2 GROUP MANAGEMENT REPORT

2.1 BASIS OF THE VA-Q-TEC GROUP

2.1.1 Business model, market and strategic orientation

2.1.1.1 Business model and market

va-Q-tec is a technologically leading supplier of highly efficient products and solutions in the area of thermal insulation. The offerings of va-Q-tec in the Group's business lines of products, systems and services are applied in thermal logistics, the refrigeration industry, in industrial and technical applications such as water boilers, in the building industry and in the mobility area.

In the Products business line, the company develops, produces and markets innovative vacuum insulation panels ("VIPs") and phase change materials ("PCMs"). VIPs are high-performance insulation panels between 5 mm and 50 mm in thickness that are particularly suited to space-saving and energy-efficient thermal insulation. PCMs are cold and heat storage materials that absorb and store thermal energy during a freezing or thawing process. Various temperature ranges can be established through utilising various storage materials such as paraffins and saline solutions. In its Systems business line, va-Q-tec also produces passive thermal packaging systems, containers and boxes through combining VIPs and PCMs, which maintain constant temperatures for up to 200 hours without making recourse to external energy.

In its Services business line, va-Q-tec operates a fleet of rental containers that it produces itself, which allow temperature-sensitive transports to be operated cost efficiently and safely. va-Q-tec has run this business through its UK subsidiary since 2011. For this purpose, va-Q-tec has established a comprehensive global partner network consisting of airlines, freight forwarding firms and service partners. Since 2015, va-Q-tec AG has also been operating a business for high-performance thermal transport boxes that the company produces itself. These transportation solutions enjoy particularly strong demand from the healthcare industry.

To augment this, va-Q-tec offers consultancy services related to thermal insulation. This makes va-Q-tec a problem solver in the cold chain logistics area and other thermal technology areas.

With this extensive portfolio, va-Q-tec serves customers from the following target sectors:

- Healthcare & Logistics; e.g. containers and transport boxes for temperature-sensitive transports, plus rental service
- Appliance & Food, e.g. insulation of refrigeration/ freezing equipment and food containers
- Technology & Industry, e.g. insulating water boilers, pipelines, laboratory equipment and ultra low temperature refrigeration units
- Building, e.g. building insulation (façades, roofs, floors)
- Mobility, e.g. Insulation in refrigeration trucks, automobiles, trains and aircraft

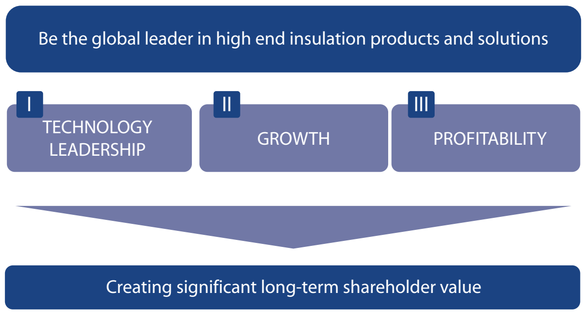
All applications in the respective target sectors are subject to high requirements in terms of the performance and durability of the thermal insulation. Moreover, space restrictions mostly exist in relation to installation.

The following market trends play a key role for the target market of Healthcare & Logistics. Clinical research and pharmaceuticals production is characterised by increasing globalisation. Demand for ever more complex and often temperature-sensitive biotech medications is rising constantly, the demands made of product safety ("good distribution practice of medicinal products for human use" – GDP) are becoming increasingly more stringent, and healthcare system expenditures are growing continuously. The Group's businesses in the end-markets of Appliance & Food, Technics & Industry, Building and Mobility are particularly affected by the growth drivers of rising energy efficiency and urbanisation.

2.1.1.2 Strategic orientation

va-Q-tec operates in a very dynamic, innovation-driven and global market environment that is being developed further constantly in line with the aforementioned megatrends.

Three pillar strategy



Within this market environment, va-Q-tec pursues the objective of expanding its position as one of the globally leading providers of highly efficient productions and solutions in the thermal insulation area, and sustainably influencing cold chain logistics. To reach this goal, va-Q-tec pursues three strategic approaches:

I. Technology leadership

To benefit from the global trends, the Group focuses on securing and further expanding its leading innovation and technology position in the thermal insulation area with VIPs and PCMs. va-Q-tec stands for its "Always the Right Temperature" mission statement in the cold chain of the healthcare industry and many other end applications. The company works continuously on innovative technologies, process innovations and new business models that can change not only cold chain logistics but also thermal insulation in many industries in the future. va-Q-tec aims to constantly enhance its own innovative strength and capability. Such efforts focus on advanced VIP types such as for higher temperatures, new thermal packaging and innovative materials. In accordance with this objective, the Group invests in highly qualified personnel, product development and research. Selective M&A activities such as acquiring an interest in the Cologne-based materials start-up SUMTEQ to gain access to its new technologies also form part of the strategy. Above and beyond this, va-Q-tec also pursues cooperation ventures with technology partners in externally supported R&D projects. In the medium term, the company aims to rank among the top three technology providers in all its target markets.

II. Growth

The technology platform of va-Q-tec offers great growth possibilities through the broad application of its products, systems and services in the aforementioned target sectors. va-Q-tec is strongly oriented to growth. The company's processes, organisational structure and business model are aligned to scalability and consistent exploitation of growth opportunities. The company is on a clearly defined growth track with its increasingly international presence, strengthening of its solid financing base and focus on business relationships with major customers.

va-Q-tec is oriented to high-growth markets that also offer the company attractive target margins. Pharmaceutical and biotech customers have long been of great significance for va-Q-tec: as its most important business pillar, the Healthcare & Logistics end-market accounts for around 69 % of the revenue of va-Q-tec. In the temperature-managed logistics area, the global healthcare industry is relying increasingly on high-quality solutions such as offered by va-Q-tec.

Healthcare customers are still frequently using packaging solutions based on conventional insulation materials and basic water and ice mixtures. With the rising quality requirements made of cold chains – under the "good distribution practices (GDP)" motto – customers are substituting these types of basic solutions with high-performance thermal packaging. With its rental models ("Serviced Rental"), va-Q-tec is also targeting demanding customers that are also cost-sensitive in relation to packaging solutions. Such customers receive optimally customised rental solutions offering very high-performance thermal packaging at a favourable price. For this reason, va-Q-tec expects to grow further globally in the Healthcare & Logistics end-market over the coming years and outperform the growth rates of the underlying markets of (healthcare) cold chain logistics in doing so. The aim is to become the globally leading provider of services and packaging solutions in this market.

In the other target sectors, too, the company is endeavouring to benefit to an above-average extent from underlying growth opportunities, such as the energy efficiency trend. The technology platform that has grown over the past years is to be established in the defined end-markets: va-Q-tec expects significant growth in the Appliance & Food area in the short and medium term. To a growing extent and with higher regulatory requirements made of the energy efficiency classes of refrigerators, such equipment increasingly needs to be insulated with VIPs. The high-quality VIPs from va-Q-tec – with their insulation performance testable in the manufacturing processes of the OEMs – will benefit particularly from this trend. Growth in product sales of VIPs is also anticipated in the end-market of Technics & Industry through introducing energy efficiency classes for water storage tanks, for example. Manufacturers are increasingly equipping their premium products with va-Q-tec VIPs to achieve the best energy efficiency class. Here, too, the company expects that better insulated products will establish themselves increasingly in the mass market. Medium- and long-term, the end-markets of Mobility and Building serve as additional growth drivers for the Group.

Overall, the company anticipates continued growth in the low to mid double-digit percentage range over the next three years.

III. Profitability

Profitability is indispensable to secure the company and its competitiveness. Profitability forms the third pillar of the corporate strategy and is thereby a significant metric of corporate steering.

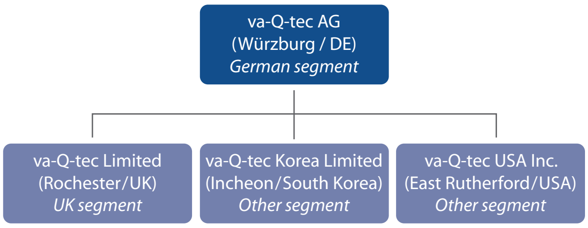
Various measures in the operational excellence area are being advanced continuously to enable profitable growth. Such Management Board initiatives relate primarily to measures to optimise and harmonise quality, processes, the organisation, resource consumption as well as IT systems across the Group. Economies of scale accompany the significant expansion of the Group's business activities and corresponding sales revenue growth: the purchasing terms on which the Group can procure intermediate products and third-party services improve significantly with the increasing expansion of business and sales revenues, and consequently rising purchasing volumes. The cost increases for Group support functions such as personnel, marketing, financial accounting and controlling do not match the top line growth rate. Profitability is also improved by vertical integration into downstream steps of the value chain as far as services and new models, as with the "Serviced Rental" of boxes and containers. This forwards integration and control of upstream value steps to improve profitability forms a central element of the corporate strategy. The company aims to improve the EBITDA margin to more than 25 % over the coming years through the aforementioned operative and strategic measures.

Group structure, employees, investments and steering

The va-Q-tec Group consisted of a total of four companies during the reporting period. From these four companies derive the Group's three operating segments – the German segment (va-Q-tec AG), the UK segment (va-Q-tec Ltd. UK) and the Other segment (va-Q-tec Ltd. Korea and va-Q-tec USA Inc.)

Following the acquisition of all still outstanding non-controlling interests in the UK subsidiary in 2016, the parent company va-Q-tec AG (German segment) wholly owned all three foreign subsidiaries as of 31 December 2016.

va-Q-tec AG covers all three divisions (Products, Systems and Services), whereby in the "Services" division it has operated the business with rental boxes since 2015. va-Q-tec Ltd. (UK) primarily comprises the "Services" division with its focus on the rental business of (returnable) containers. The "Other" segment encompasses the business activities of the subsidiaries va-Q-tec Ltd. (Korea) and va-Q-tec Inc. (USA). The South Korean subsidiary is responsible for the purchasing and business development of all three of the Group's business areas in Asia. The subsidiary in the USA operates as the Group's sales company in North America. For the purposes of corporate management and controlling, the divisions are reflected in the three reporting segments, whereby va-Q-tec (Korea) and va-Q-tec (USA) are aggregated to form one reporting segment (Other).



Structure of va-Q-tec Group, Status as of 31 December 2016

To manage the three reporting segments, the management monitors these areas individually and across the Group on the basis of detailed and regular reports. The management steers the allocation of resources based on this information and institutes countermeasures where performance falls short of target. A streamlined Group structure ensures the Group management can intervene efficiently in the subsidiaries' important business decisions.

Central metrics of the va-Q-tec Group that serve the corporate steering by the management include sales revenue, earnings before interest, tax, depreciation and amortisation (EBITDA) and the equity ratio. Compared with the previous year, the steering system at va-Q-tec AG has not changed. The Group's specific steering metrics are presented in greater detail below:

Sales revenue growth is the basic indicator of business performance and growth and of the attractiveness of the Group's products, systems and services. This metric reflects the extent to which the company succeeds in exploiting the potential of its unique and very differentiated technology platform, and of underlying market growth. Viewed at the level of the reporting segments and geographic distribution, sales revenue also serves as an indicator of the success and performance of the Group's business models.

EBITDA serves as the metric for profit results. To this is then added as a subsidiary measure the EBITDA margin measured in relation to total income as a benchmark for the Group's operative performance and profitability. Due to the special situation in the financial year elapsed, adjusted EBITDA and the adjusted EBITDA margin are additionally used to explain the 2016 reporting period. The adjustments relate exclusively to the one-off special effects due to the IPO. These are explained in more detail in section 2.2.4 Results of operations. As a fast-growing technology company, va-Q-tec AG invests large parts of its financial resources in machinery, plant and its fleet of containers and boxes for rental services. A high level of depreciation during the current phase of building up infrastructure and fleet distort the actual picture of financial performance. For this reason, an earnings figure before depreciation presents a more precise view of the company's performance.

The equity ratio informs the management and external shareholders about the strength of the va-Q-tec Group's balance sheet, its capacity to withstand crises, its creditworthiness and its credit risk. In the medium term, we regard an equity ratio with a target of 40-50 % as representing a balanced relationship between debt and equity, and consequently of the risk distributed among equity investors and creditors.

In the area of non-financial performance indicators, the number of employees serves as an indicator and central steering metric of the growth in the Group's operating activities.

The following overview shows the growth in the relevant steering metrics.

The section 1.2.4 "Financial position and performance" provides a detailed discussion of these key indicators.

EUR millions unless stated otherwise	**2016**	2015	Change
Revenues	35.53	22.54	58 %
EBITDA (IFRS)	5.22	3.60	44 %
EBITDA margin (IFRS)	12 %	12 %	
Adjustment	1.74	0.06	
EBITDA (adjusted)*	6.95	3.66	90 %
EBITDA margin (adjusted)*	16 %	12 %	
Equity ratio	64 %	24 %	
Year-average number of employees	267	212	26 %

* Adjusted for one-off expenses for the IPO. For more information see section 1.2.4 on the results of operations.

2.1.2 Research and development

va-Q-tec is one of the leading technology innovators in the development and production of energy-efficient and space-saving VIPs, high-performance PCMs and thermal packaging systems. The research and development area is of strategic importance to secure and further extend the company's position as one of the technology leaders in the thermal insulation areas. Group research at va-Q-tec operates across the whole company, developing technologies for future-viable products and solutions for the Group companies.

va-Q-tec operates a portfolio of internal and external R&D projects that not only serve basic research on VIPs but also relate to five of the target sectors defined by va-Q-tec that require advanced thermal heat insulation and energy storage.

As a spin-off from a university – the Bavarian Centre for Applied Energy Research (ZAE Bayern) – va-Q-tec maintains partnerships with international associations, research institutions, universities and colleges. Internally, the company has established its own R&D organisation with extensive capacities for basic research and, in particular, application-oriented research.

The past years' successful R&D activities have created a portfolio of patents that manifests in the leading technology platform.

The worldwide unique va-Q-check® quality control system enables the insulation of VIPs to be controlled before use, or boxes and containers to be approved for reuse, through measuring internal gas pressure. va-Q-tec VIPs are thereby the only insulation whose performance and efficacy can be swiftly measured and controlled at the place of use. This fosters confidence and trust in the VIP technology and enables va-Q-tec to meet its high quality commitment to a demanding customer group, including complying securely, and on an evidenced basis, with the thermal protection requirements for cold chain transportation, for example. The patented va-Q-pro vacuum insulation panel is a freely formable, powder-filled VIP from which holes and sections can be cut on the production side, and which can be manufactured in three-dimensional geometry. These properties and flexible structuring possibilities allow va-Q-pro to be deployed in various application areas, including for batteries in e-vehicles or to insulate parts of aircraft, such as the galley, for example.

va-Q-tec conducted basic research in 2016 in applying VIPs in entirely new temperature ranges, for example. While conventional VIPs are typically deployed in the -80 to +80°C temperature range, va-Q-tec is working on expanding VIPs' deployment range through optimally combining various case materials and core materials. The significant interest held in the Cologne-based start-up SUMTEQ is of strategic importance in the area of fundamental research for core VIP materials. The joint target of va-Q-tec and SUMTEQ is the pilot testing and market launch of SUMTEQ's submicroporous foams as a further high-performance insulation material. This strategic partnership offers both companies the opportunity to contribute their respective specialist and technical research and development expertise, and thereby generate added value for their customers.

In the year under review, va-Q-tec worked mainly on expanding and improving its existing product portfolio: the va-Q-safe insulation solution, which was further developed and launched on the market in 2016, is wrapped in a thin and robust polyurethane layer surrounding the actual vacuum insulation panel as protection. It makes installation and handling easier, as fitters can and even dowel glue the non-sensitive polyurethane surface. This enables shorter assembly times and more efficient labour deployment. With va-Q-shell, va-Q-tec further developed a product to market maturity in partnership with customers from the water boiler area: va-Q-shell consists essentially of two polyurethane shell halves with integrated VIPs. Deploying va-Q-shell enables 50-60 % energy savings compared with traditional solutions with conventional insulation. With VIPs, water storage tanks reach the A+ labelling according to the new EU norm mandatory since September 2015.

In the Systems business line, the newly developed va-Q-one adds to the portfolio of passive thermal packaging systems that can maintain constant temperatures over several days without the addition of external energy. The box is arranged for the temperature-managed transportation of valuable biological materials, especially for use in clinical trials. It consists of a surrounding packaging consisting of cardboard, VIPs and PCMs that protect from temperature fluctuations due to external temperatures. Various sizes and temperature classes were developed for pharmaceutical customers as part of the development project. va-Q-one was launched on the market as a particularly cost efficient solution for one-off use in this context, and rounds out the offering of va-Q-tec in this area.

va-Q-tec is diversifying its business activities by expanding its services (Serviced Rental of containers and boxes) along the vertical value chain. For this purpose, for its customers the Group defines processes for logistics for boxes and containers. At the same time, customers are advised on the optimal implementation of the packaging solution into existing systems. To manage such logistic processes, va-Q-tec is also increasingly developing advanced software solutions. For this purpose, resources in the IT area were boosted significantly in the reporting period, including to use IT support to manage logistics processes in Serviced Rental, for example.

The technology platform is secured through around 80 patents and patent registrations. These relate mainly to efficient manufacturing methods for powder-filled VIPs as well as the va-Q-check® quality control system, a sensor technology to measure vacuum in VIPs. One national and two international patents were newly registered in the reporting period, and two international and one national patent were issued.

The company made further investments in its research and development area in the year under review. Expenditure for this area amounted to EUR 1.2 million, up on the previous year's level (EUR 1.0 million). Research and development costs of kEUR 52 were capitalised in total in the reporting period. Amortisation of development costs capitalised in previous years amounted to kEUR 9.

2.2 BUSINESS REPORT

2.2.1 Macroeconomic environment and Group-specific conditions

The International Monetary Fund (IMF) estimates that the world economy grew by 3.1% in 2016. For 2017, the IMF anticipates a stronger global growth dynamic reflected in a 3.4% growth rate. Developing and emerging economies will make an above-average contribution to global growth, according to the forecast. The IMF identifies macroeconomic uncertainties in the economic consequences of the United Kingdom's decision to leave the European Union ("BREXIT"), for example. va-Q-tec does not expect any significantly negative effects from the BREXIT decision on its business in the UK reporting segment, as although operative management occurs from the UK, actual value creation is generated across the globally distributed container fleet.

In the USA, the Federal Reserve took its first steps to a turn round the direction of its interest rates. Given extremely low interest rates in the other big currency zones – yen and euro – the interest rate spread to the US dollar widens, which could lead to an appreciation of the US dollar in relation to the euro. Exports from US companies would become more expensive as a consequence. Imports, including products and services of the va-Q-tec Group, would become relatively less expensive. In its election campaign, the newly elected US government expressed a preference for protectionism ("America first") and a critical view of the healthcare system ("Obamacare"), which could negatively affect the business of the Group and its customers in the USA. As a globally positioned Group, va-Q-tec consequently sees itself facing both opportunities and risks in macroeconomic terms.

Key sales revenue drivers for the va-Q-tec Group include the two end-markets of Healthcare & Logistics as well as Appliance & Food, which together represent a 92% share of consolidated revenue.

With its German and UK segments, va-Q-tec operates in the market for thermal packaging systems – particularly for the healthcare industry as the most important sales market for va-Q-tec. Market research agency IMARC takes an optimistic view of market growth over the coming years: over the 2015-2021 period, IMARC expects an average annual growth rate of 9.2%, whereby va-Q-tec assumes the relevant market subsegments (high-performance packaging systems) will grow faster. High regulatory requirements of cold chain logistics (under the motto of "Good Distribution Practices") are making ever more efficient packaging systems necessary for pharmaceutical industry customers. Moreover, IMARC assumes that 27 of the 50 highest selling medications worldwide will require cold chain logistics in the 2-8°C range by 2020. va-Q-tec is convinced that it can grow faster than the market with its high-quality system solutions for sale as well as innovative rental solutions ("Serviced Rental" of thermal packaging systems). Especially with groundbreaking rental solutions, va-Q-tec aimed to enter markets that conventional thermal packaging systems have served to date.

After the healthcare industry, manufacturers of refrigeration and freezing equipment are the second most important customer. The market for vacuum insulation panels in refrigeration and freezing equipment is growing at an annual rate of almost 21% in the 2014-2019 period, according to an estimate produced by LUX Research in 2015. va-Q-tec expects to enjoy somewhat higher growth rates in this end-market due to its particularly durable and high-quality products.

Overall, va-Q-tec addresses a growing market with its product business with VIPs: in Germany, approximately 60 % of primary energy is utilised for thermal purposes – refrigeration or heating in other words – according to the Working Group on Energy Balances (AGEB), a statistical office established by seven German energy sector associations. With a worldwide increase in primary energy prices for consumers, greater awareness among customers about energy saving and more stringent statutory regulation, the economic and political incentive is increasing to invest in energy efficiency, and consequently in va-Q-tec products.

2.2.2 Business trends

Business activity at the va-Q-tec Group in the 2016 financial year focused on implementing the growth track, the IPO and strengthening profitability.

In the Products business line of the German reporting segment, new customers were acquired in the target sectors of Appliance & Food and Technics & Industry, while at the same time business with existing customers was expanded further. This success reflects not only the high quality, performance and durability of our VIPs, but also the capability of va-Q-tec to deliver efficiently in such markets the depend on reliable supplies.

In the German reporting segment, additional large-scale orders were acquired with new customers in Q3 and Q4 in the Systems division (thermal packaging), some of which were already realised in 2016. A large-scale order from Swiss Post deserves particular mention here, which opened up a new area of inland thermal transportation from pharmaceuticals wholesalers to local pharmacies. It is also connected with accompanying services for Swiss Post, however, such as the preparation and precooling of the box for logistics in the "last mile" from the wholesaler to the pharmacy delivered by va-Q-tec. Business with existing customers, such as with a major Swiss pharmaceuticals manufacturer, also progressed very well in the thermal packaging area.

In the Services business line of the German reporting segment, operating activities deriving from the pan-European rental of thermal boxes from a hub in Dublin reported strong growth in the 2016 financial year. A further milestone in the reporting period was the opening of a further fulfilment centre for the "Serviced Rental" business at the company's headquarters in Würzburg. Here, various high-performance packaging systems ranging from thermal transport boxes through to thermal air freight containers are prepared for the desired transport service, to transfer them to customers ready for use. At the new fulfilment centre in Würzburg for Central Europe, up to 10,000 packaging systems with 11 to 74 litres of internal volume as well as 400 containers with loading capacity of up to two US/Euro pallets can be made available per month for temperature-managed transports to our customers.

In the UK reporting segment (Services division), activities with both new and existing customers from the healthcare industry reported significant growth. More than 50 new commercial routes with temperature-controlled air freight were added during the second half of 2016. The number of existing network stations was expanded by 2 to reach 24. During the course of the 2016 financial year, new customers successfully concluded qualifications as part of "Serviced Rental" with test dispatches (albeit with delays in some cases), in turn prompting the expectation of further volume growth. The challenge in this area entails reducing dependency on individual major customers, for instance by rapidly achieving appreciable revenues with customers that have already conducted qualifications. Planning and forecasting quality in this reporting segment is increasing as a consequence.

The aforementioned progress across all reporting segments and divisions contributed to a pleasing trend in relation to the Group's strategic targets: revenue and EBITDA reported significant year-on-year growth.

In 2016, the Group continued to achieve purchasing benefits through the "smart sourcing" approach and selective development in upstream value chain steps. The inexpensive purchasing of intermediate products in Asia through the Korean subsidiary and higher purchasing volumes with correspondingly more beneficial procurement terms proved particularly significant. Greater recourse to second and third tier suppliers led to diversification effects. Initial tests to use SUMTEQ materials as raw materials for VIPs were also successful during the financial year elapsed.

During the financial year under review, va-Q-tec again invested more in machinery, plant and personnel to support growth in operating activities. The company used its own shares to acquire expansion spaces at an attractive location in Würzburg. Investments were also realised in equipment for the fulfilment centre for box and container rental. The container and box fleets of the va-Q-tec Group form the core of "Serviced Rental". The box fleets were expanded particularly significantly in 2016. Containers were also added to the global rental network to serve existing customers and create sufficient capacity for new customers.

Research and development activities were successfully advanced further in 2016 to underpin the technological leadership claim of va-Q-tec. The focus here was on developing cost efficient thermal packaging, such as va-Q-one and easy assembly VIP modules for the Building and Technics & Industry areas. These and other product innovations enabled the technological differentiation of va-Q-tec to be further expanded.

The Group has hired significantly. Both experienced specialists and young career starters have been taken on to support the company's growth. Talented young individuals from the ranks of former working students from the University of Würzburg were also taken on.

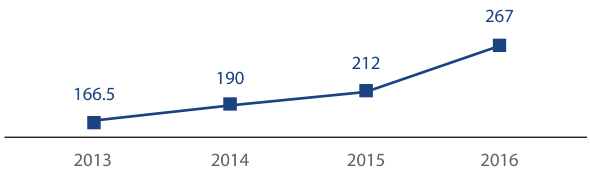
The cash inflow from the IPO, which bolstered equity and attracted growth capital, was particularly important for liquidity and for the financing position. The strengthened equity ratio of 64 % also considerably improved the Group's refinancing terms in the 2016 financial year.

2.2.3 Non-financial performance indicators

Employees at va-Q-tec

As a technology company with broad coverage of the value chain, va-Q-tec ascribes particularly great significance to its staff and their qualifications. The employees' knowledge, skills, further development and commitment are essential for the further success and performance of va-Q-tec. Staff received both in-house and external training measures during the year under review. Along with corresponding functional training sessions for employees, the focus was on the cross-functional topic of project management. va-Q-tec employs a high number of students, especially in research and development. A total of 18 working students were employed at va-Q-tec (previous year: 16). The average of employees (excluding Management Board members and trainees) grew from 212 to 267 in the 2016 financial year.

Average Number of Employees va-Q-tec Group



2.2.4 Explanation of business results and analysis of the financial position and performance

Results of operations

EUR millions unless stated otherwise	**2016** (IFRS)	Adjust-men	**2016 adjusted***	**2015** (IFRS)	Adjust-ment	**2015** adjusted	**Δ 16/15** adjusted
Revenues	35.53	-	35.53	22.54	-	22.54	58 %
Total income	42.88	-	42.88	29.56	-	29.56	45 %
Cost of materials and services	-17.32	-	-17.32	-12.35	-	-12.35	40 %
Gross profit	25.55	-	25.55	17.20	-	17.20	49 %
Personnel expenses	-11.81	0.17	-11.65	-8.85	-	-8.85	32 %
Other operating expenses	-8.52	1.57	-6.95	-4.75	0.06	-4.69	48 %
EBITDA	5.22	1.74	6.95	3.60	0.06	3.66	90 %
EBITDA margin	12 %		16 %	12 %		12 %	
Depreciation, amortisation and impairment losses	-5.64	-	-5.64	-3.17		-3.17	78 %
EBIT	-0.42	1.74	1.31	0.43	0.06	0.49	167 %
Net financial result	-1.62	0.40	-1.22	-1.06	0.17	-0.88	38 %
EBT	-2.10	2.14	0.04	-0.63	0.24	-0.40	

* Adjusted for one-off expenses for the IPO

Sales revenues grew very well overall. A high level of new order intake, up considerably on the previous year's level, was recorded in the 2016 financial year. The order book position as of 31 December 2016 increased compared with the previous year, supporting the company's positive outlook. Given this, va-Q-tec grew its sales revenues by 58 % year-on-year to reach EUR 35.5 million in the financial year elapsed, exceeding the EUR 33-34 million forecast for the Group it issued as of Q3 2016. Here, the sales revenue growth was driven equally from the three business lines of Products, Systems (thermal packaging) and Services. The business with Products was up by EUR 3.9 million, from EUR 7.4 million to EUR 11.3 million (+53 %). In the Systems business line, sales revenues grew by EUR 5.1 million, from EUR 5.3 million to EUR 10.4 million (+96 %). With Services, the Group generated sales revenues of EUR 13.2 million, compared with EUR 9.4 million in the previous year (+40 %, EUR +3.8 million).

The German segment (va-Q-tec AG) contributed EUR 23.9 million to consolidated revenue (previous year: EUR 13.8 million), and the UK segment (va-Q-tec UK) EUR 11.6 million (previous year: EUR 8.7 million). The main proportion of sales revenues, 69 %, is generated internationally. This underscores the Group's international orientation and worldwide success of its sales activities.

Total income was up by 45 % to EUR 42.9 million in the financial year elapsed, reflecting the sales revenue growth. Work performed by the company and capitalised of EUR 4.5 million (previous year: EUR 4.9 million) arose in 2016 mainly from the continued expansion of the container and box fleets. Other operating income of EUR 1.4 million (previous year: kEUR 680) was generated from releasing the special item deriving from container sale and lease back transactions.

This special liability item arises on the sale of self-produced containers by the parent company va-Q-tec AG to leasing companies, and subsequent leaseback by the UK subsidiary. It represents the difference between the market price of the container and its production cost, and is released over a five-year depreciation period and added to other operating income (please see note 3.2.1 "Sale and finance leaseback transactions" in the notes to the consolidated financial statements for more information).

The cost of materials was up from EUR 12.4 million to EUR 17.3 million, less than the rate of total income growth, and corresponding to an improved cost of materials ratio of 40 % (previous year: 42 %). This improvement is attributable to greater efficiency in purchasing and the growing proportion of revenue from the high-margin business with Systems and Services. Negative effects on the cost of materials ratio arise from the work performed by the company and capitalised in connection with expanding the self-produced container and box fleets as well as price pressure in the product business. The cost of purchased services also formed part of costs of materials, and increased by 54 % to EUR 4.0 million (previous year: EUR 2.6 million). This was due to the greater utilisation of warehousing, logistics and fulfilment services at partner companies as part of "Serviced Rental".

To better compare operating performance at va-Q-tec over the course of time, adjustments are applied to expenses in the 2015 and 2016 financial years in the following section. These adjustments comprise exclusively expensed personnel, legal and advisory costs, as well as financing costs connected with the IPO. These expenses were only incurred at va-Q-tec AG (German reporting segment) (see table above for more information about the adjustment).

Personnel expenses were up from EUR 8.9 million in the previous year to EUR 11.8 million in the 2016 financial year (+33 %), thereby declining from 30 % to 28 % in relation to total income. The absolute rise is mainly attributable to the hiring of new staff to support the planned growth, wage and salary increases and the higher level of personnel expenses as part of the IPO. On an adjusted basis, personnel expenses amount to EUR 11.7 million, equivalent to 27 % of total income.

Other operating expenses rose considerably in the reporting period, from EUR 4.8 million in the previous year to EUR 8.5 million. These include EUR 1.6 million of one-off additional expenses connected with the IPO. Adjusted other operating expenses amounted to EUR 7.0 million in the 2016 financial year, compared with EUR 4.7 million in the previous year (+49 %). The increase after adjusting for one-off effects reflects, among other items, higher rental expenses due to additional administrative and production buildings, as well as an increase in marketing and sales expenses in line with the business expansion. Measured in relation to total income, this led the adjusted other operating expense ratio to remain stable at 16 % (previous year: 16 %).

In line with the sales revenue growth in 2016, earnings before interest, tax, depreciation and amortisation (EBITDA) increased from EUR 3.6 million in the previous year to EUR 5.2 million. Adjusted for one-off expenses from the IPO, EBITDA was up even more significantly from EUR 3.7 million to EUR 7.0 million, reflecting a 16 % adjusted EBITDA ratio (previous year: 13 %). As a consequence, the forecast of EUR 5.7-6.0 million for consolidated adjusted EBITDA issued as of Q3 2016 was exceeded.

Depreciation and amortisation recorded a marked increase of 75 % to EUR 5.6 million (previous year: EUR 3.2 million), reflecting a high level of investments in containers and boxes with respectively short depreciation periods.

Both the aforementioned IPO costs and the sharp increase in depreciation and amortisation negatively affected the result before interest and tax (EBIT). EBIT reported a significant reduction from kEUR 429 to kEUR -423. On an adjusted basis, however, EBIT rose by 164 %, from kEUR 492 to EUR 1.3 million in the 2016 financial year, equivalent to an improved EBIT margin of 3 % in relation to total income (previous year: 2 %).

The net financial result worsened from EUR -1.1 million in the previous year to EUR -1.6 million, mainly due to the higher borrowing costs for the lease financing of the growing container fleet. The net financial result includes one-off additional expenses connected with the IPO in an amount of kEUR 400. The adjusted net financial result amounted to EUR -1.2 million (previous year: EUR -0.9 million).

A negative result before tax (EBIT) of EUR -2.1 million was incurred for the 2016 financial year (previous year: kEUR -635). On an adjusted basis, EBT in 2016 was positive to the tune of kEUR 36, after having still incurred a loss of kEUR -398 in the previous year.

The reporting segments performed as follows in the 2016 financial year:

German reporting segment (va-Q-tec AG)

EUR millions unless stated otherwise	**2016 (IFRS)**	Adjust-ment	**2016 adjusted***	**2015** (IFRS)	Adjust-ment	**2015** adjusted	**Δ 16/15** adjusted
Revenues	29.22	-	29.22	22.30	-	22.30	31 %
EBITDA	2.51	1.74	4.25	3.96	0.06	4.02	6 %
Equity ratio	81 %	-	n.a.	45 %	-	n.a.	
Average number of employees	238	-	n.a.	195	-	n.a.	

* Adjusted for one-off expenses for the IPO

The German reporting segment (va-Q-tec AG) grew its revenues from EUR 22.3 million in the previous year to EUR 29.2 million in the 2016 financial year. The sales revenue growth is mainly attributable to the sale and rental of thermal packaging, as well as additional revenues from the sale of VIPs to manufacturers of refrigerators and hot water tanks. In the financial year elapsed, sales revenues also include payments from customers for thermal boxes unreturned within the rental network in an amount of kEUR 528 (previous year: kEUR 21). The establishment of box fleets was reflected in a significantly higher level of work performed by the company and capitalised. Other operating expenses and personnel expenses rose considerably given the IPO. In consequence, EBITDA reduced by 38 % to EUR 2.5 million in 2016 (previous year: EUR 4.0 million) and EBIT was down 84 % to kEUR 413 (previous year: EUR 2.5 million). Adjusted for one-off effects connected with the IPO, EBITDA grew by 6 % to EUR 4.3 million (previous year: EUR 4.0 million). The equity ratio stood at 81 % as of 31 December 2016 (previous year: 45 %). The average number of employees rose by 43 to 238 (previous year: 195).

UK reporting segment (va-Q-tec UK Ltd)

EUR millions unless stated otherwise	**2016 (IFRS)**	**2015** (IFRS)	Δ
Revenues	12.56	8.74	44 %
EBITDA	3.36	2.99	12 %
Equity ratio	19 %	21 %	
Average number of employees	25	14	79 %

The UK reporting segment comprises mainly the rental of temperature-managed containers for the global pharmaceuticals industry. Sales revenues in this segment grew by 45 % from EUR 8.7 million in the previous year to EUR 12.6 million in 2016. The cost of materials and personnel expenses rose at a faster rate than sales revenue in 2016. This reflected higher expenses for purchased services due to expanding the global rental network and the container fleets, as well as a significant strengthening of the commercial and sales area. As a consequence, EBITDA growth in this segment failed to match its top line growth rate, rising from EUR 3.0 million in the previous year to EUR 3.4 million. The reduced profitability in this reporting segment is partly attributable to the delayed start-up of the new customers. The average number of employees rose by 11 to 25 (previous year: 14). In the UK reporting segment, the parent company strengthened the equity by EUR 1.0 million in November 2016. This served the continued financing of the container fleet expansion and compliance with external financing partners' lending covenants. The equity ratio stood at 19 % in 2016, compared with 21 % in 2015. The parent company also extended kEUR 300 of loans in 2016. Given the current business situation, characterised by the constant expansion of the container fleet and of the operating business, it is anticipated that the parent company will continue to provide support for the capital backing of the UK subsidiary for two further years.

Other reporting segment

EUR millions unless stated otherwise	**2016 (IFRS)**	**2015** (IFRS)	Δ
Revenues	0.72	0.36	106 %
EBITDA	0.11	-0.16	
Equity ratio	-12 %	-134 %	
Average number of employees	4	3	33 %

The two subsidiaries in Korea and the USA, which together comprise the **Other reporting segment**, realised no external revenues with third parties, as the business acquired by these companies is invoiced by either va-Q-tec AG or va-Q-tec Ltd (UK). These are crucial for the local presence of va-Q-tec in the USA (world's largest pharmaceuticals market) and Asia (purchasing advantages).

Due to the Group's purchasing and sales activities in these regions, the subsidiaries in the USA and Korea generated higher purchasing and sales commissions. The subsidiary in Korea operated profitably and repaid part of a loan granted by the parent company. The US entity continued to incur operating losses in the financial year elapsed, as a higher level of preparatory work was realised during th2016 to tap markets in the future. The Other reporting segment reports total EBITDA of kEUR 109 (previous year: kEUR -158). The number of employees amounted to 4 individuals (previous year: 3), and the equity ratio stood at -12 % (previous year: -134 %).

Financial position

Principles and goals of financial management

The financing strategy of va-Q-tec is oriented to providing the funds required for strong growth. Recourse is made in this context to various financing instruments such as loans, leasing, factoring, overdrafts and government subsidies. The financial policy is generally oriented to the target of making the requisite liquidity permanently available. Existing reserves are invested on a neutral interest basis and credit lines are optimised in terms of their interest rates. Interest-rate risks and some currency risks are hedged with corresponding swaps.

Liquidity

EUR millions unless stated otherwise	**2016**	**2015**
Net cash flow from operating activities	-1.10	0.16
Net cash flow from investing activities	-35.33	-7.19
Net cash flow from financing activities	39.85	6.97
Net change in cash and cash equivalents	**3.41**	**-0.06**

Net cash flow from operating activities amounted to EUR -1.1 million in the 2016 financial year, EUR 0.9 million below the previous year's level of EUR 0.2 million. The reduction is attributable to the high expense incurred for the IPO, the deterioration in the consolidated net result that this caused, as well as a higher level of inventories and trade receivables. Adjusted for IPO costs of EUR 1.57 million (previous year: EUR 0.06 million, recognised in other operating expenses), the adjusted net cash flow from operating activities was positive to the tune of approximately EUR 0.5 million.

EUR millions	**2016**	**2015**
Net cash flow from operating activities (IFRS)	-1.10	0.16
Adjustment	1.57	0.06
Net cash flow from operating activities (adjusted)	0.47	0.22

Cash flow from investing activities changed from EUR -7.2 million to EUR -35.3 million. This is mainly due to outgoing payments to acquire short-term deposits where the IPO proceeds were deposited on a neutral interest basis. These deposits have terms of six to twelve months. The EUR 32.9 million increase in cash flow from financing activities, from EUR 7.0 million to EUR 39.9 million, is chiefly attributable to the cash inflow from the IPO.

Net assets and capital structure

Assets

EUR	31/12/2016	31/12/2015
Non-current assets		
Intangible assets	440,957	364,961
Property, plant and equipment	31,410,609	28,043,616
Equity accounted investments	435,918	370,097
Financial assets	66,770	46,214
Other non-financial assets	234,384	54,450
Deferred tax assets	2,839,618	2,146,935
Total non-current assets	**35,428,256**	**31,026,273**
Current assets		
Inventories	5,683,812	4,577,210
Trade receivables	7,141,968	4,415,527
Other financial assets - of which term deposits (6-12 months): 30,000,000	30,183,591	16,107
Tax assets	377,839	25
Other non-financial assets	748,475	704,435
Cash and cash equivalents	4,600,437	1,186,045
Total current assets	**48,736,122**	**10,899,349**
Total assets	**84,164,378**	**41,925,622**

Property, plant and equipment grew by 12 %, from EUR 28.0 million to EUR 31.4 million in 2016, due to positive net investments. The main reasons in this context included, firstly, the purchase of a plot of land to expand business in Würzburg. Secondly, significant growth continued in the financial year elapsed in the container fleet of the UK reporting segment and the box fleets of the German reporting segment to meet growing demand and expected future demand. The equity accounted interest in SUMTEQ was topped up to 18.5 % in the reporting period.

The cash inflow from the IPO led to a marked increase in liquid assets. These funds were invested in deposits with terms of between six and twelve months on a neutral interest basis and are now being gradually invested in accordance with the IPO plans. Overall, the Group's liquidity position improved considerably compared with 2015: other current financial assets and the cash position, which reflects cash inflows from the IPO, rose from EUR 1.2 million to EUR 34.8 million.

Investments

Investment activity in the 2016 financial year focused on expanding production capacities and the fleets of air freight containers and thermal boxes. A total of EUR 9.3 million was invested in property, plant and equipment (previous year: EUR 10.0 million).

Production capacities at the two plants in Würzburg and Kölleda were almost fully utilised at the financial year-end due to high demand in all target sectors, especially during peak periods. For this reason, work started in 2016 on the planning and partially implementing new capacities. Several halls were rented and a plot of land was acquired in Würzburg, for example. To this extent, investments in land and buildings of EUR 1.7 million were significantly above the previous year's level (kEUR 28). Investments in technical equipment reduced from EUR 1.1 million to kEUR 303. A total of EUR 4.6 million was invested in the container fleet (previous year: EUR 7.8 million). Investments in operating

Equity and liabilities

EUR	31/12/2016	31/12/2015
Equity		
Issued share capital	13,089,502	4,578,187
Treasury shares	-470,631	-
Additional paid-in capital	46,666,302	9,030,470
Cumulative other comprehensive income	-32,969	-21,376
Retained earnings	-5,315,915	-3,588,984
Equity attributable to parent company owners	53,936,289	9,998,297
Non-controlling interests	-	-6,588
Total equity	**53,936,289**	**9,991,709**
Non-current liabilities and provisions		
Provisions	17,400	46,400
Bank borrowings	2,173,111	2,016,575
Other financial liabilities	4,012,249	5,108,042
Other non-financial liabilities	7,150,616	7,450,749
Deferred tax liabilities	-	-
Total non-current liabilities and provisions	**13,353,377**	**14,621,766**
Current liabilities and provisions		
Provisions	37,329	77,000
Bank borrowings	5,410,141	6,893,775
Other financial liabilities	5,791,059	5,785,142
Trade payables	2,346,965	1,633,172
Tax liabilities	215,015	518,996
Other non-financial liabilities	3,074,202	2,404,062
Total current liabilities and provisions	**16,874,712**	**17,312,147**
Total assets	**84,164,378**	**41,925,622**

and office equipment of EUR 1.8 million due to the build-up of the rental box fleets in the German reporting segment were markedly above the previous year's level (kEUR 190). An amount of kEUR 52 was invested in intangible assets that the company created itself (previous year: kEUR 32). The interest in SUMTEQ GmbH was increased to participate further in the development of this Cologne-based technology company and further advance deployment of SUMTEQ's innovative foam material in VIPs.

Overall, total assets more than doubled due to the IPO and the cash inflows.

The main changes to the capital structure derived from the issue proceeds and preparatory capital measures for the IPO in September 2016. Following an EGM resolution, the company realised the repurchase of 127,233 ordinary shares in April 2016. In May 2016, a resolution was passed at the Ordinary AGM to convert the preference shares of series A1 and A2 (existing in the previous year) into ordinary shares with voting rights. A resolution was also passed to increase the company's share capital from company funds through issuing 4,578,187 new shares to a level of EUR 9,156,374 (1:2 share split). The plot of land acquired from the City of Würzburg in May 2016 was paid for with 60,000 treasury shares (before the share split). In September 2016, the company's share capital was increased by EUR 183,128 to EUR 9,339,502 through issuing 183,128 shares in va-Q-tec AG in exchange for a 10 % interest in the subsidiary va-Q-tec Ltd (UK) to the managing director of va-Q-tec Ltd (UK) under partial utilisation of Approved Capital 2016/1. In connection with the IPO of va-Q-tec AG, the share capital increased by EUR 3,750,000 to EUR 13,098,502 on 27 September 2016 through partial utilisation of approved capital (date of entry in the commercial register).

The Group's equity increased very considerably in 2016 due to the IPO, standing at the equivalent of 64 % of total assets as of the balance sheet date (previous year: 24 %). This rise also reflected the acquisition of a plot of land in Würzburg in exchange for treasury shares as well as the non-cash capital contribution by the minority shareholder of the UK subsidiary in exchange for treasury shares in va-Q-tec AG. The non-controlling interests reduced to 0 due to the aforementioned non-cash capital contribution (previous year: kEUR 6,588).

Non-current bank borrowings reported a slight rise from EUR 2.0 million to EUR 2.2 million due to a new loan from one of the house banks. Current bank borrowings decreased from EUR 6.9 million to EUR 5.4 million due to less utilisation of overdraft lines. Existing overdraft lines as well as supplementary new lines as part of a multibank lending agreement with the house banks were bundled in September 2016. This enabled the master terms of the loans with four house banks to be standardised, and additionally created a debt funding platform that can be expanded in the future. The overdraft facility thereby available amounts to EUR 11.0 million. The lending agreement has an initial term until 31 December 2017, with an extension and expansion of the facility anticipated by mid-2017.

Non-current other financial liabilities reduced from EUR 5.1 million to EUR 4.0 million due to the decrease in finance leasing and repayment of a dormant investment. Non-current other non-financial liabilities diminished from EUR 7.5 million to EUR 7.2 million as a result of the scheduled reduction of the government grants item. No investment grants were awarded by development banks during the reporting period. Current other non-financial liabilities increased from EUR 2.4 million to EUR 3.1 million as a consequence of the further appreciation of the special item for container profits.

Bank borrowings plus equipment leasing of EUR 15.5 million comprised 18 % of total equity and liabilities (previous year: EUR 17.8 million; 42 %). At the level of the UK reporting segment, further sale and lease back transactions were concluded as part of expanding the container fleet. The volume of finance leasing reduced by EUR 1 million, from EUR 8.9 million in the 2015 year to EUR 7.9 million in the 2016 financial year elapsed. Current liabilities and provisions stood at EUR 16.9 million in the financial year under review, representing 20 % of total equity and liabilities (previous year: EUR 17.3 million; 41 %). The Group's non-current liabilities amounted to EUR 13.4 million, corresponding to 16 % of total assets previous year: EUR 14.6 million; 35 %). Trade payables totalled EUR 2.3 million, compared with EUR 1.6 million in the previous year. In the fourth quarter, due to the strengthened equity backing, lending terms for newly drawn down borrowings, especially finance leasing, were improved significantly.

Overall statement on business progress

Overall, the Management Board appraises the business progress during the 2016 financial year very positively. All three business lines – Products, Systems and Services – respectively the underlying reporting segments – reported strong revenue growth in the financial year elapsed as a consequence of the good commercial trend. Gross profit also performed well, thanks to the shift in product mix towards the higher margin areas of "Systems" and "Services". The Group also further enhanced its purchasing efficiency. The Group's profitability has nevertheless reduced significantly mainly due to the high one-off costs for the IPO. A higher level of legal and advisory costs, personnel expenses and borrowing costs negatively affected the EBITDA ratio, and the consolidated net result was significantly negative. Adjusted for these one-off costs, Group performance was stronger: profitability measured in terms of EBITDA and the EBITDA margin rose significantly year-on-year, and the consolidated net result was slightly positive, by contrast with the previous year. The Group strengthened its financial position considerably due to the proceeds from the IPO. The Group has significantly expanded its capacities for VIP production as well as box and container rental in accordance with expected sales opportunities. The management is of the view that va-Q-tec is thereby positioned very well to outperform the growth rate offered by its end-markets long-term and expand its technology position.

2.3 FORECAST

2.3.1 Outlook

The following forecasts for the trend in management metrics were made under the assumption of a continuation of robust macroeconomic growth in 2017. Moreover, they are also based on the expected positive growth rates in the market for VIPs and insulation materials overall. Moreover, a high growth dynamic is expected in the market for thermal packaging and services, particularly in the high-performance thermal packaging segment. These assumptions are underpinned by estimates produced by market research institute IMARC and Lux Research, which already expect growth in the low double-digit percentage range (see 1.2.1 Macroeconomic environment and Group-specific conditions). Above and beyond this, va-Q-tec expects to benefit to an above-average extent from the megatrends of energy efficiency, regulation of cold chains (product safety) and globalisation of value chains. Also taking into account the opportunities and risks entailed in operating activities as outlined in section 2.4.2, the company identifies growth levers in tapping new markets in terms of both products (e.g. last mile to the pharmacy and food transportation) and geography (new country markets).

Overall statement
For the 2017 financial year, the Management Board expects further strong sales revenue growth in the 30-40% range compared to 2016 in all three business divisions. Marked sales revenue growth is especially expected in the Services and Products divisions, as we expect demand for energy-efficient high-performance products and reliable transportation solutions to grow further along with greater environmental awareness and increasing regulation.

For earnings before interest, tax, depreciation and amortisation (EBITDA), the company expects continued strong growth for the 2017 financial year due to operating economies of scale and a changed product mix with a greater proportion of high-margin services.

The equity ratio will prospectively reduce to 50-55% after being strengthened by the IPO in 2016 and due to the intended utilisation of low interest rate debt financing for investments in the 2017 financial year.

The number of employees will increase further significantly to facilitate the anticipated growth, albeit not as fast as the expected sales growth rate.

As a consequence, the Management Board of va-Q-tec AG expects above-average sales growth compared with the target markets accompanied by rising high profitability.

2.3.2 Forward-looking statements

This report includes forward-looking statements based on current assumptions and forecasts of the management of va-Q-tec AG. Such statements are subject to risks and uncertainties. These and other factors can lead the company's actual results, financial position, development or performance to differ significantly from the estimates provided here. The company assumes no obligation of any kind to update such forward-looking statements and adjust them to future events or developments.

2.4 REPORT ON OPPORTUNITIES AND RISKS

2.4.1 Risk management and internal control system

Risk management va-Q-tec is based on three main aspects:

- a risk-aware corporate culture
- a formalised risk management system
- the internal control system

Anchoring risk awareness within the corporate culture
All successful business activity is connected with the conscious assumption of risks. It is crucial to the corporate governance of va-Q-tec that existing and newly added risks are handled in such a way to enable them to be managed actively, and incur as few losses as possible. Opportunities in a business sense should also be utilised to enhance the company's value for all stakeholders. va-Q-tec enjoys a high degree of "risk awareness", which is communicated openly and transparently. From the Management Board's perspective, risk awareness that is put into practice is one of the most efficient instruments for handling risks. If employees are aware of risks and handle them entrepreneurially, the risk of losses being incurred because of risks being realised is diminished. Risks are disclosed and managed proactively and transparently in such an environment. The establishment and company-wide communication of compliance guidelines also fosters greater awareness of compliant behaviour. A compliance management system was introduced in 2016 that defines a code of conduct for both internal and external business activity. The compliance officer appointed in this context records, processes and reports to the Supervisory Board and its Audit Committee on all relevant compliance cases.

Risk management system
Risk management at va-Q-tec refers to the systematic engaging with risks, understood as negative events whose occurrence can incur losses and / or unforeseen costs within the company. To meet this requirement, internal and external risks for all segments and subsidiaries are systematically surveyed, measured, steered, managed and reported to the Management and Supervisory boards with the risk management system.

To supplement the existing internal and external control system, the Group management of va-Q-tec implemented a further developed and formalised risk management system (RMS) in the 2016 financial year for this purpose. The past years' experience in risk identification has been included in the new RMS. The insights gained as part of preparing the listing prospectus and first-time preparation of IFRS financial statements at the time of the IPO in 2016 were also included in the risk inventory.

The aims of the risk management system at va-Q-tec are, as a matter of principle, to avoid, reduce and transfer risks, including through corresponding insurance cover, for example. Along with compliance with regulatory requirements, systematic risk management secures long-term and sustainable competitiveness. Such risk management also aims to identify potential going concern risks at an early stage. Risk management va-Q-tec is not only a security instrument but also a management instrument. Identified risks also offer new business opportunities and competitive advantages.

The RMS is based on a reporting process, a defined risk inventory and risk assessment during the course of the year. As part of the risk inventory, the respective decision-makers and experts within the specialist areas appraise all significant risks. Risks identified within the va-Q-tec Group are measured according to their potential loss, taking event probabilities into account. The risks identified as part of the risk analysis are categorised into risk classes according to their event probability and impact, by multiplying their respective effect by their respective event probability. The bandwidth of event probabilities and effects starts with "very low" and ends with "very high". Risks can thereby be differentiated and prioritised according to the resultant expected risk value. The specialist areas are required to identify and report new risks as part of risk appraisal during the course of the year. The information that is aggregated in this manner is summarised in risk files that are addressed and reported to the Management Board of the va-Q-tec Group. All risks – newly added as well as existing – are also to be monitored and reported continuously. Requisite countermeasures are launched quickly, and subsequently monitored.

New risks and significantly changed risks also form fixed agenda items at all regular management meetings, at each Management Board meeting and at each Supervisory Board meeting. They are discussed as part of results briefings between the Management Board of the va-Q-tec Group and the managers of the specialist areas. A review is also conducted as to whether risk minimising measures that have already been taken are sufficient, or whether further steps are to be initiated.

The Group risk management system enables the company's management to identify significant risks at an early stage, launch countermeasures and monitor implementation. The auditor also examines the risk early warning system to ensure it is suited to the early identification of going concern risks.

Accounting-related internal control system
va-Q-tec operates a clear organisational, corporate, as well as control and supervision structure. Planning, reporting, controlling and early warning systems and processes exist across the company for the comprehensive analysis and management of earnings-relevant risk factors and going concern risks. The functions in all areas of the (Group) financial accounting process (e.g. financial accounting, financial bookkeeping and controlling) are clearly allocated. To date, va-Q-tec AG has refrained from operating a separate internal audit function due to the company's somewhat small dimensions and limited complexity.

Use is mainly made of standard software (Navision) as far as installed financial systems are concerned. Here, existing structures have to be adjusted constantly to reflect the company's growth and changing conditions, such as capital market requirements.

The IFRS consolidated financial statements are prepared on the basis of a standard reporting format for submission by all Group companies to the central administration in Würzburg. The validation processes applied there and additional plausibility checks ensure that the separate financial statements of the subsidiaries and of va-Q-tec AG are complete and correct.

The internal control and risk management system relating to the financial accounting process ensures that business transactions are recorded, processed and appraised correctly from a financial accounting standpoint, before being transferred to external financial reporting.

Payment transactions are performed electronically with embedded control mechanisms (two sets of eyes principle with a selected group of individuals). External service providers implement payroll transactions.

The organisational, corporate as well as controlling and supervisory structure determines the framework of the ICS. Clear statutory and in-house regulations and guidelines ensure a standard and proper financial accounting process. Check mechanisms within the areas directly involved in the financial accounting process, review by the internal control function, backup from the independent auditors and early risk identification by the risk management function should ensure that Group financial accounting is free of error.

2.4.2 Operating risks

va-Q-tec measures risks on the basis of their estimated event probability, and their potential effects on the company's financial position and performance, as well as reputation. Measurement of risk loss levels and event probabilities leads to the following examples of key risk indicators.

Event probability	Loss level in EUR	Risk indicator
very low	0 – 50,000	1
low	50,000 – 500,000	4
medium	500,000 – 1,000,000	9
high	1,000,000 – 5,000,000	16
very high	5,000,000	25

The Management Board applies the following scheme to measure the characteristic of a risk based on its risk indicator:

Risk indicators	Risk characteristic
0 - 5	Low
5 - 15	Medium
> 15	High

Overall, the following section presents risks after instituting countermeasures.

Risks in the value chain
As a manufacturing company, va-Q-tec has to make recourse to suppliers for intermediate products. va-Q-tec procures the main raw materials, consumables and intermediate products from a limited number of key suppliers. For some materials, only a few purchasing sources are available due to the specific characteristics. It is consequently the objective in the purchasing strategy of va-Q-tec to reduce dependency on individual or a few suppliers by qualifying and selecting new suppliers ("dual" or "multiple" sourcing). As in previous years, in 2016 the company continued to newly qualify and select second and third tier suppliers for intermediate products and materials. The company also intentionally includes international suppliers in its selection to avoid regional dependency. A medium risk exists for va-Q-tec AG overall due to its limited number of suppliers.

Production stoppages and operational interruptions represent a further risk. The company depends on the continuous operation of its production systems to ensure it can meet delivery requirements, especially to major industrial customers whose value chains are closely intermeshed with that of va-Q-tec. va-Q-tec produces at two geographically separate sites in Würzburg and Kölleda. Stoppage at one site has no effects on the other site, where production can continue. The individual production systems, where possible and economically feasible, are also decoupled from each other through technical measures, so the stoppage of an individual system does not restrict the operation of other plants. Finally, several systems are also available for each of the individual plant types, so that sufficient replacement capacity is available as a rule. To this extent, the Management Board gauges the risk of a prolonged production stoppage as low.

The rental services ("Serviced Rental") are particularly dependent on external logistics providers, which are not only responsible for operational processes at the network stations – for the cleaning, warehousing and cooling processes, in other words – but also for transporting the preconditioned containers and boxes to the end-customers. This can lead to interruptions to operations and damage to reputation. Auditing and close-meshed controlling by the company's own logistics specialists serve to assure the quality of rental services for the pharmaceuticals industry globally. For this reason, the Management Board gauges this risk as low.

Personnel risks

The company's operating activities and success depend on qualified managerial and key personnel. The company's very well trained personnel has acquired specific knowledge, skills and commercial contacts, in part through working for the company for many years. va-Q-tec counters the risk of losing such staff not only through measures aimed at employee loyalty, but also through diversifying the knowledge base through the workforce: staff departures at va-Q-tec are avoided through employee development, diversification of the knowledge base within the company, and compensation in line with the market. Employee motivation and satisfaction is also boosted through performance-based compensation components, regular further training and the good corporate culture with the possibility to help shape disruptive business models. The risks to which va-Q-tec is exposed due to a change of key staff are appraised as medium level risks.

Market and competition risks

The Group in its business activities has a strong focus on major industrial customers. This initially leads to a greater level of customer concentration. The company is constantly reducing this customer concentration risk through the growing number of customers and diversification. Further protection exists through a high level of customer loyalty, especially in the healthcare industry. The Group generally endeavours to establish and maintain a close, trusting and sustainable business relationship with all partners, employees and customers, and consequently gauges such risk as medium, and as a risk that can be reduced further.

As a young, fast-growing company, va-Q-tec might potentially be unable to effectively advance and shape its growth. The Group is in a phase of significant investment in personnel, sales activities, rental fleets, infrastructure and research & development. To this extent, were actual growth to prove lower than planned, the risk exists of a negative effect on operating results. As a matter of principle, the Management Board decides on such future investments with due objectivity and sense of proportion, and always on the basis of specific expectations about market trends. Less well-founded and / or excessively early investments are avoided as a consequence. The Management Board assesses the remaining risk as medium.

An intensification of the competitive environment also represents a significant risk. This can generate more pressure on prices and margins.

The company protects itself from such risk through two strategic levers, namely cost optimisation measures and innovative products and services. Cost optimisation includes, for example, increasingly automated production and particularly efficient purchasing of intermediate products, with selective backwards integration to upstream value chain steps. The innovation topic includes research and development activities, which have already led to commercially successful, high-quality and particularly differentiated products since the company was formed. The company's range of products and services distinguishes itself from that of its competitors in many aspects: examples include the unique possibility to test the quality of the insulation on-site, or the production of VIPs with sections extracted and in three-dimensional form. Overall, the Group gauges the risk due to newly emerging competitors or a more aggressive competitive situation as medium.

Cyclical target markets

Especially the target sectors of Appliance & Food, Technics & Industry and Building are dependent on the economic situation. The Management Board gauges this risk as low, as the underlying drivers of the business of va-Q-tec (increasing regulation and energy efficiency) are less susceptible to economic cycles.

Financial risks
The central finance department of va-Q-tec uses revolving liquidity plans to monitor liquidity risk. The Group was solvent at all times. The company enjoys an excellent financial position after the IPO. Its current liquidity, improved rating and positive business development enable further improvements in borrowing opportunities and terms. Interest risks deriving from existing long-term lending facilities are hedged through interest-rate swaps. The Group is exposed to interest-rate risk on its short-term overdrafts, although such risk is currently unlikely to materialise. Currency risks are also limited due to the fact that most invoicing occurs in euros (the company's functional currency). Overall, the Group consequently gauges risks in its financial area as low.

In an overall view of risks, va-Q-tec is predominantly exposed to general business risks (performance risks) and financial risks. The Management Board does not identify any individual or aggregated risks as going concern risks. The company is positioned both strategically and financially to exploit the business opportunities on offer to it.

2.4.3 Future development opportunities

Increasing regulation
Increasing regulation in cold chain logistics for pharmaceutical products is enhancing the requirements made of the reliability of thermal packaging and consequently demand for high-performance thermal packaging. In terms of their conformity with regulatory requirements, the passive packaging solutions of va-Q-tec offer significant benefits compared with conventional solutions based on styrofoam and ice. va-Q-tec possesses extensive knowledge concerning regulatory compliance in the respective countries and regions it targets. Laborious and expensive qualification measures carried out for and by healthcare customers, with corresponding quality assurance and process documentation, generate the requisite expertise at va-Q-tec for the successful implementation of packaging solutions. Only few companies are currently capable of successfully combining the necessary characteristics of thermal packaging within a complex, reliable and at the same time user-friendly offering. With its technology platform, va-Q-tec is one of the few companies worldwide to meet the high requirements. Increasingly complex regulation makes it necessary for companies in this space to constantly further develop themselves and research new technologies. In such an environment, high barriers to entering the market for thermal packaging are beneficial for va-Q-tec.

In other target sectors, too, demand for VIPs is increasing due to regulation: customers in the Technics & Industry target sector currently face a change in the regulatory environment in important core markets: like many household devices, heating system tanks have since recently been subject to the European Union's Ecodesign Directive – in other words, their energy efficiency is made transparent to the end-consumer through a labelling system consisting of energy efficiency classes. Moreover, equipment with high energy consumption and a low energy efficiency class is excluded from the European domestic market. Customers of va-Q-tec currently use VIPs mainly to position premium storage tanks in the highest efficiency classes. In future, and with more stringent regulation, we believe VIP-insulated tanks from the premium segment will also penetrate the mass market.

New markets
Since it was founded, va-Q-tec has worked on developing new products and services that open up additional markets and application possibilities for vacuum insulation panels. Along with basic research and product predevelopment, such as VIPs for entirely new temperature ranges, examples in this context include Food Logistics and the Mobility area.

Both existing thermal packaging and thermal packaging in development, as well as the serviced rental of va-Q-tec, are currently deployed almost exclusively in the healthcare industry. In the e-commerce area, major international providers and start-ups are currently implementing new business models to deliver food products purchased online directly to end-consumers. We believe the transportation of easily perishable food to the end-customer will be regulated even more stringently in the future. The high-performance thermal packagings of va-Q-tec are very well suited to such transports.

Enormous growth opportunities are also on offer to va-Q-tec in the target sector of Mobility: in the future, thermal management in vehicles with both conventional and electric engines will become increasingly significant: CO2 can be saved in conventional vehicles through insulation measures in vehicle cabins and through storing heat energy from the cooling cycle. In vehicles with electric engines, range depends on the optimal working temperature of the vehicle battery as well as the electricity consumed by peripheral functions such as heating and interior air conditioning. In the opinion of va-Q-tec, OEMs can extend vehicle range in this context through deploying vacuum insulation. In the Building sector, the opportunity arises to benefit from the currently outstanding situation in the construction cycle, along with ever more stringent energy efficiency standards for new buildings and renovations. va-Q-tec VIPs could be deployed here to enhance energy efficiency.

Along with the aforementioned market opportunities in terms of products and services, the Management Board also identifies considerable future growth opportunities in geographic expansion. The internationalisation of business activities and the company's entry into new global markets open up major sales opportunities for the Group. Equally, its international presence can be exploited to tap new sources of raw materials, consumables and intermediate products, and for efficient purchasing.

By way of summary, the Management Board is of the opinion that the opportunities pertaining to the development and growth of the business outweigh the aforementioned risks.

2.4.4 Risk reporting on the deployment of financial instruments

The Group is exposed to various financial risks due to its operating activities. The Group's risk management aims to minimise the potential negative effects on the Group's financial position. Financial instruments are only deployed to a limited extent at va-Q-tec.

Currency risk within the Group was low in 2016. In the German reporting segment, almost 100 % of sales and approximately 97 % of purchases were processed in euros. In the UK reporting segment, some sales revenues were generated in US dollars. The costs attributable to such revenues are generally also incurred in US dollars. Risk-reducing natural hedging consequently exists for the US dollar. The Management Board gauges the remaining currency risk relating to the US dollar as low.

Interest rate hedging instruments continue to exist to hedge interest payments on long-term loans to a standard market interest rate level. An interest-rate hedge was also arranged for a new long-term loan drawn down in 2016. No interest-rate hedge was arranged for existing variable interest overdrafts. None of these hedges is recognised as a hedge in the meaning of IAS 39.

No separate financial instruments are held to hedge against default on receivables. The risk of defaults on receivables is relatively low due to the high credit standing of the customer base. No receivables factoring is conducted apart from classical reverse factoring for customers with very high credit ratings. For one further major customer, reverse factoring was arranged through a major European bank in 2016.

The financial investments reported under other financial assets in the consolidated financial statements exclusively comprise euro denominated deposits with a term of up to twelve months held at German banks belonging to a German deposit guarantee fund.

Above and beyond the financial instruments described here, the Group holds no further financial instruments that are important for appraising the Group's position or prospective development. Please refer to the sections on "Financial instruments" and "Risk management" in the notes to the consolidated financial statements for more details.

2.5 COMPENSATION REPORT

In accordance with its corporate government principles, va-Q-tec aims for performance-based and sustainable compensation for the work of the Management and Supervisory boards. Compensation comprises basic and variable components.

Management Board
In accordance with the requirements of the German Stock Corporation Act (AktG), and the recommendations of the German Corporate Governance Code (DCGK), the compensation of the Management Board members consists of both basic and variable elements. Variable compensation comprises a cash component paid as an annual bonus. A long-term share-based compensation component (option program) exists for one Management Board member. With the IPO va-Q-tec AG, the beneficiary's exercise terms were met as part of the option program. The beneficiary had not yet exercised his options as of the balance sheet date.

All compensation elements are appropriate both individually and in their entirety. The Supervisory Board concerns itself intensively with the appropriateness and standard nature of Management Board compensation, taking into account all criteria set out in Section 87 of the German Stock Corporation Act (AktG) and Section 4.2.2 Clauses 4 and 5 of the German Corporate Governance Code (DCGK), such as the individual Management Board members' tasks, personal performance as well as the financial situation, performance and future prospects of va-Q-tec AG.

In March 2017, external compensation experts confirmed to the Supervisory Board the fundamental appropriateness of the Management Board compensation. The basic compensation corresponds to the annual basic salary; in addition, two Management Board members have use of a company car. The Group pays premiums for D&O insurance cover for all Management Board members. The Management Board members themselves bear the cost of the 10% deductible. The annual basic salary is set for the entire duration of an employment contract and is paid in twelve monthly instalments. Factors on which it is based include the individual Management Board members' tasks, and on the Group's current business and financial position, performance and future prospects. The variable compensation element of the cash component paid in the form of an annual bonus is based on reaching the Group's sales and earnings targets; it is limited in terms of amount to 1.4 times the amount payable on 100% target attainment. The Supervisory Board approves the annual Group targets to measure the variable cash component. It also determines to which extent the targets have been achieved.

The Management Board members' contracts include no separate payments for the instance of a termination of their contracts due to a change of control.

The total compensation of the Management Board amounted to EUR 637,912 in the 2016 reporting year (previous year: kEUR 564,531). The basic compensation amounted to EUR 500,759 (previous year: EUR 473,663); this also includes payments for benefits in kind such as a company car. Variable cash compensation stood at a total of EUR 114,780 (previous year: EUR 69,000).

Defined contribution pension commitments have existed for the Management Board members since 2014. To this end, EUR 22,373 (previous year: EUR 21,868) was paid into an external, congruently reinsured pension fund in the year under review. For this reason, no provisions for pensions have been formed on the balance sheet.

Accordingly, fixed compensation including benefits in kind and pension fund contributions accounts for 82% of total compensation (previous year: 88%).

No loans or advances were granted to members of the Management Board.

In accordance with the AGM resolution dated 31 May 2016, va-Q-tec discloses the total compensation of the Management Board, but not the individual amounts for the individual members. This practice complies with section 314 (2), 286 (5) of the German Commercial Code (HGB).

Supervisory Board
The AGM sets Supervisory Board compensation. The compensation of the Supervisory Board of va-Q-tec AG is regulated in Section 14 of the bylaws of va-Q-tec AG.

The Supervisory Board received compensation of EUR 124,930 for the 2016 reporting year (previous year: EUR 100,901). This total includes the reimbursement of outlays incurred by each Supervisory Board member, as well as the VAT incurred on their pay and compensation for outlays. The company bears the cost of the premium for the D&O insurance concluded for the Supervisory Board Members. A deductible that is personally payable is to be implemented from 2017. Moreover, consultancy services and other services in an amount of EUR 74,939 (previous year: EUR 20,486), especially in relation to implementing the IPO, were paid for.

2.6 DISCLOSURES PURSUANT TO SECTIONS 289 (4) AND 315 (4) HGB, AS WELL AS THE EXPLANATORY REPORT ON "TAKEOVER LAW DISCLOSURES"

As a capital market oriented public stock corporation, va-Q-tec AG is required to make takeover law disclosures pursuant to Sections 289 (4) and 315 (4) of the German Commercial Code (HGB). The following subsection provides an insight into the takeover law relationships as of the 31 December 2016 balance sheet date, and explains them in greater detail.

2.6.1 Composition of the subscribed share capital

The share capital of va-Q-tec AG amounts to EUR 13,089,502, and is divided into 13,089,502 ordinary registered shares. The share capital is fully paid in. The shares carry the same rights and obligations. Each share grants one vote at the general meeting of shareholders. Exceptions to this are shares that the company itself holds (treasury shares), from which no rights accrue to va-Q-tec AG, such as the right to vote at the general meeting of shareholders. As of the balance sheet date, va-Q-tec AG held 134,466 treasury shares.

2.6.2 Restrictions affecting voting rights or the transfer of shares

Above and beyond the time-delimited lock-up regulations for the Management Board, Supervisory Board and previous shareholders agreed as part of the IPO, the Management Board is not aware of any restrictions affecting voting rights all the transfer of shares.

2.6.3 Interests in the share capital exceeding 10 % of the voting rights

Pursuant to German Securities Trading Act (WpHG), all investors reaching, exceeding or falling short of voting rights thresholds pursuant to Section 21 WpHG through purchase, sale or in another manner are required to report such transactions to the respective company and to the German Federal Financial Supervisory Authority (BaFin). To this extent, the Management Board of va-Q-tec AG is aware of the following individuals and companies whose interests exceed 10 % of the voting rights:

Name	Country	No. of shares	Interest in the share capital
Dr. Joachim Kuhn	DE	1,978,667	15.12 %
Dr. Roland Caps	DE	1,606,433	12.27 %
Zouk Capital / Cleantech Europe II Luxembourg S.à.r.l.	LUX	2,137,563	16.33 %
Total		**5,722,663**	**43.72 %**

Rules concerning the appointment and recall from office of Management Board members
Pursuant to Section 84 of the German Stock Corporation Act (AktG), and the bylaws of va-Q-tec AG, the Supervisory Board appoints the members of the Management Board. Pursuant to the company's bylaws, the Management Board consists of one or several individuals. The Supervisory Board determines the number of Management Board members. If the Management Board consists of several members, Management Board resolutions are passed with a simple voting majority. If the Supervisory Board has appointed a Management Board Chair and if the Management Board consists of at least three members the vote of the Management Board Chair is decisive given an equal number of votes on a resolution.

Rules concerning bylaw amendments
Amendments to the bylaws require a resolution of the general meeting of shareholders. Resolutions by the general meeting of shareholders require a simple voting majority unless a greater majority is imperative by law.

Management Board authorisations relating to the issuing and repurchase of shares
va-Q-tec AG has both approved share capital and contingent share capital as follows:

Approved share capital
On the basis of an AGM resolution of 31 May 2016, the Management Board is authorised to increase the share capital, with Supervisory Board assent, once or several occasions until 30 May 2021 against cash and / or non-cash capital contributions by a total of up to EUR 4,278,187, whereby shareholders' subscription rights can be excluded.

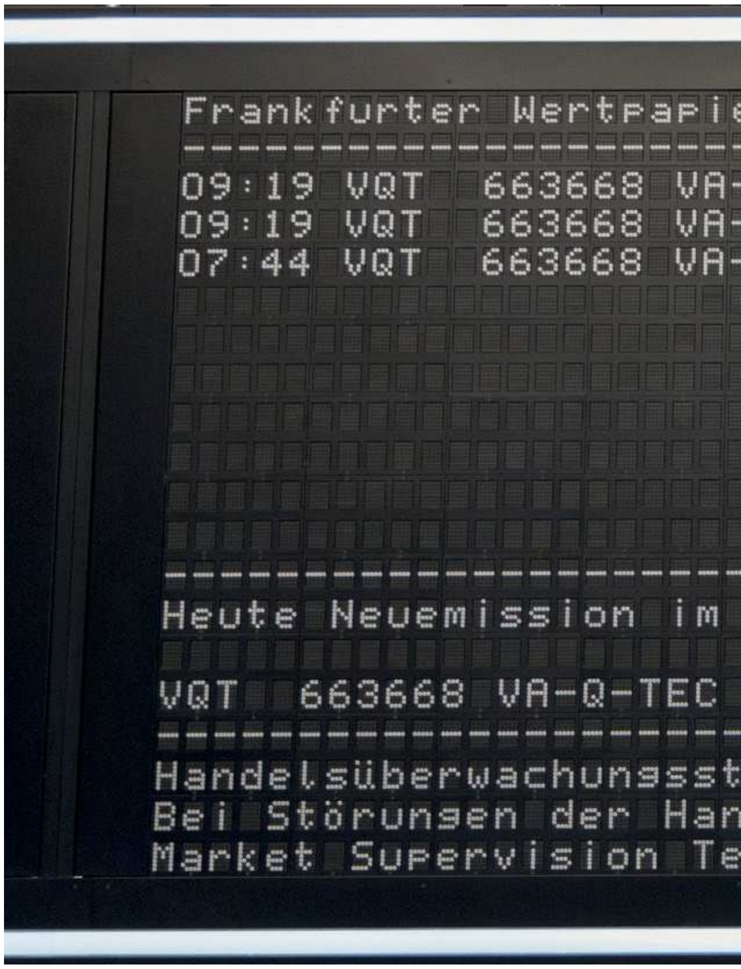
Contingent capital
Pursuant to Section 6.5 of the company's bylaws, the share capital is conditionally increased by EUR 1,000,000 through issuing up to 1,000,000 new ordinary registered shares (Contingent Capital 2016). The Contingent Capital 2016 serves exclusively to grant shares on the exercise of conversion and option rights.

Significant agreements in the case of a change of control due to a takeover offer and compensation agreements in the case of a takeover offer

The company has no agreements in the meaning of Section 315 (4) Nos. 8 and 9 of the German Commercial Code (HGB).

2.7 CORPORATE GOVERNANCE STATEMENT

The company has published on its website at www.va-Q-tec.com within the Investor Relations area the corporate governance statement pursuant to Section 289a of the German Commercial Code (HGB) including the statement relating to the German Corporate Governance Code pursuant to Section 161 of the German Stock Corporation Act (AktG).




erbörse - Bekanntmachungen vom 30.09.16
-Q-TEC AG - ERSTER PREIS 14,00
-Q-TEC AG - ERSTE QUOTIERUNG (13,00-15,00)
-Q-TEC AG - ERSTER HANDELSTAG
elektronischen Handelssystem XETRA (XETR):
Match. Range: Erster Preis
AG 13,00-15,00 14,00
elle FWB Tel.: 2 11 1 - 52 96
dels- und Anzeigesysteme:
l.: 2 11 1 - 10 50

va-Q-tainer US
FORK LIFT
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JYP40068VQ
JYP40066VQ
JYP40070VQ
JYP40052VQ