makers and were due to call-offs from framework contracts. Orders received, especially in General Industry business, rose from €103.9 million (Q2/16) to €172.0 million – a plus of 65.5%. This increased the proportion of General Industry business in the overall volume of orders received during the quarter by 19.2%. The Service business also developed positively due to the high demand for industrial robots. In the past quarter, the Service share rose from €50.3 million (Q2/16) to €55.9 million – a gain of 11.1%.

KUKA Systems

In the second quarter of 2017, the Systems division generated a volume of orders received of €438.6 million. The value thus decreased by 0.3% and is virtually at the previous year's level (Q2/16: €440.0 million). The Body Structure segment, in particular, expanded especially positively in the past quarter, recording a double-digit growth rate.

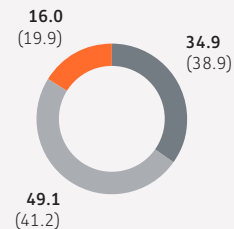
In the first half of 2017, Systems booked new orders with a total volume of €884.2 million (H1/16: €825.5 million). This corresponds to a rise of 7.1% on the same period last year.

Swisslog

The Swisslog division achieved a volume of orders received totaling €234.7 million (Q2/16: €210.1 million), equivalent to an increase of 11.7%. This represented a continuation of the positive development in previous quarters. This performance was driven by the Logistics segment, which showed substantial growth.

Orders received at Swisslog rose 38.4% to €464.9 million in the first half of 2017 compared with the same period of the previous year (H1/16: €335.8 million).

Robotics orders received by segment Q2/17 (Q2/16)
in % of total



● Automotive ● General Industry ● Service

Sales revenues

KUKA Group

In KUKA Group, sales revenues were up in the second quarter of 2017 from €704.1 million (Q2/16) to €1,007.7 million. This represents an increase of 43.1% compared with the same quarter of the previous year. The one billion euro mark was surpassed on account of the good earnings contributions from all three divisions. Robotics registered an increase of 40.8%, Swisslog 30.3% and Systems 53.2%.

KUKA Group generated sales revenues of €1,798.5 million in the first half of 2017. Compared with the same period last year (H1/16: €1,333.2 million), this represents growth of 34.9%.

KUKA Robotics

In the past quarter, sales revenues at Robotics totaled €349.7 million (Q2/16: €248.3 million), corresponding to a rise of 40.8%. This was the highest value ever achieved in any quarter. It was mainly the Automotive and General Industry segments which had a positive impact on this result.

In the first half of 2017, Robotics generated sales revenues of €621.8 million. Compared with the same period last year (H1/16: €458.7 million), this signifies an increase of 35.6%. This is the highest value ever achieved in a half-year for the second time in a row.

KUKA Systems

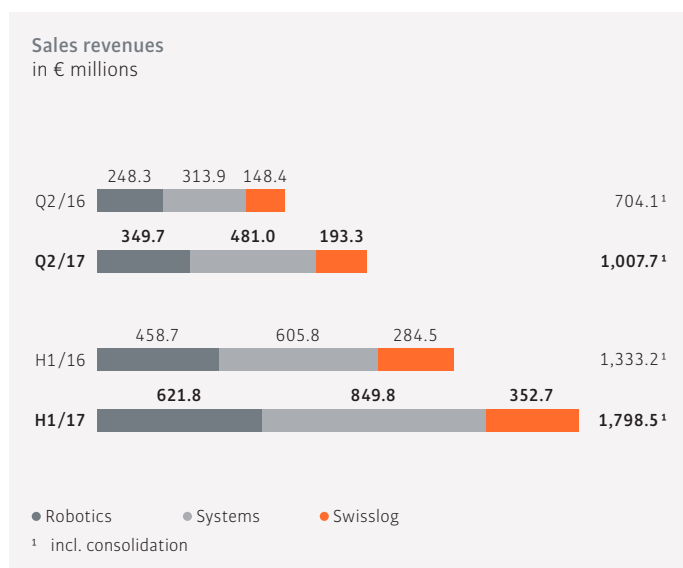
In the second quarter of 2017, sales revenues in the Systems division reached €481.0 million. Compared with the prior-year quarter (Q2/16: €313.9 million), this is an increase of 53.2%. The Body Structure and Assembly segments were the prime contributors to this good result.

Sales revenues climbed 40.3% to €849.8 million in the first half of 2017 (H1/16: €605.8 million). The main reason for this development was the Body Structure segment, which recorded substantial growth in the quarter under review. Asia, especially China, and the Americas supported this development from a regional perspective.

Swisslog

Swisslog generated sales revenues of €193.3 million in the second quarter. This is an increase of 30.3% on the previous year's result for the same quarter (Q2/16: €148.4 million). This value reflects the positive results for orders received in both the current quarter and previous quarters.

Sales revenues in the first half of 2017 totaled €352.7 million. Compared with the same quarter last year, the figure rose by 24.0% (H1/16: €284.5 million).



Book-to-bill ratio and order backlog

KUKA Group

The book-to-bill ratio – in other words the ratio of orders received to sales revenues – came in at 1.00 in the previous quarter (Q2/16: 1.27). By comparison, the equivalent figure for the first half-year 2017 was 1.10 (H1/16: 1.23). This value decreased slightly as compared with both the prior-year quarter and half-year although the figure was well above 1 in the first half-year, which is a positive indicator for the Group's future capacity utilization.

The Group order backlog increased by 16.3% on the same period in the previous year to €2,237.4 million as at June 30, 2017 (June 30, 2016: €1,923.0 million). The indicator benefited from the high volumes of orders received.

KUKA Robotics

In the past quarter, Robotics achieved a book-to-bill ratio of 1.00, close to last year's level (Q2/16: 1.02). In the first half of 2017, this indicator amounted to 1.06 compared with 1.08 as at June 30, 2016.

As at June 30, 2017, the order backlog totaled €350.3 million excluding framework contracts. Compared with the reference value for the previous year, this represents growth of 35.1% (June 30, 2016: €259.2 million).

KUKA Systems

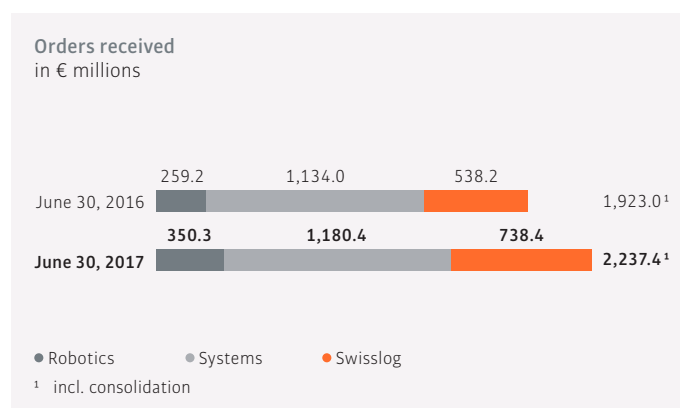
In the second quarter of 2017, the Systems division achieved a book-to-bill ratio of 0.91 (Q2/16: 1.40). This was attributable to the slight decline in orders received compared with the prior-year quarter. In the first half-year, this indicator amounted to 1.04 as against 1.36 in H1/16.

As at June 30, 2017, the Systems division had an order backlog of €1,180.4 million. This is an increase of 4.1% on the comparable figure for the previous year (June 30, 2016: €1,134.0 million).

Swisslog

The Swisslog division achieved a book-to-bill ratio of 1.21 in the second quarter of 2017. The previous year's figure had been 1.42 (Q2/16). In the first half-year, this indicator amounted to 1.32 as against 1.18 in H1/16.

The order backlog increased considerably by 37.2% and amounted to €738.4 million on June 30, 2017, versus €538.2 million on June 30, 2016.



EBITDA

KUKA Group

KUKA Group generated earnings before interest, taxes, depreciation and amortization (EBITDA) of €63.6 million in the second quarter of 2017 (Q2/16: €32.9 million), which corresponds to an increase of 93.3%. The equivalent result for the first half-year 2017 totaled €119.1 million, topping the figure for the corresponding period last year by 46.1% (H1/16: €81.5 million).

EBIT

KUKA Group

KUKA Group achieved earnings before interest and taxes (EBIT) amounting to €45.5 million in the second quarter of 2017 (margin: 4.5%). This compares with EBIT of €15.3 million in the prior-year quarter (Q2/16) and a corresponding margin of 2.2%.

In the first half of 2017, EBIT increased by 76.4% to €82.4 million (H1/16: €46.7 million). The margin amounted correspondingly to 4.6% in the first half-year 2017 (H1/16: 3.5%).

KUKA Robotics

In the second quarter, the Robotics division achieved an EBIT of €37.8 million (Q2/16: €25.5 million). The EBIT margin at 10.8% was higher than for the previous year (Q2/16: 10.3%) and therefore has a positive effect on profitability in KUKA Group.

In the first half-year 2017, EBIT increased by 36.4% to €63.7 million (H1/16: €46.7 million). The margin thus stood at 10.2% (H1/16: 10.2%).

KUKA Systems

In the second quarter of 2017, the Systems division's EBIT grew from €19.7 million (Q2/16) to €22.5 million. This represents an increase of 14.2%. The EBIT margin decreased from 6.3% (Q2/16) to 4.7%. This was mainly attributable to delays and additional costs that have been encountered in two projects in Europe due to capacity bottlenecks.

Compared with the same six months last year, the figure rose from €38.8 million (H1/16) to €48.8 million – growth of 25.8%. The margin stood at 5.7% (H1/16: 6.4%).

Swisslog

In the second quarter, Swisslog's EBIT increased significantly, climbing from €0.4 million (Q2/16) to €1.1 million. The margin rose from 0.3% to 0.6% in the second quarter of 2017. EBIT decreased from -€0.3 million (H1/16) to -€0.8 million year-on-year in a half-yearly comparison. The margin stood accordingly at -0.1% (H1/16) and -0.2% in the first half-year 2017.

Performance of the divisions

Key Figures Robotics

	Q2/16	Q2/17	Change in %
in € millions			
Orders received	252.2	350.0	38.8
Order backlog (June 30)	259.2	350.3	35.1
Sales revenues	248.3	349.7	40.8
Gross profit	91.8	113.4	23.5
in % of sales revenues	37.0	32.4	-
Earnings before interest and taxes (EBIT)	25.5	37.8	48.2
in % of sales revenues	10.3	10.8	-
Earnings before interest, taxes, depreciation and amortization (EBITDA)	30.8	43.8	42.2
in % of sales revenues	12.4	12.5	-
in € millions			
Orders received	493.9	657.4	33.1
Order backlog (June 30)	259.2	350.3	35.1
Sales revenues	458.7	621.8	35.6
Gross profit	177.5	209.7	18.1
in % of sales revenues	38.7	33.7	-
Earnings before interest and taxes (EBIT)	46.7	63.7	36.4
in % of sales revenues	10.2	10.2	-
Earnings before interest, taxes, depreciation and amortization (EBITDA)	57.4	75.6	31.7
in % of sales revenues	12.5	12.2	-
Employees (June 30)	4,311	4,981	15.5

Key Figures Systems

	Q2/16	Q2/17	Change in %
in € millions			
Orders received	440.0	438.6	-0.3
Order backlog (June 30)	1,134.0	1,180.4	4.1
Sales revenues	313.9	481.0	53.2
Gross profit	55.9	50.7	-9.3
in % of sales revenues	17.8	10.5	-
Earnings before interest and taxes (EBIT)	19.7	22.5	14.2
in % of sales revenues	6.3	4.7	-
Earnings before interest, taxes, depreciation and amortization (EBITDA)	23.7	26.8	13.1
in % of sales revenues	7.6	5.6	-

in € millions	H1/16	H1/17	Change in %
Orders received	825.5	884.2	7.1
Order backlog (June 30)	1,134.0	1,180.4	4.1
Sales revenues	605.8	849.8	40.3
Gross profit	109.8	110.5	0.6
in % of sales revenues	18.1	13.0	-
Earnings before interest and taxes (EBIT)	38.8	48.8	25.8
in % of sales revenues	6.4	5.7	-
Earnings before interest, taxes, depreciation and amortization (EBITDA)	47.0	57.3	21.9
in % of sales revenues	7.8	6.7	-
Employees (June 30)	5,249	5,299	1.0

Key Figures Swisslog

in € millions	Q2/16	Q2/17	Change in %
Orders received	210.1	234.7	11.7
Order backlog (June 30)	538.2	738.4	37.2
Sales revenues	148.4	193.3	30.3
Gross profit	37.7	43.1	14.3
in % of sales revenues	25.4	22.3	-
Earnings before interest and taxes (EBIT)	0.4	1.1	175.0
in % of sales revenues	0.3	0.6	-
Earnings before interest, taxes, depreciation and amortization (EBITDA)	6.0	6.7	11.7
in % of sales revenues	4.0	3.5	-

in € millions	H1/16	H1/17	Change in %
Orders received	335.8	464.9	38.4
Order backlog (June 30)	538.2	738.4	37.2
Sales revenues	284.5	352.7	24.0
Gross profit	74.9	82.5	10.1
in % of sales revenues	26.3	23.4	-
Earnings before interest and taxes (EBIT)	-0.3	-0.8	>100
in % of sales revenues	-0.1	-0.2	-
Earnings before interest, taxes, depreciation and amortization (EBITDA)	11.0	11.1	0.9
in % of sales revenues	3.9	3.1	-
Employees (June 30)	2,654	2,763	4.1

Financial position and performance

Earnings

In the reporting period, KUKA Group posted sales revenues totaling €1,798.5 million (H1/16: €1,333.2 million). Viewing the quarters on a “stand-alone” basis, orders received worth €1,007.5 million (Q2/17) not only represents a new record, but also means that the Group surpassed the billion mark in a quarter for the first time. The order backlog amounted to €2,237.4 million, clearly topping the previous year’s value (H1/16: €1,923.0 million). The gross earnings from sales increased compared to the first half of 2016 by €42.7 million to €404.6 million. Taking into account the slightly greater increase in the cost of sales compared to sales revenues, this results in a gross profit margin at Group level of 22.5% in the first half of 2017 (H1/16: 27.1%).

The sales, research & development and administration costs totaled €325.3 million (H1/16: €311.9 million) – a rise of €13.4 million or 4.3%. The increase in selling costs was €24.5 million, which was mainly attributable to the expansion of the sales team (+ 157 employees). The high revenues in the robotics segment also led to greater freight and transport costs, which are also reflected in sales expenditure. Lastly, mention must also be made of the measures for enhancing market presence. Administration costs developed counter to the sales expenditure. A reduction of €13.7 million was recorded here. The previous year had already been negatively impacted by extraordinary expenses for Midea at this time. At €66.3 million, the expenses for research and development shown on the income statement for the second half of 2017 were slightly higher than for the prior-year period (H1/16: €63.7 million). In relation to sales revenues, these overhead costs were reduced overall from 23.4% to 18.1%.

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 highly-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 highly diverse.

- › Development of conceptual ideas to real customer projects promoted by close networking of the R&D department, sales and customers as well as through joint workshops with customers
- › Ongoing development of human-robot collaboration (HRC) with sensitive systems with only minimal safety fencing or without any at all (e. g. for BMW Group Munich, development of a special HRC-capable gripper for the LBR iiwa; the solution not only supports employees in assembly tasks in production, but also only requires around a quarter of the space compared to a design without HRC)

- › Mobility – in this area, research is carried out on solutions aimed at achieving process and cost enhancements through the mobility of robots and automation solutions in the “factory of the future”. This generally involves the following options: a robot either moves freely around the production area or travels along with an assembly line. Also conceivable are robots which can be deployed in a multifunctional manner with corresponding programming and flexible tools such that the robot is installed in a fixed location and the products requiring different forms of processing are machined by the robot as they pass by on the assembly line
- › IT networking through, for example, KUKA Connect as a cloud-based software platform that allows customers to easily view the data of their KUKA robots from anywhere in the world and thus to increase the performance and effectiveness of their production operations
- › Robot vision – our robots are being endowed with a sense of vision and perception: this includes new, pioneering technologies such as the use of 3D cameras in conjunction with the smart KUKA light-weight robot LBR iiwa (e.g. for automatic sorting after a short training phase) – in close cooperation with RoboCeption GmbH and others
- › Investments in start-ups (for example, the new start-up connyun founded in 2016 which is responsible for the development of a cloud-based platform and forms the technical basis for KUKA Connect) or the stake in the aforementioned RoboCeption GmbH
- › Strategic cooperation and projects with various partners from different industries (such as Volkswagen in the automotive sector, telecommunications supplier Huawei, software vendor SAP, Fujitsu in the IT sector) and research institutions (e.g. A*STAR Institute for Infocomm Research in Singapore, Fraunhofer Institutes, EHI Retail Institute)
- › Cooperative ventures within the industry such as with Dürr AG – a jointly developed new painting robot that is unique on the market was unveiled in the first half of 2017
- › Continuous analyses for cost efficiency improvements of KUKA products

Supporting these activities, KUKA continuously invests in major internal projects such as with the Power ON program – to harmonize, standardize and optimize Group-wide processes with a focus on a customer-oriented organization.

KUKA has also launched a project in the second quarter of 2017 for aligning its own organization with various customer ecosystems. The optimization of the communication culture between KUKA and its customers and partners, which has been ongoing since 2016, is also to be seen in this context. This builds especially on the cooperation with Salesforce. This enables all KUKA companies to be gradually connected to a CRM platform via Salesforce OneCRM and makes for much closer interaction of customers and partners with sales, service and marketing employees along the entire value chain.

Finally, reference should also be made to the expansion of the workforce in all functional areas. Compared to June 30, 2016, the number of employees in research and development rose by 121, in sales by 157 and in administration by 22 until June 30, 2017.

The aim of all this is to support customers with integrated solutions in order to optimize their value creation and to inspire them with solution ideas and concepts for the factory of the future.

The costs of €14.9 million (H1/16: €9.8 million) incurred for new developments in the period under review were capitalized and will be reported as planned depreciation in subsequent financial statements. Current research and development expenditures include €5.0 million in depreciation, versus €3.8 million in H1/16. This results in a capitalization ratio of 19.6% (H1/16: 14.2%).

Earnings before interest and taxes (EBIT) for the first six months of this year increased by 76.4% from €46.7 million in H1/16 to €82.4 million. The EBIT margin for the first half of 2017 rose from 3.5% to 4.6% compared to the same period last year.

Without taking into account the scheduled depreciation amounting to €4.9 million arising from the purchase price allocation in connection with the acquisition of Swisslog Group, the EBIT margin would be 4.9%.

If the growth investments in the first half of 2017 amounting to around €7 million are also eliminated, this results in an EBIT margin of 5.2%.

	Q1/16	Q2/16	Q3/16	Q4/16	Q1/17	Q2/17
EBIT (in € millions)	31.4	15.3	35.9	44.6	36.9	45.5
EBIT margin (in %)	5.0	2.2	5.0	4.9	4.7	4.5
EBITDA (in € millions)	48.6	32.9	56.7	67.1	55.5	63.6
EBITDA margin (in %)	7.7	4.7	8.0	7.4	7.0	6.3

The Robotics segment was at the same level as the previous year of 10.2% (H1/16: 10.2%). Swisslog achieved a slightly lower EBIT margin of -0.2% as compared with H1/16 (-0.1%). Adjusted for the effects of purchase price allocation, the margin was 1.2% (H1/16: 1.8%). The EBIT margin was also lower in the Systems segment at 5.7% (H1/16: 6.4%). This was mainly attributable to delays and additional costs that have been encountered in two projects in Europe due to capacity bottlenecks. The resulting negative effect could only be partially offset by positive earnings contributions from other projects.

Comparison with the same six months last year shows that EBITDA (earnings before interest, taxes, depreciation and amortization) rose from €81.5 million to €119.1 million. Total depreciation and amortization in the period under review was €36.7 million, versus €34.8 million in H1/16. €11.9 million of this (H1/16: €10.7 million) was attributable to Robotics, €8.5 million (H1/16: €8.2 million) to Systems, €11.9 million (H1/16: €11.3 million) to Swisslog and €4.4 million (H1/16: €4.6 million) to other areas.

While the income and expenditure in the financial result balanced out to zero in H1/2016, the higher interest expenditure resulted in a net financial expenditure of €3.7 million in the first six months of this year.

Interest income was €3.5 million, down from €5.7 million in H1/16. This mainly includes income from finance leases. Interest expenditure amounted to €7.2 million (H1/16: €5.7 million). Interest expenditure included therein from the promissory note loan placed in October 2015 totaled €1.8 million (H1/16: €1.8 million). The net interest expense for pensions was €0.9 million (H1/16: €1.0 million). The net currency effect amounted to -€2.4 million (H1/16: €0.9 million).

Earnings before taxes (EBT) in the first six months of 2017 were €78.7 million, compared to €46.7 million in H1/16. With tax expenditure of €18.5 million during the period under review (H1/16: €16.3 million), the tax ratio amounted to 23.5% (H1/16: 34.9%). Advantageous changes in the legal environment in the USA (in 2016), leading to relief in the income tax area, had a positive effect on the tax ratio.

Earnings after taxes were €60.2 million, 98.0% higher than in the prior-year period (H1/16: €30.4 million). The undiluted earnings per share increased correspondingly from €0.78 to €1.52.

Consolidated income statement (condensed)

in € millions	H1/16	H1/17
Sales revenues	1,333.2	1,798.5
EBIT	46.7	82.4
EBITDA	81.5	119.1
Financial result	0.0	-3.7
Taxes on income	-16.3	-18.5
Earnings after taxes	30.4	60.2

Financial position

The cash earnings are an indicator derived from the earnings after taxes, adjusted for income taxes, net interest, cash-neutral depreciation on tangible and intangible assets, together with other non-cash expenses and income. Cash earnings increased by 42.5% and amounted to €118.7 million in the first half of 2017 (H1/16: €83.3 million).

Cash flow from current business operations decreased to -€132.2 million (H1/16: -€68.7 million). A major factor behind this reduction was the strong increase in trade working capital of €140.5 million to €569.6 million as at June 30, 2017 (December 31, 2016: €429.1 million). Worthy of particular note in this context is the rise of €129.4 million in receivables from construction contracts. The good order situation, especially in the Systems segment in North America, leads here to higher advance financing of projects.

The following overview shows the development of trade working capital:

in € millions	Dec. 31, 2016	June 30, 2017
Inventories less advance payments	223.2	265.3
Trade receivables and receivables from construction contracts	888.9	1,110.3
Trade payables and liabilities from construction contracts	683.0	806.0
Trade working capital	429.1	569.6

In the first six months of 2017 the company invested €41.3 million (H1/16: €41.0 million). Capital investment in tangible assets totaled €17.7 million and concerned technical plant and equipment as well as operating and office equipment. Intangible asset investments totaled €23.6 million, of which €14.9 million was for internally generated intangible assets. There were outflows of cash amounting to €14.6 million in connection with the acquisition of shares in affiliated companies (Easy Conveyors B.V., Nuenen/Netherlands), companies accounted for at equity (KBee AG, Munich; Pipeline Health Holdings LLC, San Francisco/USA) and in other investments (Nebbiolo Technologies Inc., Delaware/USA). Outstanding purchase price liabilities in the amount of €11.7 million were also settled for acquisitions from previous years (Reis Group, UTICA). The cash flow from investment activities amounted to -€59.7 million in total (H1/16: -€29.2 million).

The cash flow from current business operations plus cash flow from investment activities resulted in a free cash flow of -€191.9 million, compared to -€97.9 million in H1/16.

The cash flow from financing activities amounted to -€22.4 million (H1/16: -€19.7 million). This includes dividends to shareholders of €0.50 per share (2016: €0.50 per share) making a total of €19.9 million.

As a result, the cash and cash equivalents available to KUKA Group as at June 30, 2017 totaled €152.7 million (June 30, 2016: €374.9 million). Compared to December 31, 2016, the cash and cash equivalents decreased by €211.5 million (December 31, 2016: €364.2 million).

Syndicated loan for KUKA Aktiengesellschaft

KUKA AG finances itself through a syndicated loan agreement (“SFA” – Syndicated Facilities Agreement) which came into effect in April 2015 as part of a refinancing operation with an original term to March 30, 2020. This included two extension options each for one year. The first extension option was exercised in 2016. The second extension option available to KUKA was requested at the start of 2017. As all banks of the SFA approved a further extension, the new final maturity date is now March 30, 2022.

After an amendment came into effect on November 28, 2016, KUKA has a guaranteed credit line from the SFA of €200.0 million and a cash line with the same volume of €200.0 million at its disposal, which can also be used for guarantees as previously. The syndicated loan agreement is unsecured and contains only the customary equal treatment clauses and negative pledges. Covenants for leverage and interest coverage are agreed for the SFA. For further details, please refer to the company’s 2016 annual report.

As at the reporting date, the utilization of the guarantee facility and cash credit line from the syndicated loan agreement of KUKA AG amounted to a total of €162.6 million (December 31, 2016: €170.9 million).

Consolidated cash flow statement (condensed)

in € millions	H1/16	H1/17
Cash earnings	83.3	118.7
Cash flow from current business operations	-68.7	-132.2
Cash flow from investment activities	-29.2	-59.7
Free cash flow	-97.9	-191.9

Net worth

The balance sheet total of KUKA Group increased by €77.4 million from €2,543.9 million as at December 31, 2016 to €2,621.3 million as at the reporting date.

Compared to the end of the previous year, non-current assets decreased slightly to €834.3 million as at June 30, 2017 (December 31, 2016: €838.1 million). In this connection, tangible assets declined by €8.4 million, and finance lease receivables by €9.1 million. Other receivables and other assets increased by €1.1 million. Amounts totaling €17.4 million were included for investments accounted for using the at-equity method (December 31, 2016: €4.2 million). Deferred tax assets amounted to €48.4 million (December 31, 2016: €48.8 million), with €13.5 million being attributable to losses carried forward (December 31, 2016: €9.8 million).

The value of current assets amounted to €1,787.0 million as at June 30, 2017 (December 31, 2016: €1,705.8 million). Further explanations regarding the current assets are included in the notes on the financial position.

Within the reporting period, equity increased from €840.2 million to €866.7 million. The increase results from earnings after taxes amounting to €60.2 million. Equity capital was reduced by exchange rate effects (essentially USD, CHF and CNY) totaling €19.4 million and dividend payments of €19.9 million for the 2016 financial year.

The valuation of pension provisions including the associated deferred taxes in the first half of 2017, while not affecting earnings, resulted in equity increasing by €5.4 million due to a slight rise in the interest rate level and a positive, actual development in plan assets.

Minority interests changed slightly from -€0.3 million as at December 31, 2016 to -€0.4 million as at June 30, 2017.

The equity ratio, i.e. the ratio of equity to the balance sheet total, is 33.1%, which is slightly higher than the ratio of 33.0% at the end of the 2016 financial year.

The non-current and current financial liabilities totaled €252.7 million, which compares to €251.2 million at December 31, 2016 and primarily relate to the existing syndicated loan agreement and the issued promissory note loan.

The decrease in pension provisions and similar obligations by €9.9 million is primarily attributable to the effect of the actuarial valuation not affecting net income already described in the previous section in relation to equity changes.

Current liabilities increased from €1,258.1 million as at December 31, 2016 to €1,327.1 million as at June 30, 2017. The seasonal increase in liabilities in the personnel sector such as accruals for unused leave was one of the factors contributing to this. Details of the liabilities for the trade working capital are included in the notes on the financial position.

The existing net liquidity of the Group, i.e. the liquid assets less the current and non-current financial liabilities, dropped from €113.0 million at year-end 2016 to -€100.0 million as at June 30, 2017.

Group net worth

in € millions	Dec. 31, 2016	June 30, 2017
Balance sheet total	2,543.9	2,621.3
Equity	840.2	866.7
in % of balance sheet total	33.0	33.1
Net liquidity	113.0	-100.0

KUKA recorded a return on capital employed (ROCE) of 16.6% in the first half of 2017 with average capital employed of €993.0 million as at June 30, 2017 (December 31, 2016: €783.0 million).

The ROCE of the individual segments is shown in the table below.

Return on capital employed (ROCE)

in % of capital employed	Dec. 31, 2016	June 30, 2017
Group ¹	16.2	16.6
of which Robotics	51.7	52.5
of which Systems	42.8	27.9
of which Swisslog ²	1.5	-0.5

¹ incl. consolidations

² incl. impairment charges due to purchase price allocation

Research & development

In the second quarter of 2017, research and development (R&D) expenditure for KUKA Group amounted to €35.0 million. Investment was thus slightly above the value in the same period of the previous year (Q2/16: €33.8 million). This brings R&D expenditure for the first half of the year up to €66.3 million (H1/16: €63.7 million). R&D expenditure is primarily attributable to the Robotics division. At Systems, research and development activities are mainly processed within the framework of customer projects. In the second quarter of 2017, KUKA continued to work on key technologies for Industrie 4.0 such as human-robot collaboration, mobility and smart platforms as well as products for the specific requirements of the focused growth markets.

Robot-based service concepts for vehicles of the future: cooperation agreement concluded with Volkswagen

Volkswagen Corporate Research and KUKA are strengthening their strategic partnership in the field of service concepts for vehicles of the future. The new 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 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.

Invitation to submit entries for the KUKA Innovation Award 2018

The KUKA Innovation Award was initiated for the fifth time in May. The focus of the competition this time is on the support provided to humans by robots outside the industrial environment. It involves concepts from the medical, service and domestic robotics sectors which go beyond the previous industrial focus of the award. Young researchers from all over the world submitted their concepts on the theme “Real World Interaction Challenge” by July 2, 2017. In order to be able to compare the concepts, the teams of finalists will each be provided with a KUKA flexFellow – a mobile robot unit on which a KUKA LBR iiwa is mounted, a sensitive lightweight robot for safe human-robot collaboration. In addition, it will also be possible for a 3D vision system of the RoboCeption GmbH start-up to be used. With the research prize, KUKA is encouraging innovations as well as the transfer of technologies into industry. Endowed with prize money of 20,000 euro, the KUKA Innovation Award will be presented at a major flagship trade fair in 2018.

Integrated solution “ready2_spray” in cooperation with Dürr

Dürr and KUKA have jointly developed the integrated solution “ready2_spray” for the automated application of paint. The small robot comes from KUKA, while Dürr is contributing the technology for paint application. The pre-installed, “ready-to-paint” robot from the KR AGILUS series with coordinated and proven components is unique on the market in this combination. It is fully tailored to the requirements of general industry. Areas of application include the painting of wood, plastic, glass and metal. The paint application technology is available in various configurations. The system with its components is completed at Dürr and pre-commissioned. This means that it is ready for paint application (“ready2_spray”) and can be quickly installed at the customer's premises. The painting robot system is prepared for the tasks of Industrie 4.0.

KUKA at ICRA in Singapore

KUKA presented innovative applications along with research partners at the IEEE International Conference on Robotics and Automation (ICRA) in Singapore and demonstrated 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. KUKA supports research institutes for robotics throughout the world and by doing so enhances its partner network. ICRA is the most important robotics and automation conference for researchers from all over the world to discuss the latest trends in robotics and automation.

Innovative laser technology

KUKA showcased the latest applications in the laser industry at the Laser World of Photonics in Munich 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, CO₂ lasers are suitable for processing non-metallic materials and most plastics. For this reason, CO₂ 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. Unlike mechanical cutting processes, the tool is not subject to wear and tear thanks to the contactless laser machining process. Furthermore, the energy input of the KUKA CO₂ laser robot can be adapted exactly to the specific laser cutting process. 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.

Swisslog is building an innovative logistics center with dm-drogerie markt

Swisslog has won a large-scale order from dm-drogerie markt GmbH & Co. KG, Europe's highest-turnover drugstore chain: valued at around 100 million euro, an innovative logistics center will be constructed in Brandenburg over the next two and a half years. This is the third logistics center to be implemented for the drugstore group by Swisslog, which is responsible for both the intralogistics and all construction measures. The project involves the latest technologies and thus the comprehensive expertise for holistic automation solutions in intralogistics. The solution for dm is based on ACPaQ, the newly developed robot-based solution concept from Swisslog.

Employees

As at June 30, 2017 KUKA Group employed 13,755 people. Compared with the reporting date of the previous year, this was a rise of 8.5% (June 30, 2016: 12,675). The Robotics division's workforce increased by 15.5% from 4,311 to 4,981. The new employees were hired in all customer segments – Automotive, General Industry and Service. At Systems, the workforce increased by 1.0% from 5,249 as at June 30, 2016 to 5,299 as at June 30, 2017. The Swisslog division had 2,763 employees at the end of the second quarter of this year, 4.1% more than on the reporting date of the previous year (June 30, 2016: 2,654). At the end of the second quarter, there were 3,572 employees at the Augsburg site. This was 7.2% more than at the reporting date of the previous year (June 30, 2016: 3,332).

Opportunities and risk report

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. For information on risks affecting EBIT, please also refer to the detailed report on pages 56 and following of the management report in the 2016 annual report.

Outlook

Given the current economic forecasts and general conditions, KUKA expects high demand in the 2017 financial year, particularly from the North America and Asia regions, and here especially from China. Demand in Europe is expected to remain relatively stable overall. From a sector perspective, a positive development is predicted for the General Industry market. This is due in part to the low penetration rate of robot-based automation in some areas and in part to new robot types and technologies enabling the efficiency of production stages previously characterized by a low degree of automation to be improved. Automotive customers have already significantly increased investments over the past few years.

Based on current general conditions, KUKA expects sales revenues of around €3.3 billion for the full year 2017, up approximately 12% on last year. If the figure for the previous year is adjusted by the contribution to sales revenues of the divested US Aero division, this signifies an increase in sales revenues of approximately 16%. Both customer segments – General Industry and Automotive – and from a regional viewpoint, China and North America, should make a positive contribution to sales revenue development. Given the current economic environment and anticipated sales revenue development, KUKA Group expects to achieve an EBIT margin of more than 5.5% before purchase price allocation for Swisslog and before growth investments. The expenditure for purchase price allocation at Swisslog should amount to about €8.8 million in 2017 and thus be slightly below the level of the previous year.

Interim Report (condensed)

Group income statement

of KUKA Aktiengesellschaft for the period January 1 – June 30, 2017

in € millions	Q2/16	Q2/17	H1/16	H1/17
Sales revenues	704.1	1,007.7	1,333.2	1,798.5
Cost of sales	-518.8	-798.4	-971.3	-1,393.9
Gross income	185.3	209.3	361.9	404.6
Selling expenses	-66.3	-80.9	-126.9	-151.4
Research and development costs	-33.8	-35.0	-63.7	-66.3
General and administrative expenses	-68.0	-52.0	-121.3	-107.6
Other operating income	3.6	7.9	6.4	10.5
Other operating expenses	-4.3	-3.8	-7.5	-6.4
Loss from companies consolidated at equity	-1.2	0.0	-2.2	-1.0
Earnings from operating activities	15.3	45.5	46.7	82.4
Reconciliation to earnings before interest and taxes (EBIT)				
Earnings before interest and taxes (EBIT)	15.3	45.5	46.7	82.4
Depreciation and amortization	17.6	18.1	34.8	36.7
Earnings before interest, tax and amortization (EBITDA)	32.9	63.6	81.5	119.1
Interest income	2.2	1.4	5.7	3.5
Interest expense	-3.2	-4.2	-5.7	-7.2
Financial result	-1.0	-2.8	0.0	-3.7
Earnings before tax	14.3	42.7	46.7	78.7
Taxes on income	-4.8	-9.1	-16.3	-18.5
Earnings after taxes	9.5	33.6	30.4	60.2
(of which: attributable to minority interests)	(-0.3)	(0.0)	(-0.5)	(-0.1)
(of which: attributable to shareholders of KUKA AG)	(9.8)	(33.6)	(30.9)	(60.3)
Earnings per share (undiluted) in €	0.24	0.85	0.78	1.52
Earnings per share (diluted) in €	0.24	0.85	0.78	1.52

Statement of comprehensive income

of KUKA Aktiengesellschaft for the period January 1 – June 30, 2017

in € millions	Q2/16	Q2/17	H1/16	H1/17
Earnings after taxes	9.5	33.6	30.4	60.2
Items that may potentially be reclassified to profit or loss				
Translation adjustments	3.8	-16.1	-7.9	-19.4
Items that are not reclassified to profit or loss				
Changes of actuarial gains and losses	-6.9	2.6	-19.0	6.4
Deferred taxes on changes of actuarial gains and losses	2.2	-0.1	4.4	-1.0
Changes recognized directly in equity	-0.9	-13.6	-22.5	-14.0
Comprehensive income	8.6	20.0	7.9	46.2
(of which: attributable to minority interests)	(-0.3)	(0.0)	(-0.5)	(-0.1)
(of which: attributable to shareholders of KUKA AG)	(8.9)	(20.0)	(8.4)	(46.3)

Group cash flow statement

of KUKA Aktiengesellschaft for the period January 1 – June 30, 2017

in € millions	H1/16	H1/17
Net income after taxes	30.4	60.2
Income taxes	24.3	28.9
Net interest result	0.0	3.7
Depreciation of intangible assets	15.7	16.7
Depreciation of tangible assets	19.1	20.0
Other non-payment related income	-11.3	-14.8
Other non-payment related expenses	5.1	4.0
Cash earnings	83.3	118.7
Result on the disposal of assets	0.1	0.1
Changes in provisions	-13.5	-31.7
Changes in current assets and liabilities		
Changes in inventories	-6.7	-64.3
Changes in receivables and deferred charges	-81.4	-285.5
Changes in liabilities and deferred income (excl. financial debt)	-21.7	157.5
Income taxes paid	-27.3	-24.9
Investments/financing matters affecting cash flow	-1.5	-2.1
Cash flow from operating activities	-68.7	-132.2
Payments from disposals of fixed assets	2.0	4.5
Payments for capital expenditures on intangible assets	-17.5	-23.6
Payments for capital expenditures on tangible assets	-23.5	-17.7
Payments received from financial assets in the course of short-term funds management	8.9	0.0
Payments for the acquisition of consolidated companies and other business units	-3.3	-26.3
Interest received	4.2	3.4
Cash flow from investing activities	-29.2	-59.7
Free cash flow	-97.9	-191.9
Dividend payments	-19.3	-19.9
Proceeds from/payments from the issuance /repayment of bonds and liabilities similar to bonds	-	0.0
Proceeds from/payments for the acceptance/repayment of bank loans	2.1	-1.2
Payments from grants received	1.6	2.1
Interest paid	-4.1	-3.4
Cash flow from financing activities	-19.7	-22.4
Payment-related changes in cash and cash equivalents	-117.6	-214.3
Changes due to acquisitions of companies	0.0	0.0
Exchange rate-related and other changes in cash and cash equivalents	-3.7	2.8
Changes in cash and cash equivalents	-121.3	-211.5
(of which net increase/decrease in restricted cash)	(-0.3)	(-0.6)
Cash and cash equivalents at the beginning of the period	496.2	364.2
(of which net increase/decrease in restricted cash)	(3.5)	(1.1)
Cash and cash equivalents at the end of the period	374.9	152.7
(of which restricted cash at the end of the period)	(3.2)	(-0.5)

Group consolidated balance sheet

of KUKA Aktiengesellschaft as of June 30, 2017

Assets

in € millions	Dec. 31, 2016	June 30, 2017
Non-current assets		
Intangible assets	445.1	444.6
Property, plant and equipment	261.2	252.8
Financial investments	4.9	5.2
Investments accounted for at equity	4.2	17.4
	715.4	720.0
Finance lease receivables	57.7	48.6
Income tax receivables	0.0	0.0
Other long-term receivables and other assets	16.2	17.3
Deferred taxes	48.8	48.4
	838.1	834.3
Current assets		
Inventories	318.8	371.8
Receivables and other assets		
Trade receivables	353.2	445.2
Receivables from construction contracts	535.7	665.1
Finance lease receivables	9.6	9.3
Income tax receivables	33.4	33.5
Other assets, prepaid expenses and deferred charges	90.9	109.4
	1,022.8	1,262.5
Cash and cash equivalents	364.2	152.7
	1,705.8	1,787.0
	2,543.9	2,621.3

Equity and liabilities

in € millions	Dec. 31, 2016	June 30, 2017
Equity		
Subscribed capital	103.4	103.4
Capital reserve	306.6	306.6
Revenue reserve	430.5	457.1
Minority interests	-0.3	-0.4
	840.2	866.7
Non-current liabilities, provisions and accruals		
Financial liabilities	249.6	249.6
Other liabilities	28.0	30.6
Pensions and similar obligations	122.7	112.8
Deferred taxes	45.3	34.5
	445.6	427.5
Current liabilities		
Financial liabilities	1.6	3.1
Trade payables	459.3	553.7
Advances received	95.6	106.5
Liabilities from construction contracts	223.7	252.3
Income tax liabilities	40.0	52.9
Other liabilities and deferred income	280.0	233.6
Other provisions	157.9	125.0
	1,258.1	1,327.1
	2,543.9	2,621.3

Development of Group equity

of KUKA Aktiengesellschaft for the period January 1 – June 30, 2017

	Number of shares out-standing	Subscribed capital	Capital reserve	Revenue reserves			Equity to shareholders	Minority interests	Total
				Translation gains/losses	Actuarial gains and losses	Annual net income and other revenue reserves			
in € millions									
Jan. 1, 2016	38,501,259	100.1	265.3	53.0	-15.2	329.8	733.0	-0.5	732.5
Earnings after taxes	–	–	–	–	–	30.9	30.9	-0.5	30.4
Other earnings	–	–	–	-7.9	-14.6	–	-22.5	–	-22.5
Comprehensive income	–	–	–	-7.9	-14.6	30.9	8.4	-0.5	7.9
Capital increase from conversions	1,274,211	3.3	41.3	–	–	–	44.6	–	44.6
Dividend of KUKA AG	–	–	–	–	–	-19.3	-19.3	–	-19.3
Change in scope of consolidation/other changes	–	–	–	–	–	0.5	0.5	–	0.5
June 30, 2016	39,775,470	103.4	306.6	45.1	-29.8	341.9	767.2	-1.0	766.2
Jan. 1, 2017	39,775,470	103.4	306.6	61.1	-23.7	393.1	840.5	-0.3	840.2
Earnings after taxes	–	–	–	–	–	60.3	60.3	-0.1	60.2
Other earnings	–	–	–	-19.4	5.4	–	-14.0	–	-14.0
Comprehensive income	–	–	–	-19.4	5.4	60.3	46.3	-0.1	46.2
Dividend of KUKA AG	–	–	–	–	–	-19.9	-19.9	–	-19.9
Change in scope of consolidation/other changes	–	–	–	–	–	0.1	0.1	–	0.1
June 30, 2017	39,775,470	103.4	306.6	41.6	-18.4	433.8	867.0	-0.4	866.7

Notes on the consolidated financial statements (condensed)

Group segment reporting

of KUKA Aktiengesellschaft for the period January 1 to June 30, 2017

in € millions	Robotics		Systems		Swisslog		KUKA AG and other companies		Reconciliation and consolidation		Group	
	H1/16	H1/17	H1/16	H1/17	H1/16	H1/17	H1/16	H1/17	H1/16	H1/17	H1/16	H1/17
Orders received	493.9	657.4	825.5	884.2	335.8	464.9	–	–	-15.3	-31.7	1,639.9	1,974.8
Order backlog (June 30)	259.2	350.3	1,134.0	1,180.4	538.2	738.4	–	–	-8.4	-31.7	1,923.0	2,237.4
Group external sales revenues	445.5	604.8	603.3	841.4	284.5	352.0	–	0.0	-0.1	0.3	1,333.2	1,798.5
in % of Group sales revenues	33.4%	33.6%	45.3%	46.8%	21.3%	19.6%	–	0.0%	–	–	100.0%	100.0%
Intra-Group sales	13.2	17.0	2.5	8.4	0.0	0.7	–	44.1	-15.7	-70.2	–	0.0
Sales revenues by division	458.7	621.8	605.8	849.8	284.5	352.7	–	44.1	-15.8	-69.9	1,333.2	1,798.5
Gross profit	177.5	209.7	109.8	110.5	74.9	82.5	–	44.2	-0.3	-42.3	361.9	404.6
in % of sales revenues of the division	38.7%	33.7%	18.1%	13.0%	26.3%	23.4%	–	–	–	–	27.1%	22.5%
EBIT	46.7	63.7	38.8	48.8	-0.3	-0.8	-17.8	-29.7	-20.7	0.4	46.7	82.4
in % of sales revenues of the division	10.2%	10.2%	6.4%	5.7%	-0.1%	-0.2%	–	–	–	–	3.5%	4.6%
EBITDA	57.4	75.6	47.0	57.3	11.0	11.1	-13.2	-25.3	-20.7	0.4	81.5	119.1
in % of sales revenues of the division	12.5%	12.2%	7.8%	6.7%	3.9%	3.1%	–	–	–	–	6.1%	6.6%
Assets	432.4	577.4	760.0	1,039.6	615.5	666.8	545.3	621.9	-442.5	-485.5	1,910.7	2,420.2
Number of employees (June 30)	4,311	4,981	5,249	5,299	2,654	2,763	461	712	–	–	12,675	13,755

IFRS/IAS accounting standards

KUKA Aktiengesellschaft, headquartered in Augsburg, has prepared its interim financial statements for the period ending June 30, 2017 in line with the IAS 34 “Interim Financial Reporting Guidelines” as adopted by the European Union. The company has elected to prepare a condensed version in accordance with this standard. The condensed consolidated interim financial statements should be read in conjunction with the consolidated financial statements as at December 31, 2016. Unless stated to the contrary, all values are stated in € millions.

The consolidated financial statements were prepared according to the International Financial Reporting Standards (IFRS) of the International Accounting Standards Board (IAS) as approved by the European Union. The term IFRS also includes all valid international accounting standards (IAS). The interpretations of the Standing Interpretations Committee (SIC) and the International Financial Reporting Standards Interpretations Committee (IFRS IC) – supplemented by the guidelines stipulated in section 315a para. 1 of the German Commercial Code (HGB) – were also taken into consideration.

KUKA Aktiengesellschaft is a 94.55% 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 http://www.midea.com/global/investors/financial_statements.

Scope of consolidation

In comparison to the end of year the scope of consolidation has changed as follows:

Number of fully consolidated companies

	Robotics	Systems	Swisslog	Other	Total
Status as of Jan. 1, 2017	24	39	33	4	100
First-time consolidations	–	–	1	–	1
Status as of June 30, 2017	24	39	34	4	101
of which, Germany	1	11	5	3	20
of which, abroad	23	28	29	1	81

Number of at-equity consolidated companies

	Robotics	Systems	Swisslog	Other	Total
Status as of Jan. 1, 2017	1	2	–	–	3
First-time consolidations	–	–	1	–	1
Status as of June 30, 2017	1	2	1	–	4
of which associated companies	1	1	1	–	3
of which joint ventures	–	1	–	–	1

Additions of companies through company acquisitions

100% of the shares in the company Easy Conveyors B.V., Nuenen/Netherlands were acquired for a low single-digit million amount in the second quarter of 2017. The acquisition in the Swisslog segment in the sector of Warehouse and Distribution Solutions (WDS) was made with the aim of increasing market penetration and enhancing the vertical value chain.

Investments in associates and joint ventures

In the second quarter of 2017, 25% of shares in the American company Pipeline Health Holdings LLC, San Francisco/USA were acquired for a purchase price of €13.9 million (USD 15.2 million) in the Swisslog segment. The company offers telepharmacy services for hospitals. This involves organizing medical staff who provide digital services on demand (so-called “remote” pharmacists) and providing software solutions for the automated supply of medication. The reason for the acquisition is to expand the product portfolio of integrated automation solutions in the sector of Healthcare Solutions.

In the first half of 2017, further shares amounting to €0.9 million were purchased in KBee AG, Munich.

As at the reporting date, the investment carrying amount of the associated companies KBee AG, Munich, Yawei Reis Robot Manufacturing (Jiangsu) Co., Ltd., Yangzhou/China, Pipeline Health Holdings LLC, San Francisco/USA as well as of the joint venture Chang’an Reis Robotic Intelligent Equipment (Chongqing) Co., Ltd, Chongqing/China, was valued at €17.4 million; the effect on the pro-rata earnings of these companies was -€1.0 million.

Accounting and valuation methods

With the exception of the changes outlined below, the same valuation methodology and accounting principles as those used for the consolidated financial statements for the 2016 financial year were applied in preparing this consolidated interim report. For further information, please refer to the consolidated financial statements dated December 31, 2016, which form the basis of the interim report presented here. These are also available on the Internet at www.kuka.com.

The adoption of the new standard IFRS 15 – Revenue from Contracts with Customers into European law was announced through “Regulation (EU) No. 2016/1905 of the Commission” on September 22, 2016. IFRS 15 clarifies how, when and over what period IFRS reporters should recognize revenue. The standard also requires entities preparing financial statements to provide the users of such statements with more informative and relevant disclosures than before. The standard provides a principles-based five-step model to be applied to all contracts with customers. The changes must be applied in the EU no later than for financial years beginning on or after January 1, 2018. The initial application therefore corresponds to the date of application stipulated by the IASB. In the context of the implementation, a Group-wide internal project was launched, comprising various steps ranging from an analysis phase to training courses. Determination of the effects due to the initial application of the new standard is currently still ongoing. However, the current status of the project indicates that barely any impact is expected on the consolidated financial statements in the Robotics segment (mainly revenue recognition on a specific date) and altogether only a minor impact in the Systems and Swisslog segments (mainly revenue recognition over a specific period).

Changes in accounting and valuation methods and changes in estimates

No new standards or interpretations based on endorsement by the European Union have become mandatory since the start of the 2017 financial year.

The useful life of the “Swisslog” brand, which was capitalized within the scope of the company acquisition of Swisslog Group and has previously been amortized using the straight-line method, was changed to indefinite at the beginning of the 2017 financial year on account of a modified management assessment. The brand name was previously amortized annually at around €1.2 million. The impairment of the residual book value amounting to €22.2 million will therefore be assessed on an annual basis, with an impairment test being carried out if there are relevant indications. There was no need for recognition of an impairment loss as at June 30, 2017.

The expenditure anticipated in 2017 from the Swisslog purchase price allocation therefore amounts to around €8.8 million (previously around €10,0 million).

Earnings per share

Undiluted earnings per share break down as follows:

	H1/16	H1/17
Net income for the year attributable to the shareholders of KUKA AG (in € millions)	30.9	60.3
Weighted average number of shares outstanding (No. of shares)	39,417,296	39,775,470
Undiluted/diluted earnings per share (in €)	0.78	1.52

Undiluted earnings per share due to shareholders of KUKA Aktiengesellschaft were calculated in accordance with IAS 33 and the weighted average number of shares outstanding for the year.

In the first six months of 2017, the weighted average number of shares in circulation was 39.8 million (June 30, 2016: 39.4 million shares).

Equity

The capital stock of KUKA Aktiengesellschaft amounts to €103,416,222.00 (June 30, 2016: €103,416,222.00). This is subdivided into 39,775,470 (June 30, 2016: 39,775,470) no-par-value bearer shares outstanding. Each share carries one vote.

IAS 19 Employee Benefits

Changes in the discount rates affect the pension provisions and give rise to actuarial gains and losses. The development of discount rates applied by KUKA for countries with significant pension obligations is shown in the table below:

in %	Dec. 31, 2016	June 30, 2017
Germany	1.50	1.85
Switzerland	0.60	0.65
UK	2.60	2.60
Sweden	2.50	2.40
USA	3.96 – 4.00	3.70 – 3.74

Due to a slight increase in the interest rate level in Germany and Switzerland and the positive, actual development of plan assets (primarily at the Swiss companies), actuarial income of €6.4 million was recorded in the first half of 2017. The actuarial effects were reported under equity as an income-neutral sum of €5.4 million, taking deferred taxes into account.

Promissory note loan

KUKA AG issued an unsecured promissory note loan with a total volume of €250.0 million on October 9, 2015. After deducting the transaction costs, KUKA received a total of €248.9 million from this issue.

The total volume was placed in two separate tranches. Tranche 1 has a volume of €142.5 million with an original term to maturity of five years; tranche 2 has a volume of €107.5 million and an original term to maturity of seven years. The issue price was 100.0% with a 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.

The promissory note loans contain a change-of-control clause that entitles the promissory note investors to request repayment of the investment on the next interest payment date after a change of control. The closing of the takeover bid by Midea was a change of control pursuant to the promissory note document. Despite the fact that some investors made use of the right to redeem their units in connection with the change of control, KUKA does not expect there to be any redemption obligations at the redemption date on October 9, 2017.

On initial recognition, the promissory note loan was carried on the balance sheet at fair value less transaction costs of €1.1 million. The difference between the amount paid out (less transaction costs) and the repayment amount is recognized in the interest result for the term of each tranche using the effective interest method. Taking account of the transaction costs, the effective interest rate rises to 1.24% for tranche 1 and 1.67% for tranche 2.

The carrying amount stands at €249.3 million as of June 30, 2017 (December 31, 2016: €249.2 million). Interest amounting to €2.4 million (December 31, 2016: €0.8 million) was deferred.

Syndicated loan for KUKA Aktiengesellschaft

KUKA AG finances itself through a syndicated loan agreement ("SFA" – Syndicated Facilities Agreement) which came into effect in April 2015 as part of a refinancing operation with an original term to March 30, 2020. This included two extension options each for one year. The first extension option was exercised in 2016. The second extension option available to KUKA was requested at the start of 2017. As all banks of the SFA approved a further extension, the new final maturity date is now March 30, 2022.

After an amendment came into effect on November 28, 2016, KUKA has a guaranteed credit line from the SFA of €200.0 million and a cash line with the same volume of €200.0 million at its disposal, which can also be used for guarantees as previously. The syndicated loan agreement is unsecured and contains only the customary equal treatment clauses and negative pledges. Covenants for leverage and interest coverage are agreed for the SFA. For further details, please refer to the company's 2016 annual report.

As at the reporting date, the utilization of the guarantee facility and cash credit line from the syndicated loan agreement of KUKA AG amounted to a total of €162.6 million (December 31, 2016: €170.9 million).

Guarantee facility lines from banks and surety companies

The guarantee facility lines pledged by banks and surety companies outside the SFA total €118.0 million as at June 30, 2017, and can be utilized up to a total volume of €100.0 million in accordance with the regulations of the SFA.

As at the reporting date, the amount exercised was €80.1 million (December 31, 2016: €87.2 million).

Asset-backed securities program

In June 2011, KUKA Group set up an ABS (Asset-Backed Securities) facility with a volume of €25.0 million. This program was utilized in full as at June 30, 2017. The volume was also used entirely as at December 31, 2016.

Financial instruments measured at fair value

IFRS 13 defines how to determine fair market value and expands on disclosures related to the fair market value. The standard does not include any requirements regarding the cases for which fair value is to be used. Here, fair value is defined as the price that would be paid by independent market participants in an arm's length transaction at the evaluation date if an asset were sold or a liability transferred. In accordance with IFRS 13, assets and liabilities evaluated at market values are to be attributed to the three levels of the fair value hierarchy. The three levels of the fair value hierarchy are defined as follows:

Level 1

Quoted prices in active markets for identical assets or liabilities

Level 2

Inputs other than quoted prices that are observable either directly or indirectly

Level 3

Inputs for assets and liabilities that are not based on observable market data

The following table shows the breakdown of the financial assets and liabilities measured at fair value:

June 30, 2017

in € millions	Level 2	Level 3	Total
Financial assets	12.6	3.2	15.8
Financial liabilities	3.5	–	3.5

Dec. 31, 2016

in € millions	Level 2	Level 3	Total
Financial assets	9.6	3.0	12.6
Financial liabilities	13.0	–	13.0

There are currently no financial assets assigned to level 1 of the fair value hierarchy. The assets in level 2 mainly relate to forward exchange transactions carried as assets or liabilities. The value is determined with the aid of standard financial mathematical techniques, using current market parameters such as exchange rates and counterparty credit ratings (mark-to-market method) or quoted prices. Middle rates are used for this calculation. The level 3 financial assets include units in investments not traded on the market.

All other financial instruments are reported at amortized cost and mainly correspond to the book values.

Segment reporting

The internal reporting and organizational structure subdivides KUKA into the KUKA Robotics, KUKA Systems and Swisslog segments. Key financial indicators are determined for all three segments. Earnings before interest and taxes (EBIT) are used as the key indicator with regard to managing segment profits.

The main elements of the segment reports are contained in the management report on the Robotics, Systems and Swisslog operating business divisions, as well as in the tables at the beginning of the notes to the quarterly report.

Cash flow statement

The cash flow statement shows changes to KUKA Group's liquidity position in accordance with IAS 7. This item comprises all funds recognized on the balance sheet as cash and cash equivalents; i. e. cash in hand, checks and cash balances with financial institutions, provided that they are available within three months. Cash and cash equivalents of €0.5 million (December 31, 2016: €1.1 million) are subject to restrictions. These restrictions relate to a government-funded contract in Brazil and government funding for eligible development projects with a German company.

Contingent liabilities and other financial commitments

Apart from the reduction of rental and leasing commitments (due to the smaller number of tenancies) and of liabilities from guarantees by a low million euro amount, there has been no material change in other financial obligations and contingent liabilities since December 31, 2016.

Related party disclosures

Due to the change in shareholdings (see the section “Takeover of KUKA by Midea Group”), Voith Group and Loh Group are no longer included among the related parties. The group of related parties has been expanded to include the companies allocable to Midea Group.

Aside from these changes and the newly acquired at-equity investment Pipeline Health Holdings LLC, San Francisco/USA, the group of related parties has remained unchanged compared to December 31, 2016 in terms of associated companies, joint ventures and non-consolidated subsidiaries.

In the first half of 2017, services to the value of €3.3 million were performed by related companies and persons, and services to the value of €7.5 million were received by them.

Furthermore, as at the reporting date, the sums outstanding in relation to dealings with related parties amounted to €1.0 million for receivables and €5.3 million for liabilities and other obligations.

The contractually agreed, future capital contributions to KBee AG are to be made depending on the achievement of certain milestones and amount to a further €1.3 million. There are currently significant differences in opinion between the parties regarding the interpretation of certain components 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.

Takeover of KUKA by Midea Group

On June 16, 2016, MECCA International (BVI) Limited, Tortola/British Virgin Islands, an indirect wholly-owned subsidiary of Midea Group Co. Ltd. (Midea) published the bid document for the public tender offer for KUKA Aktiengesellschaft (KUKA). The takeover bid was made in the form of a cash offer of €115.0 per KUKA share and was addressed to all KUKA shareholders.

At the end of June 2016, based on the fairness opinion, the Executive Board recommended that KUKA shareholders accept the offer. KUKA shareholders were able to offer their shares to Midea up to August 3, 2016 during a grace period (due to the 30% minimum acceptance threshold being exceeded).

After the grace period expired, the stake held by Midea Group Co. Ltd., Foshan City, Guangdong Province/China in KUKA amounted to 94.55% taking into account the tendered shares.

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

All the closing conditions of the takeover bid of June 16, 2016 were therefore met and the takeover bid was finally settled effective January 6, 2017.

For further details, please refer to the company’s 2016 annual report.

Changes to the Supervisory Board

The following persons were elected by a large majority of the shareholders as new members of the Supervisory Board at this year’s Annual General Meeting held on May 31, 2017:

- › Dr. Yanmin (Andy) Gu
- › Mr. Honbo (Paul) Fang
- › Ms. Min (Francoise) Liu
- › Professor Dr. Michèle Morner
- › Mr. Alexander Liong Hauw Tan
- › Professor Dr. Henning Kagermann

Mr. Michael Leppek, Mr. Wilfried Eberhardt, Mr. Siegfried Greulich, Mr. Armin Kolb, Dr. Constanze Kurz and Ms. Carola Leitmeir will continue to be members of the KUKA AG Supervisory Board.

Events of material importance after the end of the reporting period

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

Responsibility statement

To the best of our knowledge and belief, and in accordance with the applicable reporting principles for interim financial reporting, the Group's condensed interim financial statements give a true and fair view of the assets, liabilities, financial position and income of the Group, and the Group's interim management report includes a fair review of the development and performance of the business and the position of the Group, together with a description of the principal opportunities and risks associated with the expected development of the Group in the rest of the financial year.

Augsburg, July 31, 2017
The Executive Board

Dr. Till Reuter

Peter Mohnen

Declaration by the auditors

To KUKA Aktiengesellschaft, Augsburg

We have reviewed the condensed consolidated interim financial statements – consisting of the condensed income statement, statement of comprehensive income, condensed consolidated cash flow statement, condensed consolidated balance sheet, changes to Group equity statement and selected explanatory notes – and the interim Group management report of KUKA Aktiengesellschaft, Augsburg, for the period from January 1, 2017 to June 30, 2017, all of which form part of the half-year report as per section 37w of the German Securities Trading Act (WpHG). Preparation of the condensed consolidated interim financial statements in accordance with the International Accounting Standard 34 “Interim Financial Reporting”, as adopted by the EU, and the interim Group management report in accordance with the applicable provisions of the German Securities Trading Act (WpHG) for interim group management reports is the responsibility of the parent company’s Executive Board. Our responsibility is to issue a statement on the condensed consolidated interim financial statements and the interim Group management report based on our review.

We conducted our review of the condensed consolidated interim financial statements and the interim Group management report in accordance with the German standards for the review of financial statements stipulated by the Institute of Public Auditors in Germany (IDW). According to these standards, we are required to plan and conduct our review so that we can be reasonably certain through critical evaluation that the condensed consolidated interim financial statements have been prepared in all material respects in accordance with IAS 34 “Interim Financial Reporting”, as adopted by the EU, and that the interim Group management report has been prepared in all material respects in accordance with the applicable provisions of the German Securities Trading Act (WpHG). A review is primarily restricted to interviews with company employees and analytical evaluations and is therefore less rigorous than an audit. Since we have not conducted an audit, we are unable to express an audit opinion.

When conducting our review, we did not encounter any issues that lead us to conclude that the condensed consolidated interim financial statements have not been prepared in all material respects in accordance with IAS 34 “Interim Financial Reporting”, as adopted by the EU. Nor did we conclude that the interim Group management report has not been prepared in all material respects in accordance with the provisions of the German Securities Trading Act (WpHG) as applicable to interim group management reports.

Munich, July 31, 2017

KPMG
Aktiengesellschaft
Wirtschaftsprüfungsgesellschaft

Karl Braun
(Auditor)

Rainer Rupprecht
(Auditor)

Financial calendar 2017

Interim report for the third quarter

October 30, 2017

This quarterly report was published on August 2, 2017, and is available in German and English from KUKA Aktiengesellschaft Corporate Communications/Investor Relations department. In the event of doubt, the German version applies.

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