

## RISK AND OPPORTUNITY REPORT

### PRINCIPLES

KUKA Group conducts business around the globe. Every entrepreneurial activity presents new business opportunities, but also many risks, especially technical ones. The goal of KUKA AG's Executive Board is to minimize these risks and take advantage of potential opportunities, in order to systematically and continuously improve the value of the company for all stakeholders and shareholders.

### Risk management

To achieve this objective, the Executive Board implemented a comprehensive risk management system within the Group, which is used to continuously and systematically identify, evaluate, control, monitor and report internal and external risks to which its divisions and subsidiaries are exposed. Identified risks are evaluated throughout the Group for their potential impact on profits and the likelihood that they will occur. They are categorized according to worst, medium and best case scenarios, including the expected risk value. Accruals and write-downs associated with these risks are included in the financial statements in accordance with applicable accounting principles. The monthly risk report includes the top ten risks for the divisions and KUKA AG as holding company, as well as an overview of the entire Group's risk exposure. These top ten risks are a fixed part of the monthly reporting. The risk report is also reviewed during Executive and Supervisory Board meetings, especially when the audit committee convenes. The identified risks are presented and explained in more detail to the Executive Board quarterly by the risk management committee. The committee also determines whether or not initiatives to minimize the risk are adequate or whether further measures are required. This management committee also evaluates the plausibility of the reported risks and derives alternative ways to avoid similar risks in future.

The direct responsibility for early identification, control and communication of risks is defined and lies with the management of the divisions and subsidiaries. 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. Whenever defined reporting thresholds are exceeded, the responsible parties are obliged to use internal ad hoc announcements. The head of the Group controlling department at KUKA AG is responsible for coordinating the risk management system. This central risk management position reports directly to KUKA AG's CFO. 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 makes it possible for the Executive Board to identify material risks at an early stage and take appropriate steps to counter them as well as to monitor the mitigating measures. As part of its regular audits, the internal audit department monitors whether KUKA Group's risk management directives are being adhered to, and thus the effectiveness of the procedures and tools that have been implemented. If necessary, the internal audit involves the risk responsible into audit scope. In addition, the internal audit department regularly audits the risk management process to ensure that it is efficient and continuously improved. Furthermore, the external auditors check that the early risk identification procedure is suitable for timely identification of risks that threaten the existence of the company.

KUKA Group's opportunities and risk-related controlling process ensures that opportunities and risks are taken into consideration by the management. Further details regarding associated opportunities are provided in the description of the various risk categories.

KUKA Group also has an internal controlling system (p. 89, Internal control and risk management system) above and beyond the risk management system, which is used to continuously monitor the Corporation's business and accounting processes and helps to ensure that they are properly adhered to.

## MARKET AND BUSINESS RISKS AND OPPORTUNITIES

KUKA is exposed to the cyclic investment plans of its customers in the various market subsectors. The automotive sector, with its oligopolitical structures and constant price pressure, represents a major share of the Systems and Robotics divisions' business volumes. Variations in the industries' capital expenditure plans are also considered in the respective strategic and operative plans by analyzing public announcements and disclosures. Due to the cyclic nature of the business, the company continuously strives to be as flexible as possible with its own capacities and its cost structure.

It is further exposed to country risks, such as inadequate patent and brand protection in Asia, exchange rate fluctuations, financial and technical risks and the risk of substantial price increases of key raw materials. To the extent possible and economically viable, value added is increasingly being localized to reduce currency exchange risks. KUKA has developed an independent strategy to safeguard its intellectual property, which is primarily secured by patents and trademark rights. New competitors in the market, particularly from Asia, increase price pressure. We counter this by maintaining strong relationships with our customers, and especially by expanding our technological skills and protecting them.

KUKA benefited from sharply higher orders received than the year prior from both the automotive industry and the general machinery and plant engineering sector, especially in the first half of 2011. Additional opportunities also arose because KUKA Group's key automotive customers enjoy an excellent competitive position in their markets. Compared to its own competitors, KUKA Group sees business growth opportunities due to its customer portfolio, particularly with respect to the development of its customers' market shares. Further opportunities arise from the general trend toward greater automation in non-industrial sectors, such as the long-term prospects associated with assisting an aging society.

KUKA works with suppliers that focus on quality, innovation strength, continuous improvement and reliability so that it can supply its own customers with top quality products. Generally, KUKA sources product components from several suppliers, but due to a lack of alternatives is dependent on single source suppliers that dominate their markets in a few cases.

An additional risk that could also impact business performance after 2011 is the further development of national debts around the world, but particularly in the eurozone. Increasing currency fluctuations, particularly of the American dollar, the Hungarian forint, the Japanese yen and the Chinese yuan, pose an additional risk. How KUKA manages its currency exchange risks is described in detail in the section on financial risks.

## PERFORMANCE RISKS AND OPPORTUNITIES

### KUKA Robotics

The key challenges for this division's product portfolio are the continuing cost sensitivity of customers around the world and their demands for continuous product innovation. This applies especially to the automotive industry and its sub-suppliers. The result is permanent price pressure and potentially longer life cycles for the robots.

KUKA Robotics counters such trends by continually developing new products and applications that offer customers in existing markets quantifiable financial advantages driven by very fast pay-backs. In fiscal 2011, KUKA Group spent € 37.7 million on research and development. The Robotics accounted for 93,9 percent of the expense. Over the course of the financial year, the division rolled out a new generation of robots in stages to its traditional markets. Launching new products goes hand-in-hand with risks associated with product performance and warranties, which could generate reworking costs. 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 into general industry. One of the corporation's key strategic thrusts is to penetrate new, non-automotive markets. This includes the health care market and other consumer related sectors in which human-machine collaboration will in future be necessary. The systems used for human-machine collaboration can operate without protective barriers or similar safety measures. One of the division's subgroups, Advance Robotics, focuses on technical development of such innovative products and applications. In addition, the company is expediting sales in the American region and the BRIC nations. Increased distribution of our own value added across various local currencies will make the profitability of the company less dependent on exchange-rate fluctuations.

#### **KUKA Systems**

This division's sales and profits are subject to general business risks due to the length of 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, as well as 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 thus uses appropriate risk checklists for individual orders, which are used to assess the associated legal, business and technical risks prior to preparing a quotation or accepting an order. Insolvency risks especially are monitored, tracked and mitigated using a strict project and receivables management process in conjunction with this exposure reporting. Other risks are continuously monitored and if necessary accounted for by accruals or write-downs. In addition, the company is standardizing and optimizing the quotation and order acceptance processes used by its international subsidiaries. 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 changes over the course of the project.

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

The increasing variety of models offered by the automotive industry has a positive impact on the potential market volume, since it generates increasing demand for flexible manufacturing systems, which in turn spurs demand for new assembly lines or the revamp of existing ones. This creates new business opportunities for systems integrators and subsuppliers. Scarce resources are driving demand for smaller and more fuel-efficient vehicles, which will rely on alternative energy sources. Going forward, this will make it necessary for automakers, especially the American players, to invest in new assembly-lines or to upgrade their existing production systems.

Pay-on-production contracts such as the one entered into by KUKA Toledo Productions Operations (KTPO) offer additional opportunities, but also risks. The Jeep Wrangler brand continues to offer above average growth opportunities compared to other American car models. Again in 2011, KUKA participated in the growth. The risks herein are the strong dependence on the volume 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. Current examples are the aerospace and solar industry, from which new orders were again received in 2011. Although there is an opportunity to penetrate new markets, there are also associated risks, above all in relation to technical requirements, since customers in these sectors often have absolutely no experience with automated systems. Checking technical risks by using appropriate risk lists is therefore a major instrument in advance of applying new automation technologies.

## STRATEGIC RISKS AND OPPORTUNITIES

The goal of the business divisions is to be among the technology and market leaders in their target markets. Consistently enhancing their core technologies using coordinated innovation programs is thus of primary importance. A key task is to identify the opportunities and risks of technical innovations in a timely manner and evaluate their feasibility. The company mitigates the impact of faulty market assessment by conducting regular market and competitor analyses, some of which are decentralized. Application-oriented developments, partnerships with systems integrators and alliances and cooperative research projects; for example, the German Aerospace Center (DLR) in Wessling near Munich, RWTH Aachen and the university clinic in Aachen reduce the risk of developing non-marketable products and systems.

Using effective quality assurance systems in combination with regular certification programs helps convince purchasers that the company offers customer-oriented products and solutions and strengthens the positions of KUKA's companies in their target markets.

The corporate strategy is managed by a central KUKA AG department and is regularly reviewed and coordinated with the divisions. The joint Innovation Center develops crossover technologies and concepts. Uniform procedures and processes generate synergies that help the company meet market demands for innovative products and solutions.

## PERSONNEL RISKS AND OPPORTUNITIES

The success of KUKA Group, a high-tech company, depends mainly on having qualified technical and management staff. Personnel risks arise mainly from employee turnover at key positions within the Group. Improved business and economic prospects enable the company to strengthen the loyalty of its core personnel, provide highly skilled employees with continuing education or entice new recruits to join the company. This applies to the traditional markets in Europe, but especially the United States, as well as the growth markets; e.g. the BRIC countries, in which the need for highly qualified employees is steadily growing. 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.

Furthermore, in Germany, there is evidence of an increasing shortage of qualified personnel, particularly in the technical area. This requires that the company have appropriate in-house training programs and permanently stay in tune with the job market and job seekers. KUKA works closely with local and national universities and research institutes, such as the University of Augsburg, RWTH Aachen and the German Aerospace Center (DLR).

Centralized and decentralized training and continuing education programs for employees at all levels ensure that the Group's people have the indispensable expert skills they require. The in-house and international trainee program offers recruits the opportunity to get to know various business areas and foreign companies. The 227 apprentices to be trained by the KUKA Group by year-end will be quickly integrated into the company and mostly offered a permanent position when they have completed their training. One of the key challenges in the coming years will be to prepare KUKA Group for the future in view of the demographic shift.

KUKA Group has an attractive performance and results-driven compensation system for managers to strengthen entrepreneurial thought processes and management styles and to encourage employees to remain with the company and participate in its growth over the long term. KUKA Group's employee share program is another initiative that serves this purpose.

## IT RISKS AND OPPORTUNITIES

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 computer systems related risks such as failure of computer centers and other IT systems. This is done by continuously investing in updated hardware and software. A new storage system with the requisite processes and corresponding data and applications recovery systems was installed and started up to ensure business continuity in the event of failures. The company mitigates the risks associated with an increasing number of external threats, and dependence on ever-expanding digitization of business processes, by systematically monitoring the associated processes. Targeted investment and ongoing optimization of IT-supported processes generate long-term cost reduction opportunities and lead to continuous quality improvement.

IT security is also closely tied into KUKA Group's risk management process. External and internal auditors conduct an annual IT audit as well as spot checks to ensure that the respective processes adhere to legal requirements.

## FINANCIAL RISKS

One of KUKA AG's primary tasks is to coordinate and control the Group's financing requirements and ensure that KUKA remains financially independent. With this goal in mind, a central department optimizes the Group's financing and limits its financial risks. The standard, group-wide treasury reporting system implemented in 2007 was further enhanced for this purpose. In addition, the Group's overall liquidity risk is reduced by closely monitoring the Group's companies and their control of payment flows.

Over the course of the past two-and-a-half years, KUKA Group's solvency was strengthened by way of several measures. One of these was to restructure the company's debt in terms of maturity and the type of financial instruments used. For 2009 and 2010, this included two capital increases, the issue of a corporate bond and conclusion of a new Syndicated Senior Facilities Agreement.

The rating agencies Standard and Poor's and Moody's gave KUKA AG a long-term Corporate Family Rating (CFR) of B and B2 respectively. Both ratings were assigned a stable outlook. KUKA AG's bond was given a rating of B- and B3 respectively.

The Syndicated Senior Facilities Agreement concluded in November 2010 runs until March 31, 2014. It includes the usual covenants specifying quarterly restrictions. A fundamental risk associated with this type of financing exists when business performance is significantly below plan and the resulting profit and financial situation precludes adherence to the covenants. In such cases, extension of the financing depends on the extent to which the banks involved agree to the necessary adjustments. KUKA monitors adherence to these covenants monthly. The company complied with all covenants during the course of the 2011 financial year.

In addition to the aforementioned steps, agreements on bilateral credit lines with banks and credit insurance companies supplement KUKA Group's financing portfolio. This includes, for example, the ABS program (regular sale of receivables) established in 2006 with Bayerische Landesbank in the amount of up to € 25 million, the term of which has been extended until March 31, 2013. An additional ABS program in the amount of over € 25 million has also been concluded with Landesbank Baden-Württemberg.

Transaction-related currency exchange risks are hedged using currency futures. The goal is to hedge the currency exchange risk on a rolling basis. Details of the central currency management process are provided under Financial Instruments on pages 111 f. of the notes to the financial report. As a basic principle, all KUKA Group companies must secure their foreign currency positions as soon as they arise. Translation risks; that is, valuation risks associated with balance sheet items whose value has been converted from a foreign currency, 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). Internal guidelines are used to control the trading and use of derivatives. Associated risks are continuously monitored internally.

## COMPLIANCE RISKS

Compliance violations can lead to fines, sanctions, legal directives regarding future business conduct, forfeiture of profits, exclusion from certain businesses, loss of union concessions 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. It could also have a negative impact on the company's ability to pursue strategic projects and transactions that may be important for the business; e.g., 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 amounts of money.

In order to make these risks transparent and controllable, a Corporate Compliance Program was introduced in early 2008. It applies to all German and international KUKA companies and all managers around the globe have been trained. A compliance committee meets at regular intervals and ad hoc and reports to KUKA AG's CEO, who in turn reports to the Supervisory Board's Audit Committee.

In spring 2011, KUKA Group's updated corporate compliance program manual, with supplementary rules regarding each employment contract, was distributed to all employees. As a logical extension to the steps taken to date, an e-learning program to educate employees at the German sites about the contents of the compliance guidelines was established in consultation with the Group's works council and has been in use since fall 2011. The next step, which is scheduled for February 2012, is to roll out the program to all the company's international locations and to include all employees who started with the company at the German sites since September 2011.

The CEO is ultimately responsible for the corporate compliance program. The program is regularly updated and subject to strict internal controls. The initiative did not uncover any substantial risks in 2011, since the company was able to actively implement countermeasures by mitigating risk at an early stage and striving to eliminate risk sources; e.g., by aligning its business processes.

## OTHER RISKS

KUKA Group continuously monitors other risks and mitigates these to the 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 that any situations exist which would have a negative impact on the valuation in the balance sheet. However, there is no guarantee that such situations, which could, for example, require costly cleanup operations to be undertaken, will not occur in the future.

The events in Japan on March 11, 2011 had no negative impact on KUKA Group's business results. Neither do we currently foresee any impact on the business operations going forward.

Where possible, legal risks are limited by using standard general contracts. The Group's legal department supports the business operations and thereby helps to limit risks. A Group-wide Directors' and Officers' (D&O) Liability Insurance Policy is in place that covers, among others, the business management bodies (Executive Board and managers) and supervisory bodies (Supervisory, administrative and advisory boards) of the German and foreign Group subsidiaries. Existing insurance policies are reviewed annually in order to weigh the relationship between the insurance protection and deductible amount versus the risk premium. KUKA's Executive Board subsequently decides on further steps.

The shareholder structure is periodically analyzed to assess a possible takeover of the company. Because it has operations around the world, KUKA Group is required to observe numerous international and country-specific regulations, mostly related to the laws of the particular country, as well as financial administration rules. There is a risk that countries could implement duties should the company fail to properly observe laws and other regulations. Tax audits in particular could have a negative impact on the Group. Should the auditors find compliance issues, the company could be liable for payment of interest charges, penalties and tax arrears. Appropriate precautions based on experience are taken for such tax risks.

## SUMMARY

From an overall perspective, KUKA Group is primarily exposed to business performance and financial risks. The Executive Board is not aware of any individual or combined risks that could threaten the company's existence. Strategically and also financially, the company is positioned to be capable of taking advantage of business opportunities that arise.