

Annual Report 2017

# BUILDING BLOCKS FOR THE DIGITAL AGE.

SECURE.  
INNOVATIVE.  
AT YOUR SIDE.

**QSC** AG

# MULTIYEAR OVERVIEW

€ million	2017	2016	2015	2014	2013
Revenues	357.9	386.0	402.4	431.4	455.7
EBITDA	38.3	37.1	42.2	35.0	77.8
Depreciation and amortisation <sup>1</sup>	31.1	50.2	53.3	69.0	51.3
EBIT	7.1	(13.1)	(11.1)	(34.0)	26.5
Net income (loss)	5.1	(25.1)	(13.2)	(33.9)	23.6
Earnings per share <sup>2</sup> (in €)	0.04	(0.20)	(0.11)	(0.27)	0.19
Shareholders' equity <sup>3</sup>	89.5	86.3	113.8	145.6	193.2
Long-term liabilities <sup>3</sup>	147.9	159.3	171.0	180.2	103.3
Short-term liabilities <sup>3</sup>	59.6	60.4	63.3	79.7	95.5
Balance sheet total <sup>3</sup>	297.1	306.0	348.1	405.5	392.0
Equity ratio (in %)	30.1	28.2	32.7	35.9	49.3
Free cash flow	12.6	8.4	7.1	(24.9)	25.6
Liquidity <sup>3</sup>	61.9	67.3	74.0	88.1	59.0
Capital expenditure (capex)	19.3	28.4	26.7	30.0	39.6
Capex ratio <sup>4</sup> (in %)	5.4	7.4	6.6	7.0	8.7
Dividend per share (in €)	0.03 <sup>5</sup>	0.03	0.03	0.10	0.10
Xetra closing price <sup>3</sup> (in €)	1.51	1.92	1.51	1.74	4.30
Number of shares <sup>3</sup>	124,172,487	124,172,487	124,162,487	124,142,487	124,057,487
Market capitalisation <sup>3</sup>	187.5	238.4	187.5	216.0	533.4
Number of employees <sup>3</sup>	1,342	1,360	1,454	1,697	1,689

Consolidated financial statements (IFRS) from 2013 to 2017.

<sup>1</sup> Including non-cash share-based compensation.

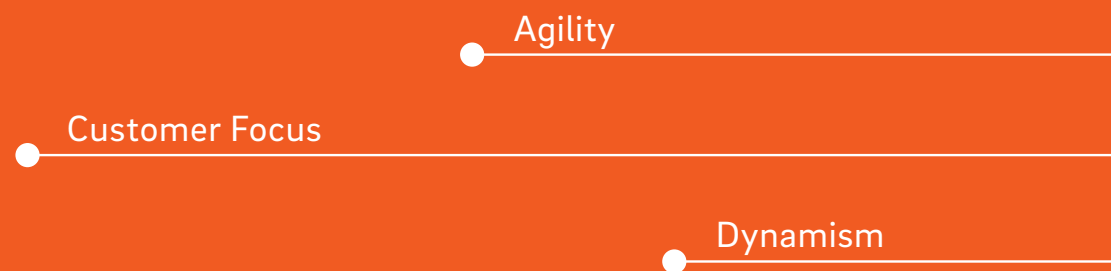
<sup>2</sup> Basic.

<sup>3</sup> As of 31 December.

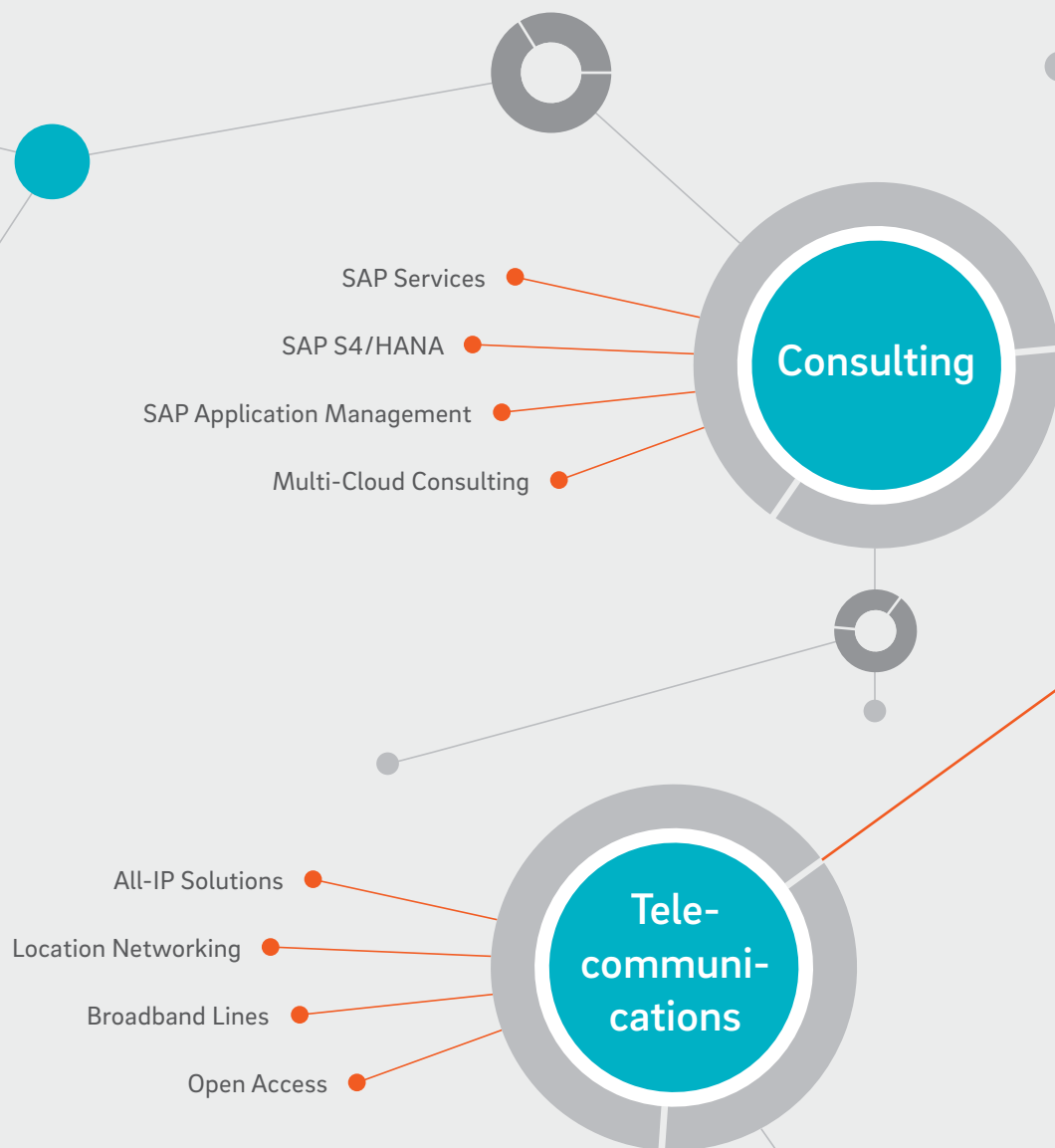
<sup>4</sup> Ratio of capital expenditure to revenues.

<sup>5</sup> Proposal to the Annual General Meeting.

QSC is the digitiser to Germany's SME segment and a one-stop source for all building blocks for the digital age: Cloud, Internet of Things, Consulting, Telecommunications, and Colocation. These business fields have been boosted since the beginning of 2018 by a new vertical structure. This offers more agility, greater customer focus and increased dynamism – three key levers for success in the digital age.



**Building blocks for the digital age.** Our total of around 30,000 customers benefit from innovative products and services from a single source – securely and with absolute end-to-end quality.





JÜRGEN HERMANN,  
CHIEF EXECUTIVE OFFICER

STEFAN A. BAUSTERT,  
CHIEF FINANCIAL OFFICER



- "BUILDING ON THIS NEW STRUCTURE,  
WE INTEND TO ACQUIRE NEW CUSTOMERS  
IN ALL BUSINESS FIELDS IN 2018."

Dear Shareholders,

Consistent with our forecasts, after three difficult years we returned to profitability in 2017. Our company is back in the black. We can also report improvements in our other key operating performance figures, namely EBITDA and EBIT. And our free cash flow even exceeded our original expectations by a clear margin.

QSC is the digitiser to the German SME segment. It provides companies with all the "building blocks" they need for the digital age: Cloud, the Internet of Things, Consulting, Telecommunications, and Colocation. Based on this extensive portfolio, we can bear comparison with the large players in our industry. What distinguishes us from our competitors, however, is that we build partnerships of equals with our customers and also compile individually tailored solutions if they so wish. Together with the personal contacts we maintain on management level, this SME-based approach is an important and often decisive factor in the success of our sales activities.

The market is showing an unprecedented level of dynamism and pace of innovation. The various sub-markets in which QSC operates require ever greater expertise and customers expect specific solutions to be developed at ever faster intervals. It is now almost the norm for companies to have different contact partners for different topics. To account for these developments, we decided in November 2017 to grant our business fields more freedom to structure the way they approach and work their individual markets. They each now have their own sales and operations and are responsible for their own revenues and earnings.

With its flat hierarchies, this new vertical organisation offers three key advantages: more agility, greater customer focus and increased dynamism. The agile organisational structure responds flexibly and proactively to customers' wishes. Products and solutions can be offered swiftly and tailored precisely to needs, while response times to changes in conditions are notably shorter. Greater customer focus is the second major advantage: The business fields are now more autonomous and work more closely with customers. Transparency in all processes, close dialogue with customers and rapid feedback mechanisms form the basis for quality and trust. Increased dynamism, the third advantage, comes from the greater latitude the business fields now have to take their own decisions and assume responsibility for these. The process of developing and launching innovative products is enhanced and speeded up by drawing on the expertise and ideas of each individual employee.

"THE BUSINESS FIELDS ARE NOW  
MORE AUTONOMOUS AND WORK  
MORE CLOSELY WITH CUSTOMERS."

## "THE CLOUD BUSINESS WILL CONTINUE TO ACT AS OUR MAIN GROWTH DRIVER."

We would like to take this opportunity to thank all our employees for their willingness to embrace change. The great commitment they have shown and the efforts they have made to press ahead with our transformation over the past years should not simply be taken for granted. We would also like to thank our customers, numbering around 30,000 in total, especially for the trust they place in us and for the strong working relationships in the past year. They will be our key focus in future as well. And we owe our particular thanks to you, our shareholders, for your willingness to accompany QSC's transformation and patiently support it.

Building on this new organisational structure, we intend to acquire new customers in all five business fields in 2018, while also securing our existing customer relationships. The Cloud business, with its two areas of Cloud Services and IoT, will continue to act as our main growth driver. Cloud is without any doubt the baseline technology for the digital age. And QSC builds and operates the cloud solution that best meets the needs of each of its customers. In many cases, customers primarily draw on our Pure Enterprise Cloud. At the "Frankfurter Leben" Group, for example, the PEC has, since last year, offered impressive evidence of its ability to support new business models. Having said this, increasing numbers of our SME customers prefer to combine our solution with standard applications from large providers such as Amazon and Microsoft. And that is precisely what the multi-cloud hub presented in 2017 does: it turns the Pure Enterprise Cloud into the central hub for various cloud worlds.

In our IoT business we expect further projects to advance to regular operations. The underlying technology, large parts of which we developed ourselves, is already used to control windows and doors, heating systems and industrial gates. Energy companies as well as experts for fine particle measurement are drawing on the expertise available at our IoT subsidiary Q-loud. That provides a strong foundation for us to build on in this fast-growing market. And we will increasingly be cooperating with large partners to jointly implement specific IoT projects in future.

Our SAP Consulting business is also strongly positioned. Here, we acted early to prepare for the conversion to S4/HANA by setting up a proprietary competence centre. More and more companies are now beginning the extensive process of converting their systems. The resultant opportunities were already documented at the beginning of 2018 in the form of rising new order volumes. New customers are also a key focus at Colocation Services. Already today, numerous companies appreciate the flexibility and individuality of these solutions. Customers include online services with high availability standards and banks with extremely strict requirements in terms of security. In the traditional Outsourcing business, we are currently witnessing a trend towards greater individuality, with new opportunities arising, above all, at small and medium-sized companies whose IT is reaching its limits but which are not yet ready for a full transition to the cloud age. Having said this, larger companies are also on the lookout for individual solutions enabling them to benefit from the advantages of different cloud worlds. Together with our existing customers, we are consistently working on gradually migrating current services to the cloud.



## "TELECOMMUNICATIONS IS AT THE DAWN OF A NEW ERA."

Telecommunications is at the dawn of a new era. The German fixed-network market is currently in transformation and the expansion in fibre optics is gaining momentum. This process is being accompanied by the unstoppable advance of cloud technology, which is conquering both telephony and networking. QSC is excellently positioned for this transformation and enjoys a strong reputation in the market, as is documented by specific projects. Some examples: We are currently migrating the corporate customer SDSL connections at Telefónica Deutschland to our network. We operate fibre optics networks for several municipal utility companies and in some cases also provide them with voice, data and IPTV functionalities. And it is our technology that is behind the new cloud-based telephony system at NetCologne. That said, by offering forward-looking concepts we have also managed to extend the terms and scope of contracts with our existing customers for conventional location networking.

To enable us to act swiftly and flexibly to exploit opportunities arising from these structural market changes, we have decided to spin-off our TC business into a standalone company. At the next Annual General Meeting, we will be asking you, our shareholders, to approve this move. The new structure will enable us to enter cooperations, acquire shareholdings and implement new business models more quickly. This will provide QSC with every opportunity to benefit from the new era.

Returning to profitability marks an important milestone in QSC's organisational restructuring. We also, for the third consecutive year, met the targets communicated. Together, these developments will enhance the trust placed in us by our investors. That is good news, but is clearly not yet enough, as is apparent from our share price performance. Investors expect revenue growth, also on group level, as the basis for sustainable earnings growth. Given the wide variety of growth opportunities available to us in different areas, we have no doubt that we are moving in this direction. And our new, lean structures and clear customer focus will enable us to make further progress. QSC's positioning as digitiser to the SME segment remains absolutely right. We will seize growth opportunities and overcome the remaining challenges – and that together with all our employees and in the interests of all our shareholders.

Cologne, 26 March 2018



Jürgen Hermann  
Chief Executive Officer



Stefan A. Baustert  
Chief Financial Officer

---

# CONTENTS

---

## 10–21 **TO OUR SHAREHOLDERS**

- 10 The Management Board
- 11 The Supervisory Board
- 12 Report of the Supervisory Board
- 18 QSC Share Performance

## 22–93 **GROUP MANAGEMENT REPORT**

- 24 Group Fundamentals
- 32 Corporate Governance (partly unaudited)
- 51 Non-Financial Declaration (unaudited)
- 68 Business Report
- 81 Risk Report
- 89 Outlook and Opportunity Report

## 94–174 **FINANCIAL REPORT**

- 96 Consolidated Financial Statements
- 103 Notes to the Consolidated Financial Statements
- 166 Statement of Responsibility
- 167 Auditor's Report

## 175 **FURTHER INFORMATION**

- 175 Index
- 176 Building Blocks of Digital Communication
- 177 Contact, Calendar

## THE MANAGEMENT BOARD



**Jürgen Hermann (\*1964),  
Chief Executive Officer**

The digital world is QSC's future. Since taking over as CEO in May 2013, Jürgen Hermann, a prime mover at QSC, has pressed ahead with aligning the Company as digitiser to the SME segment. In addition to strategy, this graduate in economics also bears management board responsibility for the key topics of innovation and communications. Having held senior positions for several years at Thyssen Telecom AG, he joined what was then QS Communication Service GmbH back in 1997. As Director of Finance, he played a key role in organising QSC's IPO in April 2000 and was the Company's Chief Financial Officer from 2009 to 2013.

**Stefan A. Baustert (\*1956),  
Chief Financial Officer**

QSC's success in the digital age is driven by efficient structures. Stefan A. Baustert has been implementing these since becoming CFO at the beginning of 2015. In addition to finance, this graduate in business administration also holds board responsibility for procurement, human resources, and investor relations. His previous positions include working as CEO at the publicly listed company Singulus Technologies AG, as Commercial Director at E-Plus Mobilfunk GmbH, and at the beginning of his career he held various management positions at the Thyssen-Krupp Group, where he was latterly CFO at Thyssen Telecom AG.

---

## THE SUPERVISORY BOARD

---

The six-member Supervisory Board comprises four shareholder and two employee representatives. In the regular election held at the Annual General Meeting on 29 May 2013, shareholders elected four representatives for a term of office of five years each. The employees selected their two representatives in advance of the meeting.

### **Dr. Bernd Schlobohm, Chairman**

Dr. Schlobohm, who holds a doctorate in engineering, founded QSC in 1997, had the Company publicly listed in April 2000, and then managed it as CEO until May 2013. Together with QSC's co-founder, Gerd Eickers, he is the largest shareholder. At the end of 2017, these two shareholders held a combined stake of 25% in QSC.

### **Dr. Frank Zurlino, Deputy Chairman**

Dr. Zurlino, holder of a doctorate in business engineering, was elected to the Supervisory Board in May 2013. Formerly head of strategy consulting and development at IBM Deutschland, he is now Managing Partner at the international management consultancy Horn & Company.

### **Gerd Eickers**

QSC's second founder, Gerd Eickers, moved to the Supervisory Board in June 2004 after three years on the Management Board. In subsequent years, this graduate in economics played a major role in shaping the political framework for the TC market, particularly in his capacity as President of the Association of Telecommunications and Value-Added Service Providers (VATM).

### **Ina Schlie**

Ina Schlie, Senior Vice President Digital Government – Head of Government Relations MEE at SAP SE, has been a member of the Supervisory Board since September 2012. Drawing on her previous experience as the long-standing head of the group tax department at SAP, she also chairs the Audit Committee.

### **Anne-Dore Ahlers**

QSC's workforce elected Anne-Dore Ahlers, the Hamburg-based Chair of its Works Council, as one of its two representatives on the Supervisory Board in April 2013. A data processing specialist, she can point to around 20 years of experience as an IT consultant.

### **Cora Hödl**

QSC's workforce elected Cora Hödl, now head of the Infrastructure & Voice department, as its second representative on the Supervisory Board. A qualified data communications electrician, Cora Hödl has worked at QSC since 2002 and is based at the Company's head office in Cologne.

## REPORT OF THE SUPERVISORY BOARD



DR. BERND SCHLOBOHM,  
SUPERVISORY BOARD CHAIRMAN

Dear Shareholders,

The following Supervisory Board Report informs you about the activities of the Supervisory Board in the 2017 financial year.

**Activities of the Supervisory Board.** In 2017 as well, the Supervisory Board performed all of the duties incumbent on it by law and the Articles of Association. It continually monitored and advised the Management Board in its management of QSC AG. It was directly involved in all decisions and measures of material significance, particularly those impacting on the Company's financial position, financial performance and cash flows. After careful consideration, it voted on all measures for which its consent is required by law, the Articles of Association and the Rules of Procedure of the Management Board.

The members of the Management Board attended the meetings of the Supervisory Board unless stipulated otherwise by the Supervisory Board Chairman. At these joint meetings, the Supervisory and Management Boards discussed key aspects of the Company's business policy and strategy, as well as its performance and planning. Moreover, the Chairs of the two boards were in regular contact to discuss topics arising between Supervisory Board meetings.

The Management Board informed the Supervisory Board with regular, timely and detailed reports, both written and oral, about the Company's business performance, drawing in particular on monthly and quarterly financial statements and rolling budget/actual comparisons. The Management Board reports also included information about variances in the actual performance from targets previously reported and variances in the business performance from the planning.

The reports also included all relevant information concerning the Company's strategic development and planning, risk situation, risk management and compliance. All enquiries and requests for additional information by the Supervisory Board were promptly and thoroughly answered by the Management Board.

**Topics addressed by the Supervisory Board.** The main focuses of Supervisory Board meetings and resolutions in the 2017 financial year were:

- 1. Current revenue and earnings performance.** The Supervisory Board ensured that it was continually informed about the performance of the operating business, and especially of the progress made in the Cloud segment.
- 2. Verticalisation of organisational structure.** The Supervisory Board also dedicated a significant amount of its time to discussing the Management Board's plans to boost the five business fields of Cloud, Colocation, Consulting, Internet of Things, and Telecommunications. It also dealt in detail with the planned spin-off of the TC business.
- 3. Management Board.** By resolution dated 14 November 2017, the Supervisory Board extended the appointment of Jürgen Hermann as a member of the Management Board and as Chief Executive Officer from the expiry of his current appointment on 31 March 2018 through to 31 March 2021. By resolution dated 17 August 2017, the Supervisory Board also extended the appointment of Stefan A. Baustert as a member of the Management Board from the expiry of his current appointment on 31 December 2017 through to 31 December 2020. Both resolutions involved corresponding extensions to the existing employment contracts. At its meeting on 14 November 2017, the Supervisory Board approved the request submitted by the members of the Management Board Felix Höger and Udo Faulhaber for them to stand down from their Management Board positions as of 31 December 2017. It approved the premature rescission of their respective employment contracts. The Supervisory Board would like to thank Felix Höger and Udo Faulhaber for their work. They played a key role in shaping QSC's transformation into the "digitiser to the SME segment" by, among other things, developing the new cloud service portfolio, standardising all aspects of IT service performance and focusing QSC's sales activities on small and medium-sized companies.
- 4. Updating of Supervisory Board targets.** Two years after its previous adjustment to the targets first set in the 2012 financial year, the Supervisory Board addressed this topic once again and, consistent with the German Corporate Governance Code, compiled a competence profile. This lays down detailed requirements for the composition of the Supervisory Board. Moreover, the Supervisory Board once again set targets for the share of women on the Management and Supervisory Boards and new deadlines for these to be achieved.

Furthermore, in 2017 the Supervisory Board dealt with the internal control mechanisms at QSC AG, and here in particular with the risk management system and with corporate governance and compliance consistent with statutory requirements. The Supervisory Board reviewed these areas on the basis of submissions and Management Board reports and discussed them with the Management Board. The Supervisory Board is of the opinion that the internal control and early warning risk identification systems operate reliably.

**Composition of the Supervisory Board.** The Supervisory Board witnessed no changes in its composition in 2017 and continued to comprise four shareholder representatives, namely Dr. Bernd Schlobohm (Supervisory Board Chairman), Dr. Frank Zurlino (Deputy Chair), Ina Schlie and Gerd Eickers, and two employee representatives, namely Anne-Dore Ahlers and Cora Hödl.

**Supervisory Board meetings and committees.** As well as four scheduled meetings attended in person, the Supervisory Board held two unscheduled meetings, of which one in person and one by conference call, in the 2017 financial year. All meetings were attended by all members. Where necessary, the Supervisory Board also adopted resolutions on individual topics by circulating and approving the respective documents.

The Supervisory Board has formed four committees to assist it in its work. These are the Human Resources Committee, the Audit Committee, the Nomination Committee and the Strategy Committee. The Chairs of the respective committee regularly report to the full Supervisory Board on the work of their committees. All committee members attended all meetings of their respective committees in 2017.

The **Human Resources Committee** met three times in the year under report. The members of this committee are: Dr. Bernd Schlobohm (Chair), Gerd Eickers and Cora Hödl. This committee prepared the Supervisory Board decision concerning the degree of target achievement by Management Board members in the 2016 financial year and the Management Board target agreements for the 2017 financial year. It also dealt in particular with preparing Supervisory Board resolutions on extending the Management Board appointments for Jürgen Hermann und Stefan A. Baustert, its approval of Felix Höger and Udo Faulhaber standing down from their Management Board positions and the conclusion of appropriate rescission agreements.

The **Audit Committee** comprises Ina Schlie as its Chair and independent financial expert, as well as Dr. Bernd Schlobohm and Dr. Frank Zurlino. The Audit Committee monitors the financial reporting process and may submit recommendations to safeguard its integrity. It also monitors the effectiveness of the internal control, risk management and internal audit systems, as well as compliance, and prepares all decisions required by the full Supervisory Board in this respect. The Audit Committee also deals with the audit of the financial statements and is responsible for selecting and issuing the audit assignment to the auditor, as well as for monitoring the auditor's independence. It decides whether the Company may commission the auditor to provide non-audit services and, where appropriate, monitors the auditor's provision of such services. The Audit Committee met five times in the past financial year. It reviewed the documents relating to the annual and consolidated financial statements, including the dependent company



report, for the 2016 financial year, held in-depth discussions about these documents and the accompanying audit reports in the presence of the auditor and adopted recommendations for the full Supervisory Board resolution concerning the annual and consolidated financial statements and their audit. The Audit Committee discussed the interim financial reports and statements due for publication with the Management Board. It dealt with the planning of the audit and key audit focuses for the 2017 financial year and negotiated and concluded the auditor's fee agreement. As QSC was obliged by law to publicly tender the financial statements audit assignment for 2018, the Audit Committee organised a corresponding process in the period from April to July 2017. Based on the results of this tender process, the Committee submitted a substantiated recommendation to the full Supervisory Board. This contained two proposals for the resolution to be adopted by the Supervisory Board with regard to the candidate proposed to the Annual General Meeting for election as auditor. Consistent with legal requirements, in its proposals the Audit Committee submitted a substantiated preference, in this case for the current auditor, KPMG AG Wirtschaftsprüfungsgesellschaft, which is headquartered in Berlin and has a branch office in Cologne. At its meeting on 17 August 2017, the Supervisory Board accepted this recommendation and adopted a corresponding election proposal for the 2018 Annual General Meeting. Responding to an amendment made to the German Corporate Governance Code in February 2017, the Audit Committee dealt closely with the resultant recommendation and suggestion to provide employees and third parties with a suitable opportunity to submit information about any infringements of the law at the Company in a protected manner and recommended that the Management Board should introduce a suitable whistle-blowing system.

The task of the **Nomination Committee** is to submit suitable candidates to the full Supervisory Board for its nomination of candidates at any forthcoming election of shareholder representatives to the Supervisory Board at the Annual General Meeting. The members of the Nomination Committee are Gerd Eickers (Chair) and Dr. Frank Zurlino. As no elections of shareholder representatives to the Supervisory Board were due in the 2017 financial year, the Nomination Committee did not meet in the year under report.

The members of the **Strategy Committee** are Dr. Bernd Schlobohm (Chair) and Dr. Frank Zurlino. The Strategy Committee has a purely advisory function and addresses the strategic, and thus long-term, development of QSC AG. The Committee met twice in 2017 and dealt in particular with the opportunities and risks associated with the Management Board's plan to strengthen Cloud, Colocation, Consulting, Internet of Things, and Telecommunications by verticalising these five business fields.

**Corporate governance.** The Supervisory Board continuously monitors the further development in the German Corporate Governance Code and its implementation at QSC AG. Consistent with the Code, in the past financial year the Supervisory Board reviewed the efficiency of its own activities. No deficits were identified. At its meeting on 23 November 2017, the Supervisory Board acting together with the Management Board submitted its updated annual Declaration of Conformity pursuant to § 161 AktG. This is permanently available on the Company's website.

The Management Board reports in detail on corporate governance, also on behalf of the Supervisory Board, in the Corporate Governance Report within the Group Management Report. Each member of the Supervisory Board discloses any conflicts of interest that may arise, taking due account of the recommendations made in the German Corporate Governance Code. No conflicts of interest arose in the year under report.

**Audit of financial statements.** KPMG AG Wirtschaftsprüfungsgesellschaft, headquartered in Berlin and with a branch office in Cologne, audited both the annual financial statements of QSC AG as of 31 December 2017 prepared by the Management Board in accordance with the requirements of the German Commercial Code (HGB) and the consolidated financial statements as of 31 December 2017 prepared in accordance with International Financial Reporting Standards (IFRS) as requiring application in the European Union and the supplementary provisions of German commercial law applicable pursuant to § 315e of the German Commercial Code (HGB), as well as the management and group management reports. The audit assignment had been awarded by the Audit Committee in accordance with the resolution adopted by the Annual General Meeting on 24 May 2017.

Key audit matters for 2017 included the recoverability of the equity interest held in Ventelo GmbH in the case of the annual financial statements and the recoverability of goodwill recognised in the case of the consolidated financial statements. The auditor granted unqualified audit opinions to the Company's annual financial statements (HGB) and consolidated financial statements (IFRS) for the 2017 financial year, including the respective management reports. Furthermore, the Management Board compiled a report on relationships with affiliated companies for the 2017 financial year (dependent company report). The auditor audited this report, reported in writing on its findings and granted the following unqualified opinion:

"Based on our audit and assessment performed in accordance with professional standards, we confirm that

1. The factual information in the report is correct
2. The Company's compensation with respect to the transactions listed in the report was not incommensurately high."

The aforementioned documents, including the audit reports submitted by the auditor, were provided to all Supervisory Board members in good time ahead of their review. At its meeting on 14 March 2018, the Supervisory Board discussed all of these documents and the auditor's reports with the Management Board and the auditor, taking due account of the findings of the preliminary review conducted by the Audit Committee. It also reviewed the non-financial declaration and group declaration requiring compilation for the first time for the 2017 financial year in accordance with the CSR Directive Implementing Act. Furthermore, the Supervisory Board reviewed and discussed the Management Board's proposal concerning the appropriation of profit. The auditor reported key audit findings to the meeting and was available to answer questions and provide further information. The auditor reported on the audit of the internal control

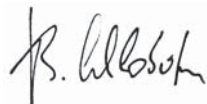
system in respect of the financial reporting process and risk management system and also informed the Supervisory Board of services it provided in addition to the audit of the financial statements and that there were no circumstances indicating that its impartiality was impaired. Having conducted its own review, the Supervisory Board did not raise any objections to the annual financial statements (HGB) of QSC AG for the 2017 financial year, the consolidated financial statements (IFRS), the management report of QSC AG or the group management report and concurs with the findings of the audit conducted by the auditor. Consistent with the recommendation made by the Audit Committee, the Supervisory Board therefore approved the consolidated financial statements (IFRS) and annual financial statements (HGB). The annual financial statements are thus adopted. The review of the non-financial declaration and group declaration by the Supervisory Board also did not lead to any objections. With due consideration of the interests of shareholders and of QSC AG, the Supervisory Board endorses the appropriation of profit proposed by the Management Board. The Management and Supervisory Boards will propose the distribution of a dividend of € 0.03 per share with corresponding entitlement for approval by the Annual General Meeting on 12 July 2018.

Following its own review, the Supervisory Board also approved the Management Board's report on relationships with affiliated companies and concurred with the findings of the audit of the report by the auditor. Based on this review, the Supervisory Board established that no objections were to be raised against the declaration by the Management Board at the end of the report on relationships with affiliated companies.

The Supervisory Board would like to thank all shareholders for their continued trust at a time in which QSC is undergoing fundamental transformation. We owe our particular thanks to all employees and the members of the Management Board for their great commitment and their willingness to shape and press ahead with this process of transformation.

Cologne, 14 March 2018

On behalf of the Supervisory Board of QSC AG



Dr. Bernd Schlobohm  
Supervisory Board Chairman

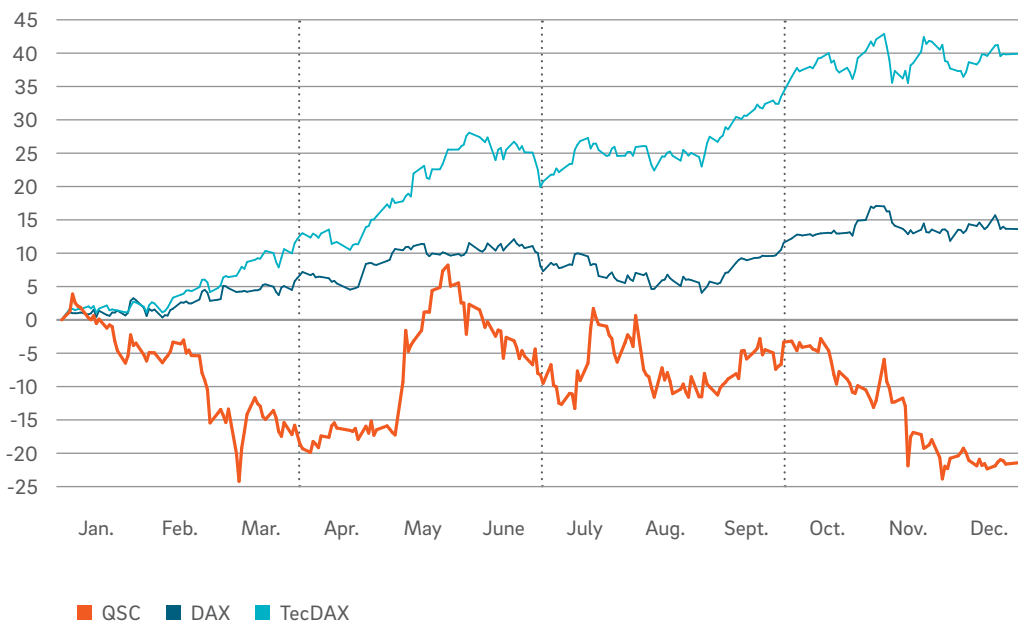
## QSC SHARE PERFORMANCE

**Record highs on the stock markets, setback for QSC.** In 2017, QSC's share price was unable to match the strong performance seen in the previous year, in which it rose by 27%. The share price rather shed its previous gains and closed at € 1.51 on 29 December 2017. This 21% reduction means that QSC's shares posted a significantly weaker performance than the relevant indices. Over the course of the year, the DAX rose by 13%, with the TecDAX even surging by 40%. As 2017 progressed, low interest rates and strong economic data sent stocks rising to new record levels in numerous markets.

QSC's share price was unable to benefit from these record highs, not least as many investors were critical in their assessment, particularly of the development in the Company's total revenues. The crucial importance of this key figure was apparent in the first three months already. Once the Company published its forecast for the current financial year on 6 March 2017, the share price fell to its annual low of € 1.45. QSC may have expected a higher free cash flow and improved EBITDA margin for 2017, but it also forecast a lower volume of total revenues, a development due above all to the reduction in TC revenues with resellers on account of market and regulatory factors.

### QSC's share price performance

(indexed)



In the spring, investors temporarily focused more closely on the improvement in the Company's financial and earnings position and the progress made in its operations, especially in the Cloud business. The share price then reached its annual high at € 2.15 at the end of May 2017. Subsequent volatility in the share price continued to reflect the ambivalence of many investors. They continued to notice the progress made in restructuring the business and the momentum shown by the Cloud business, but remained critical of the revenue performance. Not only that, they would have liked to see announcements of new orders, and thus indications that revenues would return to growth in the years ahead. By the end of the year, the share price was unable to recover from the second setback in early November 2017 and closed at the same level as at the end of 2015.

**Analysts recommend holding QSC shares.** The five analysts who regularly cover QSC were unanimous in their assessment: At the end of 2017, they all recommended holding the share. Deutsche Bank and Hauck & Aufhäuser discontinued their coverage in the course of 2017. With five analysts, QSC nevertheless enjoys a comparatively high level of attention for what is a second-tier stock.

#### Financial institutes with studies on QSC

Bankhaus Lampe	Independent Research	Warburg Research
Commerzbank	Odfo BHF	

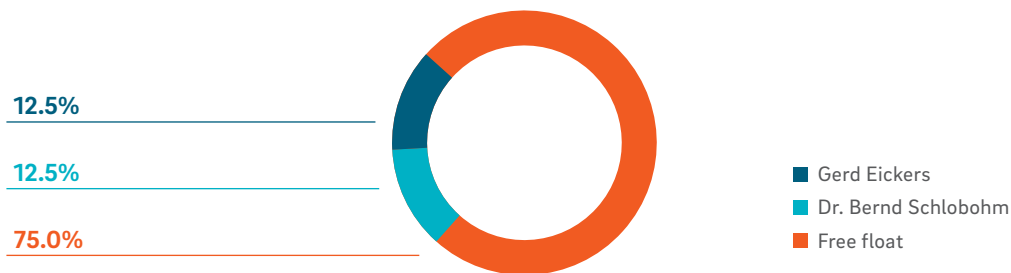
**Institutional investors watching and waiting.** Due not least to analysts' assessments, numerous fund managers adopted a reserved stance towards QSC in the past year. Consistent with this, the percentage of free float shares held by institutional investors slipped by 8 percentage points to 30% during 2017. According to the Company's share register, retail investors owned 70% of the free float shares as of 31 December 2017. Overall, the free float shares make up 75% of QSC's total shares and were distributed among 28,950 investors at the end of 2017. A total of 25% of QSC's shares are still held by the Company's two founders Gerd Eickers and Dr. Bernd Schlobohm. Now members of QSC's Supervisory Board, these two individuals have not sold any of their shares since the Company's IPO in spring 2000. On the contrary, they have increased their shareholdings further in the intervening years.

Two investors, namely the Dutch fund provider Kempen Capital Management and the US fund Dimensional Holding, each held more than 3% of QSC's shares at the end of 2017. Kempen informed QSC in October 2017 that it had also fallen short of the 5% disclosure threshold.

# 25%

of QSC's shares owned  
by its two founders

### Shareholder structure as of 31 December 2017



**Lively trading with QSC shares.** Despite the reluctance shown by many investors, QSC shares witnessed lively trading on German stock markets once again in 2017, with 580,000 shares changing hands on average each day. Notwithstanding the lower share price, the total trading volume of € 258.0 million in the past year exceeded the previous year's figure of € 240.6 million.

**Great interest, reluctance to buy, disappointing price performance.** These catchwords effectively summarise QSC's experience on the stock market in 2017. The high level of interest was reflected in numerous enquiries, meetings with investors and roadshows held during 2017. The enquiries referred in particular to the expansion in QSC's Cloud business, the opportunities resulting from the spin-off of the TC business and the development in total revenues. The Company's dialogue with investors was promoted by, among other measures, the Management Board and Investor Relations staff taking part in capital market conferences organised by Bankhaus Lampe, Berenberg Bank, Commerzbank and Oddo BHF and in roadshows at leading European financial centres, such as Frankfurt, London and Zurich. These activities were supplemented by numerous one-to-one talks at the Company's locations in Cologne and Hamburg and in conference calls.

Upon publication of the quarterly figures, the Management Board held conference calls to respond to questions from analysts and investors. QSC made the relevant presentations and recordings of the comments by members of the Management Board available without delay on its website. In general, the IR section of QSC's website acts as the central information platform. As well as financial reports, presentations and IR press releases, this section also includes the financial calendar, analysts' assessments and documents relating to the Annual General Meeting. Not only that, QSC draws on a variety of social media to keep capital market participants up-to-date. All of the Company's presentations are available on SlideShare, while shareholders can use Twitter to remain permanently up to date. An IR Newsletter serves the same purpose.



[WWW.SLIDESHARE.NET/QSCAG](http://WWW.SLIDESHARE.NET/QSCAG)

[WWW.TWITTER.COM/QSCIREN](http://WWW.TWITTER.COM/QSCIREN)

[WWW.QSC.DE/EN/INVESTOR-RELATIONS](http://WWW.QSC.DE/EN/INVESTOR-RELATIONS)

# 3 cents

dividend proposal for 2017

**Further dividend of 3 cents per share.** Retail investors in particular take the Annual General Meeting as an opportunity to find out more about QSC and its shares. The Annual General Meeting held in Cologne on 24 May 2017 was attended by around 220 shareholders. These voted with a large majority to approve, among other items, the proposal submitted by the Supervisory and Management Boards to distribute a dividend of 3 cents per share for the 2016 financial year. The two bodies will be proposing a dividend in the same amount for the 2017 financial year for approval by this year's Annual General Meeting on 12 July 2018.

## Key facts about QSC shares

Securities control number	513 700
ISIN	DE0005137004
Trading symbol	QSC
Bloomberg symbol	QSC GR
Reuters symbol	QSCG.DE
Market segment	Prime Standard
Stock exchanges	Xetra and regional German stock exchanges
Designated sponsorship	Oddo Seydler Bank AG
Shares outstanding as of 31 December 2017	124,172,487
Share class	No-par-value registered shares of common stock
Xetra closing price on 30 December 2016	€ 1.92
Xetra share price high in 2017	€ 2.15
Xetra share price low in 2017	€ 1.45
Xetra closing price on 29 December 2017	€ 1.51

---

# GROUP MANAGEMENT REPORT

---

## 24–31 **GROUP FUNDAMENTALS**

- 24 Business Activities
- 26 Market and Competitive Position
- 27 Strategy
- 29 Research and Development
- 30 Organisational Structure
- 31 Management

## 32–50 **CORPORATE GOVERNANCE**

- 32 Corporate Governance Report (unaudited)
- 36 Declaration of Conformity (unaudited)
- 40 Compensation Report
- 47 Takeover-Related Disclosures

## 51–67 **NON-FINANCIAL DECLARATION** (unaudited)

- 51 Basic Principles
- 53 Data Security
- 56 Data Protection
- 58 Customer Management
- 58 Employee and Social Concerns
- 63 Environment
- 65 Compliance



## 68–80 **BUSINESS REPORT**

- 68 Overall Summary
- 68 Macroeconomic and Industry Framework
- 69 Regulatory Framework
- 71 Business Performance
- 74 Key Performance Indicators
- 75 Earnings Performance
- 76 Earnings Performance by Segment
- 78 Financial Position
- 79 Net Asset Position
- 80 Actual vs. Forecast Business Performance

## 81–88 **RISK REPORT**

- 81 Risk Management
- 81 Organisation and Procedures
- 82 Assessment Methodology
- 84 Supplementary Disclosures pursuant to § 315 (4) HGB
- 85 Individual Risks
- 88 Overall Summary

## 89–93 **OUTLOOK AND OPPORTUNITY REPORT**

- 89 Overall Summary
- 89 Future Macroeconomic and Industry Framework
- 90 Expected Financial Position, Financial Performance and Cash Flows
- 91 Expected Earnings Performance by Segment
- 92 Opportunity Management
- 92 Individual Opportunities

## GROUP FUNDAMENTALS

### Business Activities

**QSC is digitising the German SME sector.** With decades of experience and expertise in the areas of Cloud, Internet of Things, Consulting, Telecommunications, and Colocation, QSC accompanies its customers securely into the digital age. The cloud-based provision of all services offers increased speed, flexibility and availability. The Company's TÜV and ISO-certified data centres in Germany and its nationwide All-IP network form the basis for maximum end-to-end quality and security. QSC's customers benefit from one-stop innovative products and services that are marketed both directly and via partners. The Company divides its operating business into the four segments described below:

**Cloud – the centrepiece of digitisation.** In this, its newest and fastest growing segment, QSC pools all activities relating to its Pure Enterprise Cloud and the Internet of Things (IoT). With its turnkey services that can be individually assembled on a modular basis, the Pure Enterprise Cloud enables companies to rapidly begin structuring their cloud strategies. Not only that, it also pools different cloud worlds on a single platform.

The IoT portfolio pooled at QSC's subsidiary Q-loud is also mainly the result of in-house development work. This portfolio covers all key performance features of scalable IoT solutions, ranging from consulting to hardware and software development, standard products such as sensors and adapters, components such as chips and protocols, and an internally developed highly scalable IoT cloud with a documented programming interface through to manufacturing services.

Cloud portfolio based  
mainly on in-house  
development work

**Outsourcing – broad range of services through to migration to cloud.** The Outsourcing segment chiefly involves QSC performing IT services and storing data on behalf of other companies. Customers are absolutely free to select the speed and direction of their own transformation process. QSC's services range from highly individual ICT outsourcing solutions through to gradual or full migration to the cloud based on standardised services. Customers benefit in all cases from QSC's longstanding experience and expertise coupled with the agility, reliability and service-driven approach of an IT service provider that is itself a medium-sized company. QSC performs the full range of services at end-to-end quality on the basis of its own data centres and its grid infrastructure. This segment therefore also includes IP-VPN networking for Outsourcing customers.

**Consulting – a guide to processes in the digital world.** QSC advises companies on optimising their business processes with a key focus on SAP technologies. As a full-service SAP service provider and longstanding partner to SAP, QSC has extensive experience in the fields of basic operations, application management, implementation, user support and maintenance, as well as in managing the necessary software licences. QSC also acted early to focus on integrating cloud-based applications, and here in particular the new S/4HANA business suite. QSC supplements its range of consulting services with advice on Microsoft applications, such as Share-Point, Skype for Business and Azure.

**QSC is pioneering the development of an open-access platform**

**Telecommunications (TC) – voice and data services from a single source.** QSC has decades of expertise with Voice over IP and operating broadband technologies such as DSL, fibre optics, leased lines and wireless local loop. Not only that, QSC was one of the first providers to develop an open-access platform facilitating the interconnection of a wide variety of broadband networks with different requirements. Furthermore, this segment also includes the Colocation business, which provides SMEs with access to a secure and flexible IT infrastructure. The offering comprises traditional products, such as racks and cages, and extends to virtualised solutions offered via virtual data centres.

**Data centres and an All-IP network in Germany.** All four segments work with QSC's proprietary ICT infrastructure within Germany and are thus able to guarantee the utmost end-to-end quality and security along the entire value chain. The centrepiece of this infrastructure consists of data centres within Germany that have been certified by both TÜV and ISO. At the end of 2017, QSC operated data centres at six locations (Cologne, Frankfurt am Main, Hamburg, Munich, Nuremberg, Oberhausen) with total floor space of around 20,000 square metres. The Company is thus subject at all of its locations to German data protection requirements, which are very strict by international standards.

#### **QSC's data centres**

Hamburg

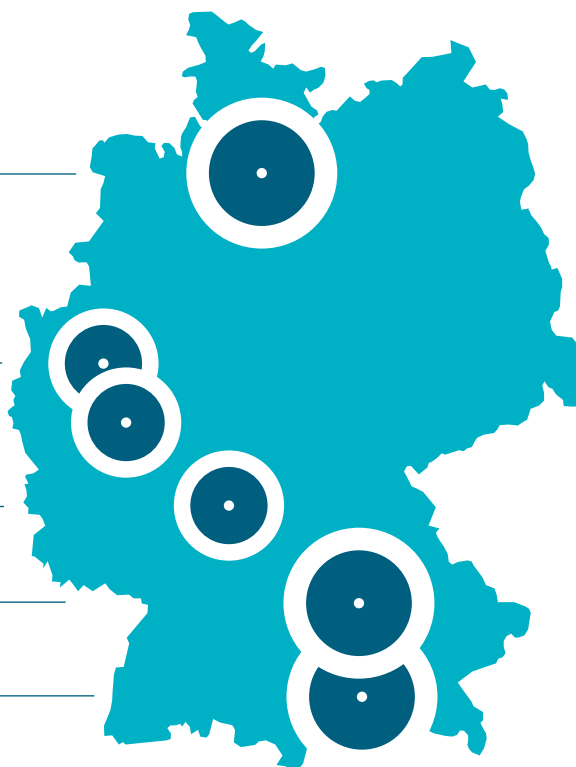
Oberhausen

Cologne

Frankfurt am Main

Nuremberg

Munich



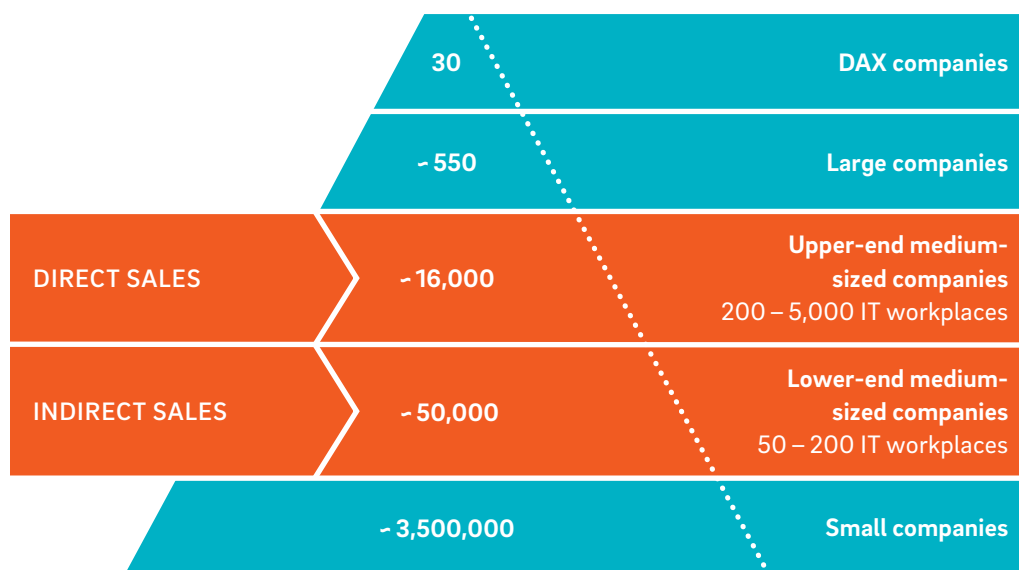
The data centres are linked with a cutting-edge infrastructure. This includes one of Germany's most up-to-date and best-performing core networks with connection capacities of 100 Gb/s and a Next Generation Network (NGN). This latter network safeguards the convergence of various voice and data transmission technologies with the IP protocol. Moreover, QSC has traditionally operated a nationwide DSL network, one of Germany's largest wireless local loop (WLL) access networks and – since 2006 already - a nationwide All-IP voice network.

**Nationwide All-IP voice network in place since 2006**

## Market and Competitive Position

**Focus on German SME sector.** QSC focuses on medium-sized companies headquartered in Germany. Thanks to its own character as a medium-sized company, its nationwide presence throughout Germany and the fact that all of its data centres are located within the country's borders, QSC enjoys a high degree of acceptance among this target group. The Company works with two distribution channels to optimally meet the needs of its SME customers. In Direct Sales, a key account team targets medium-sized companies with more than 200 IT workplaces. Indirect Sales focuses on companies with 50 to 200 workplaces. Here, QSC has worked together for many years now with more than 200 sales partners, more than 150 internet service providers (ISP) and national and international carriers.

### QSC's sales activities



**Comprehensive range of services as key competitive advantage.** QSC covers all of the main requirements of SME companies in the digital age with a one-stop range of proprietary solutions. Manifold cloud scenarios using the Pure Enterprise Cloud assist companies in modernising their IT, while the extensive IoT portfolio serves to network machines and appliances. QSC's competence with SAP (especially SAP HANA) ensures that ever growing volumes of data can be intelligently processed, while its All-IP expertise in its telecommunications business ensures reliable and secure voice and data communications. In the eyes of customers, it is precisely this combination of a portfolio with a breadth normally only found at large groups with the flexibility and agility of a medium-sized provider which represents QSC's decisive strength. The combination of expertise with the service quality typical to a medium-sized company is also viewed as QSC's unique selling proposition in the German market.

## Strategy

**Digitisation as watershed for SME sector.** QSC's strategy has sustainable value creation as its key objective. It is based on the needs of German SME companies. For these companies, digitisation marks a watershed. The fact that digitisation has now reached core processes presents companies in every sector with substantial challenges. They need experienced service providers to help them seize the opportunities presented by the digital age and manage the transformation process. Given rapid technical advances, these companies' IT solutions, often home-grown, are increasingly reaching their limits. This is precisely where QSC can help by accompanying medium-sized companies as they head for the digital age – step by step and in a partnership of equals. The process of turning away from proprietary IT solutions is occurring in parallel with the advance of cloud technology, which is the IT architecture for the digital age. With its centralised approach, the cloud can satisfy ever growing expectations in terms of the agility, security and customer orientation of IT solutions. Customers wish to be able to interact with a company at all times, from all locations and from all conceivable end appliances – and this while complying with the utmost security standards. Only very large companies have the capacity to operate this kind of cloud solution on an in-house basis. SME players will therefore count on the performance capacity and technical expertise offered by external service providers. QSC is optimally positioned to satisfy these needs. It is one of only few one-stop providers of these services in the German market and has a service portfolio that unites all competencies and thus makes digitisation far easier.

Cloud is the IT  
architecture of  
the digital age

**Clear position in high-growth IoT market.** Digitisation also involves exponential growth in the networking of appliances in the Internet of Things. QSC recognised this trend towards greater networking at an early stage of developments and, with Q-loud, now has an established subsidiary in this high-growth market. Q-loud focuses on three business fields: firstly, so-called smartification, i.e. sensor-assisted warehousing and real-time tracking of goods with status monitoring; secondly, solutions aimed at enhancing the energy efficiency of companies and private households, and here especially transparent metering and efficient energy management; thirdly, IoT cloud enabling, in which Q-loud advises and supports companies in developing and operating IoT platforms. The company is currently involved in numerous pilot projects. Transition to regular operations will open up significant potential for scaling up the products and processes.

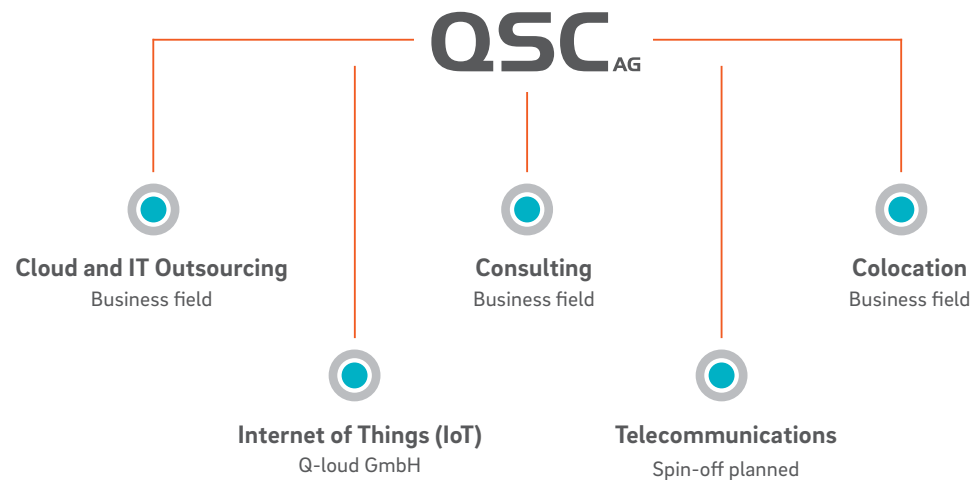
**All business fields are contributing to digitisation.** Consulting also plays an important role in digitising SME companies. After all, key service focuses include integrating cloud-based applications and transforming entire IT systems. Consulting acted early to prepare for SAP's technological advance to the S/4HANA Business Suite and now helps mainly larger SME players in smartly capturing and using large volumes of data.

QSC lays the foundation for any digital transformation with its TC services. After all, smooth network operations are a prerequisite for all digital business models. QSC is one of only few companies in Germany that is able to guarantee maximum end-to-end quality in the field of data transmission. Here too, the main focus is on corporate customers. The traditional business with resellers that mainly serve private customers is declining in significance. Furthermore, on the way towards digitisation, a secure and flexible IT infrastructure is an absolute must. This is precisely what QSC offers with its colocation services. The basis for these services is provided by the Company's high-performance and secure data centres in Germany.

**QSC is becoming more agile and focusing even more closely on customers' needs.** Given highly dynamic developments in the relevant markets, QSC is permanently developing its strategy further. In response to ever faster pace of development and ever more specific customer requirements, at the end of 2017 the Company decided to verticalise its organisational structure. Accordingly, sales and operations will in future be allocated to the five core competency fields of Cloud and IT Outsourcing, Internet of Things, Consulting, Telecommunications, and Colocation. To make optimal use of available opportunities, the Management Board also decided to spin off the telecommunications business into a standalone company. This decision still requires approval by the next Annual General Meeting in July 2018.

More than anything, QSC expects this new organisational structure to offer greater agility, i.e. increased speed and greater flexibility. This will be accompanied by greater customer focus, as vertical organisational structures with flat hierarchies are able to react more quickly to customers' wishes. Within the Company, this restructuring will release new momentum. After all, working with flat hierarchies and agile methods will make it easier to draw on employees' creativity and expertise for new business ideas. With its verticalisation, QSC is thus laying a strong foundation for the sustainable value growth it aims to achieve in the years ahead.

Flat hierarchies enable  
QSC to react more swiftly  
to customers' wishes

**QSC's new vertical organisational structure****Research and Development**

**QSC's key focus is on quality and process innovations**

**Research and development is a cross-divisional activity.** QSC's business activities in highly dynamic markets require permanent innovations. These focus on quality and on process-related innovations which, for example, ensure the smooth migration of customers' complex IT and TC systems to QSC's service portfolio and enable these to be continually optimised. This kind of innovation arises in dialogue with customers, an exchange which creates momentum for new products and services. This being so, QSC views research and development (R&D) as a cross-divisional activity and does not allocate any separate resources. The Company has therefore also foregone reporting the number of employees involved in R&D.

The R&D budget also only provides limited information concerning innovation processes. Here, QSC chiefly recognises its work on the Pure Enterprise Cloud and the IoT portfolio. Total research and development expenses amounted to € 4.7 million in 2017, as against € 5.1 million in the previous year. Of this sum, an amount of € 0.2 million was capitalised (2016: € 0.0 million).

**Innovations above all in Cloud segment.** One key focus of R&D activities in the past financial year involved completing the multi-cloud hub facilitating secure high-speed connections to private and public clouds. QSC thus acted early to respond to the growing popularity of the cloud solutions offered by large providers such as Amazon and Microsoft and created secure and consistent network services for this purpose. The new multi-cloud hub provides real-time access to data and applications from the public cloud and shields this information from the public internet.

Drawing on numerous innovations, QSC's subsidiary Q-loud assisted its customers to enter the IoT age in 2017. One good example is the IoT developer kit, which combines a common platform with easy programming options and a functioning ecosystem with QSC's in-house expertise. This way, SME players benefit from a secure environment in which to take their first basic steps in the Internet of Things.

**Network of innovation partners for the IoT business.** Developing a network of innovation partners will prove even more important for the future success of the IoT business. Q-loud has now established this type of network on four levels – there are hardware, solution, cloud and infrastructure partners. Hardware partners integrate the IoT security components and in some cases also the IoT wireless protocols from Q-loud into their sensors or appliances. Solution partners supplement their existing innovations with QSC's own IoT functions. Cloud and infrastructure partners ensure smooth operations of the aforementioned components and functions. To cooperate with partners, Q-loud has created several integration points. These include a standard microprocessor onto which certificates (identity) and keys (security) can be loaded. This enables existing appliances to be quickly and easily "smartified". Via a publicly documented data port (REST-API), software partners can quickly and easily connect their (sector) solutions with numerous sensors or gateways. Furthermore, Q-loud supports established industry standards such as Azure or SAP Leonardo. Thanks to OpenStack, Q-loud's IoT platform can also be operated at a wide variety of infrastructure-as-a-service providers.

Numerous innovations assist customers in advancing to the IoT age

## Organisational Structure

**Nationwide presence in German market.** QSC AG has its legal domicile in Cologne and a second major location in Hamburg. These two sites are supplemented by ten sales offices located across Germany. QSC has three material direct and indirect participating interests:

- Ventelo GmbH offers medium-sized and large companies services including direct landline connections, preselect and call-by-call, as well as value added services.
- Ventelo owns 100% of the shares in the network company Plusnet Infrastruktur GmbH & Co. KG. Plusnet operates a nationwide DSL network.
- Q-loud GmbH, where QSC has pooled all of its IoT activities since November 2016 ([www.q-loud.de](http://www.q-loud.de)).

A complete overview of the scope of consolidation as of 31 December 2017 can be found in Note 34 of the Notes to the Consolidated Financial Statements. In August 2017, the Management Board decided to spin-off the TC business to a standalone company. Further details about the spin-off can be found in the "Business Performance" chapter on Page 73.



SEE P. 73  
BUSINESS PERFORMANCE

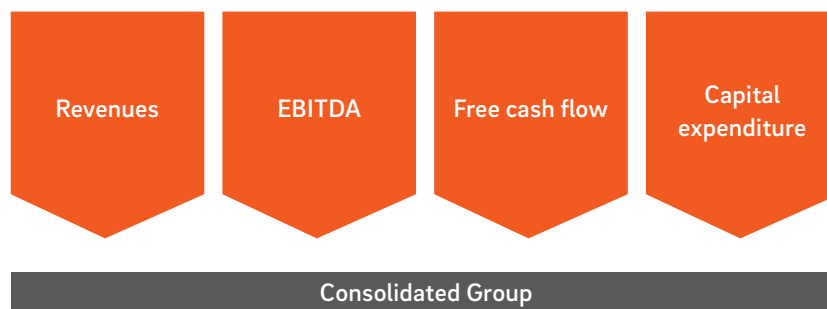


**QSC has a system of profit, cost and service centres**

## Management

**Management by key financial performance indicators.** The Company is managed via its four segments: Cloud, Consulting, Outsourcing, and Telecommunications. These are based on a system of profit, cost and service centres. The following key financial performance indicators are referred to on group level: revenues, EBITDA, free cash flow and capital expenditure. No reference is made to non-financial performance indicators for Company management purposes.

### QSC's key financial performance indicators



EBITDA is defined as earnings before interest, taxes, amortisation of deferred non-cash share-based compensation, impairment losses on customer-related inventories and depreciation/amortisation of property, plant and equipment and intangible assets. The EBITDA margin presents the ratio of EBITDA to revenues. The free cash flow presents the change in net liquidity/debt from operating activities. QSC accounts for its capital expenditure on a timing rather than flow-of-funds basis. This item includes customer-related and other investments, as well as investments in infrastructure.

**Monthly reports as core management instrument.** The monthly reports contain all relevant key figures and budget/actual comparisons. The latter serve as a key basis of discussion at the fortnightly meetings of the Management Board, as well as for the monthly reports to the Supervisory Board. Moreover, the latest budget/actual comparisons are used as a basis for regularly updating the rolling planning. This serves as an early warning system for potential variances, thus enabling corrective measures to be taken at an early stage. One integral component of reporting is the risk management system, which is described in this Group Management Report from Page 81 onwards. This ensures that any changes in opportunities and risks are directly factored into the management system.



SEE PP. 81 FF.  
RISK MANAGEMENT SYSTEM

## CORPORATE GOVERNANCE

### Corporate Governance Report (unaudited\*)

**Transparent management and supervision.** High-quality corporate governance is a prerequisite for sustainable success at any company. QSC's Management and Supervisory Boards therefore attach very great importance to ensuring that the Company is transparently managed and supervised. In this, they refer to the German Corporate Governance Code ("Code"), whose requirements they consistently implement apart from a small number of substantiated exceptions. In the following section the Management Board reports, also on behalf of the Supervisory Board, on corporate governance pursuant to Item 3.10 of the Code. This report integrates the compensation report called for by Item 4.2.5 of the Code and also includes the corporate governance disclosures required by § 289f and § 315 (5) of the German Commercial Code (HGB).

Sustainable success  
requires high-quality  
corporate governance

### MANAGEMENT AND SUPERVISION (unaudited\*)

**QSC has a dual management structure.** QSC AG is a publicly listed stock corporation under German law and has a dual management structure. The Management Board manages the Company under its own responsibility while the Supervisory Board appoints, supervises and advises the Management Board. Members of both boards are bound solely by the Company's interests. No conflicts of interest arose in the past financial year.

**Management Board adopts resolutions by simple majority voting.** The Rules of Procedure issued by the Supervisory Board stipulate that Management Board resolutions require a simple majority of the votes cast, with the CEO having the casting vote in the event of a parity. This does not apply if the Management Board has only two members; in this case, unanimity is required. All resolutions relating to measures and transactions that are of major significance to the Company or that involve substantial financial risk are adopted by the full Management Board. A business allocation plan governs the areas of responsibility of Management Board members. Each Management Board member manages those areas under his or her own responsibility within the framework of Management Board resolutions.

In the 2017 financial year, the Management Board comprised four members: Jürgen Hermann (CEO), Stefan A. Baustert (Finance), Udo Faulhaber (Sales and Consulting) and Felix Höger (Technology and Operations). The latter two members left the Company at the end of the year.

**Supervisory Board adopts diversity concept for the Management Board.** Consistent with new legal requirements, at the beginning of 2018 the Supervisory Board adopted the following diversity concept for the Management Board.

\* The sections marked with the word "unaudited" have not been reviewed by the auditor.

**Diversity concept for the Management Board of QSC AG**

The Supervisory Board cooperates with the Management Board to ensure long-term succession planning. Basic eligibility criteria in the search for candidates for Management Board positions include specialist qualifications for the position to be occupied, management qualities, achievements and skills acquired to date and knowledge of the Company.

Assuming these criteria are met, the Supervisory Board of QSC AG hereby adopts the following diversity concept for the composition of the Management Board:

(1) Members of the Management Board should cumulatively have the expertise, skills and specialist experience needed to perform their duties correctly.

(2) It should therefore be ensured that the following expertise and experience is provided by Management Board members:

- All Management Board members should be familiar with the cloud, IT and telecommunications business, and in particular with the respective market environment, as well as with the individual business fields, customer needs (especially at medium-sized companies), and the market segment in which QSC AG operates.
- Individual members at least should have expert knowledge of the capital market and financing.

- The Management Board member responsible for the finance division should have expert knowledge in the field of accounting or auditing.
- Individual members at least should have experience in managing a medium-sized company.

(3) In the search for suitably qualified candidates for the Management Board, due account should also be taken of diversity considerations. The extent to which the Management Board activities benefit from different, mutually complementary specialist profiles, professional and life experience and suitable representation of both genders should also be appraised.

(4) With regard to the female share of Management Board members, the Supervisory Board has determined the target shares and deadlines pursuant to § 111 (5) of the German Stock Corporation Act (AktG), to which due reference is made.

(5) As a general rule, Management Board members should not be older than 65. Due account should therefore be taken of the age of Management Board members when setting their term of appointment.

The Supervisory Board bases the selection of a candidate for a specific Management Board position on the Company's best interests and having duly appraised all circumstances relevant to the individual case. The Management Board of QSC AG currently comprises two members with specialist and personal qualifications in different areas. The Supervisory Board believes that the requirements of the diversity concept are already satisfied.

**Supervisory Board promptly informed by Management Board.** The Management Board informs the Supervisory Board without delay and comprehensively of issues important to the Company with regard to strategy, planning, business development, and to its risk situation, risk management and compliance. The Rules of Procedure for the Management Board require Supervisory Board approval to be obtained prior to the conclusion of any major business transactions, such as the adoption of annual planning and major investments, acquisitions and financing measures. These Supervisory Board decisions are discussed in detail in the committees and by the full Supervisory Board.

**Six-member Supervisory Board performs supervisory duties.** Pursuant to the Articles of association, QSC's Supervisory Board comprises six members. Consistent with the requirements of the German Codetermination Act (MitbestG), two thirds of Supervisory Board members are elected by shareholders and one third by employees. The term in office of all members expires upon the conclusion of the Annual General Meeting for the 2017 financial year.

Unless otherwise stipulated by law or the Articles of Association, the Supervisory Board and its committees adopt resolutions by a simple majority vote. Four committees – the Nomination, Human Resources (HR), Audit and Strategy Committees – were in place throughout the past financial year. All committees regularly report to the full Supervisory Board and prepare draft versions of its resolutions where appropriate. Detailed information about the activities of the Supervisory Board and its committees can be found in the Supervisory Board Report on Pages 12 to 17.



SEE PP. 12–17  
SUPERVISORY BOARD REPORT

### Supervisory Board committees

Nomination Committee	HR Committee	Audit Committee	Strategy Committee
Gerd Eickers (Chair)	Dr. Bernd Schlobohm (Chair)	Ina Schlie (Chair)	Dr. Bernd Schlobohm (Chair)
Dr. Frank Zurlino	Gerd Eickers	Dr. Bernd Schlobohm	Dr. Frank Zurlino
	Cora Hödl	Dr. Frank Zurlino	

QSC concludes D&O insurance for all members of the Supervisory Board. As called for by the Code, this includes a deductible of 10% of total damages. QSC caps the liability per year at 100% of the fixed annual compensation paid to Supervisory Board members as it does not deem it appropriate for the deductible to exceed this amount.

**Supervisory Board adopts competence profile.** At its meeting on 27 May 2017, the Supervisory Board adopted specific targets for its composition and a competence profile. The Supervisory Board currently in office complied with all of the targets thereby stipulated in the 2017 financial year. With Ina Schlie and Dr. Frank Zurlino, the Supervisory Board included two independent members. As the longstanding Director of the Group Tax Department at SAP, Ina Schlie also has the expert knowledge called for in the fields of accounting and auditing.

The Supervisory Board has also based its proposals for the forthcoming election of new members at the Annual General Meeting for the 2017 financial year on the following catalogue of criteria. The Supervisory Board will append a curriculum vitae providing information about the candidate's relevant knowledge, skills and experience to each of its proposals. The Company naturally complies with the statutory disclosure obligations set out in § 124 (3) Sentence 4 and § 125 (1) Sentence 5 of the German Stock Corporation Act (AktG). Due to the lack of specific details available, however, the Company currently does not comply with Item 5.4.1 of the Code with regard to the disclosure of personal and business relationships.

### Specific targets for the composition of the Supervisory Board of QSC AG including competence profile

Taking due account of

- its own size (six members, of which four shareholder and two employee representatives)
- the business field in which the Company operates
- the size and structure of the Company
- the national alignment of the Company's activities
- the Company's public listing and current shareholder structure

the Supervisory Board decided on 23 May 2017 that its composition should, where possible, comply with the following specific targets:

#### Preamble

The Supervisory Board of QSC AG aims for a composition that enables it to supervise the Management Board in a qualified manner and advise it as appropriate. The Supervisory Board should be composed such that its members cumulatively have the specialist knowledge, skills and experience needed for the Board to perform its duties correctly. The specific knowledge, skills and experience contributed by individual members of the Supervisory Board should be mutually complementary. The objective here is to ensure the availability at all times of sufficient specialist expertise for the work of the Supervisory Board itself and for each significant area of the company. This way, the Supervisory Board should ensure that it is permanently able to supervise the Management Board professionally and efficiently and to accompany the Management Board in an advisory capacity.

#### Requirements in individual Supervisory Board members

**Competence profile of individual Supervisory Board members.** Each member of the Supervisory Board should satisfy the following criteria:

- Entrepreneurial and/or business experience
- An ability to assess the correctness, viability, expediency and lawfulness of the business decisions to be taken
- An ability to assess the annual financial statements and accompanying documents, where necessary with assistance from the auditor
- A willingness and ability to make an adequate commitment to the requirements of the role
- No directorship held or advisory function performed at any significant competitor of QSC AG

**Age limit.** As a general rule, the candidates proposed for election to the Supervisory Board should be aged below 75.

#### Requirements in composition of full Supervisory Board

**Competence profile of full Supervisory Board.** The Supervisory Board should as a whole have the specialist skills

needed to assess the business activities of QSC AG. It should therefore be ensured that the skills listed below are available at least among individual members of the Supervisory Board:

- All members of the Supervisory Board must be familiar with the cloud, IT and telecommunications business, and here in particular with the market environment, the individual business fields, customer requirements and the market segments in which QSC AG operates. In view of this, at least two Supervisory Board members should have in-depth experience of these business fields.
- At least one Supervisory Board member must have expert knowledge in the fields of accounting or auditing.
- At least one Supervisory Board member should have in-depth knowledge of the German SME sector.

**Independence.** The Supervisory Board should include at least two members who are independent in the sense of Item 5.4.2, Sentence 2, of the German Corporate Governance Code. Of these independent members, at least one should have expert knowledge in the fields of accounting or auditing.

**Appropriate participation of women.** The inclusion of women is basically viewed as a responsibility shared by shareholder and employee representatives alike. The share of female members of the Supervisory Board should amount to at least 16.6%. This target should be met in the period from 1 July 2017 to 30 June 2022. The Supervisory Board does not have any influence over the election of employee representatives. The shareholder representatives therefore assume the task of accounting for this target when compiling their list of candidates to be proposed to the Annual General Meeting for election as shareholder representatives.

**Former Management Board members.** The Supervisory Board should not include more than two former members of the Management Board of QSC AG.

In preparing and adopting its resolutions concerning the candidates to be proposed to the Annual General Meeting for election as Supervisory Board members, the Supervisory Board will in each case be guided by the Company's best interests. The targets referring to the appropriate participation of women and the age limit are therefore subject to the condition that the other targets are always satisfied and that suitably qualified candidates are available to hold office on the Supervisory Board as and when required. The Supervisory Board regularly reviews the aforementioned targets and will publish these and their implementation status each year in the Corporate Governance Report.

## SHAREHOLDERS AND ANNUAL GENERAL MEETING (unaudited\*)

**Website provides prompt information on all relevant development.** QSC communicates transparently and extensively with the capital market. The Company uses its own website to report promptly on all relevant developments. Interested parties will find ad-hoc and press releases there, as well as the Company's quarterly and annual reports, latest presentations and a financial calendar. The website is also where QSC makes available all of the documents relevant to its Annual General Meeting.

One aspect of transparent communication involves providing prompt information about any purchase or sale of QSC shares by members of the Management and Supervisory Boards or parties closely related to such. An overview of the transactions in the 2017 financial year can be found at [www.qsc.de/en/directors-dealings](http://www.qsc.de/en/directors-dealings).

**Ongoing dialogue with capital market players.** The Annual General Meeting is the most important event for the Company's dialogue with its shareholders. A total of 41% of the share capital was present at the Annual General Meeting for the 2016 financial year held in Cologne on 24 May last year. Shareholders not present were able to have their voting rights exercised either by a proxy holder of their choice or by a voting proxy bound to vote in line with their instructions. The shareholders approved all agenda items with large majorities. Like in previous years, the Chair of the Meeting ensured that the meeting progressed efficiently. It was decided not to broadcast the event on the internet, as the associated costs and legal uncertainties outweigh the potential benefit for absent shareholders.

In the course of the year, QSC upholds its dialogue with shareholders above all by way of meetings held with investors and analysts at road shows and in one-to-one talks, some of which at capital market conferences organised by banks. Conference calls held on the days the quarterly results are published also ensure that all target groups receive up-to-date information. The Company makes the respective presentations, as well as recordings of the comments made by members of the Management Board, available to all shareholders. Further information about the Company's investor relations activities can be found in "QSC Share Performance" on Pages 18 to 21 of this Annual Report.



[WWW.QSC.DE/EN/  
DIRECTORS-DEALINGS](http://WWW.QSC.DE/EN/DIRECTORS-DEALINGS)



SEE PP. 18–21  
QSC SHARE PERFORMANCE

## Declaration of Conformity (unaudited\*)

**Information pursuant to § 289f and § 315 (5) of the German Commercial Code (HGB).** The corporate governance declaration is a constituent component of the management report. Pursuant to § 317 (2) Sentence 6 of the German Commercial Code (HGB), the review performed by the auditor is limited to the presentation of the disclosures made below and does not address their contents.

**Declaration pursuant to § 161 of the German Stock Corporation Act (AktG).** The Management and Supervisory Boards published the following Declaration of Conformity on 23 November 2017.

\* The sections marked with the word "unaudited" have not been reviewed by the auditor.

**Declaration made by the Management and Supervisory Boards of QSC AG pursuant to § 161 of the German Stock Corporation Act (AktG) regarding the Company's conformity with the German Corporate Governance Code in the version dated 5 May 2015 in the period since taking effect on 7 February 2017**


Since its formation, QSC AG ("QSC") has been committed to good corporate governance and has viewed transparency and value-driven management as essential. Consequently, the company implements nearly all recommendations set forth in the German Corporate Governance Code and adheres to them in its daily work. Since the submittal of its last Declaration of Conformity, the Company has complied and continues to comply with the recommendations of the Government Commission "German Corporate Governance Code" in the version dated 5 May 2015 in the period since taking effect on 7 February 2017, with the following exceptions:

- **No agreement regarding a deductible in the D&O insurance for members of the Supervisory Board (§ 93 [2] of the German Stock Corporation Act [AktG]) (Item 3.8, Paragraphs 2 and 3 of the Code).** QSC complies with the recommendation of the German Corporate Governance Code insofar as the D&O insurance policy has, since 1 July 2010, included a deductible for Supervisory Board members of 10% of the respective damages per damage event. However, and contrary to the recommendation, the liability per year is capped at 100% of the fixed annual compensation of the Supervisory Board members, since QSC does not deem it appropriate for the deductible to exceed their annual compensation.
- **Opportunity for employees to report, in a protected manner, suspected breaches of the law within the company to be introduced by the end of 2017 (Item 4.1.3, Sentence 3 of the Code).** According to this new recommendation, employees should be given an appropriate opportunity to report, in a protected manner, suspected breaches of the law within the company. This is generally taken to mean an institutional whistle-blower system enabling employees to communicate specific breaches either anonymously or with guaranteed confidentiality concerning their identity. To date, QSC has not had any such whistle-blower system in place. Following the introduction of this new recommendation, QSC has reviewed the options for complying with such. The Management Board has already initiated the steps necessary to establish an appropriate whistle-blower system in the form of an electronic communications platform. This should also be accessible to third parties and is scheduled to go online before the end of the 2017 calendar year.
- **No cap on individual variable compensation components or on the overall compensation of one Management Board member and consequently no presentation of the maximum achievable compensation in the compensation report (Item 4.2.3, Paragraph 2, Sentence 6 and Item 4.2.5, Paragraph 3 [first bullet point] and Paragraph 4 of the Code).** Only one Management Board member still holds convertible bonds issued within the 2006 Stock Option Plan as one variable component of his Management Board compensation. These were allocated before the recommendation took effect. The current Management Board contract provides for a cap in the event of unforeseen developments; it does not, however, set any maximum

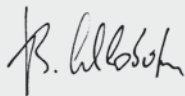
limit on gains from exercising conversion rights in connection with the 2006 Stock Option Plan and thus on the overall compensation of the Management Board member. In view of this, QSC will also be unable to state any maximum amounts that may be called for in the model tables in the compensation report. QSC otherwise fully complies with the recommendations in respect of existing Management Board compensation and will also comply with the recommendations when determining any future Management Board compensation.

- **No regular limit set for length of Supervisory Board membership (Item 5.4.1, Paragraph 2, Sentence 2 of the Code).** The Supervisory Board of QSC has compiled a competence profile for the board as a whole and set specific targets for its composition that are consistent with the recommendations made in Item 5.4.1 with the exception of the requirement to set a regular limit for the length of Supervisory Board membership. The Supervisory Board believes that it would not be in the Company's best interests to set an advance limit on the length of individual board membership. It is basically desirable that the Supervisory Board should change its composition at certain intervals; on the other hand, the Company should also be able to draw on the expertise of experienced Supervisory Board members.
- **No disclosure of personal and business relations of each individual candidate with the Company, its executive bodies and with any shareholders holding material interests in the company in election proposals to Annual General Meeting (Item 5.4.1, Paragraphs 6 to 8 of the Code).** In QSC's opinion, the recommendation of the German Corporate Governance Code does not specify clearly enough which relationships of a candidate must be disclosed and the extent to which such disclosures are required to be made for proposed elections at the Annual General Meeting in order to comply with the recommendation. In the interests of legal certainty with respect to future elections to the Supervisory Board, the Management Board and Supervisory Board have decided to declare a divergence from the recommendation. QSC is of the opinion that the existing disclosure requirements contained in § 124 (3) Sentence 4 and § 125 (1) Sentence 5 of the German Stock Corporation Act (AktG) are sufficient to meet the informational needs of the shareholders and will, at an appropriate date in the future, investigate and decide – voluntarily and without tying itself to the Code's recommendation – whether to disclose additional information about candidates proposed for election at the Annual General Meeting.

Cologne, 23 November 2017



On behalf of the Management Board  
Jürgen Hermann



On behalf of the Supervisory Board  
Dr. Bernd Schlobohm





WWW.QSC.DE/EN/  
CODE-OF-CONDUCT



SEE PP. 65–67  
NON-FINANCIAL DECLARATION



SEE PP. 32–35  
CORPORATE GOVERNANCE REPORT

SEE PP. 12–17  
SUPERVISORY BOARD REPORT



SEE P. 35  
SUPERVISORY BOARD AIMS

**Relevant corporate governance practices.** QSC views corporate governance as providing a framework for managing and supervising the entire Company. Its internal policies are therefore consistent with the Code. Moreover, QSC's corporate management is based on a system of shared values. The main contents of this system are summarised in QSC's Compliance Guidelines within the Code of Conduct. These are binding for the Management Board and for all employees and are also expected to shape business dealings with third parties. The Code of Conduct has been published at [www.qsc.de/en/code-of-conduct](http://www.qsc.de/en/code-of-conduct).

As a general rule, compliance requires the ongoing attention of the Company's directors and officers. The Management and Supervisory Boards therefore address this topic regularly, as does the Audit Committee. In doing so, they draw on information such as the quarterly risk reports, in-house controlling and internal audit reports. The associated discussions generate major impetus for enhancing the compliance management system on an ongoing basis. Further information about compliance at QSC can be found in the Non-Financial Declaration on Pages 65 to 67.

**Description of the mode of operation of the Management and Supervisory Boards.** The Corporate Governance Report describes the mode of operation of the Management Board on Pages 32 and 33. Information about the Supervisory Board can be found in the same section on Pages 34 and 35, and in the Supervisory Board Report on Pages 12 to 17.

**Diversity pursuant to § 76 (4) and § 111 (5) of the German Stock Corporation Act (AktG) – gender parity on Supervisory Board.** In line with statutory requirements, in 2015 QSC for the first time published its targets for the share of female members of its Supervisory Board, Management Board and top two management tiers for the period to 30 June 2017. According to these targets, the minimum share of female members of the Supervisory Board should amount to 16.6%. In the 2017 financial year, the Supervisory Board comprised three women and three men. The Supervisory Board aims to ensure that women make up at least 16.6% of its members in the next five years as well. Information about further targets can be found on Page 35 of this report. A target of 0% was set for the Management Board. This was because the terms in office of the Management Board members, all of whom are men, would only end after the target date set by lawmakers, namely 30 June 2017. Given QSC's focus on IT and technology, the Supervisory Board decided at its meeting on 23 May 2017 to retain the target of 0% for the next five years as well, and thus for the period to 30 June 2022.

For the top management tiers, in 2015 the Company set targets for the share of women of 5% (first management tier) and 10% (second management tier). These figures too reflect the Company's focus on IT and technology and the fact that some positions only attract male applicants. By mid-2017, QSC had exceeded these quotas, with a 15% share of female employees in the first management tier and 13% in the second. In view of these figures, the Management Board has now set targets of 15% for the share of female employees in both management tiers for the period from 1 July 2017 to 30 June 2022.

## Compensation Report

**Performance-based compensation system.** One major element of good corporate governance involves transparently presenting the total compensation paid to members of executive bodies. The compensation system for members of the Management Board, which is presented in greater detail below, was most recently approved by the Annual General Meeting on 27 May 2015. The Supervisory Board continues to determine the total compensation payable to individual members of the Management Board. The criteria referred to when assessing the appropriateness of compensation on the one hand include the tasks of the individual Management Board member, his or her personal performance, and the Company's economic situation and its sustainable development. On the other hand, they take account of the appropriateness of compensation by reference to peer group companies and compensation structures otherwise applicable within the company itself and at comparable companies. Furthermore, the compensation is structured to be competitive in the market for highly qualified executives.

**A maximum of 50% of annual target compensation for Management Board members is fixed.**

The compensation system for the Management Board of QSC AG consists of fixed and variable compensation components, pension benefits and other fringe benefits.

The annual non-performance-related fixed compensation makes up a maximum of 50% of total annual target compensation (comprising fixed and variable compensation based on 100% target achievement). It accounts for the performance of the respective member of the Management Board and the function and responsibilities assigned to him or her. Fixed compensation is paid by transfer and in 12 equal monthly instalments at the end of each calendar month. Management Board members do not receive any separate compensation for assuming further group-internal positions.

Furthermore, Management Board members receive variable compensation (bonus), the amount of which is based on achievement of annual targets (short-term incentive) and multiyear targets (long-term incentive). These targets may be based on Company-related key figures and/or individual considerations. For Company-related key figures, they may also include more ambitious minimum targets than those communicated in external outlooks.

The assessment period for multiyear targets covers three years. Multiyear targets are agreed at the beginning of the assessment period and must be met by the end of such period. When defining target achievement, the Supervisory Board may also agree further interim targets to be met over the individual financial years in the assessment period and/or further conditions. Variable compensation is payable in cash and accounts for at least 50% of the total annual target compensation (based on 100% target achievement). Target achievement is basically determined following the adoption of the consolidated financial statements relevant to the targets defined in the target agreement. Any resultant bonus is paid out at the end of the month in which the Annual General Meeting is held following expiry of the financial year, to the extent that it relates to annual targets, and at the end of the month in which the Annual General Meeting is held following expiry of the assessment period, to the extent that multiyear targets are involved.

Variable compensation makes up at least 50% of p.a. target compensation

Furthermore, the Company also grants pension benefits to its Management Board members. These involve defined contribution commitments for benefits provided by insurance companies and pension funds and/or commitments to pay a fixed amount to enable the member to secure his or her own suitable provision for retirement and for surviving dependants. The other fringe benefits granted to Management Board members mainly relate to the provision of a company car, payment of a car allowance and insurance provision customary to the market.

**Variable compensation dependent on achievement of minimum targets.** The Supervisory Board agrees lower and upper limits for the achievement of each individual annual and multiyear target. Failure to meet lower limits or any condition governing an annual target and/or multiyear target results in the complete loss of the variable compensation attributable to the respective target. In the case of the multiyear target, the variable compensation attributable to the respective target may be lost for the entire assessment period. Non-achievement of an interim target results in the partial or complete loss of the compensation dependent on achievement of such target. The upper limit serves to cap variable compensation in the event of exceptional developments at a maximum of 1.5 times the target compensation attributable to variable compensation and attainable upon 100% target achievement.

Compensation components  
of a long-term nature  
granted great priority

In concluding target agreements, the Supervisory Board ensures that the share of variable target compensation due to achievement of the multiyear targets basically reaches the share attributable to achievement of the annual targets. The share of variable compensation due to annual targets may nevertheless be weighted more significantly to the extent that the compensation structure remains focused on the Company's sustainable development and on providing a long-term performance incentive by including other elements (such as additional bonuses by way of shares and stock options).

To recognise the achievement of multiyear targets and promote the Company's sustainable development, the Supervisory Board may commit to paying Management Board members an appropriate additional bonus in the form of shares or stock options in QSC and, if so, agree suitable waiting, holding and exercise periods. This may further increase the share of total variable compensation attributable to variable compensation of a long-term incentive nature, as well as the share of total target compensation attributable to variable compensation. Finally, to acknowledge exceptional performance, the Supervisory Board may – at its own discretion – grant Management Board members a suitable additional bonus in cash or in the form of shares or stock options in the Company. Holding and exercise periods may be agreed in this regard as well.

**Management Board compensation for 2017.** Total Management Board compensation for the 2017 financial year came to € 2,412k, as against € 1,973k in the previous year.

The increase in total compensation was due to the higher level of target achievement for the annual target compared with the previous year, as well as to the variable compensation determined for the multiyear targets after the end of the assessment period.

Individualised Management Board compensation is presented in the tables on Pages 44 and 45.

In the target agreements entered into for the 2017 financial year, a congruent annual target and two separate, equally weighted multiyear targets were agreed for all Management Board members in office in the 2017 financial year. Furthermore, to acknowledge exceptional performance the Supervisory Board granted a special bonus in the form of cash compensation of € 20k to each of the Management Board members. The 2017 annual target, which was linked to the Group's free cash flow in the 2017 financial year, was reached in full.

The assessment period for multiyear targets covers the financial years from 2015 to 2017.

The multiyear targets are linked to consolidated EBITDA for the 2017 financial year and to the revenues generated in the Cloud segment in the same period. The multiyear sub-target relating to consolidated EBITDA was not fully met. Here, the Management Board members are therefore only entitled to a prorated share of the bonus. By contrast, the lower limit for the multiyear sub-target for Cloud segment sales was not reached, as a result of which the entitlement to variable compensation for this multiyear sub-target was forfeited in full. No loans were granted to Management Board members.

**Benefits in the event of premature termination.** All Management Board members have been promised settlements should their Management Board activities be prematurely terminated due to effective revocation of their appointment by the Company within the first two years covered by their employment contracts. These settlements amount to € 600k in the case of the CEO, Jürgen Hermann, and to € 500k in the case of the Management Board member Stefan A. Baustert. In the final year of their employment contracts, this settlement reduces by one twelfth per month in which the employment relationship still pertained in the final year of the contract. There is no entitlement to any settlement payment should the employment relationship be terminated without notice due to compelling reason (§ 626 BGB) or in the event of the employment relationship being terminated due to the Management Board member legitimately resigning from his position. Should Management Board activity be terminated by mutual agreement and without compelling reason, the total value of the benefits committed by the Company in any agreement of this nature should not exceed the amounts of € 600k and € 500k respectively.

**Disclosures on retired Management Board members.** Total compensation for former Management Board members came to € 942k in the 2017 financial year (2016: € 0k).

The Management Board member Udo Faulhaber stood down from his position as of 31 December 2017 and his employment contract was terminated by mutual agreement as of the end of



SEE PP. 44–45  
COMPENSATION OVERVIEW

Targets for EBITDA  
and growth in  
Cloud segment

31 December 2017. In connection with the conclusion of his Management Board activity, a settlement of € 292k plus other fringe benefits (contribution to retirement pension, car use) of € 16k were granted to Mr. Faulhaber.

The Management Board member Felix Höger also stood down from his position as of 31 December 2017 and his employment contract was also terminated by mutual agreement as of the end of 31 December 2017. In connection with the conclusion of his Management Board activity, a settlement of € 600k plus other fringe benefits (contribution to retirement pension, car use, insurance premiums) of € 34k were granted to Mr. Höger.

Dr. Bernd Schlobohm, a former Management Board member, was granted a direct pension commitment for a retirement, occupational disability and widow's pension in 1997. At the balance sheet date, the obligation amounted to € 1,879k prior to the offsetting of reinsurance claims of € 1,486k. The actuarial present value of provisions for vested claims for other former Management Board members amounts to € 82k.

**Shares and conversion rights held by Management Board members.** The following table presents individualised information about the number of shares and conversion rights held by members of the Management Board:

	Shares		Convertible bonds	
	31 Dec. 2017	31 Dec. 2016	31 Dec. 2017	31 Dec. 2016
Jürgen Hermann	400,000	400,000	350,000	350,000
Stefan A. Baustert	40,000	40,000	200,000	200,000
Udo Faulhaber (until 31 December 2017)	-	-	150,000 <sup>1</sup>	150,000
Felix Höger (until 31 December 2017)	-	-	150,000 <sup>1</sup>	150,000

<sup>1</sup> Holdings at the time of retirement from the Management Board.



WWW.GSC.DE/EN/  
DIRECTORS-DEALINGS

During the period of their Management Board activity, Udo Faulhaber and Felix Höger purchased and sold shares in the Company via the stock exchange in the 2017 calendar year (please also see the corresponding directors' dealings notifications made pursuant to Article 19 of the European Market Abuse Directive on QSC's website).

**Benefits granted**

€ 000s

	<b>Jürgen Hermann</b> Chief Executive Officer since 30 May 2013				<b>Stefan A. Baustert</b> Member of the Management Board since 1 January 2015			
	2016	2017	2017 (min.)	2017 (max.)	2016	2017	2017 (min.)	2017 (max.)
<b>Benefits granted</b>								
Fixed compensation	300	300	300	300	250	250	250	250
Fringe benefits	31	33	33	33	35	35	35	35
<b>Total</b>	<b>331</b>	<b>333</b>	<b>333</b>	<b>333</b>	<b>285</b>	<b>285</b>	<b>285</b>	<b>285</b>
Special bonus <sup>1</sup>	-	20	20	20	50	20	20	20
One-year variable compensation	150	150	0	225	125	125	125	187
Multiyear variable compensation								
Long-term incentive (2015 – 2017) <sup>2</sup>	150	150	0	225	125	125	0	187
2015 Stock Option Plan <sup>3</sup>	-	-	-	-	67	-	-	-
<b>Total compensation pursuant to DCGK</b>	<b>631</b>	<b>653</b>	<b>353</b>	<b>803</b>	<b>652</b>	<b>555</b>	<b>430</b>	<b>679</b>
<b>Reconciliation with total compensation</b>								
<b>pursuant to § 314 (1) No. 6a HGB in conjunction with DRS 17</b>								
Less annual variable target compensation granted	(150)	(150)			(175)	(125)		
Less Long-term incentive (2015 – 2017) <sup>4</sup>	(150)	(150)			(125)	(125)		
Plus annual variable actual compensation paid	128	189			156	208		
Plus long-term incentive paid (2015 – 2017) <sup>4</sup>	0	146			0	122		
<b>Total compensation</b>	<b>459</b>	<b>688</b>			<b>508</b>	<b>635</b>		
Total expenses for share-based compensation recognised in reporting period	38	38			39	39		

**Benefits paid**

€ 000s

	<b>Jürgen Hermann</b> Chief Executive Officer since 30 May 2013		<b>Stefan A. Baustert</b> Member of the Management Board since 1 January 2015	
	2016	2017	2016	2017
<b>Benefits paid</b>				
Fixed compensation	300	300	250	250
Fringe benefits	31	33	35	35
<b>Total</b>	<b>331</b>	<b>333</b>	<b>285</b>	<b>285</b>
Special bonus <sup>1</sup>	-	20	-	70
One-year variable compensation	128	189	106	158
Multiyear variable compensation				
Long-term incentive (2015 – 2017) <sup>2</sup>	0	146	0	122
2015 Stock Option Plan <sup>3</sup>	0	0	0	0
Sundry	-	-	-	-
<b>Total compensation pursuant to DCGK</b>	<b>459</b>	<b>688</b>	<b>391</b>	<b>635</b>

&gt; Please see Page 46 for footnotes.

<b>Udo Faulhaber</b> Member of the Management Board until 31 December 2017				<b>Felix Höger</b> Member of the Management Board until 31 December 2017				
2016	2017	2017 (min.)	2017 (max.)	2016	2017	2017 (min.)	2017 (max.)	
250	250	250	250	300	300	300	300	<b>Benefits granted</b>
31	31	31	31	42	42	42	42	Fixed compensation
<b>281</b>	<b>281</b>	<b>281</b>	<b>281</b>	<b>342</b>	<b>342</b>	<b>342</b>	<b>342</b>	Fringe benefits
-	20	20	20	-	20	20	20	<b>Total</b>
125	125	0	187	150	150	0	225	Special bonus <sup>1</sup>
								One-year variable compensation
125	125	0	187	150	150	0	225	Multiyear variable compensation
73	-	-	-	77	-	-	-	Long-term incentive (2015 – 2017) <sup>2</sup>
<b>604</b>	<b>551</b>	<b>301</b>	<b>675</b>	<b>719</b>	<b>662</b>	<b>362</b>	<b>812</b>	2015 Stock Option Plan <sup>3</sup>
								<b>Total compensation pursuant to DCGK</b>
								<b>Reconciliation with total compensation</b>
								<b>pursuant to § 314 (1) No. 6a HGB in conjunction with DRS 17</b>
(125)	(125)			(150)	(150)			Less annual variable target compensation granted
(125)	(125)			(150)	(150)			Less Long-term incentive (2015 – 2017) <sup>4</sup>
106	125			128	150			Plus annual variable actual compensation paid
0	76			0	75			Plus long-term incentive paid (2015 – 2017) <sup>4</sup>
<b>460</b>	<b>502</b>			<b>547</b>	<b>587</b>			<b>Total compensation</b>
								Total expenses for share-based compensation
14	59			15	63			recognised in reporting period

<b>Udo Faulhaber</b> Member of the Management Board until 31 December 2017		<b>Felix Höger</b> Member of the Management Board until 31 December 2017		
2016	2015	2016	2017	
250	250	300	300	<b>Benefits paid</b>
31	31	42	42	Fixed compensation
<b>281</b>	<b>281</b>	<b>342</b>	<b>342</b>	Fringe benefits
-	20	-	20	<b>Total</b>
106	125	128	150	Special bonus <sup>1</sup>
				One-year variable compensation
0	76	0	75	Multiyear variable compensation
0	0	0	0	Long-term incentive (2015 – 2017) <sup>2</sup>
-	-	-	-	2015 Stock Option Plan <sup>3</sup>
<b>387</b>	<b>502</b>	<b>470</b>	<b>587</b>	Sundry
				<b>Total compensation pursuant to DCGK</b>

**< Footnotes from Pages 44/45**

- <sup>1</sup> To acknowledge exceptional performance, the employment contracts concluded with Management Board members allow for the possibility of the Supervisory Board granting appropriate cash bonuses to individual Management Board members over and above the respectively agreed fixed and variable compensation.
- <sup>2</sup> The variable compensation for the long-term incentive was agreed on the basis of two separate, equally weighted multiyear targets. The assessment period for the multiyear targets covered the financial years from 2015 to 2017. The multiyear targets were linked to consolidated EBITDA for the 2017 financial year and to the revenues generated in the new high-growth Cloud segment in the 2017 financial year. While the contractually agreed lower threshold was met for the consolidated EBITDA sub-target, the lower threshold for the Cloud revenue sub-target was not met, as a result of which all of the variable compensation attributable to the latter sub-target was forfeited.
- <sup>3</sup> The Management Board members Stefan A. Baustert, Udo Faulhaber and Felix Höger subscribed convertible bonds in QSC AG in the 2016 financial year. These had been allocated to them by the Supervisory Board on 20 August 2015 within the 2015 Stock Option Plan. Further details can be found in the Corporate Governance Report for the 2016 financial year.
- <sup>4</sup> Consistent with § 314 (1) No. 6a of the German Commercial Code (HGB), this compensation is only considered granted as of the end of the 2017 financial year, as the conditions governing target achievement are only deemed to have been met as of this time.

---

**Supervisory Board compensation.** Consistent with the provisions in the Articles of Association of QSC AG, each member of the Supervisory Board receives fixed annual compensation of € 35k payable after the end of the financial year. The Chairman and his or her Deputy receive € 70k and € 50k respectively. In addition to compensation for their duties on the Supervisory Board, each Supervisory Board member receives separate compensation of € 5k for their activities in any Supervisory Board committee (except the Nomination Committee). Committee chairmen receive € 10k. Members sitting on several committees nevertheless receive a maximum total of € 25k for their committee activities. Supervisory Board members sitting on the Supervisory Board or a committee for only part of a given financial year receive prorated compensation. As in the previous year, for its activity in the 2017 financial year the Supervisory Board received total compensation of € 315k. The table below presents individualised information about the compensation paid to Supervisory Board members, as well as about their respective holdings of shares and conversion rights.



	Compensation as per § 15a of Articles of Association (€ 000s) <sup>1</sup>		Shares		Number of convertible bonds	
	2017	2016	31 Dec. 2017	31 Dec. 2016	31 Dec. 2017	31 Dec. 2016
Dr. Bernd Schlobohm, Chairman	95 (25)	95 (25)	15,519,910	15,519,910	132,000	132,000
Dr. Frank Zurlino, Deputy Chairman	60 (10)	60 (10)	10,000	10,000	-	-
Gerd Eickers	40 (5)	40 (5)	15,577,484	15,577,484	-	-
Ina Schlie	45 (10)	45 (10)	-	-	-	-
Anne-Dore Ahlers <sup>2</sup>	35 -	35 -	-	-	2,700	2,700
Cora Hödl <sup>2</sup>	40 (5)	40 (5)	-	-	4,100	4,100
<b>Total</b>	<b>315 (55)</b>	<b>315 (55)</b>				

<sup>1</sup> Numbers in parentheses refer to compensation for committee activity included in total amount.

<sup>2</sup> Employee representative.

Apart from the reimbursement of travel and other out-of-pocket expenses, no member received any further compensation or other advantages for personal services rendered over and above the compensation presented here, neither were any loans granted to Supervisory Board members. QSC maintains liability indemnification insurance coverage for members of the Supervisory Board.

## Takeover-Related Disclosures

**Customary regulations for a listed company.** The following overview outlines the disclosures mandatory under § 315a (1) of the German Commercial Code (HGB). Overall, these involve regulations that are typical at listed companies. The following disclosures reflect the circumstances at the balance sheet date.

**Composition of issued capital.** Issued capital amounted to € 124,172,487 as of 31 December 2017 and was divided into 124,172,487 no-par registered ordinary shares. According to the Share Register, these shares were distributed among 28,950 shareholders as of 31 December 2017.

**Limitations on voting rights or transfer of shares.** Each share grants one vote at the Annual General Meeting. A voting and pooling agreement is in place between the following shareholders with direct and indirect holdings in QSC: Dr. Bernd Schlobohm, Gerd Eickers and Gerd Eickers Vermögensverwaltungs GmbH & Co. KG. This agreement provides for the uniform exercising of voting rights and restrictions relating to the disposability of the pool-bound shares. The Management Board is otherwise not aware of any further limitations on voting rights or restrictions on the transfer of shares.

**Direct or indirect holdings of more than 10% of capital.** There are the following direct and (pursuant to § 22 of the German Securities Trading Act [WpHG] / § 34 of the version valid since 3 January 2018) indirect holdings in the Company's capital that exceed 10% of voting rights:

- Dr. Bernd Schlobohm, Germany: 25.05% of voting rights (of which 12.50% directly and 12.55% indirectly)
- Gerd Eickers, Germany: 25.05% of voting rights (indirectly)
- Gerd Eickers Vermögensverwaltungs GmbH & Co. KG, Cologne, Germany: 25.05% of voting rights (of which 12.55% directly and 12.50% indirectly)

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

**Voting right controls for employee holdings in capital.** There are no voting right controls.

**Appointment and dismissal of Management Board members.** The appointment and dismissal of members of the Management Board is governed by § 84 and § 85 of the German Stock Corporation Act (AktG) and by § 7 of the Articles of Association in their version dated 30 January 2017. Pursuant to § 7 of the Articles of Association, the Management Board comprises one or more individuals. The Supervisory Board determines the number of Management Board members. Even though issued capital exceeds € 3 million, the Supervisory Board may stipulate that the Management Board should consist of only one individual. The appointment of deputy members of the Management Board is permitted.

**Amendments to Articles of Association.** Pursuant to § 179 of the German Stock Corporation Act (AktG), amendments to the Articles of Association require a resolution adopted by a majority of at least 75% of issued capital represented at a shareholders' meeting. Pursuant to § 15 of the Articles of Association, the Supervisory Board is authorised to adopt amendments and additions to the Articles of the Association that are of a purely formal nature and in themselves do not involve any changes to actual content.

**Acquisition and buyback of treasury stock.** By resolution of the Annual General Meeting on 29 May 2013, the Management Board is authorised pursuant to § 71 (1) No. 8 of the German Stock Corporation Act (AktG) until 28 May 2018 to acquire QSC shares on a scale of up to 10% of issued capital upon the adoption of the said resolution. To date, the Management Board has not acted on this authorisation.

**Authorised capital.** By resolution of the Annual General Meeting on 27 May 2015, the Management Board is authorised, subject to approval by the Supervisory Board, to increase the Company's issued capital by up to a total of € 50,000,000 on one or several occasions up to 26 May 2020 by issuing new no-par registered shares in return for contributions in cash and/or kind

(authorised capital). When drawing on authorised capital, the Management Board may, subject to approval by the Supervisory Board, exclude shareholders' subscription rights in four cases: (1) to exclude residual amounts from shareholders' subscription rights; (2) when the new shares are issued in return for contributions in kind, particularly in the context of company acquisitions; (3) if, pursuant to § 186 (3) Sentence 4 of the German Stock Corporation Act (AktG), the new shares are issued in return for cash contributions and if, at the time of final stipulation, the issue price does not fall materially short of the stock market price of the shares already listed; and (4) to the extent necessary to issue subscription rights for new shares to the bearers or creditors of warrant and/or convertible bonds in order to avoid dilution of their respective holdings. This authorised capital is intended to enable QSC to react swiftly and flexibly to opportunities arising on the capital market and where necessary to obtain equity capital on favourable terms. No use was made of authorised capital in the past financial year.

**Conditional capital.** The Company had conditional capital totalling € 46,490,365 as of the balance sheet date. This was divided into Conditional Capital IV (€ 40,000,000), Conditional Capital VII (€ 750,365), Conditional Capital VIII (€ 5,000,000) and Conditional Capital IX (€ 750,000).

Conditional Capitals VII, VIII and IX serve to secure the conversion rights of bearers of convertible bonds that QSC has issued or may issue within the framework of existing stock option plans to Management Board members (Conditional Capital IX), Management Board members, managing directors of affiliated companies, employees of QSC and affiliated companies (Conditional Capitals VII and VIII) and other parties contributing to the Company's success (Conditional Capital VII). Conditional Capital IV may be used by the Management Board to create tradable warrant and/or convertible bonds. The Management Board is authorised by resolution of the Annual General Meeting on 27 May 2015 to issue such instruments in order to access an additional, low-interest financing option given favourable capital market conditions. The convertible bonds may be issued in return for both cash contributions and contributions in kind. The Management Board is authorised, subject to approval by the Supervisory Board, to exclude shareholders' subscription rights to these warrant and/or convertible bonds in four cases: (1) to settle residual amounts resulting from the subscription ratio; (2) when the bonds are issued in return for contributions in kind, particularly in the context of company acquisitions; (3) if, in the case of bonds being issued in return for cash contributions pursuant to § 186 (3) Sentence 4 of the German Stock Corporation Act (AktG), the issue price does not fall materially short of the market value of the bonds; and (4) to the extent necessary to issue subscription rights to the bearers or creditors of warrant and/or convertible bonds previously issued in order to avoid dilution of their respective holdings. To date, the Management Board has not acted on the authorisation to issue tradable warrant and/or convertible bonds.

**Capital limits for the exclusion of subscription rights.** The exclusion of shareholders' subscription rights pursuant to § 186 (3) Sentence 4 of the German Stock Corporation Act (AktG) may only apply for the use of treasury stock, for the issue of new shares from authorised capital and for the issue of warrant and/or convertible bonds corresponding to an aggregate total of no more than 10% of issued capital during the term of the respective authorisation. Apart from this, the exclusion of shareholders' subscription rights, irrespective of the legal grounds, for the use of treasury stock, for the issue of new shares from authorised capital and for the issue of warrant and/or convertible bonds (including those issued within QSC's stock option plans) may not exceed an aggregate total of 20% of issued capital during the term of the respective authorisation.

Further details apply in accordance with the underlying resolutions adopted by the Annual General Meeting for each of these measures.

**Material agreements conditional on a change of control due to a takeover bid.** In the 2014 financial year, QSC agreed five promissory note loan contracts with a financial institution with a total volume of € 150 million (balance sheet date: € 135 million). These allow the lender to terminate the agreements prematurely should a natural person or legal entity or a group of persons and entities acting together directly or indirectly acquire more than 50% of the shares or voting rights in QSC.

In the 2016 financial year, QSC agreed a syndicated loan agreement with six financial institutions which had a credit limit of € 70 million at the balance sheet date. This agreement allows the banks to terminate the loan prematurely should a natural person or legal entity, acting either alone or together with other persons or entities, gain control over QSC. In this context, "control" is defined as the de facto ability to exercise a controlling influence pursuant to § 17 of the German Stock Corporation Act (AktG) and "acting together" satisfies the definition of this concept provided in § 2 (5) of the German Securities Takeover Act (WpÜG).

The Company has no further material agreements conditional on a change of control due to a takeover bid.

**Compensation agreements in the event of a takeover bid.** No compensation agreements in the event of a takeover bid have been concluded either with the Management Board or with employees.

## NON-FINANCIAL DECLARATION (unaudited\*)

### Basic Principles

**QSC acts sustainably.** To succeed in the longer term, businesses have to think and act sustainably and cannot merely restrict this approach to economic factors. Since its foundation, QSC has always accorded high priority to employee, social and environmental concerns as well. Throughout its history, the Company has respected human rights and taken measures to combat corruption and bribery as a matter of course. In accordance with the new statutory requirements set out in § 315b and § 315c of the German Commercial Code (HGB), QSC has now summarised these and other topics in a Non-Financial Declaration. Pursuant to § 317 (2) Sentence 4 HGB, the auditor's review is limited to the presentation of this declaration and does not cover its content. Sustainable actions create sustainable value – achieving this has always been the key focus of QSC's strategy (further information about Strategy on Pages 27 to 29). The Company therefore sees no reason to present a separate sustainability strategy and thus fully comply with the new legal requirements that are tailored to large companies with global operations. QSC has a variety of processes, programmes and approaches in place to address all aspects to which the new, non-financial declaration is as a minimum required to refer, as well as to cover further sustainability aspects. The detailed compilation of dedicated concepts pursuant to § 315c in conjunction with § 289c (3) Nos. 1 and 2 HGB for each of the aspects listed in § 289c (1) HGB would require disproportionate expense, not least as this topic has to date only been of subordinate significance to the Company's stakeholders, to the extent that it has been raised at all. Furthermore, the Company is managed exclusively on the basis of financial performance indicators. Non-financial performance indicators are of no relevance to the Company and therefore do not exist (further information about Management on Page 31). In view of this, no account has been taken of sustainability targets in the compensation systems for managers and employees.



SEE PP. 27–29  
STRATEGY



SEE P. 31  
MANAGEMENT



SEE PP. 27–29  
STRATEGY

**Great importance attached to employee concerns, compliance and data security.** In terms of the relevant contents, QSC has exceeded the new requirements, and in some cases significantly so, for many years now. The following comments have taken the German Sustainability Code (DNK) as their reference framework. The importance attached to non-financial topics is particularly apparent from the information provided about employee concerns, compliance, data protection and data security, areas in which the Company has for years had proven structures, processes and regulations in place. A responsible approach towards the environment is inherent in the Company's very business model. QSC is digitising the German SME sector. Its products and services assist customers in moving forward to the digital age (further information about the strategy on Pages 27 to 29).

\* The sections marked with the word "unaudited" have not been reviewed by the auditor.

Given the various interconnected factors involved, QSC views sustainability as a topic which is relevant to all departments and has therefore not established a separate position for this purpose. Sustainability rather affects the daily life of nearly every employee and is lived in their day-to-day work. Corresponding behavioural norms are already set out in the "Code of Conduct", with examples here including "We take responsibility for society and the environment" or "We condemn all forms of bribery and corruption" (cf. the complete "Code of Conduct" at [www.qsc.de/en/code-of-conduct](http://www.qsc.de/en/code-of-conduct)).

**CEO responsible for sustainability.** The importance attached to sustainability is reflected in the allocation of this topic to the responsibilities of the Chief Executive Officer. He is reported to by a workgroup comprising representatives from all relevant departments, including data protection, procurement, internal audit and compliance, investor relations, personnel, process and quality management, regulation and corporate communications. The managers involved ensure that material sustainability aspects are factored into the Company's opportunity and risk management. This way, QSC ensures that opportunities and risks newly arising as a result of the attention paid to sustainability are identified, recorded and assessed at an early stage. Further information about opportunity management can be found on Page 92 of this report, while the Risk Report is presented on Pages 81 to 88.

**Material sustainability aspects from the perspective of stakeholders and QSC.** Based on the criteria set out in the German Sustainability Code (DNK), in the past financial year the workgroup referred to above determined which sustainability aspects were of material relevance to the Company's own future operating capacity. In its considerations, the workgroup took due account of the perspective both of QSC itself and of its most important stakeholders, such as customers, sales partners and employees. The Company is regularly in contact and exchanges opinions with all of its key stakeholders. Alongside direct contacts made by the sales department, numerous customer dialogue forums are also available on all levels, ranging from specialist exchanges to meetings held on Management Board and Managing Director level. The partner sales department regularly holds roadshows and conferences. The central communications platform for employees is the intranet, which is supplemented by face-to-face events in the form of employee meetings and networking events. The materiality matrix presented on the opposite page summarises all aspects that are of material significance from the perspective of QSC and its stakeholders. This matrix shows four key focuses, namely data security and data protection, customer management, attracting and retaining employees, and resource-saving energy use. Further information about these and other aspects is provided below. Despite their undisputed importance, other aspects and topics are not material for QSC, particularly as they do not involve any material risks in relation to QSC's business activities or its business relationships, products and services. This is true, for example, for human rights, a topic explicitly referred to by lawmakers. As QSC is exclusively based in Germany and its operations are also predominantly located in this country, the Company is governed by German legislation. This offers comprehensive protection for human rights and ensures that all companies operating here unreservedly respect such rights.



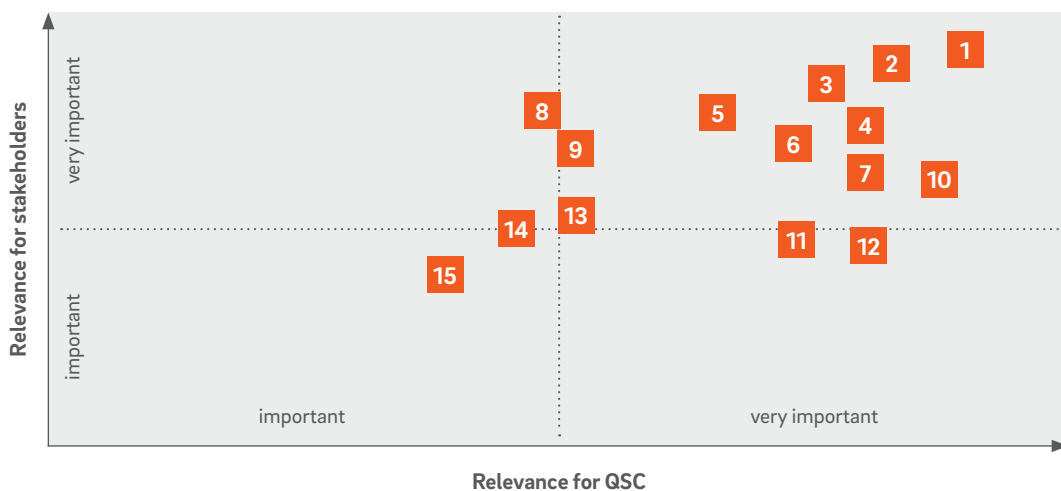
[WWW.QSC.DE/EN/  
CODE-OF-CONDUCT](http://www.qsc.de/en/code-of-conduct)



SEE P. 92  
OPPORTUNITY MANAGEMENT  
SEE PP. 81-88  
RISK REPORT

**QSC in regular  
dialogue with all  
key stakeholders**

**QSC's materiality matrix**



- |  |  |
|--|--|
| <b>1</b> Data security   | <b>9</b> Employee retention and development                  |
| <b>2</b> Customer satisfaction and retention                     | <b>10</b> Training and securing next generation of employees |
| <b>3</b> Service quality   | <b>11</b> Employee health and wellbeing                      |
| <b>4</b> Data protection   | <b>12</b> Attractive and family-friendly employer            |
| <b>5</b> Energy efficiency at data centres                       | <b>13</b> Compliance with employees' rights                  |
| <b>6</b> Regenerative energies                                   | <b>14</b> Resource-saving operations and business operations |
| <b>7</b> Ethical business practices and compliance               | <b>15</b> Diversity and antidiscrimination                   |
| <b>8</b> Stakeholder involvement<br>(dialogue with stakeholders) |  |

**Data Security**

**IT security is an integral component of business policy.** Data security is quite simply the most important sustainability topic for IT companies like QSC. Only those companies which can guarantee data security at all times and in all places have earned the trust placed in them by customers. This is an absolute prerequisite for such companies being able to operate and act sustainably. In view of this, data and information security is a comprehensive, ongoing and strategic task which affects QSC in its entirety, and one that is understood and lived as an integral component of the Company's business policy. The Risk Report on Pages 81 to 88 provides information on those material risks which could harbour potential weaknesses.



SEE PP. 81-88  
RISK REPORT

QSC has an integrated information protection concept which ensures that all information requiring protection – both customer and proprietary information – is secured with all appropriate technical and organisational means available and that such information is protected against unauthorised processing, incompleteness, distortion, disclosure, destruction, loss and misuse, as well as against perusal by unauthorised parties. Thanks to the information protection concept, it is always possible to trace every action back to the individual performing such action. This protects the information and transmission systems against unauthorised use and safeguards the operational readiness required at all times.

**Priority accorded to prevention and individual responsibility.** The Management Board bears overall responsibility for data security, information security and data protection. As a general rule, it accords priority to preventive measures and individual responsibility rather than to control and supervision. Technical measures alone are never sufficient to uphold security. All employees are therefore regularly provided with information and training suitable to their respective roles. Responsibility for monitoring implementation of the requirements is incumbent on the managers of the respective business fields. All employees have signed individual declarations in which they undertake to comply with the regulations governing information security, data secrecy and data protection, and in particular with the requirements of postal, telecommunications and social data secrecy. Before commencing their activities, external staff are required to provide an additional written undertaking that they will only use those systems, services and applications that are absolutely necessary for them to perform their respective assignments at QSC.

**Chief Information Security Officer responsible for information security.** The information security department, which is directed by the Chief Information Security Officer (CISO) and reports directly to the CEO, is responsible for IT security on an operational level. This department safeguards the development of the Information Security Policy and the associated standards and ensures that these are kept permanently up to date and consistently communicated within the Company. It is also responsible both for introducing security programmes consistent with business requirements and for providing security services to protect the Company.

QSC complies with the measures and procedures for operators of critical infrastructures called for by the Federal Office for Information Security (BSI) in the German IT Security Act and included in the German Energy Industry Act (EnWG). The Company has implemented those measures required to protect against interruptions which could result in substantial interferences with telecommunications networks and services or from external attacks or the impact of catastrophes (business continuity management). Furthermore, as a provider of telecommunications services QSC is subject to the German Telecommunications Act (TKG) and takes all measures needed to protect the confidentiality of telecommunications and prevent any breaches of personal data protection. The Company's telecommunications and data networks are secured against unauthorised access. To this end, QSC has a security concept consistent with the requirements of the German Telecommunications Act (TKG) and approved by the German Federal Network Agency for Electricity, Gas, Telecommunications, Post and Railway.

Regular training  
and information  
for all employees



**QSC's infrastructure  
governed by very high  
security standards**

**Proprietary data backup concepts for all systems and application data.** All relevant servers and all clients are equipped with virus protection programmes that are kept permanently up to date. Data backup concepts are in place for all systems and application data. Communication from outside the Company (WAN, internet) via or within the internal network (LAN) is only possible via network accesses that are secured by firewalls. Access from remote terminals to the network and systems at the group of companies is only authorised when special security procedures (call-back procedures, use of tokens and/or VPN dial-in) are deployed. All employees who have a remote access authorisation have to authenticate themselves with a username and password. In the absence of additional protective measures, proprietary QSC hardware which is made available may only be used in the networks envisaged for the respective purpose. The use of other, third-party networks (home office, customer networks, hotels, hotspots, mobile communications etc.) is only permitted if the pre-configured security measures are also used. QSC's infrastructure is governed by very strict security standards. The buildings are permanently supervised, and the premises, outer building shells and several sensitive areas within buildings are monitored by a video surveillance system. Access to the building is monitored with an access control system. In some areas, singularisation systems such as turnstiles are also installed. Access authorisations are applied for using a workflow and have to be approved by the manager responsible for the respective section of the building. Fire, water and burglary detection systems are installed at the data centres and are monitored by the security department around the clock. Sprinkler systems are also installed to fight any fires. To secure the electricity supply, the data centres have separate lead-ins from two separate grids, an uninterruptible electricity supply for each circuit and diesel motors acting as independent emergency generators for special departments.

**Regular audits check compliance with relevant concepts and standards.** The status of overall IT security, the specific security concepts and the implementation of protective measures is reviewed by a competent independent body in internal audits performed at regular intervals, and at least once a year. An external inspection agency may also be commissioned to conduct these audits. The emergency plans are also reviewed at two-yearly intervals. The data centres in Cologne, Hamburg, Munich and Nuremberg have for many years been certified under ISO 27001:2013, thus documenting that they have information security management systems based on the leading international norm in this area. The relevant audit is conducted by an external certification company once a year and was most recently performed in September 2017.

## Data Protection

**QSC complies with what are probably the world's strictest data protection requirements.** The location of QSC's operations in itself shows that the Company accords absolute priority to data protection. After all, as a German company it is subject to European data protection requirements, which are probably the strictest in the world. Not only that, data is the most valuable asset which customers entrust to QSC. For that reason alone, the Company makes every effort not only to meet customers' expectations but to further extend their level of trust.

QSC has issued a Data Protection Policy which sets out applicable regulations for collecting, processing and using the personal data of natural persons, and in particular the data of customers, shareholders and other third parties, as well as of contractual and business partners. This policy takes particular account of the statutory requirements of the German Federal Data Protection Act (BDSG) and the German Telecommunications Act (TKG). The processing of personal data in systems which enable the conduct or performance of QSC employees to be monitored or which record, store, process or use personal data of employees is governed by the "Framework Agreement for the Introduction and Operation of Information and Communications Systems". All personal data is protected against the threat of unauthorised access. To this end, QSC has implemented suitable technical, organisational and employee-related measures which ensure that personal data is protected against unauthorised access, unlawful processing or dissemination and against accidental loss, unintended amendment and destruction. These measures address the security of that data requiring protection both when it is processed electronically and also in paper form. The technical, organisational and employee-related measures form part of the Company's integrated information security management and are continually updated to account for the latest technical advances and organisational changes.

**Group officer responsible for data protection.** A Group Data Protection Officer appointed by the Management Board monitors compliance with data protection requirements. In this capacity, the officer acts as the in-house authority and exercises his or her powers independently of instruction. The officer coordinates cooperation and agreement processes for all key data protection matters. Furthermore, he or she initiates data protection checks and audits while also accompanying the specialist aspects of external audits at QSC's customers. The Group Data Protection Officer is supported by data protection coordinators at the group companies. These act as contact partners for local employees in matters relating to data protection. Specialist departments are obliged to inform the data protection coordinators of any new processing of personal data. The Group Data Protection Officer is involved at an early stage in the

**Data Protection Policy  
lays down rules  
for handling data**

**Regular audits check  
compliance with Data  
Protection Policy**

development of new products and services to ensure that these conform to the principles of data protection law. Unlike a retrospective inspection of product development activities, this advance review enables the Company to avoid virtually all costly subsequent amendments. Compliance with the Data Protection Policy and applicable data protection legislation is reviewed in regular data protection audits. Customers also perform regular audits to check compliance with the high standard of data protection at QSC. Furthermore, external data protection audits are conducted at regular intervals by the German Federal Officer for Data Protection and Freedom of Information (BfDI), as well as by the German Federal Network Agency in the telecommunications business unit.

**All employees trained for the new GDPR.** Employees are provided with training on the requirements of data protection law when they join the Company. This training is followed by regular information about specific data protection topics relating to customer and employee data. The Company plans to refresh the knowledge of all its employees in advance of the General Data Protection Regulation (GDPR), which was adopted by the EU in May 2016 and will enter into effect in May 2018.

QSC acted early to set up a project team to prepare the Company for the new requirements. This project group, which is led by QSC's Data Protection Officer, will take the measures needed to ensure that the documentation requirements, which are in some cases significantly stricter than previously, can be implemented on schedule at the Company.

**Regular certifications.** QSC has structured its management systems in line with internationally recognised norms and has these regularly certified by external bodies. The two certifications set out below are of key importance in this regard:

- **ISO 9001.** QSC operates a quality management system (QMS) under ISO 9001:2015 and has the effectiveness of this system reviewed each year by an external certification company. This certificate is valid across all business fields.
- **ISO 27001.** The data centres in Cologne, Hamburg, Munich and Nuremberg have been certified under ISO 27001:2013 for many years now, thus documenting that they have information security management systems based on the leading international norm in this area. The relevant audit is conducted by an external certification company once a year and was most recently performed in September 2017.

## Customer Management

**Proprietary sales and customer advisors in each business unit.** Around 30,000 corporate customers of a wide variety of sizes rely on QSC's products and services. Companies with up to 200 IT workplaces are generally supported by sales partners. Companies with more than 200 IT workplaces receive direct support from QSC's own employees. To ensure a dedicated customer approach tailored to the relevant topical challenges, each of QSC's business fields has its own specially trained sales and customer advisors.

From the perspective of its customers, QSC's main competitive advantages are its comprehensive range of cutting-edge services relating to digitisation, its high standard of advisory competence, its consistently high level of service and operating quality and its compliance with the utmost security standards. In view of this, QSC attaches particularly great value to ensuring that its employees offer competent advice and rapid, high-quality support to its customers. It is therefore self-evident that QSC communicates with its customers via all direct points of contact (sales, sales partners, service management, support, complaints management, product management). The Company also provides a broad range of additional communications channels to offer customers and other interested parties an ongoing supply of information and support. QSC provides numerous opportunities for direct dialogue – these include its website, extranets for specific target groups, blogs, mailing actions, various customer events, trade shows, telephone hotlines and all customary social media channels.

**Customer satisfaction is continuously recorded.** QSC backs up its day-to-day contacts with its customers and other interested parties by regularly having customer surveys performed by an independent institute. These surveys, which are commissioned by the quality management department at QSC AG, measure customer satisfaction and the quality of the acquisition process ("customer journey") and customer support. The aim is to identify the relationship between customers' expectations and the way QSC satisfies their needs, to clarify strengths and weaknesses, identify potential enhancements to the Company's services and processes and detect trends in customers' expectations. The survey questions key customers and partners from across all sales segments. The findings are evaluated by the internal quality and process management departments, as well as by the Management Board, and then converted into variety of organisational measures – ranging from product development through to corporate communications. This way, QSC ensures that customer management is permanently optimised throughout the Company.

# 30,000

corporate customers rely on  
QSC's products and services

## Employee and Social Concerns

**Personnel strategy aims to retain and develop employees.** QSC's success is driven by the commitment and willingness to perform shown by all its employees. That not least is why the Company has traditionally accorded great priority to employee and social concerns. Its person-



SEE P. 88  
RISK REPORT

Very great value granted to a fair relationship with all QSC employees

nel strategy aims to retain and further develop existing specialists and executives and to recruit sufficient numbers of next-generation staff and specialists. This strategy aims to enable QSC both to meet ever new requirements on the part of its customers in the digital age and to address these challenges chiefly by qualifying its own employees for the tasks involved. After all, the shortage of specialists on the labour market is one of the key risks the Company faces, as is outlined in greater detail in the Risk Report on Page 88.

QSC reached its personnel-related targets in the past financial year. As of 31 December 2017, the Company had a total of 1,342 employees as against 1,360 employees one year earlier. Over the course of the year, QSC acquired 229 new specialists and executives, particularly in its Cloud, IoT and Consulting businesses, while 247 employees left the Company.

**Diverse measures to boost employee satisfaction.** QSC offers its employees positions with good future prospects at attractive locations throughout Germany. Employees benefit from a pleasant working environment, flat hierarchies and – as outlined in greater detail below – modern and flexible working conditions. The Company attaches very great value to dialogue and to maintaining a fair relationship with all its employees. It has established numerous networking formats to boost its employees' sense of affiliation. These range from teambuilding measures and breakfasts with Management Board members to the summer party. Taken together, these measures form a good foundation for retaining specialists and executives and for maintaining their satisfaction levels.

**Five principles shape the corporate culture.** QSC values transparent and agile processes and active communications. It therefore promotes a culture of interaction, expects its employees to show initiative and think of new ideas and supports them in doing so. This is also reflected in the "Top 5" company principles set out below, which form the basis for our corporate culture and guide us in our actions both within and outside the Company:

1. **We want to win!** We work in a highly competitive environment.  
We are the better choice for our customers.
2. **We are shaping change!** We work in one of the world's most exciting industries.  
Implementing with new technologies and alliances is what drives our business.
3. **We look after each other!** We work in dynamic times and a complex world.  
However mobile, flexible and intense our work is, we nevertheless look after our own health and that of our colleagues.
4. **We are results-focused in our work!** We work to generate sustainable profits.  
Our processes are efficient.
5. **We treat each other with respect and appreciation!** We are all different.  
By understanding each other, we turn these differences into a source of strength.

**Training and work-study programmes secure next generation of employees.** QSC is convinced that a sustainable personnel policy automatically involves a clear commitment to providing training. By supporting young people at the outset of their careers, the Company also secures its own next generation of employees in a period characterised by a substantial shortage of specialists. QSC offers two ways to enter the world of work – vocational training as IT specialists with specialisms in system integration and application development, vocational training as IT, IT system or office assistants or work-study programmes in applied IT, business IT or business administration. At the end of 2017, the Company employed 60 trainees and 20 students. For the work-study programmes, QSC cooperates with Nordakademie in Elmshorn, the University of Applied Sciences in Wedel, the FOM University of Economics & Management, Cologne, and Wirtschaftsakademie Kiel.

In the past financial year, QSC offered positions to 16 young people upon the completion of their training or studies and plans to hire 30 new career starters in 2017. The Company actively markets the opportunities involved in vocational training and to this end takes part in training fairs held in Cologne, Hamburg and elsewhere. Further opportunities for making contact at an early stage include pupil internships, school partnerships and participation in nationwide career days (“Girls’ Day” and “Boys’ Day”).

**Targeted recruitment of talented employees.** QSC covers a significant share of its specialist staff requirements from its own training programme. It additionally recruits university graduates and experienced specialists and executives. In the competition for the best candidates, QSC benefits from its prominence as a listed company, its nationwide presence with attractive locations and a wide range of measures aimed at sharpening its profile as an employer. Kununu, the leading employer assessment portal, for example, lists QSC as an “open company” and a “top company”. Company employees receive a bonus if they acquire new colleagues.

In its Consulting business, QSC has set up a separate SAP Junior Programme for university graduates. With its comprehensive training and coaching concept, this programme is currently assisting 20 participants to start out on their careers.

**QSC Academy is the centre for employee development.** In the digital age, the learning process certainly does not end upon the successful completion of vocational training. Only ongoing further training can help employees to fully develop their potential. As a responsible employer, QSC offers a wide range of training opportunities. The core of this system is the QSC Academy, which offers a broad range of seminars. These encompass numerous high-quality learning solutions for developing the specialist, methodological and social skills of all employees. Managers hold regular meetings with employees to assess their individual competencies, evaluate their potential and identify their potential development needs. This process gives rise to targeted training measures which help the employees to advance their personal or specialist skills. In the fast-moving digital world, demand mainly focuses on targeted training and certification measures for new topics. These should enable employees to react just as swiftly to the rapid changes in the market.

**In-house training covers a large share of QSC's need for specialists**

This being so, QSC also welcomes any wish shown by its employees to study for first or master's degrees and supports them in pursuing this aim. In the past financial year, specialist staff started out on courses including master's degrees in "Business IT/IT Management" and "Company Law, Mergers & Acquisitions".

The Company acts early to prepare potential executives for their new responsibilities and has an executive development programme in place across all locations and hierarchical levels. This is intended to detect and promote talent at an early stage and, notwithstanding the diverse personalities involved, to build a common understanding of management responsibilities. Furthermore, managers at individual departments also look very closely at the ways in which management culture and conduct can influence the work atmosphere and productivity. Irrespective of these considerations, all managers regularly attend seminars to update their knowledge of topics such as labour law and compliance.

**Advice on professional, personal and health-related topics.** Professional skills are not the only factor which influences the level of commitment shown by employees. In view of this, QSC has offered support for years now in helping its employees to solve any professional, personal and health-related issues they may have. To this end, the Company cooperates with the Fürstenberg Institut. QSC employees are entitled to receive advice from specialists either in person or by telephone, and that free of charge. The Institut is obliged to maintain absolute confidentiality. Managers can also receive personal coaching provided by the Fürstenberg Institut.

**Staff health and wellbeing.** The advice provided by the Fürstenberg Institut is just one component of the measures QSC takes to promote its employees' health. The Company regularly holds "health days" and works together with external partners for this purpose. Offerings which remain popular here include free influenza vaccinations and eye tests. In cooperation with a large optician's chain, QSC supports its employees in acquiring glasses for screen work.

**Attractive and family-friendly employer.** As a responsible employer, QSC respects the personal situations of all its employees and takes due account of their wishes within the range of options available to a medium-sized employer. Consistently flexibly working hours assist employees to combine their family and work commitments. There are no core working hours and, in agreement with their supervisors, employees are free to perform part of their work from home. At present, around 8% of employees even perform the predominant share of their work from home offices.

Young parents in particular draw on the option of working from home. QSC welcomes every new "citizen" with a one-off gross allowance of € 1,000 and a QSC bobby-car. Several crèche places are also available at the Company's Hamburg location. The Fürstenberg Institut advises parents on childcare-related issues. Should the regular care not be available for children aged from 4 months to 6 years, for example, then the experts at the institute can organise emergency care, which may even involve organising ad-hoc visits to a sick child at home.

---

**8%**

of employees mainly work  
from their home offices

**Compliance with ILO core labour standards.** Taking a responsible approach as an employer naturally also involves ensuring compliance with all legal requirements and core conventions of the International Labour Organization (ILO). The ILO lists four fundamental conventions: freedom of association and protection of the right to organise collective bargaining, the abolition of forced labour, the abolition of child labour and the prohibition of discrimination in employment and occupation. In Germany, all four conventions are governed by clear legal requirements and are unreservedly complied with by QSC.

**Diversity and antidiscrimination.** In Germany, the topic of discrimination has entered centre stage in recent years in connection with the discussions surrounding diversity. QSC decisively rejects any form of discrimination. In the five principles underpinning its corporate culture, it clearly states: "We treat each other with respect and appreciation!" The diversity of QSC's workforce speaks for itself: 4% of employees have foreign passports, but the share of the workforce with international roots is of course far higher. Women make up 20% of the workforce. This comparatively low share is due above all to the ongoing discrepancies shown by men and women in their choice of occupation. Technical training and study programmes generally attract a far lower share of women than men.

QSC is actively tackling this challenge and participating in several initiatives aimed at attracting more women to technical professions. These include "Girl's Day", which gives school-aged girls initial insights into working at a technology-driven company, as well as work experience and internships for school pupils and college students. QSC also takes part in PepperMINT, a Rhine-land-based cross-mentoring programme aimed at promoting female managers.

**Compliance with employee rights.** QSC has a 17-member Works Council and involves this at an early stage of discussions of any personnel and welfare topics. These discussions are conducted on a basis of trust. Management Board members are regularly invited to attend staff meetings, to present their ideas and answer questions. Over and above legal requirements and company agreements, QSC also make efforts to promote the health and wellbeing of its employees. It does this by regularly sharing and agreeing ideas with the Works Council. Any organisational changes under consideration are discussed with the Works Council in good time, as are all one-off projects, such as the setting up of a company integration management system.

QSC is not bound by any collective bargaining agreement. In cooperation with the Works Council, the Company makes its own efforts to ensure an attractive working environment and provide a market-based compensation system. In terms of the compensation paid and benefits granted, this is geared to individual and company-specific needs, as well as to market standards. In addition to their fixed salaries, all employees also receive variable compensation based on the achievement of corporate targets. The share of employees' total salaries attributable to variable compensation rises with increasing responsibility.

**Works Council involved early in discussions of HR and welfare topics**



**Social concerns – focus on surrounding areas.** In its social commitment, QSC has traditionally focused on its surrounding regions. The Company makes donations in cash and in kind to organisations in the vicinity of its locations, such as the Kita Nord crèche facility in Hamburg. Here, QSC is also one of the partners in the “Hamburger Weg” project, which works to develop and promote talent in the city with key focuses on education, welfare and sports projects. As a medium-sized company, QSC’s ability to influence political topics is very limited. The Company is a member of the Association of Telecommunications and Value-Added Services Providers (VATM) and employs its own regulatory expert to maintain a dialogue with decision-makers, especially in Berlin and Brussels.

## Environment

QSC contributes to more environmentally-friendly operations

**Clear commitment to efficient handling of natural resources.** It goes without saying that responsible and sustainable corporate management also involves ensuring that natural resources are put to the most efficient possible use. Digitisation can make a major contribution in this respect. As the digitiser to the German SME sector, QSC is contributing significantly towards making customers’ operations more environmentally friendly. After all, digitisation removes the need for many goods to be manufactured and transported. It also reduces the number of journeys which people have to make. Resource-efficient digitisation, for example, ranges from digital (rather than print) media to remote maintenance and control through to the substitution of video conferences for business travel.

**Resource-saving operations and business activities.** QSC naturally looks closely at ways to reduce the volume of resources used in its own operations and business activities as well. Numerous options are available to encourage employees to save resources. These range from company bicycles, travel cards for local transport networks and car-sharing opportunities to video conference rooms through to a work environment which promotes paperless operations. This latter approach most recently enabled paper consumption volumes to be reduced by up to 30%, with the specific figure varying from location to location. Over and above this, QSC regularly makes efforts to enhance its employees’ awareness of this topic. It also supports the training programme for internationally recognised energy managers at the Chamber of Industry and Commerce (IHK). This programme, which can be attended alongside regular work duties, qualifies employees in the field of energy-efficient technology.

QSC’s main focus is on implementing extensive measures aimed at continually optimising its energy use. Other natural resources, such as water, play hardly any role in the Company’s operations. As QSC leases most of its premises, its ability to influence topics such as water, soil and waste disposal is also limited. It nevertheless maintains a dialogue with its lessors and ensures that efficient and resource-saving solutions are in place at all of its locations.

When it comes to energy, QSC is making continuous efforts to reduce consumption, particularly at its data centres. Here, the Company only deploys hardware systems that meet the latest energy efficiency standards. The infrastructure systems (air conditioning systems, uninterrupted electricity supplies) work with smart, processor-assisted control technology which continually reviews energy expenditure. One key lever also relates to the increasing use made of "shared clouds", which involve joint use of computers rather than dedicated computer capacities for each individual customer. This significantly reduces the volume of hardware used, and thus also the amount of electricity consumed.

**Numerous projects to cut energy consumption.** The projects implemented in the 2017 financial year and outlined below underline the ongoing efforts QSC is making to increase its energy efficiency. The replacement of the air conditioning technology at one of the Company's two locations in Hamburg thus generated electricity savings of up to 50%. Consistent enclosure of the ducts there even led to savings of around 60%. Not only that, the systems used to ensure an uninterrupted electricity supply were exchanged, a move which has saved 10% of the energy previously used. In Nuremberg, computers and batteries were replaced, as were older conditioning units. This latter measure alone will generate savings of around € 150,000 a year. Furthermore, all of the larger companies regularly have energy audits performed by certified external energy consultants in line with the requirements of DIN EN 16247-1. These audits provide a good basis for the early detection of potential optimisations and prioritising the resultant measures.

**100% electricity from regenerative energy sources.** Even when continually optimised, operations at the data centres are still energy-intensive. In view of this, QSC has decided to procure all of its electricity for its data centre locations from regenerative sources from 2018 onwards. This electricity is being procured from Stadtwerke Neumünster and is 100% attributable to carbon dioxide-free and environmentally-friendly hydroelectricity, as well as to combined heat and power plants working exclusively with biogenic fuels.

**Resource-efficient procurement.** Procuring electricity from regenerative sources is just one aspect of the Company's sustainable procurement. The Central Procurement Policy requires due consideration to be given to the careful and well-considered use of natural resources in all procurement processes. These should always take due account of the basic principle of sustainable business activity and greater energy efficiency. These requirements are reflected, among other areas, in the acquisition of hardware meeting the latest energy efficiency standards and a company car pool whose emission figures, unlike those at many other companies, already comply with the EU target of 130 grammes of CO<sub>2</sub> per kilometre. All suppliers are regularly evaluated and have to comply with the company-wide General Procurement Terms. This way, QSC ensures consistently high quality for its products and services. This in itself is a further key aspect of the Company's sustainable and resource-efficient business model.

# 100%

regeneratively produced  
electricity from 2018 onwards

## Compliance

Compliance is one  
key to the success  
of the Company

**All employees are obliged to ensure ethical business conduct.** Integrity, ethical conduct and personal responsibility are key to the Company's success. In view of this, QSC strictly ensures that all its employees and corporate bodies always comply with applicable laws, the Company's own internal guidelines and its codes of conduct. Compliance defines the conduct shown by all employees towards customers, other employees and colleagues, investors, executives and the social surroundings in which the Company operates. QSC prohibits all actions, whenever and wherever they may occur, which breach applicable laws or its own internal guidelines and codes of conduct. This approach naturally also includes measures taken to combat bribery and corruption.

**Compliance management system ensures integrity and lawful actions.** In agreement with the Supervisory Board, the Management Board has implemented a compliance management system (CMS) to uphold and ensure legally correct conduct throughout the Company and at its business partners. The basic elements of this system include:

- Establishing a compliance culture
- Clearly defined compliance targets
- Continual identification and evaluation of compliance risks
- A compliance programme geared towards limiting compliance risks and thus avoiding any breaches of compliance
- A compliance organisation suitable to the size of the QSC Group and integrated into the Company's organisational structures
- Compliance communications tailored to the needs of the respective addressees
- Permanent monitoring and improvement of the CMS

Compliance aims to prevent any unlawful or inappropriate business decisions and, to achieve this, integrates suitable considerations at a preliminary stage of the relevant business processes. This reduces QSC's liability risks and enhances the Company's image as a reliable partner, particularly with its small and medium-sized customers.

**Regular risk inventory.** The risks which could prevent QSC from achieving its compliance targets are identified and assessed at least once a year. Regular risk inventories also help the Company to prioritise suitable measures intended to prevent unlawful actions. These measures form the basis for the compliance programme which, among other aspects, includes requirements and recommended actions in the form of policies, work instructions and process descriptions that are applicable either on a uniform basis throughout the Company or to specific business fields and departments. The compliance principles set out clear requirements in terms of the conduct to be shown by employees and are backed up by internal regulations governing areas such as risk and emergency management, data protection, information security, the ban on insider trading, gifts, invitations and events, and conduct towards advisors. Employees can view all of the internal regulations at any time on the Company's intranet.

**CEO is responsible for compliance.** Responsibility for the CMS is directly incumbent on the Chief Executive Officer. The Management Board has clearly allocated the roles and responsibilities involved in implementing a CMS within the Company's organisational and process structures. Given that QSC is still a medium-sized company, that the risk propensity of its business activities is not especially high and that its target customer group is predominantly located within Germany, the Company has adopted a centralised approach in terms of the structure its compliance organisation.

The head of the internal audit and compliance department acts as the Compliance Officer ("Head of Compliance"). The fact that this department is located in organisational terms directly beneath the CEO safeguards the independence of the Compliance Officer. The head of compliance is responsible for structuring, further developing and implementing the CMS across the Group and reports directly to the CEO. Following agreement with the Management Board, he or she also regularly reports to the Supervisory Board and its Audit Committee. In the event of material compliance problems in which the Management Board is directly involved, the Compliance Officer is entitled and obliged to inform the Supervisory Board Chairman or the Audit Committee Chairman directly. The head of compliance is supported in his or her work by other employees in the internal audit and compliance department and liaises closely and regularly with the heads of the legal, personnel and IT security departments.

**Intranet provides extensive information about compliance-related topics.** Within the Company, the internal audit and compliance department generally uses the intranet to keep employees informed about compliance-related topics, and, for this, works closely with the corporate communications department. There is a separate department page for this purpose. As well as providing specialist contents relevant to the topics addressed, this page particularly informs employees about reporting duties and the channels to be used to report compliance-related matters. In significant cases, standard intranet communications are supplemented by separate mails sent to inform all employees. These communications are backed up by an extensive training programme which raises awareness for the topic among all of the Company's employees. Despite all preventative measures, the possibility of legal infringements and severe breaches of duty arising at the Company cannot be fully excluded. All infringements detected must be reported by the manager of the employee in question and the head of department to the head of personnel, and to the head of the respective business unit in the case of severe infringements. Material compliance-related infringements are additionally reported to the head of compliance, who is also kept regularly informed about the scope of and reason for any disciplinary measures taken by the personnel department in this regard.

In December 2017, QSC implemented "Safe Channel", an institutionalised electronic whistle-blowing system. This can be used by employees, as well as by external third parties, such as business partners or customers, to provide tip-offs of irregular conduct. Confidentiality is guaranteed and tip-offs may also be submitted anonymously. Specially trained individuals who are obliged to maintain confidentiality investigate tip-off received which is legitimate and sufficiently specific.

**QSC implements an electronic system for whistle-blowing**



[WWW.QSC.DE/EN/  
CODE-OF-CONDUCT](http://www.qsc.de/en/code-of-conduct)

**Internal codes of conduct.** QSC's compliance policies include internal codes of conduct and guidelines for the Company's business activities. They are applicable to every member of the Company. The utmost priority is accorded to lawful conduct. This is an intrinsic part of QSC's corporate culture and a matter of course for all of its employees. The Company particularly condemns any form of bribery or corruption. All transactions without exception are performed on a lawful basis. No form of bribery or corruption, whether it be on the part of Company employees, or of sales or cooperation partners, will be tolerated. Any action which creates the mere impression of influence being influenced on or by a business partner should be avoided (cf. the complete "Code of Conduct" at [www.qsc.de/en/code-of-conduct](http://www.qsc.de/en/code-of-conduct).)

**Unrestricted application of zero tolerance policy.** In sanctioning any compliance-related infringements, QSC pursues a zero tolerance policy. No infringement of any legal requirements or in-house guidelines will be tolerated. For this reason, any such infringement will be immediately, suitably and clearly sanctioned without regard for the individual involved or the position he or she holds. In determining the nature and scope of sanction, due account is taken of the actual circumstances leading to the infringement, as well as of the legal and economic implications of such. The Management Board is exclusively responsible for imposing any such sanctions. For infringements whose implications are expected to be more minor, however, it may delegate the determination of suitable sanctions to the relevant division or department head.

The CMS is continually developed further in response both to changes in the business environment and to proposals arising from within the compliance processes. Due account is also taken of the findings of effectiveness audits performed by internal audit, as well as of improvements suggested by employees. The effectiveness of the CMS is also regularly monitored in the context of the audits performed by the internal audit department.

**Compliance management  
system subject to ongoing  
further development**

## BUSINESS REPORT

### Overall Summary

**QSC back in the black.** At € 5.1 million, QSC's consolidated net income regained positive territory for the first time in four years in 2017 and was accompanied by growth in other key earnings figures as well. The substantial improvement in the Company's earnings and financial strength is underlined by the 50% increase in the free cash flow to € 12.6 million. The organisational restructuring is producing visible results. The progress made to date is also documented by the growth in revenues in Cloud, the newest segment, by 54% to € 27.8 million.

With total annual revenues of € 357.9 million, EBITDA of € 38.3 million and a free cash flow of € 12.6 million, QSC met its targets in 2017.

# € 5.1m

consolidated net income in 2017

### Macroeconomic and Industry Framework

**German economy maintains growth course.** QSC primarily operates in the German market. The upturn in the German economy continued in 2017. Gross domestic product grew by 2.2% and thus more rapidly than in the previous year, with growth being driven above all by private household spending. Not only that, gross capital investment also rose significantly, as many companies extended their capacities to meet high demand from both Germany and abroad.

**Rising demand for IT solutions.** Numerous companies are also increasingly investing in digital technologies. As a result, revenue growth in the German IT market once again outpaced the economy as a whole. According to calculations compiled by the Bitkom sector association, IT revenues in Germany rose by 3.9% to € 86.2 billion in 2017. IT services reported comparatively subdued developments; revenues here increased by 2.3% to € 39.0 billion. With growth of 6.3%, software revenues grew nearly three times as fast.

#### The German IT market

(€ billion)



**Declining business volumes with TC services.** By contrast, the situation in the German TC market remains difficult. According to figures released by the Association of Telecommunications and Value-Added Services Providers (VATM), revenues in the German TC business totalled € 58.8 billion in 2017, as against € 59.7 billion in the previous year. In particular, the fixed-network (landline) business, in which QSC also operates, is contracting. Due to market and regulatory factors, rev-

venues here fell by € 0.6 billion to € 27.1 billion in 2017. It is interesting to note that the call-by-call and preselect businesses are beginning to bottom out, with the number of voice call minutes rising for the first time since 2014.

**Multi-billion growth in cloud business.** Based on estimates compiled by the Experton Group, cloud revenues with corporate customers, a crucially important market for QSC, grew in the past year by 31% to € 15.1 billion. Two out of three companies now use or are planning to use cloud services – and are increasingly seeking support from external service providers. According to a survey performed by Bitkom Research on behalf of KPMG, only 13% of companies still use private clouds completely under their own management. Four years ago, this figure was still twice as high. Instead, according to the survey, hybrid solutions comprising both private and public cloud elements were gaining ground, and this is precisely the area on which QSC focuses.

Two out of three companies  
already use cloud services  
or plan to do so in future

### The German cloud market for corporate customers

(€ billion)



**IoT revenues up 21% in 2017.** QSC also conforms to the latest market trends with its range of products and services for the Internet of Things. According to Bitkom, revenues generated with Industry 4.0 solutions, i.e. solutions involving the digitising and networking of production, grew by 21% to € 5.9 billion in Germany in 2017. Key components included both services – from advisory services to system integration to the development of individual software solutions – and hardware provision. With its extensive IoT portfolio, QSC's wholly-owned subsidiary Q-loud meets the needs of both forward-looking markets.

## Regulatory Framework

**Core sections of TC market remain regulated.** The German TC market relevant to QSC is in key aspects subject to regulation by the German Federal Network Agency. This is intended to ensure fair competition. Until 1998, Deutsche Telekom operated as a monopolist in the German market. Among other factors, it still possesses a nationwide, mostly copper-based infrastructure into all households that dates back to those days. Particularly for subscriber lines (local loops), i.e. the distance between the central office or cable branch and the respective customer connection, alternative providers continue to be dependent on this infrastructure built during Deutsche Telekom's time as a monopoly. In the past financial year, the German Federal Network Agency took the following decisions relevant to QSC's business activities that will mainly lead to lower preliminaries costs.

**Approval of fixed-network interconnection and termination fees.** On 21 July 2017, the German Federal Network Agency published the interconnection and termination fees at Telekom Deutschland, which are valid for a two-year period starting retrospectively on 1 January 2017. This decision has cut termination fees by more than 58%, while interconnection fees have only been marginally reduced. This was due to the first-time application of the EU Termination Rates Recommendation and the different cost standards set out therein for termination and interconnection fees. For interconnection fees, the tariff zones have also been abolished, as have the conversion fees for connections between NGN and conventional PSTN networks. This makes the migration from PSTN to NGN more efficient.

Termination fees  
down by more  
than 58% last year

**Approval of mobile telephony termination fees.** On 6 March 2017, the German Federal Network Agency published the definitive approval of mobile telephony termination fees for the period from 1 December 2016 to 30 November 2019. Due to the first-time application of the EU Termination Rates Recommendation, the approval provides for a graded reduction over three years: by around 34% to 1.1 cents/minute by 2017, to 1.07 cents/minute by 2018 and finally to 0.95 cents/minute.

**Approval of leased line fees.** With a definitive decision dated 28 June 2017, the German Federal Network Agency newly approved the license fees for leased lines from 1 July 2017. Here, the items charged for the provision of the connection line and the collocation feeder have been increased slightly.

**Regulatory order for Market 4.** Based on the market definition for Market 4 issued in 2016, the German Federal Network Agency has published a draft regulatory order which obliges Telekom Deutschland GmbH not only, as previously, to offer conventional and Ethernet-based leased lines, but now explicitly covers native Ethernet as well. Furthermore, the draft order provides for Telekom also being obliged to offer a high-level bit-stream access product tailored in particular to the needs of business customers. However, the draft order sees this obligation as subject to the proviso that Telekom also introduces this product for itself. The consultation procedure has been performed, but the results are still outstanding.

**Regulatory order for Market 1.** According to the regulatory order for Market 1, which took effect as of 1 January 2017, Telekom Deutschland GmbH is still obliged not only to execute terminations in its fixed network but also to set up connections to added value services and operator (pre)selection.



## Business Performance

**Operating business performance largely consistent with expectations.** QSC's four segments performed largely as planned in 2017, with the Cloud segment generating a high level of revenue growth. As expected, market and regulatory factors led to a substantial downturn in revenues in the TC business with resellers.

**Cloud revenues rise by 54%.** Cloud, the newest segment, generated revenues of € 27.8 million in 2017, up from € 18.1 million in the previous year. This growth documents the great interest shown by SME companies in cloud solutions. The "Frankfurter Leben" Group, for example, decided in June 2017 to procure all aspects of its IT environment in future as a service from QSC. This run-off platform for the German life insurance market needed a highly scalable IT platform that facilitated the swift integration of insurers' applications and data. Here, the open, flexible architecture of the Pure Enterprise Cloud enables precisely this requirement to be met.

### Cloud revenues

(€ million)



### New multi-cloud hub for secure connection to private and public clouds

QSC is continually expanding its portfolio. Since August, the Company has offered a multi-cloud hub for secure high-speed connections to private and public clouds. Here, QSC has combined network services including Microsoft Azure ExpressRoute and Amazon Direct Connect. The multi-cloud hub guarantees real-time access to data and applications and shields the information from the public internet.

QSC's second key growth driver, the IoT business, also saw significant growth in demand in 2017. Q-loud, the subsidiary responsible for this area, agreed a far-reaching cooperation with Schüco, one of the world's leading suppliers of window, door and façade systems, in January 2017 already. Among other services, Q-loud is developing and producing a new hardware for the central management and monitoring of Schüco products and operating a corresponding IoT platform. As the year progressed, a further focus related to solutions for the energy sector and for measuring energy consumption. At ZF Friedrichshafen, for example, so-called "energy cams" are being deployed in a project with "Meine-Energie". These appliances record electricity consumption directly at the meter and communicate this data to a central control centre. Networking end appliances and meters in this way enables larger-scale consumers to optimise their consumption extremely efficiently.

**Traditional Outsourcing business declines in significance.** Consistent with expectations, the revenues of € 102.0 million generated in the Outsourcing segment in 2017 fell short of the previous year's figure of € 117.4 million. In terms of the outsourcing and assumption of ICT services, in the past year QSC mainly built on the cloud-based provision of corresponding services and offered its existing customers the possibility of gradually migrating to industrialised and standardised outsourcing – and thus to the Pure Enterprise Cloud. This migration reduced revenues in this segment, as did the decision taken by a customer with global operations to work together with a global IT provider rather than QSC from the second half of 2017 onwards.

### Outsourcing revenues

(€ million)



**Consulting at high level.** After several years of growth, Consulting showed more subdued developments in 2017. With revenues of € 39.4 million, as against € 40.3 million in the previous year, this segment fell slightly short of expectations. Of these revenues, 85% were generated with consulting services relating to SAP software, an area in which QSC benefits in particular from its all-round expertise in deploying the new S/4HANA product family.

### Consulting revenues

(€ million)



The excellence of QSC's SAP-related services was underlined at the end of the June, when the software group singled out the Company as an "SAP Recognized Expert" in the Retail category in Germany. This certification, which is also based on customer surveys, documents the in-depth understanding which QSC's consultants have for the needs of retailers. At the time, QSC was one of only two providers in Germany with this particular competence in the retail sector. Over and above this, the Consulting segment is permanently extending its range of services. Since the third quarter of 2017, the Company has offered process mining. For this, it draws on

**Singled out as "SAP  
Recognized Expert"  
in retail category**

technology from Celonis, the market leader in this area. Prior to this, QSC had already launched multi-cloud consulting, a range of advisory services for the development of complex cloud scenarios. This way, the Company can now support SME players even more closely in planning and managing extensive Cloud solutions which also involve public cloud and software-as-a-service offerings.

**Stable TC business with corporate customers.** QSC generated revenues of € 92.0 million in its TC business with corporate customers in the past financial year, compared with € 91.8 million in the previous year. In this competitive and price-sensitive market, the Company has benefited in particular from its All-IP competence. This was accompanied by growing demand for colocation services. Given tough market competition, TC revenues with resellers, by contrast, fell by € 21.7 million to € 96.7 million. This development was exacerbated by the further tightening up in regulation. Overall, this factor involved a loss of revenues, with no impact on earnings, of around € 15 million in the past financial year. At € 188.7 million, total revenues in the Telecommunications segment therefore fell short of the previous year's figure of € 210.2 million.

#### Telecommunications revenues

(€ million)



**QSC plans spin-off of TC business.** To make even better use of available opportunities in the TC business, at the end of August 2017 the Management Board decided to spin off these activities to a standalone subsidiary. At this company, QSC will pool network operations, network services and the entire management of preliminary and end products for corporate customers and resellers, including customer and partner management, sales and marketing. This resolution still requires approval by the next Annual General Meeting in July 2018.

**QSC boosts business fields and amends the composition of its Management Board.** To account for growing demand for digital services and increasingly specific customer expectations, in November 2017 QSC's Management Board decided to verticalise its organisational structures. Among other changes, individual business fields will be enabled to manage their respective sales activities and technology and operations. With the introduction of the new organisational and management structures, Udo Faulhaber and Felix Höger, the Management Board members responsible for sales and consulting and for technology and operations respectively, left the Company at the end of 2017.

**Business fields to assume management of sales and technology and operations**

## Key Performance Indicators

**Revenues total € 357.9 million in 2017.** QSC generated revenues of € 357.9 million in the past financial year, as against € 386.0 million in the previous year. After a subdued start, the Company increased its revenues in the second half of the year, benefiting here from ongoing growth in its Cloud segment and from success in its TC business.

**EBITDA rises to € 38.3 million.** Despite the reduction in revenues, QSC increased its EBITDA to € 38.3 million in 2017, as against € 37.1 million in the previous year. The EBITDA margin rose by 1 percentage point to 11%.

**Free cash flow improves to € 12.6 million.** QSC substantially improved its free cash flow in 2017, increasing this key figure by 50% to € 12.6 million. The table below shows the amounts at the two balance sheet dates on 31 December 2016 and 31 December 2017.

€ million	31 Dec. 2017	31 Dec. 2016
<b>Liquidity</b>	<b>61.9</b>	<b>67.3</b>
Long-term other financial liabilities	(135.2)	(145.8)
Short-term other financial liabilities	(1.6)	(5.4)
<b>Interest-bearing financing liabilities</b>	<b>(136.8)</b>	<b>(151.2)</b>
<b>Net debt</b>	<b>(74.9)</b>	<b>(83.8)</b>

Net debt fell by € 8.9 million to € -74.9 million in 2017. QSC has long based its free cash flow reporting on the financial strength of its operating business and therefore corrects the change in net debt to exclude the impact of extraneous measures such as acquisitions and dividends. The distribution of a dividend of € 0.03 for the 2016 financial year led to an outflow of € 3.7 million in 2017. Correcting the net debt figure as reported to exclude this factor results in a free cash flow of € 12.6 million.

**Capital expenditure of € 19.3 million in 2017.** The sharp rise in free cash flow was driven not only by the improvement in the Company's earnings performance, but also by the moderate volume of capital expenditure in the past financial year. This came to € 19.3 million, as against € 28.4 million in 2016. Of this total, 41% related to infrastructure and technology, while 40% was customer-related. The remaining 19% involved other property, plant and equipment and licences. As of the balance sheet date, the purchase commitment for future capital expenditure amounted to € 1.9 million (2016 balance sheet date: € 2.1 million).

# 11%

EBITDA margin in 2017

## Earnings Performance

**Consistent gross margin.** The reduction in revenues was accompanied by a parallel decline in the cost of revenues in the past financial year. This line item came to € 291.1 million, compared with € 312.6 million one year earlier. Gross profit amounted to € 66.8 million, down from € 73.4 million in 2016. The gross margin remained unchanged at 19%.

Lower sales-related  
and administrative  
costs in 2017

The two other major cost items, namely sales and marketing expenses and general and administrative expenses, also fell short of the previous year's figures. Sales and marketing expenses amounted to € 28.5 million in 2017, compared with € 34.7 million one year earlier. A considerable share of this reduction was due to lower commission payments to sales partners. General and administrative expenses totalled € 30.7 million, as against € 36.6 million in 2016. These costs benefited in particular from leaner organisational structures. Other operating expenses fell to € 2.9 million, down from € 17.8 million in 2016. The previous year's figure included write-downs of goodwill and intangible assets totalling € 15.2 million. In 2017, by contrast, amortisation of € 1.1 million was recognised on intangible assets.

Personnel expenses, an important component of all major cost items, amounted to € 106.9 million in 2017 and thus fell short of the previous year's figure of € 112.4 million. As of 31 December 2017, the Company had a total of 1,342 employees as against 1,360 one year earlier. Further information about the Company's employees can be found in the Non-Financial Declaration on Pages 58 to 62.



SEE PP. 58–62  
EMPLOYEES

### Personnel expenses

(€ million)

2017		<u>106.9</u>
2016		<u>112.4</u>

**Increased earnings strength in operating business.** QSC's operating earnings strength can be better understood if, by analogy with the quarterly reports, depreciation, amortisation and non-cash share-based compensation components are reported separately in the income statement. Consistent with IAS 1, these figures are therefore a component of the individual cost items in these consolidated financial statements. The following abridged income statement presents depreciation and amortisation as a separate line item.

€ million	2017	2016
<b>Revenues</b>	<b>357.9</b>	<b>386.0</b>
Cost of revenues*	(266.1)	(282.9)
<b>Gross profit</b>	<b>91.8</b>	<b>103.1</b>
Sales and marketing expenses*	(27.2)	(33.0)
General and administrative expenses*	(27.0)	(31.8)
Other operating income	2.5	2.7
Other operating expenses*	(1.8)	(3.9)
<b>EBITDA</b>	<b>38.3</b>	<b>37.1</b>
Depreciation and amortisation (including non-cash share-based compensation)	(31.1)	(50.2)
<b>Operating earnings (EBIT)</b>	<b>7.1</b>	<b>(13.1)</b>

\* Excluding depreciation and amortisation and non-cash share-based compensation.

It is apparent that, despite the reduction in revenues, EBITDA rose by € 1.2 million to € 38.3 million. As expected, depreciation and amortisation fell sharply and amounted to € 31.1 million, compared with € 50.2 million in the previous year. Together, the increase in EBITDA and reduction in depreciation and amortisation led to a significant improvement in operating earnings (EBIT) in 2017: this key figure rose to € 7.1 million, compared with € -13.1 million in 2016.

Due to a reduction in interest-bearing financial liabilities, the financial result also improved in 2017, rising from € -5.8 million in the previous year to € -4.4 million. Net of this item, earnings before taxes amounted to € 2.7 million, compared with € -18.9 million in the previous year. Taxes on income benefited in 2017 from a positive item relating to deferred taxes on losses carried forward. This item therefore rose to € 2.4 million, as against € -6.1 million in the previous year. Together, all these positive developments enabled QSC to report positive consolidated net income for the first time since 2013. This key figure rose to € 5.1 million, up from € -25.1 million in 2016. That corresponds to earnings per share of € 0.04, as against € -0.20 in the previous year.

# € 7.1m

operating earnings in 2017

## Earnings Performance by Segment

**High-growth Cloud business generates first positive segment contribution.** QSC further expanded its Cloud business in the past financial year. Consistent with this, the cost of revenues rose by € 6.9 million to € 22.1 million. As revenues grew significantly faster, however, this segment nearly doubled its gross profit to € 5.7 million, up from € 2.9 million in 2016. Given that sales and marketing expenses remained virtually stable, the segment contribution also improved significantly. QSC's newest segment therefore generated its first positive full-year segment contribution of € 0.5 million, contrasting with the figure of € -2.2 million reported for the previous year.

**Cloud segment margin**

**Personnel-intensive Consulting segment increases segment margin.** Like revenues, the cost of revenues in the Consulting business also fell slightly short of the previous year's figure, totalling € 32.9 million as against € 33.6 million one year earlier. At € 6.5 million, gross profit therefore remained almost unchanged on the 2016 figure of € 6.7 million. Given the lower volume of sales and marketing expenses incurred in the Consulting business, the segment contribution improved slightly from € 5.2 million in the previous year to € 5.4 million. The corresponding margin rose by 1 percentage point to 14%.

**Consulting segment margin**

**Outsourcing under pressure.** Price competition in QSC's traditional Outsourcing business is intensifying from year to year and contracts can only be extended if they include corresponding concessions. This development is increasingly influencing the earnings performance: gross profit fell from € 31.6 million in the previous year to € 23.6 million in 2017. At € 17.3 million, the segment contribution also fell significantly short of the previous year's figure of € 24.3 million. The challenging situation in the Outsourcing business is underlined by the decline in the segment margin to 17%, down from 21% in 2016.

**Outsourcing segment margin**

**TC business generates highest margins.** The Telecommunications segment comprises the high-margin business with corporate customers and the low-margin business with resellers. These two areas have shown disparate developments. While revenues with corporate customers are rising, market and regulatory factors mean that the resellers business is declining in significance.

This shift is sustainably improving margins in the TC business. Even though the reduction in overall revenues led gross profit to decrease from € 61.9 million to € 56.0 million in 2017, the gross margin nevertheless improved by one percentage point to 30%. The segment contribution developed in parallel. In absolute figures, it amounted to € 41.5 million and thus fell slightly short of the previous year's figure of € 42.7 million. The corresponding margin nevertheless rose by two percentage points to 22%. In no other segment is QSC able to generate a similarly high margin.

Higher segment margin thanks to higher share of revenues in corporate customer business

#### Telecommunications segment margin



## Financial Position

**Two core objectives of financial management.** QSC's financial management serves to ensure smooth financing of the operating business and upcoming capital expenditure. In this, it pursues two core objectives – maintaining and optimising financing capacity and reducing financial risks. QSC invests its surplus liquidity exclusively in money market and low-risk investments. As a result, like in previous years there was once again no need for capital investment write-downs in 2017. QSC deployed derivative financial instruments in the form of interest swaps once again in 2017. These serve to hedge the interest rate risk on floating-rate tranches of the promissory note loan. As virtually all of QSC's operations are in the euro area, the Company is not exposed to any exchange rate risks. Further information about financial risk management can be found in Note 41 of the Notes to the Consolidated Financial Statements.

In its financing, the Company primarily depends on three sources. Firstly, it generates inflows of cash from its operating activities. Secondly, QSC draws on the funds received from a promissory note loan taken up in 2014. Thirdly, the Company had a current credit line of € 70 million as of 31 December 2017. Apart from for guarantee facilities, the Company made no use of this credit line as of 31 December 2017.

**High inflow funds from operating business.** At € 39.3 million, the cash flow from operating activities for 2017 remained at a similarly high level as in the previous year (€ 40.3 million). At € -21.8 million, by contrast, the cash flow from investing activities fell significantly short of the previous year's figure of € -26.0 million. Due to higher loan repayments, the cash flow from financing activities increased from € -20.5 million in 2016 to € -23.4 million. Overall, the resultant change in cash and cash equivalents came to € -5.9 million, compared with € -6.2 million in the previous year. QSC reported cash and cash equivalents of € 61.9 million as of 31 December 2017.



SEE PP. 156 FF.  
NOTES



## Net Asset Position

**QSC's financing has congruent terms.** QSC has traditionally accorded priority to ensuring matching maturities for the financing of its assets and has a solid balance sheet structure. As of 31 December 2017, shareholders' equity and long-term liabilities covered 136% of the value of long-term assets. In the previous year, this key figure amounted to 133%. Long-term assets accounted for 59% of total assets. Due in particular to the depreciation of property, plant and equipment and amortisation of other intangible assets, the value of long-term assets decreased from € 185.0 million at the previous year's balance sheet date to € 174.9 million as of 31 December 2017. By contrast, short-term assets increased to € 122.2 million as of 31 December 2017, up from € 121.0 million one year earlier. This was significantly due to trade receivables, which rose from € 45.8 million as of 31 December 2016 to € 52.3 million. By contrast, cash and cash equivalents fell to € 61.9 million, down from € 67.4 million as of 31 December 2016.

**Shareholders' equity boosted by consolidated net income.** Shareholders' equity increased from € 86.3 million at the end of 2016 to € 89.5 million as of 31 December 2017. Like in the previous year, issued capital amounted to € 124.2 million. Due to non-cash share-based compensation, the capital reserve rose by € 0.6 million to € 143.8 million. The accumulated deficit decreased to € -175.6 million, down from € -177.2 million at the previous year's balance sheet date. The consolidated net income of € 5.1 million was countered by the dividend payment of € 3.7 million. QSC charges this distribution directly to equity.

**Long-term financing secured by promissory note loan.** QSC reduced its long-term liabilities to € 147.9 million as of 31 December 2017, down from € 159.3 million at the previous year's balance sheet date. At € 135.2 million, the predominant share of this line item comprised other financial liabilities, primarily comprising the promissory note loan with a term of 5 and 7 years taken up in 2014. In 2017, QSC prematurely repaid an amount of € 10.0 million of this facility. Short-term liabilities came to € 59.6 million as of 31 December 2017, as against € 60.4 million at the previous year's balance sheet date. Trade payables and other liabilities rose by € 9.4 million to € 46.9 million, while other financial liabilities fell significantly, as did other provisions.





**€ 10.0m**

of promissory note  
loan prematurely repaid

## Actual vs. Forecast Business Performance

**QSC achieves all targets.** In the 2017 financial year, in which its business performed largely as planned, QSC met all the targets published at the beginning of the year and significantly exceeded its free cash flow target. In the forecast presented at the beginning of March 2017, QSC predicted revenues of between € 355 million and € 365 million, EBITDA of between € 36 million and € 40 million, free cash flow slightly ahead of the previous year's figure of € 8.4 million, and capital expenditure of up to € 30 million. Given its strong performance during the financial year and moderate volume of capital expenditure, upon the presentation of its nine-month results at the beginning of November 2017 the Company raised its free cash flow forecast to between € 10 million and € 11 million. Ultimately, the free cash flow of € 12.6 million even exceeded this higher target. By contrast, the Company's capital expenditure of € 19.3 million fell significantly short of the target. With revenues of € 357.9 million and EBITDA of € 38.3 million, QSC's two other key performance indicators were within the ranges communicated at the beginning of the year.

**QSC exceeded its higher free cash flow forecast in FY 2017**

	Targets	Actual 2017 results	
Revenues	€ 355 – 365 million	€ 357.9 million	
EBITDA	€ 36 – 40 million	€ 38.3 million	
Free cash flow	€ 10 – 11 million*	€ 12.6 million	
Capital expenditure	Up to € 30 million	€ 19.3 million	

\* Higher free cash flow forecast.

# RISK REPORT

## Risk Management

**Risk management as basis for decisions.** Like all companies, QSC is permanently exposed to numerous potential risks. By consciously addressing and assessing these risks, the Company boosts its competitiveness and its sustainable business success. Professional risk management therefore has to ensure that all events, actions or neglected actions that could potentially pose a threat to QSC's success, or even to its continued existence, are already identified, analysed, assessed, managed and monitored at the earliest possible stage of their development. Risk management comprises coordinated procedures, measures and the necessary rules for dealing with risks. In many cases, uniform risk management thus supports decision-making processes at QSC and all its subsidiaries.

## Organisation and Procedures

**Uniform and integrated risk management system.** To ensure the effectiveness of risk management and facilitate the aggregation of risks and transparent reporting, QSC has implemented a Company-wide uniform integrated risk management system (RMS) and further optimised it in the past financial year. The use of a risk management software that has proven its worth for years now enables the Company to classify risks precisely and, as a result, to clearly focus on material risks.

An integral component  
of decision-making  
processes: the RMS

The RMS is an integral component of decision-making processes at the Company. It ensures that risk assessments are considered in all decisions and that measures to reduce risks are taken at an early stage. Quarterly reports raise awareness of risk issues among all managers with responsibility for risk management. Guidelines, procedures and work instructions are in place to flank the RMS and ensure its implementation in day-to-day operations. The risk analyses, such as those required for management systems under ISO 27001 (Information Security) or ISO 9001 (Quality Management), ensure uniform, efficient reporting.

All Company departments are included in the RMS. Managers reporting directly to the Management Board ("direct reports") continually monitor and assess the risks arising. Within the RMS framework, they are responsible as risk coordinators for making sure that the risks identified are always up to date. Heads of department report to Corporate Risk management at least once a quarter. They also regularly check whether any new risks with material implications and previously undetected have arisen in their areas of responsibility and whether there is any need to amend the assessment of risks already identified. This process ensures that potential risks in the operating business can be detected at an early stage.

Corporate Risk Management is responsible for risk reporting to group management. It also serves as an interface to other audit and/or certification processes and ensures that, there too, the risks relevant to the Company are uniformly recorded. The Finance department is responsible for monitoring risks on the basis of key operating and financial performance figures.

**Quarterly risk reporting to the Management Board.** Corporate Risk Management continuously monitors the introduction of and compliance with measures to avoid and reduce risks. It also acts as a permanent contact partner for all departments.

Corporate Risk Management is responsible for consolidating and documenting the risks assessed by the risk coordinators. Based on the risk reports submitted by departments, it compiles a compact report (using the "Risk to Chance" [R2C] software) and forwards this to the Management Board on a quarterly basis. The Management Board is informed immediately of any high risks newly detected. The Management Board informs the Supervisory Board with an extensive risk report at least once a year.

Risk Management Guidelines issued by the Management Board govern the approach to handling risks and define risk management processes and organisational structures. These guidelines are reviewed and modified as necessary on a regular basis, and at least once a year. In the context of their audit of the financial statements, the external auditors each year review whether the RMS is suitable for the early detection of any risks to the Company's continued existence. Further information about the RMS in respect of IFRS 7 disclosure obligations for financial instruments can be found in the Notes to the Consolidated Financial Statements from Page 156 onwards.

**Risk management  
responsible for  
risk reporting**



SEE PP. 156 FF.  
NOTES

## Assessment Methodology

**QSC bases its classification of risks on probability of occurrence and potential implications.**

The R2C risk management software support the overall risk management process throughout the Company. This tool initially uses a gross view to classify a risk in terms of its probability of occurrence and potential implications. This means that the probability of occurrence and potential implications are assessed without accounting for any measures taken to minimise risks. For the highest implication category ("threat to continued existence"), severe financial damages have to be exacerbated by an actual or legal circumstance that would endanger QSC's continued existence. The classification of a risk as "low", "medium" or "high" is based on the combination of its probability of occurrence and damage class. The following diagram provides an overview of the methodology used to classify risks.

**Classification of risks**

Probability of occurrence >	Very low	Low	Medium	High	Very high
Damage class v					
Immaterial	Low risk	Low risk	Low risk	Medium risk	Medium risk
Low	Low risk	Low risk	Medium risk	Medium risk	Medium risk
Medium	Low risk	Medium risk	Medium risk	Medium risk	High risk
Serious	Medium risk	Medium risk	Medium risk	High risk	High risk
Survival-endangering	Medium risk	Medium risk	High risk	High risk	High risk

■ Low risk   
 ■ Medium risk   
 ■ High risk

**Assessment of probability of occurrence**

Very low:	Less than once in 5 years
Low:	Not more than once in 5 years
Medium:	Once a year on average
High:	More than once a year
Very high:	Once a quarter or more

**Damage class (estimated damage in the event of occurrence)**

Immaterial:	Under € 50,000
Low:	€ 50,000 to € 250,000
Medium:	€ 250,000 to € 1,000,000
Serious:	Over € 1,000,000
Survival-endangering:	As a result of legal or actual circumstances occurring

General risks are analysed to assess whether and how these could specifically harm QSC. If this analysis concludes that relevant damages from such risks really are conceivable, then these risks are included as specific risks. General risks without any specific reference to the Company are otherwise not recorded in the RMS. General risks include developments such as global catastrophes, financial system collapse, war and terrorist attacks.

This risk analysis and classification is followed by measures aimed at dealing with and monitoring risks. These serve to reduce existing risks, to hedge risks with provisions and insurance coverage, where this is economically expedient, and to raise awareness of existing residual risks and/or risk acceptance.

The risk is subsequently reassessed in terms of its probability of occurrence and scope of damages to account for the aforementioned measures (net view). The external risk report only includes those risks that still have to be deemed material for QSC's future business performance even after all risk reduction and avoidance measures have been factored in, i.e. subsequent to performance of the net analysis. Based on this classification, these risks are categorised as "high risks". A risk that is allocated to the "risk to continued existence" damage class, for example, is only assessed as constituting a "high risk" in the overall assessment if there is at least a "medium" probability of occurrence. Risks to the Company's continued existence that are assessed as having a low probability of occurrence (low or immaterial) are therefore not classified as "high risks" for ongoing observation purposes and are not viewed overall as direct threats to the Company's continued existence.

As a result of this risk analysis, in its external risk report QSC reports risks that are either individually material or aggregates individually immaterial risks in suitable risk categories (e.g. regulatory risks). The assessments and accompanying comments and requirements are only provided in quantitative terms in cases where it is possible to quantitatively assess the specific extent of damages. As this is generally not possible, however, the relevant risks are usually classified in terms of classes of damage.

Risks classified  
into classes of damages

## Supplementary Disclosures pursuant to § 315 (4) HGB

**Permanent monitoring of accounting risks.** Risk management in respect of financial reporting forms an integral component of the RMS. The risks involved in accounting and financial reporting are constantly monitored, with the results being factored into Group-wide reporting. Within the audit of the annual financial statements, the external auditor also reviews the financial reporting process. Based on the auditor's findings, both the Supervisory Board Audit Committee and the full Supervisory Board deal with the internal control system in respect of the financial reporting process.

At QSC, the RMS is characterised by the following key features:

- QSC has a clear management and corporate structure. Accounting activities for subsidiaries are performed either by QSC AG itself on the basis of agency agreements or handled in close liaison with the subsidiaries. Individual process responsibility is clearly allocated at all subsidiaries.
- QSC ensures strict compliance with legal requirements and International Financial Reporting Standards (IFRS) by means of a range of measures including employing qualified specialists, providing targeted and ongoing training and development for these specialists, strictly observing the dual control principle by separating execution, billing and approval functions in organisational terms and clearly segregating duties for document creation and posting and in its controlling department.

- QSC uniformly works with standard software from SAP throughout the Company.
- The accounting software is comprehensively protected against unauthorised access. It ensures that all major transactions at all companies are consistently, correctly and promptly recorded.
- Once prepared, separate financial statements are transferred to a uniform consolidation system in which intercompany transactions are eliminated. This system then provides the basis for the consolidated financial statements and for major disclosures in the Notes to the Consolidated Financial Statements and the Group Management Report.
- Group-wide monthly reporting ensures the early detection of potential risks during the financial year.

With these measures, QSC creates the necessary transparency for its financial reporting and – to the greatest extent possible and despite the enormous complexity of IFRS – prevents any potential risks arising in this process.

## Individual Risks

**Focus on actual risk situation.** Risk monitoring focuses not so much on the risks identified by the gross assessment as on the actual risk situation after taking relevant measures into consideration. Based on this net perspective, the following relevant risks were assessed as “high”.

**Decline in revenues in conventional TC business.** Voice call volumes in the German fixed network are declining overall and the share of the open call-by-call and preselect businesses is also falling. Revenues have been additionally held back by tough price competition and regulation. Information about the associated risks can be found in the separate “Regulatory risks” section. In its business with resellers, QSC also works together with partners with a strong market presence. In some cases, these now have their own TC infrastructures which they may put to increasing use in future. In the ADSL business as well, there are several strong players in the resellers market with which QSC works together. Here too, the Company is exposed to tough price competition. Not only that, revenues are also falling due to higher demand for broadband and the resultant increase in the use of VDSL and cable connections.

QSC's dependence on TC business has been decreasing for years

By expanding its IT and cloud business, QSC has been reducing its dependency on the conventional TC business for years now. Not only that, the Company has combated the risk of revenue losses in this line of business by acting early to build up a fully IP-based next generation network (NGN). At the same time, QSC has been reviewing whether and to what extent it can maintain its voice offerings on competitive terms following the potential expiry of further regulatory requirements. Irrespective of this, the Company expects the decline in revenues in the conventional TC market for private customers to continue in the years ahead as well, and for this to be accompanied by a further rise in pressure on margins.

Conversely, the amalgamation of voice and data networks on an IP basis offers new opportunities to optimise TC infrastructures and make them more flexible. Not only that, as the backbone for digitisation Telecommunications is noticeably gaining in significance across the board. In view of this, QSC has decided to strengthen its TC business by spinning it off to a subsidiary. This way, the Company intends to make better use of new opportunities arising in the market.

TC, as the backbone of digitisation, is now noticeably gaining in significance

**Lack of success in new business fields.** QSC is pursuing a strategy of enabling small and medium-sized companies in particular to advance more easily into the digital age and views the cloud as the IT architecture for the new age. The Company is therefore systematically extending its offering with cloud-based products and services in particular. Such innovations present an opportunity, but also involve risks. Delays may arise in the development process, thus leading to belated market launches. Any lack of market acceptance for the innovations may mean that the revenue and earnings contributions are realised at a later point in time than expected. This also applies if existing customers decide not to migrate their operations. Focusing too closely on new business fields may also mean that existing customers in the Outsourcing segment do not receive optimal support, a development which in the worst case may lead to contracts being terminated.

Not only that, any delays in realising the revenue and earnings contributions expected in the high-growth Cloud segment would also reduce the Company's financial scope for strategic investments and increase its vulnerability in future periods of macroeconomic weakness. QSC counters this risk by cooperating with potential partners and pilot customers at an early stage and before new products are launched onto the market. At the same time, with its Pure Enterprise Cloud it has created a modular service portfolio that integrates new cloud-based products and services and also facilitates extremely efficient operation of these applications. Furthermore, in the current financial year the Company is stepping up its efforts to provide optimal support to existing customers in its Outsourcing business and to acquire new customers here once again.

**Operations stability.** The ICT industry is undergoing structural transformation. Particularly when it comes to outsourcing IT from companies to specialists, customers expect ever higher technical and operating quality at ever lower cost and, despite this, expect services to be tailored just as closely to their individual needs. Service providers such as QSC have to meet these exacting standards by ensuring stable operations accompanied by inexpensive production, while at the same time satisfying customers' wishes swiftly and efficiently. Any lack of reliability in terms of operations stability may lead to a loss of both revenues and customers and thus impede the expansion in the business.



By permanently optimising its operating organisational structure and taking measures to stabilise operations, QSC has created a basis enabling it to fully meet customers' expectations. These measures also include extensive and effective emergency plans, which safeguard the permanent availability of all services or their immediate restoration without any disadvantages for customers following any criminal attack.

**Security.** Safeguarding IT security and complying with all relevant provisions of data protection law are two crucial success factors in QSC's business activity. Any failure to do so would harm the Company's reputation. Protecting company data and personal data relating to customers and employees with all suitable means available in technological and organisational terms is therefore an absolute focus of QSC's IT security strategy. QSC also acted early to prepare for the General Data Protection Regulation (GDPR) due to take effect in May 2018. By then, it will have brought its employees' knowledge of data protection requirements absolutely up to date.

QSC acted early to prepare for the GDPR due to take effect from May 2018

**Regulatory risks.** QSC continues to operate in the regulated German TC market. Here, there is still a tendency in the political arena, and thus indirectly on the part of the German Federal Network Agency and the European Commission, to limit or abolish access regulation in various markets and to restrict themselves from now on to monitoring these markets and, where appropriate, to being able to intervene retrospectively on the basis of general fair competition law. There is a risk that the coming years will see a further reduction in the number of regulated markets. This could increase the scope of Deutsche Telekom AG (DTAG) to influence prices in markets already removed from regulation. Furthermore, there is the risk that specific regulated preliminary markets, especially bit-stream and subscriber lines (local loops) will be regionalised in such a way that specific preliminaries are no longer available in more competitive geographical sub-markets (e.g. metropolitan areas). The experience gained to date with the end of regulation in various markets shows that public monitoring of DTAG's competitive behaviour is insufficient to keep this company from exploiting its newly gained room for manoeuvre. QSC nevertheless expects that ongoing public discussions and the investigation of relevant cases will promote conduct consistent with fair competition and that the German Federal Network Agency or the German Cartel Office will otherwise make use of their legal options. Moreover, given its proprietary infrastructure QSC is significantly less dependent than most other ICT providers on DTAG's resale prices for voice and data services. Nevertheless, margins in the German TC market could be adversely affected in particular by aggressive pricing policies on the part of DTAG in the preliminaries and end-customer markets outside cartel and regulatory limits or in markets no longer regulated.

The Company limits potential risks by closely monitoring the regulatory landscape and by participating on an ongoing basis in the relevant discussions and commenting on various proceedings.

**Dependency on business partners.** In its Telecommunications segment, QSC generates its reseller revenues with only a small number of large voice and DSL resellers. Losing one of these partners would noticeably reduce revenues at QSC. However, this would only impact to a lesser extent on its profitability, as these revenues mainly involve lower margins. A material share of revenues in the Outsourcing segment as well is generated with a small number of major customers. The loss of one of these customers would noticeably impact on the Company's revenues and profitability. QSC counters this risk above all by carefully maintaining the successful business relationships that have grown over the years.

**Lack of specialists.** Like all ICT providers, QSC needs qualified specialists to operate and further develop its product portfolio. Given the shortage of IT specialists in the German labour market, it is sometimes difficult to find adequate replacements for the relevant positions within a short timeframe. This risk can be expected to continue to apply in 2018 and beyond. This may result in bottlenecks in operations and in the further development of existing and new IT applications. QSC is countering this risk above all by consistently training young specialists, cooperating with select universities and offering a range of targeted retention measures for especially important specialists and executives.

QSC is consistently  
training young specialists

## Overall Summary

**QSC is able to detect potential risks at an early stage and take appropriate action.** Taking due account of the potential scope of damages and probabilities of occurrences of these and other potential risks, no risks that could result in any permanent and significant impairment of the Company's financial position, financial performance or cash flows in the current financial year are currently discernible. In organisational terms, all meaningful and reasonable measures have been taken to enable the Company to detect potential risks at an early stage and take appropriate action.

Due to these or other risks or to erroneous assumptions, QSC's future earnings may nevertheless materially deviate from the expectations of the Company and its management. All statements made in this Group Management Report that are not historical facts constitute forward-looking statements. They are based on current expectations and forecasts of future events and are regularly reviewed in a risk management context.

## OUTLOOK AND OPPORTUNITY REPORT

### Overall Summary

> € 10m

free cash flow  
forecast for 2018

**Vertical organisation to increase effectiveness of sales activities.** In the current financial year, QSC expects to generate revenues of between € 345 million and € 355 million, EBITDA of between € 35 million and € 40 million and free cash flow of more than € 10 million. This forecast accounts for substantial revenue growth in the Cloud segment and growth in the two forward-looking business fields of Consulting and TC for corporate customers. This growth will be countered by a reduction in revenues, mainly due to market factors, in the TC business with resellers and the traditional Outsourcing business. The new vertical organisational structure with its flat hierarchies and clear responsibilities and the planned spin-off of the TC business will boost the effectiveness of sales activities, also beyond 2018, and will provide QSC with new growth opportunities.

### Future Macroeconomic and Industry Framework

**Broad-based upturn set to continue.** The Federal Government expects German gross domestic product to grow by 2.4% in 2018 and thus to accelerate further. Like in the previous year, the Bitkom sector association has forecast slightly less dynamic developments in the ICT sector. Revenues here are expected to rise by 1.7% to € 164.0 billion. This was due to stagnating TC revenues; given the tough price competition prevalent in this market Bitkom expects revenues to roughly match the previous year's figure of just under € 66 billion. The IT market, by contrast, would benefit from digitisation and, based on the Bitkom forecast, increase its revenues by 3.1% to € 88.8 billion.

#### The German ICT market

(€ billion)

2018		164.0
2017		161.3

**Great dynamism in two of QSC's core business fields.** Cloud and IoT will remain the key growth drivers in the German IT market. The Experton Group, part of the leading international market researcher ISG, forecasts that cloud revenues with corporate customers will surge by 30% to € 19.7 billion in 2018. Small and medium-sized companies were also increasingly relying on this forward-looking technology. The same would hold true for IoT products and services. According to a study compiled by the eco Association of the Internet Industry and the consultancy Arthur D. Little, revenues here could more than double to around € 16.8 billion by 2022, with annual growth of nearly 20% expected. QSC is well positioned in both forward-looking markets.

### The German IoT market

(€ billion)



## Expected Financial Position, Financial Performance and Cash Flows

**New growth momentum and ongoing cost discipline.** With its new vertical organisational structure, QSC is boosting its business fields. They will assume the management of their sales and technologies and thus be able to react more swiftly and flexibly to customer needs. Furthermore, QSC expects this move to result in greater agility and create new growth momentum. All business fields will further cultivate their existing customer relationships and also acquire new customers. Irrespective of this, market factors mean that the disparate revenue performance can be expected to continue in the current financial year. Substantial growth in the Cloud segment and growth in the Consulting segment and the TC business with corporate customers will be countered by declines in the Outsourcing segment and the TC business with resellers. These two latter areas are subject to tough price and crowding-out competition. Overall, QSC therefore expects to generate revenues of between € 345 million and € 355 million in 2017, compared with € 357.9 million in the past year.

EBITDA is expected to range between € 35 million and € 40 million. As a general rule, QSC is acquiring new revenues in higher-margin business fields and losing them in lower-margin activities. The Company will continue to expand its growth businesses and will be recruiting additional staff, including specialists and managers. Meanwhile, strict cost discipline throughout the Company and the increasing standardisation and automation of operations will ensure stable earnings strength.

**Free cash flow of more than € 10 million planned.** Given the stability of its earnings and the moderate volume of capital expenditure planned, QSC expects to generate a free cash flow of more than € 10 million in 2018. The Company will therefore further reduce its net debt. Given its cash flow from operating activities and its existing liquidity, QSC is solidly financed for the projects planned for the current financial year.

**QSC to press ahead  
with expanding growth  
businesses in current year**

## Expected Earnings Performance by Segment

**Persistent growth in Cloud business.** QSC expects its Cloud segment to generate the highest revenue growth once again in 2018. Major momentum will be provided by the new and existing customer business with the Pure Enterprise Cloud and the IoT project business. Numerous pilot projects underway at the IOT subsidiary Q-loud can be expected to produce the first large-scale orders in the current year. New contracts with small and medium-sized companies are also expected in the Cloud business. These will be supplemented by intensifying business relationships with existing customers and migrating Outsourcing customers. Even though QSC will continue investing in expanding this high-growth segment, the segment contribution is expected to rise further.

**New momentum in Consulting.** QSC expects its Consulting segment, which marked time in the past year, to post rising revenues once again in 2018. Here, the Company will benefit in particular from its all-round SAP competence and its extensive experience in deploying HANA technology. These aspects will be supplemented by the growing interest in multi-cloud consulting. Despite the high personnel intensity involved, the Consulting segment has once again budgeted a double-digit segment margin.

**Change in focus in traditional Outsourcing business.** As was already the case in 2017, cloud-based procurement models will increasingly replace traditional outsourcing at existing customers. Furthermore, a large contract is expected to expire from mid-year following the decision by a customer with global operations to switch to an international IT service provider. As a result, revenues in the Outsourcing segment will decrease further in 2018. New opportunities will be created by stepping up the efforts to market outsourcing solutions not involving staff takeovers to SME companies. Here, QSC will particularly be targeting companies that have so far shied away from entering the cloud age but whose proprietary IT is increasingly reaching its limits. As in the previous year, the segment margin is expected to be adversely affected by tough price competition.

**Planned spin-off to boost TC business.** The disparate developments seen in the Telecommunications segment for years now are set to continue. Slight growth in the business with corporate customers will be offset by a declining business with resellers due to market factors. In the meantime, the verticalisation of organisational structures and above all the planned spin-off the TC business will increase the relevant managers' capacity to act. Among other areas, they will be able to investigate opportunities harboured by cooperating with city carriers and municipal utility companies, press ahead with marketing colocation services and put the Company's existing extensive IP expertise to even better use when targeting SME customers. This will particularly benefit the high-margin TC business with corporate customers. QSC therefore expects this segment to continue generating the highest margins.

Spin-off especially  
beneficial to high-  
margin business with  
corporate customers

## Opportunity Management

**Dynamic pace of digitisation opens up ever more opportunities.** QSC is the digitiser to the German SME sector and one of only few providers in Germany able to offer companies all the services they need to enhance and prepare their IT for the digital age from a single source. The dynamic market climate is providing ever new opportunities. Responsibility for identifying and acting on such opportunities lies with the business fields. They are familiar with their specific market environments and alert to any resulting potential. In addition, the managers responsible also draw on the expertise to be found in sales, market and competition analyses and internal studies. These managers regularly report to the Management Board on existing opportunities and the measures necessary to seize them. The Supervisory Board Strategy Committee also regularly deals with this issue.

Specific opportunities are factored into the rolling planning, with a review being performed at an early stage to ascertain the risks involved in pursuing and implementing these opportunities. Here, the benefits of dovetailing risk and opportunity management are especially clear. QSC reports below on the future developments and events that could lead to a positive variance from the full-year outlook for 2018 provided in this Group Management Report. By analogy with risks, the Company classifies these as "large" opportunities with a comparatively high probability of occurrence and a substantially positive contribution to its financial position, financial performance and cash flows.

**Dovetailing management of risks and opportunities is particularly worthwhile**

## Individual Opportunities

**Additional customers for cloud services.** QSC is continually expanding its cloud-based portfolio and is in talks with numerous corporate customers. Past experience shows that a substantial period of time generally passes between initial contacts with customers and the first revenues. To account for this, QSC has only budgeted a moderate level of growth with new customers in its Cloud business. However, demand could exceed our expectations as, given enormous technological advances and the requirements of digital business models, the IT in place at many small and medium-sized companies is increasingly reaching its limits.

**More IoT projects in regular operation.** QSC positioned itself at a very early stage with an extensive range of products and services in the forward-looking IoT market. Many SME players are still only beginning to address this topic and are initially implementing pilot projects. Should several of these projects be transferred to regular operation, then this might trigger an additional unexpected boost to revenues. This would also be the case if SME companies were to make increasing use of QSC's extensive IoT expertise with regard to the mass production of networked appliances.

**Technological advance to SAP S/4HANA.** The technological advance currently underway at SAP from the ERP product family R/3 to S/4HANA will drive growth in the Consulting segment in 2018. As this new product family is a key to digitising business models, demand for corresponding advisory services may exceed the expectations accounted for in the Company's planning. As the digitiser for the SME sector, QSC has great credibility in this area and could additionally benefit from the interplay of advisory and implementation services.

QSC offers a broad range of IP-based telephony systems

**Replacement of ISDN in telephony systems.** As Germany's TC infrastructure is upgraded with IP technology, conventional connections are being switched off. After this, it will no longer be possible to simply continue operating ISDN telephony systems, which are still widely used. The more rigorously our competitors press their customers to convert to IP technology, the greater the opportunities available to QSC. After all, the Company on the one hand already offers a broad range of IP-based telephony systems for corporate customers of all sizes. On the other hand, QSC has extensive expertise in integrating conventional telephony systems into All-IP solutions. This makes it possible for SME customers to continue using their existing systems and thus avoid having to make investments.

**Cooperation with city carriers and municipal utility companies.** The work begun on developing fibre-optic networks on municipal level may present QSC with new opportunities to cooperate more closely with city carriers and municipal utility companies in the current year and beyond. One conceivable option involves the operation of state-of-the-art municipal TC infrastructure, such as that already made possible by QSC in Marburg and Kassel, for example. Other towns and cities are also planning to enhance their attractiveness as business locations by implementing fibre-optic networks at their own initiative. For this, they require a technology partner. QSC also has the necessary expertise with open-access platforms which enable networks and services based on different technologies to be integrated in a given region.

---

# FINANCIAL REPORT

---

## 96–102 **CONSOLIDATED FINANCIAL STATEMENTS**

- 96 Consolidated Statement of Income
- 97 Consolidated Statement of Comprehensive Income
- 98 Consolidated Balance Sheet
- 100 Consolidated Statement of Changes in Equity
- 102 Consolidated Statement of Cash Flows

## 103–165 **NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

### 103 **COMPANY INFORMATION**

#### 103 **ACCOUNTING POLICIES**

- 103 Basis of preparation
- 104 Consolidation
- 104 Significant judgements and estimates
- 106 Summary of significant accounting policies
- 113 Changes in accounting policies

#### 120 **NOTES TO THE CONSOLIDATED INCOME STATEMENT**

- 120 Revenues
- 120 Cost of revenues
- 121 Sales and marketing expenses
- 121 General and administrative expenses
- 122 Write-downs and impairments
- 122 Other operating income and expenses
- 123 Financial result
- 123 Earnings per share
- 124 Personnel expenses and employees

#### 125 **NOTES TO THE CONSOLIDATED BALANCE SHEET**

- 125 Property, plant and equipment
- 126 Goodwill
- 129 Other intangible assets
- 130 Trade receivables
- 132 Prepayments
- 132 Inventories



132	Other short-term assets
132	Cash and cash equivalents
133	Issued capital
133	Capital reserve
133	Authorised and conditional capital
135	Other reserves
135	Other financial liabilities
137	Pension provisions
140	Other provisions and tax provisions
141	Trade payables and other liabilities
142	Deferred income
<b>143</b>	<b>NOTES TO THE CONSOLIDATED CASH FLOW STATEMENT</b>
143	Cash flow from operating activities
143	Cash flows from investing activities and financing activities
<b>144</b>	<b>OTHER DISCLOSURES</b>
144	Subsidiaries
145	Segment reporting
148	Stock option plans
150	Related party transactions
152	Deferred and current taxes
154	Legal disputes
154	Leases and future payment obligations
156	Objectives and methods used in financial risk management and capital management
160	Financial instruments
162	Declaration pursuant to § 161 AktG regarding conformity with the German Corporate Governance Code
162	Auditor's fees
163	Compensation of the Management and Supervisory Boards
164	Risks
164	Proposed appropriation of profit
164	Directors and officers

## 166 **STATEMENT OF RESPONSIBILITY**

## 167 **AUDITOR'S REPORT**

## CONSOLIDATED FINANCIAL STATEMENTS

### Consolidated Statement of Income

Euro amounts in thousands (€ 000s)

	Note	2017	2016
<b>Net revenues</b>	6	<b>357,867</b>	<b>385,979</b>
Cost of revenues	7	(291,059)	(312,598)
<b>Gross profit</b>		<b>66,808</b>	<b>73,381</b>
Sales and marketing expenses	8	(28,546)	(34,683)
General and administrative expenses	9	(30,739)	(36,647)
Other operating income	11	2,484	2,698
Other operating expenses	11	(2,898)	(17,849)
<b>Operating earnings (EBIT)</b>		<b>7,109</b>	<b>(13,100)</b>
Financial income	12	247	196
Financial expenses	12	(4,658)	(6,030)
<b>Net income (loss) before income taxes</b>		<b>2,698</b>	<b>(18,934)</b>
Income taxes	38	2,425	(6,120)
<b>Net income (loss)</b>		<b>5,123</b>	<b>(25,054)</b>
<b>Attribution of net income (loss)</b>			
Owners of the parent company		5,336	(24,839)
Non-controlling interests		(213)	(215)
Earnings per share (basic) in €	13	0.04	(0.20)
Earnings per share (diluted) in €	13	0.04	(0.20)

## Consolidated Statement of Comprehensive Income

Euro amounts in thousands (€ 000s)

	2017	2016
<b>Net income (loss) for the period</b>	<b>5,123</b>	<b>(25,054)</b>
<b>Other comprehensive income</b>		
<b>Line items that are not reclassified in the income statement</b>		
Actuarial gains (losses) from defined benefit pension plans	848	(744)
Tax effect	(275)	241
<b>Line items that are not reclassified in the income statement</b>	<b>573</b>	<b>(503)</b>
<b>Line items that might subsequently be reclassified in the income statement</b>		
Fair value measurement of cash flow hedge	945	8
Tax effect	(306)	(2)
<b>Line items that might subsequently be reclassified in the income statement</b>	<b>639</b>	<b>6</b>
<b>Total fair value changes (net of tax) recognised directly</b>	<b>1,212</b>	<b>(497)</b>
<b>Total comprehensive income for the period</b>	<b>6,335</b>	<b>(25,551)</b>
<b>Attribution of total comprehensive income</b>		
Owners of the parent company	6,548	(25,336)
Non-controlling interests	(213)	(215)

## Consolidated Balance Sheet

Euro amounts in thousands (€ 000s)

	Note	31 Dec. 2017	31 Dec. 2016
<b>ASSETS</b>			
<b>Long-term assets</b>			
Property, plant and equipment	15	57,481	62,554
Land and buildings	15	23,528	24,359
Goodwill	16	55,568	55,568
Other intangible assets	17	25,349	30,779
Trade receivables	18	2,461	2,435
Prepayments	19	2,549	3,161
Other long-term assets		156	190
Deferred tax assets	38	7,806	5,926
<b>Long-term assets</b>		<b>174,898</b>	<b>184,972</b>
<b>Short-term assets</b>			
Trade receivables	18	52,278	45,816
Prepayments	19	6,809	5,107
Inventories	20	649	73
Other short-term assets	21	569	1,533
Cash and cash equivalents	22	61,881	67,336
<b>Subtotal for short-term assets</b>		<b>122,186</b>	<b>119,865</b>
Assets held for sale		-	1,166
<b>Short-term assets</b>		<b>122,186</b>	<b>121,031</b>
<b>TOTAL ASSETS</b>		<b>297,084</b>	<b>306,003</b>

	Note	31 Dec. 2017	31 Dec. 2016
<b>SHAREHOLDERS' EQUITY AND LIABILITIES</b>			
<b>Shareholders' equity</b>			
Issued capital	23	124,172	124,172
Capital surplus	24	143,787	143,217
Other capital reserves	26	(2,281)	(3,493)
Accumulated deficit		(175,612)	(177,223)
<b>Equity attributable to owners of the parent company</b>		<b>90,066</b>	<b>86,673</b>
Non-controlling interests		(538)	(325)
<b>Shareholders' equity</b>		<b>89,528</b>	<b>86,348</b>
<b>Liabilities</b>			
<b>Long-term liabilities</b>			
Other financial liabilities	27	135,244	145,815
Accrued pensions	28	5,924	7,133
Other provisions	29	3,031	3,050
Trade payables and other liabilities	30	3,357	2,525
Deferred tax liabilities	38	392	775
<b>Long-term liabilities</b>		<b>147,948</b>	<b>159,298</b>
<b>Short-term liabilities</b>			
Trade payables and other liabilities	30	46,896	37,520
Other financial liabilities	27	1,577	5,355
Other provisions	29	7,388	11,724
Accrued taxes	29	1,669	2,166
Deferred income	31	2,078	2,441
<b>Subtotal for short-term liabilities</b>		<b>59,608</b>	<b>59,206</b>
Liabilities associated with assets held for sale		-	1,151
<b>Short-term liabilities</b>		<b>59,608</b>	<b>60,357</b>
<b>Liabilities</b>		<b>207,556</b>	<b>219,655</b>
<b>TOTAL SHAREHOLDERS' EQUITY AND LIABILITIES</b>		<b>297,084</b>	<b>306,003</b>

## Consolidated Statement of Changes in Equity

Euro amounts in thousands (€ 000s)

	Note	Equity attributable to equity holders of QSC AG			
		Issued capital	Capital surplus	Other capital reserves	
				Actuarial gains (losses)	Cash flow hedge reserve
<b>Balance as of 1 January 2017</b>		<b>124,172</b>	<b>143,217</b>	<b>(1,923)</b>	<b>(1,570)</b>
Net income (loss) for the period		-	-	-	-
Other comprehensive income for the period, net of tax	26	-	-	573	639
<b>Total comprehensive income</b>		<b>-</b>	<b>-</b>	<b>573</b>	<b>639</b>
Dividends		-	-	-	-
Non-cash share-based compensation	36	-	570	-	-
<b>Balance as of 31 December 2017</b>		<b>124,172</b>	<b>143,787</b>	<b>(1,350)</b>	<b>(931)</b>
<b>Balance as of 1 January 2016</b>		<b>124,162</b>	<b>142,702</b>	<b>(1,420)</b>	<b>(1,576)</b>
Net income (loss) for the period		-	-	-	-
Other comprehensive loss for the period, net of tax	26	-	-	(503)	6
<b>Total comprehensive income</b>		<b>-</b>	<b>-</b>	<b>(503)</b>	<b>6</b>
Revaluation of financial liabilities relating to business acquisition		-	-	-	-
Conversion of convertible bonds	36	10	7	-	-
Dividends		-	-	-	-
Non-cash share-based compensation	36	-	508	-	-
<b>Balance as of 31 December 2016</b>		<b>124,172</b>	<b>143,217</b>	<b>(1,923)</b>	<b>(1,570)</b>

Accumulated deficit	Total	Non-controlling interests	Total equity	
<b>(177,223)</b>	<b>86,673</b>	<b>(325)</b>	<b>86,348</b>	<b>Balance as of 1 January 2017</b>
5,336	5,336	(213)	5,123	Net income (loss) for the period
-	1,212	-	1,212	Other comprehensive income for the period, net of tax
<b>5,336</b>	<b>6,548</b>	<b>(213)</b>	<b>6,335</b>	<b>Total comprehensive income</b>
(3,725)	(3,725)	-	(3,725)	Dividends
-	570	-	570	Non-cash share-based compensation
<b>(175,612)</b>	<b>90,066</b>	<b>(538)</b>	<b>89,528</b>	<b>Balance as of 31 December 2017</b>
<b>(149,986)</b>	<b>113,882</b>	<b>(110)</b>	<b>113,772</b>	<b>Balance as of 1 January 2016</b>
(24,839)	(24,839)	(215)	(25,054)	Net income (loss) for the period
-	(497)	-	(497)	Other comprehensive loss for the period, net of tax
<b>(24,839)</b>	<b>(25,336)</b>	<b>(215)</b>	<b>(25,551)</b>	<b>Total comprehensive income</b>
1,327	1,327	-	1,327	Revaluation of financial liabilities relating to business acquisition
-	17	-	17	Conversion of convertible bonds
(3,725)	(3,725)	-	(3,725)	Dividends
-	508	-	508	Non-cash share-based compensation
<b>(177,223)</b>	<b>86,673</b>	<b>(325)</b>	<b>86,348</b>	<b>Balance as of 31 December 2016</b>

## Consolidated Statement of Cash Flows

Euro amounts in thousands (€ 000s)

	Note	2017	2016
<b>Cash flow from operating activities</b>	32		
Net income (loss) before income taxes		2,698	(18,934)
Depreciation, amortisation and impairment of long-term assets	10, 15, 17	30,578	39,027
Impairment of goodwill	16	-	10,622
Other non-cash income and expenses		716	1,147
Loss (gains) from disposal of long-term assets		13	(8)
Income tax paid		(4,572)	(2,140)
Income tax received		4,091	390
Interest received		850	117
Net financial expenses		4,411	5,834
Changes in provisions	28, 29	(5,737)	3,212
Changes in trade receivables	18	(6,634)	4,256
Changes in trade payables		12,201	(6,487)
Changes in other assets and liabilities		682	3,255
<b>Cash flow from operating activities</b>	32	<b>39,297</b>	<b>40,291</b>
<b>Cash flow from investing activities</b>	33		
Purchase of intangible assets		(6,417)	(6,561)
Purchase of property, plant and equipment		(14,990)	(19,525)
Proceeds from sale of property, plant and equipment		38	52
Proceeds from sale of a subsidiary, less liquid funds thereby disposed of		(430)	-
<b>Cash flow from investing activities</b>	33	<b>(21,799)</b>	<b>(26,034)</b>
<b>Cash flow from financing activities</b>	33		
Dividends paid		(3,725)	(3,725)
Issuance of convertible bonds	27	5	6
Proceeds from issuance of common stock		-	17
Repayment of loans	27	(12,820)	(8,318)
Interest paid		(5,507)	(5,677)
Repayment of liabilities under financing and finance lease arrangements	27	(1,351)	(2,761)
<b>Cash flow from financing activities</b>	33	<b>(23,398)</b>	<b>(20,458)</b>
<b>Change in cash and cash equivalents</b>		<b>(5,900)</b>	<b>(6,201)</b>
Cash and cash equivalents as of 1 January		67,781	73,982
<b>Cash and cash equivalents as of 31 December</b>	22	<b>61,881</b>	<b>67,781</b>



# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE 2017 FINANCIAL YEAR

## Company information

QSC AG is digitising the German SME sector. With decades of experience and expertise in its Cloud, Internet of Things, Consulting, Telecommunications and Colocation businesses, QSC accompanies its customers securely into the digital age. The cloud-based provision of all services offers increased speed, flexibility, and availability. The Company's TÜV and ISO-certified data centres in Germany and its nationwide All-IP network form the basis for maximum end-to-end quality and security. QSC's customers benefit from one-stop innovative products and services that are marketed both directly and via partners.

QSC is a stock corporation registered in the Federal Republic of Germany. Its legal domicile is Mathias-Brüggen-Strasse 55, 50829 Cologne, Germany. The Company is registered in the Commercial Register of the Cologne District Court under number HRB 28281. QSC has been listed on the Deutsche Börse stock exchange since 19 April 2000 and, following the reorganisation of the stock market, in the Prime Standard since the beginning of 2003.

## Accounting policies

### 1 BASIS OF PREPARATION

Pursuant to Article 4 of Regulation (EC) No. 1606/2002 of the European Parliament and the Council dated 19 July 2002, the Company is required to prepare consolidated financial statements in accordance with International Financial Reporting Standards (IFRS). Pursuant to § 315e (1) of the German Commercial Code (HGB), it is thus exempted from preparing consolidated financial statements in accordance with HGB.

QSC prepares its consolidated financial statements in accordance with the IFRSs issued by the International Accounting Standards Board (IASB) that require application in the EU as of 31 December 2017, as well as with the supplementary requirements of § 315e (1) HGB. The Company took due account of all IFRSs requiring mandatory application in the EU in the 2017 financial year, as well as of the interpretations of the International Financial Reporting Interpretations Committee (IFRIC) and the Standing Interpretations Committee (SIC).

In its consolidated financial statements, QSC generally makes application of the cost method. Material exceptions relate to financial instruments recognised at fair value. Liabilities for cash-settled, share-based payments in the form of equity instruments and the net liability for defined benefit pension plans are also recognised at fair value.

The financial year of QSC AG and its subsidiaries (hereinafter also referred to as "QSC") corresponds to the calendar year. The consolidated financial statements are presented in euros. All amounts, unless otherwise stated, are rounded up or down to the nearest thousand euro amount (€ 000s). The rounding up or down of figures may result in minor discrepancies on a scale of € 1k or 0.1% between numbers and percentages in this Annual Report.

No events or transactions which would have a material effect on the Group's net assets, financial position and earnings performance or cash flows occurred between the end of the reporting period and 13 March 2018 (the date on which the consolidated financial statements were approved by the Management Board for submission to the Supervisory Board).

The consolidated income statement has been prepared using the cost-of-sales method. In the interests of clarity and informational value, individual line items have been aggregated in the income statement and balance sheet. These line items are reported and commented on separately in the notes.

## 2 CONSOLIDATION

The consolidated financial statements comprise the financial statements of QSC AG and its subsidiaries as of 31 December of each financial year. The financial statements of subsidiaries included in consolidation have been prepared on the basis of uniform accounting policies pursuant to IFRS 10 (Consolidated Financial Statements). All subsidiaries have the same balance sheet date as the parent company QSC AG.

All intragroup transactions and balances are eliminated in full. Subsidiaries are fully consolidated from the date of acquisition, i.e. the date on which QSC obtains control. Inclusion by way of full consolidation ends upon the parent company no longer exercising control. Information on the companies included in the consolidated financial statements is provided in Note 34.

Non-controlling interests are measured upon acquisition at their respective share of identifiable net assets at the company thereby acquired. Changes in the level of shareholding held by the Company in a subsidiary that do not lead to a loss of control are recognised as equity transactions.

## 3 SIGNIFICANT JUDGEMENTS AND ESTIMATES

The application of accounting policies requires the use of judgements as well as of forward-looking assumptions and estimates. Actual outcomes may differ from those assumptions and estimates. Significant adjustments to the carrying amounts of assets and liabilities may therefore be required within the coming financial year. The use of judgements, assumptions and estimates was required in particular for the accounting treatment of the following items:

### **(a) Judgements made when applying accounting policies which could have the most material impact on the amounts recognised in the consolidated financial statements relate to the following items:**

**Leases.** QSC determines whether an arrangement is or contains a lease on the basis of the substance of the arrangement at the inception date. Discretion is used in determining whether an arrangement grants rights to usage of an asset and the extent to which fulfilment of the contractual agreement depends on usage of one or more specific assets. As of 31 December 2017, lease liabilities totalled € 371k (2016: € 1,722k).

**Factoring.** Within a factoring agreement with NORD/LB Luxembourg S.A. Covered Bond Bank, QSC regularly sells certain short-term trade receivables with a total volume of up to € 18.5 million to the bank. A discretionary decision has to be made concerning the scope of existing risk thereby transferred. Assuming continuing involvement, QSC has recognised receivables of € 158k (2016: € 198k).

**(b) Assumptions and estimates mainly relate to the following items:**

**Impairment of non-financial assets.** At each reporting date, QSC assesses whether there are any indications of impairment for non-financial assets.

It tests goodwill for impairment at least annually and whenever there are indications of such. Impairment is determined by calculating the recoverable amount for the groups of cash-generating units (CGUs). This corresponds to the present value of the expected future cash flows at these units. The groups of CGUs correspond to the reporting segments. Should the recoverable amount of the group of CGUs fall short of the carrying amount of these units, then impairment losses are recognised. Goodwill of € 55,568k was recognised as of 31 December 2017 (2016: € 55,568k). Further details can be found in Note 16.

Furthermore, customer bases acquired in return for payment are also tested for impairment upon any indication of such. Their value is determined using the multi-period excess earnings method. Customer bases of € 15,965k were recognised as of 31 December 2017 (2016: € 19,238k). Further details can be found in Note 17.

**Deferred tax assets.** QSC recognises deferred tax assets for all temporary differences and for all unused tax losses to the extent that it is probable that taxable income will be available against which the tax loss carryovers can be utilised.

Estimates by management are required to determine the amount of deferred tax assets that can be recognised, based upon the likely timing and level of future taxable profits together with underlying tax planning strategies. As of 31 December 2017, corporate income tax loss carryovers at QSC AG and all subsidiaries included in the consolidated financial statements totalled € 523 million (2016: € 529 million), while trade tax loss carryovers came to € 510 million (2016: € 518 million). Deferred tax assets of € 7,806k (2016: € 5,926k) and deferred tax liabilities of € 392k (2016: € 775k) were recognised as of 31 December 2017. Further details can be found in Note 38.

**Trade receivables.** QSC recognises trade receivables in the balance sheet net of allowances. Allowances for doubtful debts are measured on the basis of regular reviews and assessments performed in conjunction with credit monitoring. The assumptions concerning future payment behaviour and customer creditworthiness are subject to significant uncertainties. As of 31 December 2017, trade receivables came to € 54,739k (2016: € 48,251k). Further details can be found in Note 18.

**Provisions.** A provision is recognised when QSC has a legal or constructive obligation as a result of a past event, when it is likely that an outflow of resources embodying economic benefits will be required to settle such an obligation, and when the amount of the obligation can be reliably estimated.

Such estimates are subject to material uncertainties in terms of the timing and level of the obligation. As of 31 December 2017, other provisions and tax provisions totalling € 12,088k (2016: € 16,940k) were recognised in the balance sheet. Further details can be found in Note 29.

With regard to company pensions, individual commitments have been made that constitute defined benefit obligations. Pension provisions are measured using the projected unit credit method prescribed by IAS 19 for defined benefit plans and determined on the basis of actuarial surveys. Actuarial gains or losses are directly charged or credited to equity and thus recognised in other comprehensive income. Further details, particularly concerning the parameters selected, can be found in Note 28.

**Construction contracts.** Receivables from construction contracts are accounted for using the percentage of completion (PoC) method in accordance with IAS 11 if there is a customer-specific order. Revenue and expenses are recognised by reference to the stage of completion of contract activity, which is in turn based on estimated total cost. As of 31 December 2017, receivables from construction contracts totalled € 0k (2016: € 163k). PoC liabilities amounted to € 487k (2016: € 0k).

#### 4 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

**Revenue and expense recognition.** QSC recognises revenue to the extent that it is probable that the economic benefits will flow to the Company and when such revenue can be reliably measured. Revenue is measured at the fair value of the consideration received, less settlement discounts, rebates, VAT and other duties. The following specific recognition criteria must also be met before revenue is recognised:

- Revenue from services is recognised when the services have been provided. QSC recognises revenue for services that have not been provided completely or not throughout the reporting period on a time-apportioned basis up to the end of the reporting period by reference to the percentage of completion.
- QSC defers income from the installation of customer lines on a time-apportioned basis over a contractual period of 24 months (standardised contractual term). Related expenses are capitalised and deferred accordingly.
- Government grants are recognised as other operating income over the periods in which QSC expenses those costs the grants are intended to compensate.
- Construction contracts are accounted for using the percentage of completion (PoC) method. Please also see the comments made in "construction contracts".

- QSC recognises interest income when it arises using the effective interest method (i.e. the rate that discounts estimated future cash flows over the expected life of the financial instrument to its net carrying amount). Interest unwound on finance lease receivables from multiple element arrangements is also presented as interest income.
- Multiple element arrangements consist of a service portion and a hardware lease, where the fair values of the two components are separable and can be reliably determined. Application of IFRIC 4 requirements to hardware leases means that the Outsourcing segment functions as lessor in certain multiple element arrangements. The lease agreements relate to identifiable assets usable exclusively by the customer. Revenues for services performed under the service contract are distributed pro rata over the contractual period. For the portion of the multiple element arrangement classified as a finance lease, the revenues are recognized upon inception of the arrangement and the interest portion is recognized over the term of such. In these cases, amounts owed by customers (lessees) under a finance lease are recognised as discounted receivables. When measuring hardware leases as operating leases, the revenues are recognized on a monthly basis in accordance with the contractual terms. The total contractual performance is apportioned to the respective components using the residual value method.
- Operating expenses are recognised when the performance has been utilised or at the time they are incurred.

**Foreign currency translation.** QSC presents its consolidated financial statements in euros. Transactions in currencies other than the euro are initially recognised using the spot exchange rate on the transaction date. Differences arising from changes in the exchange rate between the transaction date and the settlement or balance sheet date are recognised by QSC through profit or loss.

**Property, plant and equipment.** QSC recognises property, plant and equipment at cost less accumulated depreciation and impairment losses. Repair and maintenance expenses that do not constitute material replacement investments are directly expensed in the period in which they are incurred. The estimated useful lives of assets are taken as the basis for applying straight-line depreciation.

Any excess in the carrying amount of an asset over its respective recoverable amount is recognised through profit or loss as an impairment loss. Property, plant and equipment are subject to straight-line depreciation over the following expected useful lives:

	Useful life in years
<b>Property, plant and equipment</b>	
Building	8–33
Networks and technical equipment	2–27
Installations on third-party land	4–20
Plant and operating equipment	3–15

**Borrowing costs.** Borrowing costs are recognised as an expense in the period in which they are incurred. There are no qualifying assets as defined in IAS 23.

**Business combinations and goodwill.** QSC accounts for business combinations using the acquisition method. This involves recognising all identifiable assets, liabilities and contingent liabilities of the acquired business at fair value. Goodwill arising in a business combination is initially measured at the amount by which the Company's interest in the fair value of the identifiable assets, liabilities and contingent liabilities exceeds the cost of the business combination. QSC tests goodwill for impairment at least once a year and upon any indication that the carrying amount is potentially impaired.

**Other intangible assets.** Intangible assets are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination corresponds to their fair value as of the date of acquisition. Internally generated intangible assets are capitalised if the IAS 38 recognition criteria are met. The costs involved relate primarily to personnel and materials. Costs not eligible for capitalisation are recognised through profit or loss in the period in which they arise. An assessment is made initially as to whether the useful lives of intangible assets are finite or indefinite. Intangible assets with finite lives are subject to straight-line amortisation over their useful economic lives and tested for impairment whenever there is any indication of such. For assets with finite useful lives, the amortisation period and method are reviewed at least at the end of each financial year.

Other intangible assets primarily include software, licences and similar rights as well as non-recurring provisioning costs for activating customer connections. Moreover, brands and customer bases have been recognised as assets in conjunction with initial consolidations.

Any excess in the carrying amount of an asset over its respective recoverable amount is recognised through profit or loss as an impairment loss.

Licences are amortised over periods of up to 10 years and software over periods of 2 to 5 years. Non-recurring provisioning costs for activating customer connections are amortised over an average customer contract term of 24 months. Internally generated intangible assets (development costs) are amortised after completion of the development phase over a period of 3 to 5 years. Acquired brands are written down over periods of 2 to 10 years.

The useful lives of intangible assets identified in the business combinations with IP Partner AG and INFO AG in 2011 are 10 to 20 years for customer bases.

**Financial assets.** QSC classifies financial assets falling within the scope of IAS 39 either as financial assets at fair value through profit or loss, held-to-maturity investments, loans and receivables, or as available-for-sale financial assets.

QSC determines the classification of its financial assets upon initial recognition and tests this designation at the end of each financial year. Items are reclassified where permitted and necessary. Upon initial recognition, QSC measures financial assets at fair value. The Company accounts for all regular way purchases and sales of financial assets on the basis of the trade date, i.e. the date on which it committed to purchasing or selling the asset. Regular way purchases or sales

are purchases or sales of financial assets that require delivery of assets within the period established by regulation or convention in the marketplace.

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. Subsequent to initial recognition, loans and receivables are measured at amortised cost using the effective interest method and net of impairment losses. Gains and losses are recognised through profit or loss when the loans and receivables are derecognised or impaired, as well as through the amortisation process.

Payment due notices are sent out immediately when receivables become overdue. When any receivable not relating to the project business is overdue by 90 days, this is deemed to represent objective evidence that impairment testing is called for pursuant to IAS 39.58. Receivables relating to the project business are considered on a case-by-case basis, i.e. all receivables overdue by more than 180 days are individually tested for impairment.

Other assets in the form of reinsurance claims on life insurance policies, which are not classified as plan assets pursuant to IAS 19, are measured on the basis of the actuarial coverage reserves determined by the relevant insurance company. All other assets are recognised at their nominal values and, in line with their terms, are presented in the balance sheet as "Long-term assets" and "Short-term assets".

**Construction contracts.** Receivables arising on construction contracts are accounted for using the percentage of completion (PoC) method in accordance with IAS 11 if there is a customer-specific order. Profit is recognised by reference to the stage of completion of the contract when the stage of completion, the total contract costs and the contract revenue of the relevant contract can be measured reliably in accordance with the requirements of IAS 11. The stage of completion of a contract is determined using the cost-to-cost method (IAS 11.30a).

When the above requirements are met, total contract revenue is recognised by reference to the stage of completion of the contract. Contract costs comprise costs relating directly to the contract as well as indirectly attributable production overheads. When it is probable that total contract costs will exceed total contract revenue, the expected loss is recognised immediately as an expense. Advance payments from customers are offset against construction contract trade receivables.

**Prepayments.** Transitory items involving outlays prior to the balance sheet date and relating to a specified period after the balance sheet date are recognised as prepayments.

**Inventories.** QSC initially measures inventories at cost. As of the balance sheet date, goods for resale are stated at the lower of cost and net realisable value.

**Cash and cash equivalents.** Cash and cash equivalents reported in the balance sheet and statement of cash flows comprise cash on hand, cash at banks, and short-term deposits with original maturities of three months or less.

**Provisions.** A provision is recognised when QSC has a legal or constructive obligation as a result of a past event, when it is likely that an outflow of resources embodying economic benefits will be required to settle such an obligation, and when the amount of obligation can be reliably estimated. Where QSC expects some or all of a recognised provision to be reimbursed, the reimbursement is recognised as a separate asset if the reimbursement is virtually certain. The expense for allocations to the provision is recognised in the income statement net of any reimbursement.

- **Restructuring measures.** A provision for restructuring measures is recognised as soon as QSC has approved a detailed and formal restructuring plan and the respective measures have either begun or been publicly announced.
- **Dismantling obligations.** Provisions are recognised to cover the obligation to dismantle central office collocations upon expiry of the expected lease term.

**Pensions.** The obligations for defined benefit plans are determined separately for each plan using the projected unit credit method and on the basis of actuarial surveys. Actuarial gains and losses are recognised under other reserves within other comprehensive income. The assumptions used by the Company to measure actuarial obligations are described in Note 28. Obligations for contributions to defined contribution plans are expensed as soon as the associated work has been performed.

**Stock option plans.** QSC's employees may receive share-based compensation in the form of equity instruments in return for work performed. QSC measures the expense of issuing such equity instruments on the basis of the fair value of the equity instrument at the grant or provision date (based on the stock option plans resolved or modified after 7 November 2002) and uses an appropriate option price model. Further details can be found in Note 36. The expense recognised for granting equity instruments and the corresponding increase in equity are spread over the vesting period of the options.

QSC does not recognise any expense for compensation entitlements which cannot be exercised. If the terms and conditions of an equity-based compensation agreement are modified, QSC recognises as a minimum the level of expense that would have arisen in the absence of such modification. If an equity-based compensation agreement is cancelled, QSC accounts for the agreement as if it had been exercised on the cancellation date and recognises the previously unrecognised expense immediately.

**Leases.** QSC determines whether an arrangement is or contains a lease on the basis of the substance of the arrangement at the inception date.

- **QSC as lessee.** In accordance with IAS 17, items attributable to QSC as their economic owner are recognised as assets and depreciated over their useful lives or over the lease term if shorter. The obligation arising from the leasing arrangement is recognised as a liability and reduced over the lease period by the capital portion of the lease payments. Contracts classified as finance leases primarily relate to arrangements for IT hardware and data centre technology.



Leased assets are measured at their fair value or, if lower, at the present value of the minimum lease payments during the non-cancellable period of the lease. In the case of finance lease arrangements, the payments are divided into their constituent elements of financing expense and capital repayment using the effective interest rate method and in such a way that the remaining carrying amount of the lease obligation is subject to a consistent interest rate. Financing expenses are charged to income. QSC's finance leases have remaining terms of 2 years. QSC classifies lease arrangements which do not transfer substantially all the risks and rewards incidental to ownership to the lessee as operating leases. Operating lease payments are recognised as an expense in the income statement on a straight-line basis over the lease term.

- **QSC as lessor.** Based on the requirements of IFRIC 4, QSC acts as the lessor in certain multiple element arrangements. The standard customer contract is then divided into a service contract for services to be rendered and a sale transaction for the leased hardware. For finance leases, the leasing component is recognised as a discounted receivable within "Trade receivables", while the revenues from the sales transaction are recognised in full in the year in which the contract is concluded. Customer payments on the leasing component are divided into principal and interest portions and recognised accordingly. Service revenues are recognised on a time-apportioned basis over the contractual term. Operating lease income is recognised as income through profit or loss on a straight-line basis over the lease term.

**Financial liabilities.** QSC measures all interest-bearing loans on initial recognition at fair value, less directly attributable transaction costs. Subsequently, interest-bearing loans and borrowings are measured at amortised cost using the effective interest method. Gains and losses are recognised in the income statement when the liabilities are derecognised as well.

**Derivative financial instruments.** QSC has since 2014 been party to derivative financial instruments in the form of interest rate swaps which are used to hedge the risk of fluctuations in interest payments.

Derivative financial instruments are recognised initially at the contract date and measured both then and at the end of subsequent reporting periods at their fair value. Positive and negative fair values are reported as assets and other financial liabilities respectively. The fair value of interest-rate derivatives is determined on the basis of present value models, taking account of relevant market information (interest rate curves).

Where derivatives are used to hedge cash flow risks (cash flow hedges), the hedging relationship is documented and its effectiveness measured at each reporting date.

The change in the fair value of the hedging instrument attributable to its effective portion is recognised in the statement of comprehensive income as a change in value charged or credited to equity. The ineffective portion of the hedging relationship is recognised through profit or loss. Amounts recognised in the cash flow hedge reserve are reclassified to the income statement in the period in which the underlying hedged transaction influences earnings.

**Deferred income.** QSC defers one-time income from the installation of customer lines on a time-apportioned basis over a contractual period of 24 months.

**Taxes.** QSC recognises current income tax assets and liabilities for current and prior periods at the amount expected to be reimbursed by or paid to the tax authorities. To calculate this, QSC uses the tax rates and tax laws applicable to the relevant assessment period. Current income taxes relating to items recognised directly in equity are also recognised in equity.

Deferred taxes are recognised using the liability method on temporary differences at the balance sheet date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes. QSC recognises deferred income tax liabilities for all taxable temporary differences, except:

- where the deferred tax liability arises from the initial recognition of goodwill
- where the deferred tax liability arises from the initial recognition of an asset or liability in a transaction that is not a business combination and that at the time of the transaction affects neither the accounting profit nor taxable profit or loss; and
- where the deferred tax liability arises from taxable temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, where the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

QSC recognises deferred tax assets for all deductible temporary differences, unused tax loss carryovers and unused tax credits to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, tax losses and tax credits can be utilised except:

- where the deferred tax asset relating to the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and that at the time of the transaction affects neither the reported result for the period nor taxable profit or loss; and
- in respect of deductible temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, if it is probable that the temporary differences will not reverse in the foreseeable future and insufficient taxable profit will be available against which the temporary differences can be utilised.

The carrying amount of deferred tax assets is reviewed at each balance sheet date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred income tax asset to be utilised. Previously unrecognised deferred tax assets are also reassessed at each balance sheet date and recognised to the extent that it has become probable that future taxable income will allow the deferred tax asset to be recovered. QSC measures deferred tax assets and liabilities at the tax rates expected to apply to the year when the asset is realised or the liability settled based on tax rates and tax laws that have been enacted as of the balance sheet date. Future changes in tax rates have to be accounted for if enacted or substantively enacted by the end of the reporting period. Deferred taxes in connection with items recognised directly in equity in other comprehensive income are likewise recognised directly in equity (in OCI) and not through profit or loss.

Deferred tax assets and deferred tax liabilities are offset if a legally enforceable right exists to set off current tax assets against current tax liabilities and the deferred tax assets and deferred tax liabilities relate to taxes on income at the same taxable entity and due to the same tax authority.

## 5 CHANGES IN ACCOUNTING POLICIES

The following amendments to accounting standards required first-time application in the 2017 financial year. The amendments and their implications for QSC's consolidated financial statements are presented below.

Standard/interpretation	Title of standard/interpretation or amendment	Effective date <sup>1</sup>
Amendments to IAS 7	Disclosure Initiative	1 Jan. 2017
Amendments to IAS 12	Recognition of Deferred Tax Assets for Unrealised Losses	1 Jan. 2017
Improvements to IFRS 2014 – 2016	Amendments to IFRS 12	1 Jan. 2017

<sup>1</sup> Financial years beginning on or after the date stated.

**Amendments to IAS 7 – Disclosure Initiative.** The amendments have improved the information provided on changes in the Company's liabilities. QSC provides disclosures on changes in those financial liabilities for which the cash flows are presented in the cash flow statement as cash flows from financing activities. Related financial assets are also included in the disclosures. Disclosures are made for the following cases: cash-effective changes, changes resulting from the acquisition or disposal of companies, changes due to the effects of changes in foreign exchange rates, changes in fair values and other changes. The Company has provided a reconciliation which presents the changes between the opening and closing balances for the relevant financial liabilities.

**Amendments to IAS 12 – Recognition of Deferred Tax Assets for Unrealised Losses.** The amendments clarify the recognition of deferred tax assets for unrealised losses in the context of debt instruments measured at fair value. The amendments have not had any material implications for the consolidated financial statements of QSC AG.

**Improvements to IFRS 2014 – 2016 – Amendments to IFRS 12.** The Annual Improvements to IFRSs (2014 – 2016) have amended three IFRSs. Only the amendment to IFRS 12 required application in 2017.

This clarifies that IFRS 12 disclosures basically also apply for investments in subsidiaries, joint ventures or associates classified as held for sale pursuant to IFRS 5. One exception in this respect relates to the disclosures called for in IFRS 12.B10-B16 (financial information).

This amendment has not had any implications for the consolidated financial statements of QSC AG, as the Company had no assets or liabilities classified under IFRS 5 in the 2017 financial year. QSC does not plan to make premature application of the following new or amended standards and interpretations only requiring mandatory application in subsequent financial years. Unless otherwise stated, their implications for QSC's consolidated financial statements are currently being reviewed.

Standard/interpretation	Title of standard/interpretation or amendment	Effective date <sup>2</sup>
<b>EU endorsement already provided</b>		
IFRS 9	Financial Instruments	1 Jan. 2018
IFRS 15	Revenue from Contracts with Customers	1 Jan. 2018
IFRS 16	Leases	1 Jan. 2019
Amendments to IFRS 4	Applying IFRS 9 Financial Instruments with IFRS 4 Insurance Contracts	1 Jan. 2018
Amendment to IFRS 15	Clarifications to IFRS 15	1 Jan. 2018
Improvements to IFRS 2014 – 2016	Amendments to IFRS 1 and IAS 28	1 Jan. 2018
<b>EU endorsement still outstanding</b>		
IFRS 17	Insurance Contracts	1 Jan. 2021
Amendments to IFRS 2	Classification and Measurement of Share-based Payment Transactions	1 Jan. 2018
Amendments to IFRS 9	Financial Assets Including Prepayment Features with Negative Compensation	1 Jan. 2019
Amendments to IFRS 10 and IAS 28	Sale or Contribution of Assets between an Investor and its Associate or Joint Venture	.. <sup>3</sup>
Amendments to IAS 28	Long-term Interests in Associates and Joint Ventures	1 Jan. 2019
Amendments to IAS 40	Transfers of Investment Property	1 Jan. 2018
IFRIC 22	Foreign Currency Transactions and Advance Consideration	1 Jan. 2018
IFRIC 23	Uncertainty over Income Tax Treatments	1 Jan. 2019
Improvements to IFRS 2015 – 2017	Amendments to IFRS 3, IFRS 11, IAS 12 and IAS 23	1 Jan. 2019
Amendments to IAS 19	Measurement of Pension Obligations upon Plan Amendment, Curtailment or Settlement based on Updated Assumptions	1 Jan. 2019

<sup>2</sup> Financial years beginning on or after the date stated.

<sup>3</sup> The IASB decided on 17 December 2015 to postpone the effective date of this amendment standard indefinitely.

**(a) EU endorsement already provided**

**IFRS 9 Financial Instruments.** IFRS 9 supersedes the existing requirements set out in IAS 39 and sets out revised requirements for the classification and measurement of financial instruments, including a new model for expected credit losses for the purposes of determining the impairment of financial assets, as well as new general requirements for hedge accounting. It also takes over the requirements for the recognition and derecognition of financial instruments contained in IAS 39.

QSC intends to apply the full retrospective method for the transition and will draw on the exemption which permits companies not to adjust comparative information for prior periods with regard to changes in classification and measurement (including impairment). Differences which arise between the carrying amounts of financial assets and financial liabilities due to IFRS 9 application will generally be recognised in other reserves as of 1 January 2018.

IFRS 9 requires extensive new disclosures, particularly with regard to hedge accounting, credit risk and expected credit losses. The Company's assessment included an analysis to identify the existence of any data omissions compared with the current procedure.

QSC is obliged to apply IFRS 9 Financial Instruments as of 1 January 2018.

**1. Classification – financial assets and liabilities.** All of QSC's financial assets and liabilities that are within the scope of IFRS 9 involve primary debt instruments. The requirements of the new standard chiefly apply to the subsequent measurement of financial assets.

IFRS 9 includes three categories for classifying financial assets: measured at amortised cost, measured at fair value through profit or loss (FVTPL) and measured at fair value in other comprehensive income (FVOCI). The standard eliminates the following existing IAS 39 categories: held to maturity, loans and receivables, and available for sale. The classification of financial liabilities is largely unchanged.

The classification category results from management requirements for financial debt instruments ("business model") and the cash flow criterion ("basic loan feature/SPPI"). Unlike IAS 39, IFRS 9 never permits derivatives which are embedded in contracts in which the underlying instrument is a financial asset falling within the scope of the standard to be accounted for separately. Classification of the hybrid financial instrument is rather based on an assessment of the instrument in its entirety.

Based on our assessment, we believe that the classification requirements will not have any implications for QSC's primary debt instruments. In particular, trade receivables and bank loans will continue to be recognised at amortised cost.

IFRS 9 largely retains existing IAS 39 requirements for the classification of financial liabilities. The changes are not relevant for QSC.

**2. Impairments.** IFRS 9 replaces the "incurred loss model" in IAS 39 with a forward-looking expected credit loss model. Alongside an appraisal of information about past events and current conditions, due account also has to be taken of forecasts of future economic conditions. Based on the impairment methodology set out below, QSC does not expect to see any changes in its impairment losses.

– **Trade receivables and other receivables.** The estimated volume of expected receivables defaults was calculated on the basis of experience with actual receivables defaults. QSC subdivides its trade receivables into two groups: receivables from the project business and other receivables.

The recoverability of receivables from the project business is generally considered on an individual case basis. Based on previous experience, however, QSC does not recognise any allowance unless the customer's creditworthiness has changed significantly in the first 180 days following performance of the respective service. Similarly, based on previous experience other receivables are generally written down if they are more than 90 days overdue. In the past, the volume of allowances recognised approximated to the receivables defaults actually arising, as a result of which the trade receivables as measured virtually corresponded to their fair values, as is apparent in the tables below.

Financial year	Receivables from project business (€ 000s)	Actual impairment requirement (€ 000s)	Default rate
2015	24,712	46	0.2%
2016	19,313	56	0.3%
2017	21,692	29	0.1%

Financial year	Other receivables (€ 000s)	Actual impairment requirement (€ 000s)	Default rate
2015	28,575	-	0.0%
2016	28,938	481	1.7%
2017	33,047	-	0.0%

In terms of their respective contents, long-term trade receivables attributable to multiple element arrangements are linked to the receivables from the project business. Given the low level of default risk involved, allowances are only recognised if any specific payment difficulties become known. Short-term trade receivables are generally settled by customers within 90 days.

There is only a weak correlation between the development in credit quality and gross domestic product, as a result of which only a substantial change or the identification of a more closely correlating parameter would have any impact on the specific allowance.

QSC believes that impairments for assets within the scope of the IFRS 9 impairment model will neither increase nor become more volatile. Application of the IFRS 9 impairment requirements will therefore not result in any additional impairment losses.

- **Cash and cash equivalents.** QSC is convinced that application of the IFRS 9 impairment requirements as of 1 January 2018 will not result in any material impairments. Cash and cash equivalents are exclusively deposited on a short-term basis at German banks which, as of 31 December 2017, were rated by the rating agencies Standard & Poor's and Fitch at A-1 to A-2 and A-/- respectively.
- **Hedge accounting.** For its interest hedge accounting, QSC draws on the option of continuing to account for the respective instruments in accordance with IAS 39 requirements and reserves the right to convert, where appropriate, to IFRS 9 requirements at a later point in time.

**IFRS 15 Revenue from Contracts with Customers (including the amendment to IFRS 15 dated April 2016).** IFRS 15 sets out a comprehensive framework for determining the amount and timing of revenue recognition. The new standard provides for a uniform, five-step revenue recognition model that is basically applicable to all contracts with customers. It replaces the existing requirements governing revenue recognition, including those contained in IAS 18 Revenue, IAS 11 Construction Contracts and IFRIC 13 Customer Loyalty Programmes.

IFRS 15 requires mandatory application for the first time in financial years beginning on or after 1 January 2018. QSC will make first-time application of the new standard for the financial year beginning on 1 January 2018 and intends to adopt the modified retrospective method and thus present comparative periods in accordance with the simplified transition requirements provided for in IFRS 15. Consistent with this approach to first-time application, the contracts not yet fully performed as of 1 January 2018 will be accounted for as if they had been recognised in accordance with IFRS 15 requirements from the outset. In accordance with this approach, any cumulative item potentially arising will be recognised directly in equity. The comparative figures for prior periods will therefore not be adjusted. The changes arising in line items in the balance sheet and income statement for the 2018 reporting period as a result of first-time application of IFRS 15 will rather be explained as appropriate.

QSC has performed investigations to identify the implications of IFRS 15 and to ensure that these have been identified in full. It has also analysed the materiality of these implications. The investigations performed on the potential implications for the consolidated financial statements concluded that, apart from the two exceptions outlined below, these would be immaterial and that no cumulative item requiring recognition as an adjustment to the relevant equity components in the opening balance sheet would arise upon first-time application of IFRS 15 as of the respective application date. The exceptions relate on the one hand to balance sheet recognition (introduction of the new "Contract assets" and "Contract liabilities" line items) and on the other hand to note disclosures, which have been extended in both qualitative and quantitative terms. Within the framework of the accounting requirement currently applied, QSC already meets the requirement to recognise the costs additionally incurred to acquire a customer contract as an asset as soon as it can be assumed that these costs can be recovered.

**IFRS 16 Leases.** IFRS 16 introduces a uniform accounting model for recognising leases in the balance sheet at lessees. In this model, a lessee recognises a right-of-use asset that embodies its right to use the underlying asset and a lease liability that embodies its obligation to make lease payments. Exceptions apply for short-term leases and low-value asset lease. The accounting treatment at lessors is comparable with the current standard, i.e. lessors are still required to classify leases as finance or operating leases.

IFRS 16 replaces the existing standards and interpretations on leases, including IAS 17 Leases, IFRIC 4 Determining Whether an Arrangement Contains a Lease, SIC-15 Operating Leases – Incentives and SIC-27 Evaluating the Substance of Transactions Involving the Legal Form of a Lease. The standard requires first-time application in the first reporting period in financial years beginning on or after 1 January 2019. Earlier application is permitted for companies that also apply IFRS 15 Revenue from Contracts with Customers upon initial adoption of IFRS 16 or earlier. The Company will not make premature application of IFRS 16.

QSC has completed an initial assessment of the potential implications for its consolidated financial statements but has not yet performed any more detailed assessment. The actual implications of IFRS 16 application for the consolidated financial statements upon first-time application will depend on future economic conditions, such as the interest rate applicable at the Company as of 1 January 2019, the composition of the leasing portfolio as of that date, the Company's assessment concerning the exercising of extension options and the extent to which it draws on exceptions and statement exemptions.

QSC intends to apply IFRS 16 for the first time as of 1 January 2019 and to draw on the modified retrospective method. For this reason, the cumulative effect resulting from application of IFRS 16 will be recognised as an adjustment to the opening balance sheet figures for other reserves as of 1 January 2019 without any adjustment to the comparative information.

#### **(b) EU endorsement still outstanding**

##### **Amendments to IFRS 2 – Classification and Measurement of Share-based Payment Transactions.**

The amendments relate to the accounting treatment of exercising conditions in connection with the measurement of cash-settled share-based payments, the classification of share-based payments settled net of tax withholdings, and the recognition of any change in the classification of the compensation from "cash-settled" to "equity-settled".

QSC currently does not expect this to have any material implications for the consolidated financial statements.

**Amendments to IFRS 9 – Financial Assets Involving Prepayment Features with Negative Compensation.** The amendments involve a limited adjustment to the assessment criteria used to classify financial assets. If certain conditions are met, financial assets including a prepayment feature with negative compensation may be recognised at amortised cost or at fair value in other comprehensive income rather than at fair value through profit or loss.



Subject to adoption into EU law, the amendments require first-time application as of 1 January 2019. QSC currently does not expect this to have any material implications for the consolidated financial statements.

**IFRIC 22 Foreign Currency Transactions and Advance Consideration.** IFRIC 22 addresses an application question relating to IAS 21 The Effects of Changes in Foreign Exchange Rates. It clarifies the time from which the exchange rate used to translate foreign-currency transactions involving the receipt or payment of advance consideration is to be determined. It states that the translation rate for the underlying asset, income or expense should be determined by reference to the date of initial recognition of the asset or liability resulting from the advance consideration. QSC currently does not expect this to have any material implications for the consolidated financial statements.

**IFRIC 23 Uncertainty over Income Tax Treatments.** The tax treatment of specific circumstances and transactions may depend on the future recognition of such by the tax authorities or fiscal courts. IAS 12 Income Taxes sets out how current and deferred taxes should be recognised. IFRIC 23 supplements the requirements of IAS 12 by addressing uncertainties regarding the income tax treatment of circumstances and transactions. QSC currently does not expect this to have any material implications for the consolidated financial statements.

**Improvements to IFRS 2015–2017 – Amendments to IFRS 3, IFRS 11, IAS 12 and IAS 23.** The Annual Improvements to IFRSs (2015–2017) have amended four IFRSs. For IFRS 3 the amendments clarify that, when an entity obtains control of a business that is a joint operation, it must apply the principles governing step business combinations. The interest previously held by the acquirer must be remeasured. For IFRS 11 the amendments clarify that, when an entity obtains joint control of a business that is joint operation, it is not required to remeasure previously held interests in that business. IAS 12 has been amended to confirm that all income tax consequences of dividends should be treated in the same way as the income on which the dividends are based. Finally, in IAS 23 the amendments determine that, when calculating the capitalisation rate for funds that an entity generally borrows to procure qualifying assets, no account should be taken of the costs of borrowing specifically taken up to procure the qualifying assets until such time that the related assets are complete. QSC currently does not expect this to have any material implications for the consolidated financial statements.

**IAS 19 Employee Benefits.** IAS 19 requires pension obligations to be measured on the basis of updated assumptions in the event of plan amendments, curtailments and settlements. The present amendment clarifies that, following such event, service cost and net interest for the remaining period have to be accounted for on the basis of updated assumptions. QSC currently does not expect this to have any material implications for the consolidated financial statements.

## Notes to the Consolidated Income Statement

### 6 REVENUES

QSC generated revenues of € 107,222k with resellers (2016: € 126,556k) and revenues of € 250,645k with end customers (2016: € 259,423k). Resellers offer QSC's products and services to end customers under their own name and on their own account.

Revenues from construction contracts came to € 1,479k in the year under report (2016: € 535k). These did not result in any material losses. Revenues from hardware leases in the context of multiple element arrangements amounted to € 2,866k in 2017 (2016: € 2,266k). A breakdown of revenues can be found in the Segment Report (Note 35).

### 7 COST OF REVENUES

Of total research and development expenses of € 4,671k (2016: € 5,144k), an amount of € 216k was capitalised as development expenses in the 2017 financial year (2016: € 0k).

€ 000s	2017	2016
Purchased services	148,318	161,648
Building, operation and maintenance of infrastructure	41,538	43,067
Depreciation and amortisation	24,743	29,432
Personnel expenses	76,234	78,196
Non-cash share-based compensation	226	255
<b>Cost of revenues</b>	<b>291,059</b>	<b>312,598</b>

**8 SALES AND MARKETING EXPENSES**

€ 000s	2017	2016
Personnel expenses	16,288	16,996
Commission payments	7,048	10,894
Other sales and marketing expenses	1,460	2,238
Allowances for bad debt and fair dealing payments	3	539
Advertising expenses	2,366	2,298
Depreciation and amortisation	1,296	1,614
Non-cash share-based compensation	85	104
<b>Sales and marketing expenses</b>	<b>28,546</b>	<b>34,683</b>

**9 GENERAL AND ADMINISTRATIVE EXPENSES**

€ 000s	2017	2016
Other general and administrative expenses	13,212	15,083
Personnel expenses	13,828	16,739
Depreciation and amortisation	3,440	4,676
Non-cash share-based compensation	259	149
<b>General and administrative expenses</b>	<b>30,739</b>	<b>36,647</b>

## 10 WRITE-DOWNS AND IMPAIRMENTS

Write-downs and impairments are allocated to individual corporate functions as follows:

€ 000s	2017	2016
Write-downs of cost of revenues	24,743	29,432
Write-downs of sales and marketing expenses	1,296	1,614
Write-downs of general and administrative expenses	3,440	4,676
Write-downs of other operating expenses	1,100	13,927
<b>Write-downs and impairments</b>	<b>30,579</b>	<b>49,649</b>

## 11 OTHER OPERATING INCOME AND EXPENSES

€ 000s	2017	2016
Other operating income	1,727	2,455
Income from subsidised projects	721	211
Income from disposal of long-term assets	36	32
<b>Other operating income</b>	<b>2,484</b>	<b>2,698</b>

€ 000s	2017	2016
Goodwill impairment	-	10,622
Write-downs of customer bases	1,100	3,305
Other operating expenses	1,749	3,882
Losses from disposal of long-term assets	49	40
<b>Other operating expenses</b>	<b>2,898</b>	<b>17,849</b>

Other operating income mainly includes income of € 1,191k from third parties in connection with value added services (2016: € 1,614k) and non-period income of € 213k (2016: € 87k). Other operating expenses mainly comprise expenses of € 1,202k in connection with value added services (2016: € 1,629k) and expenses of € 319k for the dismantling of decommissioned technical space (2016: € 1,889k).

## 12 FINANCIAL RESULT

The financial expenses of € 4,658k (2016: € 6,030k) mainly include interest expenses for loans and interest on interest rate hedges, which together amounted to € 4,246k (2016: € 4,907k). Furthermore, interest expenses also include expenses of € 25k for financing arrangements (2016: € 96k). The net interest charge on pension provisions amounts to € 105k (2016: € 135k). No borrowing costs attributable to qualifying assets were incurred.

## 13 EARNINGS PER SHARE

The calculation of basic earnings per share is based on the consolidated net income attributable to ordinary shareholders in the parent company and the weighted average number of shares in circulation in the year under report.

A total of 124,172,487 shares were in circulation throughout the 2017 financial year.

The calculation of diluted earnings per share is based on the consolidated net income attributable to ordinary shareholders in the parent company and the weighted average number of shares in circulation in the year under report following adjustment for all dilutive effects of the convertible bonds issued in connection with stock option plans.

€ 000s	2017	2016
Consolidated net income attributable to shareholders		
in the parent company (basic)	5,336	(24,839)
Share-based compensation in connection		
with subscribed convertible bonds	(11)	(276)
Consolidated net income attributable to shareholders		
in the parent company (diluted)	5,325	(25,115)

Unit share	2017	2016
Weighted average number of shares issued (basic)	124,172,487	124,164,987
Effect of conversion of convertible bonds	337,500	539,100
Weighted average number of shares issued (diluted)	124,509,987	124,704,087

The conversion effects for convertible bonds resulting from stock option plans and the associated share-based compensation only account for those convertible bonds for which the conversion terms were met at the balance sheet date, even if the respective holding period prior to conversion had not yet expired.

#### 14 PERSONNEL EXPENSES AND EMPLOYEES

€ 000s	2017	2016
Wages and salaries	92,401	98,150
Employer social security contributions (pension insurance)	6,801	6,872
Employer social security contributions (other)	6,709	6,527
Pension expenses	439	382
Non-cash share-based compensation	570	508
<b>Personnel expenses</b>	<b>106,920</b>	<b>112,439</b>

Wages and salaries include expenses of € 5,019k for the termination of employment contracts (2016: € 8,699k).

During the 2017 financial year, the companies included in consolidation had an average total of 1,356 employees (2016: 1,384). The following table presents the distribution of employees by corporate function.

	2017	2016
Sales and marketing	187	198
Technology and consulting	1,056	1,055
Administration	104	121
Head office departments	9	10
<b>Number of employees by corporate function (average)</b>	<b>1,356</b>	<b>1,384</b>

## Notes to the Consolidated Balance Sheet

### 15 PROPERTY, PLANT AND EQUIPMENT

€ 000s	Land and buildings	Network and technical equipment	Operational and business equipment	Total
<b>Gross value at 1 Jan. 2016</b>	<b>30,012</b>	<b>380,322</b>	<b>57,024</b>	<b>467,358</b>
Additions	37	20,504	584	21,125
Disposals	-	(745)	(368)	(1,113)
Reclassifications	-	107	(107)	-
Reclassifications to assets held for sale	-	-	(108)	(108)
<b>Gross value at 31 Dec. 2016</b>	<b>30,049</b>	<b>400,188</b>	<b>57,025</b>	<b>487,262</b>
Additions	-	11,020	2,193	13,213
Disposals	(11)	(163,323)	(32,077)	(195,411)
Reclassifications	-	3	(5)	(2)
<b>Gross value at 31 Dec. 2017</b>	<b>30,038</b>	<b>247,888</b>	<b>27,136</b>	<b>305,062</b>
<b>Accumulated depreciation and impairments at 1 Jan. 2016</b>	<b>4,860</b>	<b>328,957</b>	<b>45,997</b>	<b>379,814</b>
Additions	830	18,700	2,134	21,664
Disposals	-	(790)	(270)	(1,060)
Reclassifications	-	3	(3)	-
Reclassifications to assets held for sale	-	-	(69)	(69)
<b>Accumulated depreciation and impairments at 31 Dec. 2016</b>	<b>5,690</b>	<b>346,870</b>	<b>47,789</b>	<b>400,349</b>
Additions	820	16,007	2,228	19,055
Disposals	-	(163,287)	(32,064)	(195,351)
Reclassifications	-	(2)	2	-
<b>Accumulated depreciation and impairments at 31 Dec. 2017</b>	<b>6,510</b>	<b>199,588</b>	<b>17,955</b>	<b>224,053</b>
<b>Carrying amounts at 31 Dec. 2016</b>	<b>24,359</b>	<b>53,318</b>	<b>9,236</b>	<b>86,913</b>
<b>Carrying amounts at 31 Dec. 2017</b>	<b>23,528</b>	<b>48,300</b>	<b>9,181</b>	<b>81,009</b>

As of 31 December 2017, the carrying amount of technical equipment and operating and business equipment held under lease arrangements totalled € 471k (2016: € 842k).

Additions in the 2017 financial year totalled € 13,213k (2016: € 21,125k). As of 31 December 2017, the "Network and technical equipment" line item included assets under construction amounting to € 169k (2016: € 2,366k) relating to the expansion of data centres.

In the income statement, QSC recognises depreciation and amortisation under cost of revenues, sales and marketing expenses and general and administrative expenses respectively.

Liens have been granted on real estate as security for loan liabilities (Note 27).

## 16 GOODWILL

Consistent with IFRS 8 requirements, the Company's internal organisational structure used by the management for business decisions and performance assessments has been referred to as the basis for delineating segments. Accordingly, segment reporting is aligned to the Company's product structure. This has resulted in the segments of Telecommunications, Outsourcing, Consulting and Cloud.

The groups of cash-generating units (CGUs) to which goodwill has been allocated correspond to the operating segments determined for the companies included in consolidation pursuant to IFRS 8.5. The operating segments represent the lowest level of reporting at the companies included in consolidation for which goodwill is systematically monitored. The carrying amount of goodwill is allocated to the segments as follows:

€ 000s	2017	2016
Telecommunications	20,844	20,844
Consulting	10,409	10,409
Cloud	24,315	24,315
<b>Carrying amount of goodwill</b>	<b>55,568</b>	<b>55,568</b>

The goodwill allocated to the **Outsourcing segment** was written down in full in the 2016 financial year.

QSC determines the recoverable amount of the CGUs as their value in use and refers here to the cash flow forecasts based on the Management Board's planning for the Company for a three-year period. This planning accounts for management expectations with respect to the future performance of individual business units and also takes due account of internal assumptions concerning the marketing opportunities for innovative applications in the ICT market, as well as of past experience.



The **Telecommunications segment** comprises the two areas of corporate customers and resellers. In the resellers business, regulation and the market-related decline in the low-margin Voice and ADSL2+ businesses have led to a further marked reduction in revenues. This contrasts with slight revenue growth in the corporate customer business. The resultant decline in the margin in this segment can only be partly offset by lower structural expenses in the detailed planning period. This will lead to a slight decline in EBIT with a stable EBIT margin. The sustainable growth rate has been accounted for at 0% (2016: 0%).

In the **Consulting segment**, the mainly customer-driven need to convert to S/4HANA will lead to strong revenue growth in the years from 2018 to 2020. This revenue performance and the increasing deployment of internal rather than external staff will significantly increase EBIT and the EBIT margin. The sustainable growth rate has been accounted for at 0.5% in the corporate planning (2016: 0.5%).

The especially strong revenue growth in the **Cloud segment**, comparable with the development in revenues for innovative new product developments, is largely attributable to the new Pure Enterprise Cloud (PEC) platform. Alongside the acquisition of new customers, a further key growth driver results above all from migrating existing Outsourcing customers. A further strong growth area involves activities at QSC's subsidiary Q-load, which offers services for the Internet of Things (IoT) business field. Consistent with the revenue forecast, EBIT and the EBIT margin will also show correspondingly strong growth. As revenue growth is also expected beyond 2020, the sustainable growth rate for the Cloud segment has been stated at 1.0% (2016: 1.0%).

To discount the cash flows expected for the respective CGUs, the segment-specific weighted average costs of capital (WACC) were determined. Segment-specific beta factors were derived by reference peer group data. Segment-specific pre-tax discount rates are as follows:

	2017	2016
Telecommunications	8.84%	9.07%
Consulting	8.10%	9.22%
Cloud	11.89%	12.00%

The discount rate is a pre-tax key figure. It has been based on the yield on government bonds issued by the government on the relevant markets and denominated in the same currencies as the underlying cash flows. This discount rate is adjusted to account for a risk premium reflecting the higher overall risk involved in an equity investment and the specific risk profiles of individual CGUs.

The values in use of the Telecommunications, Consulting and Cloud CGUs exceeded the carrying amounts of the respective assets by the amounts presented in the following table:

	2017	2016
Telecommunications	86,341	64,532
Consulting	15,283	8,984
Cloud	27,687	27,181

The calculation of the CGUs' value in use is subject to forecasting uncertainties, particularly in respect of the development in prices and market shares, with these uncertainties requiring consideration when planning revenues, gross profit, the capex ratio and the discount rate.

Various scenario analyses were performed for the impairment test. An impairment requirement would arise in the CGUs if, all other factors being equal, revenues in the final planning year, and thus in perpetuity, were to fall short of the revenues assumed in the planning by the following amounts:

	2017	2016
Telecommunications	-11.1%	-8.6%
Consulting	-3.4%	-2.4%
Cloud	-5.1%	-6.4%

## 17 OTHER INTANGIBLE ASSETS

€ 000s	Licenses	Acquired software	Internally generated software	Customer connections	Customer bases	Brands	Other	Total
<b>Gross value</b>								
<b>at 1 Jan. 2016</b>	<b>2,059</b>	<b>31,999</b>	<b>16,019</b>	<b>142,175</b>	<b>36,223</b>	<b>2,426</b>	<b>15,871</b>	<b>246,772</b>
Additions	81	1,471	-	5,582	-	-	106	7,240
Disposals	-	(267)	(4,606)	-	-	-	-	(4,873)
Reclassifications to assets held for sale	-	-	(2,755)	-	-	-	(6)	(2,761)
<b>Gross value at 31 Dec. 2016</b>	<b>2,140</b>	<b>33,203</b>	<b>8,659</b>	<b>147,757</b>	<b>36,223</b>	<b>2,426</b>	<b>15,971</b>	<b>246,379</b>
Additions	96	1,259	143	4,473	-	200	21	6,192
Disposals	(377)	(19,221)	-	(89,060)	-	-	(3,927)	(112,585)
Reclassifications	-	2	-	-	-	-	-	2
<b>Gross value at 31 Dec. 2017</b>	<b>1,859</b>	<b>15,243</b>	<b>8,802</b>	<b>63,170</b>	<b>36,223</b>	<b>2,626</b>	<b>12,065</b>	<b>139,988</b>
<b>Accumulated amortisation and impairments</b>								
<b>at 1 Jan. 2016</b>	<b>1,390</b>	<b>24,552</b>	<b>15,456</b>	<b>135,209</b>	<b>11,315</b>	<b>2,426</b>	<b>15,013</b>	<b>205,361</b>
Additions	103	4,919	58	6,455	5,670	-	157	17,363
Disposals	-	(267)	(4,606)	-	-	-	-	(4,873)
Reclassifications to assets held for sale	-	-	(2,249)	-	-	-	(2)	(2,251)
<b>Accumulated amortisation and impairments at 31 Dec. 2016</b>	<b>1,493</b>	<b>29,204</b>	<b>8,659</b>	<b>141,664</b>	<b>16,985</b>	<b>2,426</b>	<b>15,168</b>	<b>215,599</b>
Additions	107	2,711	10	5,311	3,273	-	112	11,524
Disposals	(330)	(19,221)	-	(89,060)	-	-	(3,873)	(112,484)
<b>Accumulated amortisation and impairments at 31 Dec. 2017</b>	<b>1,270</b>	<b>12,694</b>	<b>8,669</b>	<b>57,915</b>	<b>20,258</b>	<b>2,426</b>	<b>11,407</b>	<b>114,639</b>
<b>Carrying amounts</b>								
<b>at 31 Dec. 2016</b>	<b>647</b>	<b>3,999</b>	<b>-</b>	<b>6,093</b>	<b>19,238</b>	<b>-</b>	<b>803</b>	<b>30,779</b>
<b>at 31 Dec. 2017</b>	<b>589</b>	<b>2,549</b>	<b>133</b>	<b>5,255</b>	<b>15,965</b>	<b>200</b>	<b>658</b>	<b>25,349</b>

Customer connections involve non-recurring commission payments made to retailers and distributors for each new customer line. These are capitalised together with installation costs under intangible assets and written down over a period of 24 months.

Impairment losses of € 1,100k have been recognised on capitalised customer bases. These relate to customer relationships recognised at INFO AG in 2011 in the context of a purchase price allocation performed upon the business combination and involving the Outsourcing, Consulting and Cloud segments. The impairment requirement arose due to falling revenues with existing customers, especially in the Outsourcing business. The value was determined using the residual value method. The discount rate was derived from the parameters used for goodwill impairment tests. The costs of equity were determined using the capital asset pricing model (CAPM) and with reference to the following parameters: base rate, market risk premium and beta factor at peer group companies. The costs of debt were calculated using the credit spread based on market data. Prior to the impairment loss recognised on customer bases, the carrying amount came to € 4,572k as of 31 December 2017. The recoverable amount stood at € 3,472k. This gave rise to an impairment requirement of € 1,100k.

QSC has recognised the impairment loss under other operating expenses in its income statement.

## 18 TRADE RECEIVABLES

€ 000s	2017	2016
<b>Trade receivables</b>		
Long-term trade receivables	2,461	2,435
Short-term trade receivables	52,278	45,816
<b>Trade receivables</b>	<b>54,739</b>	<b>48,251</b>

Long-term trade receivables are attributable to the recognition of leasing receivables for multiple element arrangements. The receivables presented are not subject to any material restrictions on ownership or availability. The carrying amounts correspond to the fair values.

QSC typically concludes full amortisation contracts with average rental terms of 36 to 48 months and without purchase options. Following expiry of the basic rental period, it has the option of extending the contract or selling leased items for which no purchase options were granted. No residual values are guaranteed.

Trade receivables include uncompleted contracts recognised using the percentage-of-completion (PoC) method pursuant to IAS 11. The amount reported comprises cumulative contract

expenses incurred up to the balance sheet date plus a proportion of profit earned on the relevant contracts based on the cost-to-cost method. Advance payments of € 1,684k were deducted for these contracts (2016: € 107k). Write-downs of € 103k were recognised due to the valuation of long-term construction contracts in the year under report (2016: € 2k).

Receivables from construction contracts amounting to € 0k have been recognised under trade receivables (2016: € 163k).

Short-term trade receivables bear no interest and generally have maturities of 30 to 90 days. Allowances are recognised in the full amount of all receivables that are more than 90 days overdue, except for receivables from the project business. These are considered on an individual case basis, i.e. all receivables more than 180 days overdue are individually tested for impairment. As of 31 December 2017, trade receivables amounting to € 3,196k were impaired (2016: € 3,397k). The individual allowances schedule developed as follows:

€ 000s	2017	2016
<b>Allowance at 1 January</b>	<b>3,397</b>	<b>3,434</b>
Charged for the year	64	210
Utilised	-	(2)
Reversed	(265)	(245)
<b>Allowance at 31 December</b>	<b>3,196</b>	<b>3,397</b>

The analysis of trade receivables as of 31 December is as follows:

€ 000s	2017	2016
<b>Gross total</b>		
Impaired	3,792	4,041
Neither past due nor impaired	47,207	41,301
Past due but not impaired		
< 90 days	6,925	6,306
91 – 120 days	-	-
> 120 days	11	-
<b>Gross total</b>	<b>57,935</b>	<b>51,648</b>

Within a factoring agreement with NORD/LB Luxembourg S.A. Covered Bond Bank, QSC regularly sells certain short-term trade receivables with a total volume of up to € 18.5 million to the bank. As of the balance sheet date, trade receivables with a nominal amount of € 10.5 million had been transferred (2016: € 13.2 million).

In the event of any default, the factoring company will collect the amount deposited on the reserve account (2017: € 158k; 2016: € 198k). Furthermore, under the factoring agreement any payments received from the commercial credit insurance will each be assigned to the factoring company in the amount of the claims accruing from the receivables sold.

The nominal amount corresponds to the fair value of the receivables assigned. Apart from retained default risk of € 158k (2016: € 198k), the receivables thereby assigned have been retired.

## 19 PREPAYMENTS

The long-term prepayments of € 2,549k (2016: € 3,161k) and short-term prepayments of € 6,809k (2016: € 5,107k) chiefly consist of prepayments for maintenance agreements, leased lines, leased technology premises and insurance.

## 20 INVENTORIES

Inventories totalled € 649k as of 31 December 2017 (2016: € 73k) and comprised merchandise held in stock amounting to € 622k (2016: € 48k) and consumables of € 27k (2016: € 25k).

## 21 OTHER SHORT-TERM ASSETS

Other short-term assets amount to € 569k (2016: € 1,533k) and mainly comprise receivables of € 181k due from the tax authorities (2016: € 77k), security of € 158k (2016: € 198k) that is subject to restrictions on disposability due to the sale of the respective receivables and creditors with debit accounts of € 18k (2016: € 377k).

## 22 CASH AND CASH EQUIVALENTS

Cash and cash equivalents amounted to € 61,881k at the balance sheet date (2016: € 67,781k), including liquidity at the disposal group) and consist of cash at banks and cash on hand.

### 23 ISSUED CAPITAL

As in the previous year, issued capital at the Company amounted to € 124,172,487 and comprised 124,172,487 no-par shares.

In the year under report, a dividend of € 0.03 per share with dividend entitlement was distributed for the previous year (€ 3,725k).

### 24 CAPITAL RESERVE

The capital reserve amounted to € 143,787k as of 31 December 2017 (2016: € 143,217k). This amount also includes the deferred share-based compensation for the stock option plan. The year-on-year change is due to non-cash share-based compensation of € 570k.

### 25 AUTHORISED AND CONDITIONAL CAPITAL

**Authorised capital.** The Management Board is authorised by resolution of the Annual General Meeting on 27 May 2015, subject to approval by the Supervisory Board, to increase the Company's issued capital by up to a total of € 50,000,000 on one or several occasions up to 26 May 2020 by issuing new no-par registered shares in return for contributions in cash and/or kind (Authorised Capital). When drawing on authorised capital, the Management Board may, subject to approval by the Supervisory Board, exclude shareholders' subscription rights in four cases: (1) to exclude residual amounts from shareholders' subscription rights; (2) when the new shares are issued in return for contributions in kind, particularly in the context of company acquisitions; (3) if, pursuant to § 186 (3) Sentence 4 of the German Stock Corporation Act (AktG), the new shares are issued in return for cash contributions and if, at the time of final stipulation, the issue price does not fall materially short of the stock market price of the shares already listed; and (4) to the extent necessary to issue subscription rights for new shares to the bearers or creditors of warrant and/or convertible bonds in order to avoid dilution of their respective holdings. This authorised capital is intended to enable QSC to react swiftly and flexibly to opportunities arising on the capital market and where necessary to obtain equity capital on favourable terms. No use was made of authorised capital in the past financial year.

**Conditional capital.** The Company had conditional capital totalling € 46,490,365 as of the balance sheet date. This was divided into Conditional Capital IV (€ 40,000,000), Conditional Capital VII (€ 740,365), Conditional Capital VIII (€ 5,000,000) and Conditional Capital IX (€ 750,000). Conditional Capitals VII, VIII and IX serve to secure the conversion rights of bearers of convertible bonds that QSC has issued or may issue within the framework of existing stock option plans to Management Board members (Conditional Capital IX), Management Board members, managing directors of affiliated companies, employees of QSC and affiliated companies (Conditional Capitals VII and VIII) and other parties contributing to the Company's success (Conditional Capital VII).

Conditional Capital IV may be used by the Management Board to create tradable warrant and/or convertible bonds. The Management Board is authorised by resolution of the Annual General Meeting on 27 May 2015 to issue such instruments in order to access an additional, low-interest financing option given favourable capital market conditions. The convertible bonds may be issued in return for both cash contributions and contributions in kind. The Management Board is authorised, subject to approval by the Supervisory Board, to exclude shareholders' subscription rights to these warrant and/or convertible bonds in four cases: (1) to settle residual amounts resulting from the subscription ratio; (2) when the bonds are issued in return for contributions in kind, particularly in the context of company acquisitions; (3) if, in the case of bonds being issued in return for cash contributions pursuant to § 186 (3) Sentence 4 of the German Stock Corporation Act (AktG), the issue price does not fall materially short of the market value of the bonds; and (4) to the extent necessary to issue subscription rights to the bearers or creditors of warrant and/or convertible bonds previously issued in order to avoid dilution of their respective holdings. To date, the Management Board has not acted on the authorisation to issue tradable warrant and/or convertible bonds.

The exclusion of shareholders' subscription rights pursuant to § 186 (3) Sentence 4 of the German Stock Corporation Act (AktG) may only apply for the use of treasury stock, for the issue of new shares from authorised capital and for the issue of warrant and/or convertible bonds corresponding up to an aggregate total of no more than 10% of issued capital during the term of the respective authorisation. Apart from this, the exclusion of shareholders' subscription rights, irrespective of the legal grounds, for the use of treasury stock, for the issue of new shares from authorised capital and for the issue of warrant and/or convertible bonds (including those issued within QSC's stock option plans) may not exceed an aggregate total of 20% of issued capital during the term of the respective authorisation.



## 26 OTHER RESERVES

The development in this item in the 2017 and 2016 financial years is presented in the consolidated statement of changes in equity.

Other reserves were structured as follows as of 31 December:

€ 000s	2017	2016
<b>Other reserves</b>		
Actuarial losses on pension plans	(1,350)	(1,923)
Change in fair value of cash flow hedge	(931)	(1,570)
<b>Other reserves</b>	<b>(2,281)</b>	<b>(3,493)</b>

The values are stated in each case after deferred taxes.

## 27 OTHER FINANCIAL LIABILITIES

Other financial liabilities comprise the following items:

€ 000s	2017	2016
<b>Long-term liabilities</b>		
Due to banks	135,130	145,412
Convertible bonds	38	33
Liabilities under finance lease arrangements	76	370
<b>Long-term liabilities</b>	<b>135,244</b>	<b>145,815</b>

€ 000s	2017	2016
<b>Short-term liabilities</b>		
Due to banks	1,282	4,003
Liabilities under finance lease arrangements	295	1,352
<b>Short-term liabilities</b>	<b>1,577</b>	<b>5,355</b>

Information about the convertible bonds can be found in Note 36. Outstanding liabilities are governed by the following conditions:

€ 000s	Nominal interest rate	Maturity	31 Dec. 2017	31 Dec. 2016
<b>Long-term liabilities</b>				
Secured bank loans			135,130	145,412
of which floating-interest			87,500	87,500
Promissory note loan: Tranche 1	6M Euribor + 1.4%	2019	56,500	56,500
Promissory note loan: Tranche 2	3M Euribor + 1.2%	2019	20,000	20,000
Promissory note loan: Tranche 3	6M Euribor + 1.8%	2021	11,000	11,000
of which fixed-interest			47,630	57,912
Promissory note loan: Tranche 4	2.29%	2019	23,500	33,500
Promissory note loan: Tranche 5	3.05%	2021	24,000	24,000
Further secured bank loan	4.15%	2019	130	412
Convertible bonds		from 2019 (prev. yr.: from 2018)	38	33
Liabilities under finance lease arrangements	7.14%	2019 (prev. yr.: 2018 and 2019)	76	370
<b>Long-term liabilities</b>			<b>135,244</b>	<b>145,815</b>
<b>Short-term liabilities</b>				
Due to banks			1,282	4,003
Further secured bank loan	4.15%	2018 (prev. yr.: 2017)	281	2,820
Interest liabilities		2018 (prev. yr.: 2017)	1,001	1,183
Liabilities under finance lease arrangements	7.14%	2018 (prev. yr.: 2017)	295	1,352
<b>Short-term liabilities</b>			<b>1,577</b>	<b>5,355</b>
<b>Total interest-bearing financial liabilities</b>			<b>136,821</b>	<b>151,170</b>

Loan liabilities are secured by a mortgage lien of € 23,000k on a piece of land (released as of 4 January 2018).

Furthermore, loan liabilities are also secured by a mortgage lien of € 2,300k on a plant site. In this respect, all entitlements to receive rent and lease income have been assigned to the lending bank. In the 2016 and 2017 financial years, the Company prematurely repaid loan liabilities of € 5,000k (2016) and € 10,000k (2017).

The loan agreements serve to finance the Company's general working capital. Drawdowns of loan amounts depend on QSC complying with specified key financial ratios based on EBITDA and the Company's debt servicing capacity during the term of the credit facility. These financial covenants were complied with in the 2017 financial year.

€ 000s	2017	2016
<b>Liabilities under finance lease arrangements</b>		
Future minimum lease payments under finance and hire purchase arrangements		
Up to 1 year	306	1,377
1 to 5 years	76	382
Over 5 years	-	-
<b>Liabilities under finance lease arrangements</b>	<b>382</b>	<b>1,759</b>
Interest portion	11	37
<b>Present value of future minimum lease payments</b>	<b>371</b>	<b>1,722</b>

The finance lease arrangements relate to technical equipment.

## 28 PENSION PROVISIONS

QSC operates defined benefit pension plans, which are partially secured through reinsurance and classified as plan assets in accordance with IAS 19.

Pension provisions cover the obligations resulting from pension commitments made to one member of the Supervisory Board during his previous activity as a member of QSC's Management Board and to two former Management Board members at the former INFO AG, as well as obligations resulting from pension commitments made to parts of QSC's and Ventelo's workforces in previous years.

The pension entitlements relate to defined benefits which depend primarily on the period of service with the Company and the relevant level of pensionable salary. These defined benefit plans expose QSC to various actuarial risks, including longevity and interest rate risks. The pension provision for defined benefit plans is measured using the projected unit credit method in accordance with the requirements of IAS 19 and takes future developments into account. Assumptions are based on the 2005 G biometric tables issued by Prof. Dr. Klaus Heubeck.

QSC recognises all actuarial gains and losses directly through OCI. In 2017, the accumulated actuarial gains and losses amounted to € 1,350k and were recognised in OCI (2016: € 1,923k). Total actuarial gains/losses after taxes came to € 573k in the 2017 financial year (2016: € -503k).

€ 000s	2017	2016
<b>Present value of defined benefit obligation at 1 January</b>	<b>8,674</b>	<b>8,044</b>
Service cost	-	-
Interest cost	130	165
Actuarial losses (gains)	(865)	722
Due to changes in demographic assumptions	-	-
Due to changes in financial assumptions	(812)	737
Due to experience adjustments	(53)	(15)
Benefits paid	(265)	(258)
<b>Present value of defined benefit obligation at 31 December</b>	<b>7,674</b>	<b>8,674</b>
<b>Fair value of plan assets at 1 January</b>	<b>(1,541)</b>	<b>(1,352)</b>
Interest income	(25)	(31)
Expenses for plan assets excluding amounts included in interest income	16	23
Payments from plan assets	-	-
Transfers	-	20
Amounts paid out	6	1
Company contributions to plan assets	(206)	(203)
<b>Fair value of plan assets at 31 December</b>	<b>(1,750)</b>	<b>(1,541)</b>
<b>Pension provision at 31 December</b>	<b>5,924</b>	<b>7,133</b>
Discount factor	1.58%	1.51%
Rate of compensation increase	2.00%	2.00%
Pension indexation	1.00%	2.00%

Expenses for plan assets excluding amounts included in interest income are reported under other comprehensive income.

The income and expenses recognised in the income statement for defined benefit plans are structured as follows:

€ 000s	2017	2016
<b>Pension expenses</b>		
Service costs	-	-
Interest costs	130	165
Interest income	(25)	(31)
<b>Pension expenses</b>	<b>105</b>	<b>134</b>

Pension payments of € 267k and funding contributions to plan assets of € 207k are expected in 2018.

If the aforementioned material assumptions used to measure pension obligations as of the balance sheet were to change by half a percent in each case, pension obligations would increase/decrease as follows:

€ 000s	Change in pension obligations	Pension obligations
Change in interest rate +0.5%	(540)	7,134
Change in interest rate -0.5%	606	8,280

As of 31 December 2017, the weighted average term of the defined benefit obligation came to 15.9 years (2016: 16.0 years).

Employer contributions to defined contribution plans amounted to € 6,801k in the 2017 financial year (2016: € 6,872k).

## 29 OTHER PROVISIONS AND TAX PROVISIONS

### (a) Other provisions

€ 000s	Restructuring	Redundancy payments	Litigation risks	Onerous contracts	Dismantling	Other	Total
<b>Balance at 1 January 2017</b>	<b>3,186</b>	<b>2,230</b>	<b>1,357</b>	<b>798</b>	<b>6,242</b>	<b>961</b>	<b>14,774</b>
Added	-	4,807	153	-	311	247	5,518
Utilised	(1,948)	(1,784)	(97)	(430)	(269)	(157)	(4,685)
Reversed	-	(161)	(1,134)	(368)	-	(272)	(1,935)
Compounding	-	-	-	-	27	-	27
Reclassified as liabilities	-	-	-	-	(3,280)	-	(3,280)
<b>Balance at 31 December 2017</b>	<b>1,238</b>	<b>5,092</b>	<b>279</b>	<b>-</b>	<b>3,031</b>	<b>779</b>	<b>10,419</b>
Long-term	-	-	-	-	3,031	-	3,031
Short-term	1,238	5,092	279	-	-	779	7,388
	<b>1,238</b>	<b>5,092</b>	<b>279</b>	<b>-</b>	<b>3,031</b>	<b>779</b>	<b>10,419</b>

**Restructuring.** In view of the continuing pressure on revenues and margins in the Telecommunications segment and above all in the Outsourcing segment, in the course of 2016 the Management Board decided to further optimise the Company's cost structures. Having announced the plan, QSC recognised a provision of € 3,186k for expected restructuring expenses, including contract termination costs and redundancy payments to employees. The estimated costs are based on the terms of the relevant agreements. The restructuring measures were initiated in 2017 and are expected to be completed by the end of 2018.

**Redundancy payments.** Provisions of € 4,807k were capitalised in 2017 for redundancy payments to employees. These provisions will be utilised in 2018. The estimated costs are based on the terms of the relevant agreements.

**Litigation risks.** Of the provisions of € 1,357k recognised for litigation risks in the previous year, an amount of € 1,134k has been reversed and credited to income following agreements reached with customers. The obligation of € 279k recognised as a liability as of the balance sheet date is predominantly due to an agreement reached with one customer concerning damages obligations.

**Dismantling.** Agreements concerning the general dismantling of central office collocations were reached in the 2017 financial year. The obligation of € 3,280k specified on the basis of these agreements and provided with a fixed maturity date has been allocated to trade payables. The long-term provisions relate to provisions of € 3,031k for dismantling obligations for actively used central office surfaces and wireless local loop locations.

**Other.** Other short-term provisions mainly relate to provisions of € 400k for commission payments (2016: € 582k) and provisions of € 379k for customer refund claims (2016: € 379k).

#### (b) Tax provisions

€ 000s	Corporate income tax and solidarity surcharge	Trade tax	Interest	Total
<b>Balance at 1 January 2017</b>	<b>464</b>	<b>1,162</b>	<b>540</b>	<b>2,166</b>
Added	264	382	-	646
Utilised	(129)	(164)	(455)	(748)
Reversed	-	(310)	(85)	(395)
<b>Balance at 31 December 2017</b>	<b>599</b>	<b>1,070</b>	<b>-</b>	<b>1,669</b>

### 30 TRADE PAYABLES AND OTHER LIABILITIES

€ 000s	2017	2016
<b>Long-term</b>		
Trade payables	1,640	-
Other liabilities	1,717	2,525
<b>Long-term</b>	<b>3,357</b>	<b>2,525</b>

€ 000s	2017	2016
<b>Short-term</b>		
Trade payables	34,873	24,890
Other liabilities	12,023	12,630
<b>Short-term</b>	<b>46,896</b>	<b>37,520</b>

Long-term trade payables included expenses for the dismantling of central office collocations. The short-term trade payables recognised as of 31 December 2017 include liabilities of € 487k for construction contracts (2016: € 0k).

### 31 DEFERRED INCOME

QSC defers non-recurring income from the installation of customer lines on a periodic and pro-rated basis over a contract term of 24 months. Advance payments from customers are also deferred up to the date the service is provided.



## Notes to the Consolidated Cash Flow Statement

The cash flow statement is divided into three sections: operating, investing and financing activities. The cash flow from operating activities has been calculated using the indirect method. The financial liabilities included in the cash flow from financing activities refer to all liabilities due to banks. Interest income is recognised in the cash flow from operating activities, while interest payments are accounted for in the cash flow from financing activities. Tax payments are reported in their full amount in the cash flow from operating activities, as it is not possible to allocate these items to individual segments.

### 32 CASH FLOW FROM OPERATING ACTIVITIES

At € 39,297k, the cash flow from operating activities showed a slight year-on-year reduction of € 994k in the 2017 financial year.

This was due in particular to the increase in trade receivables and the decrease in provisions and other assets and liabilities. Overall, these factors more than offset the substantial year-on-year increase in trade payables.

### 33 CASH FLOWS FROM INVESTING ACTIVITIES AND FINANCING ACTIVITIES

The cash flow from investing activities came to € -21,799k in the 2017 financial year (2016: € -26,034k). The improvement compared with the previous year was chiefly due to a lower volume of outgoing payments for the purchase of property, plant and equipment.

The cash flow from financing activities amounted to € -23,398k in the 2017 financial year (2016: € -20,458k). This outflow of funds mainly resulted from loan repayments of € -12,820k (2016: € -8,318k), interest paid of € -5,507k (2016: € -5,677k) and the dividend distribution of € -3,725k resolved by the Annual General Meeting (2016: € -3,725k).

Financial liabilities developed as follows:

€ 000s	31 Dec. 2016	Cash-effective changes	Non-cash-effective changes		31 Dec. 2017
			Reclassifications	Fair value	
<b>Financial liabilities</b>					
Long-term loans	145,412	(10,000)	(282)	-	135,130
Short-term loans	2,820	(2,820)	282	-	281
Lease liabilities	1,722	(1,351)	-	-	371
Assets to secure long-term loans	(1,570)	-	-	639	(931)
<b>Financial liabilities</b>	<b>148,384</b>	<b>(14,171)</b>	<b>-</b>	<b>639</b>	<b>134,851</b>

## Other Disclosures

### 34 SUBSIDIARIES

The consolidated financial statements include the following companies:

€ 000s	Shareholdings in %	Equity 31 Dec. 2017	Net income 2017
<b>Subsidiary, headquarters, country</b>			
<b>(Disclosures as per HGB annual financial statements)</b>			
Ventelo GmbH, Cologne, Germany	100.00	142,238	- <sup>1</sup>
Plusnet Infrastruktur GmbH & Co. KG, Cologne, Germany	100.00	4,312	- <sup>2,5</sup>
Plusnet Verwaltungs GmbH, Cologne, Germany	100.00	26	1 <sup>3</sup>
BroadNet Deutschland GmbH, Cologne, Germany	100.00	3,742	61 <sup>1,4</sup>
IP Colocation GmbH, Nuremberg, Germany	100.00	2,618	314
Q-DSL home GmbH, Cologne, Germany	100.00	1,293	- <sup>1</sup>
010090 GmbH, Cologne, Germany	100.00	156	- <sup>1</sup>
T&Q Netzbetriebs GmbH & Co. KG, Cologne, Germany	100.00	25	50 <sup>5</sup>
T&Q Verwaltungs GmbH, Cologne, Germany	100.00	40	2 <sup>6</sup>
01012 Telecom GmbH, Cologne, Germany	100.00	27	- <sup>1</sup>
F&Q Netzbetriebs GmbH & Co. KG, Cologne, Germany	100.00	1	- <sup>5</sup>
Broadnet Services GmbH, Cologne, Germany	100.00	25	- <sup>1</sup>
01098 Telecom GmbH, Cologne, Germany	100.00	25	- <sup>1</sup>
010052 Telecom GmbH, Cologne, Germany	100.00	25	- <sup>1</sup>
010088 Telecom GmbH, Cologne, Germany	100.00	25	- <sup>1</sup>
01052 Communication GmbH, Cologne, Germany	100.00	25	- <sup>1</sup>
Q-loud GmbH, Cologne, Germany	100.00	1,790	546
F&Q Netzbetriebs Verwaltungs GmbH, Cologne, Germany	100.00	34	2 <sup>7</sup>
Plusnet GmbH, Cologne, Germany	100.00	994	(5)
fonial GmbH, Cologne, Germany	74.90	(2,146)	(850)
T&Q Netz GmbH & Co. KG, Dusseldorf, Germany	50.00	-	- <sup>6</sup>

<sup>1</sup> Profit transfer agreement with QSC AG – § 264 (3) HGB drawn on for this company.

<sup>2</sup> Shares held by Ventelo GmbH.

<sup>3</sup> Shares held by Plusnet Infrastruktur GmbH & Co. KG.

<sup>4</sup> Profit transfer agreement not executed due to § 301 AktG.

<sup>5</sup> § 264b HGB drawn on for this company.

<sup>6</sup> Shares held by T&Q Netzbetriebs GmbH & Co. KG.

<sup>7</sup> Shares held by F&Q Netzbetriebs GmbH & Co. KG.

For all of its subsidiaries, the control exercised by QSC is attributable to its share of voting rights.

In January 2017, QSC sold all of the shares it previously held in FTAPI Software GmbH. At the previous balance sheet date, this company's assets and liabilities were reported under assets held for sale/liabilities associated with assets held for sale.

tengo GmbH, Cologne, and tengo Vermögensverwaltungs GmbH, Cologne, were merged into Broadnet NGN GmbH, Cologne, on the basis of the respective merger agreements dated 3 May 2017, the respective approval resolutions adopted by the shareholders' meetings on 3 May 2017 and the shareholders' meeting of the recipient entity on 3 May 2017. These mergers took effect by entry in the respective Commercial Registers on 11 May 2017. Based on a merger agreement dated 31 May 2017, Broadnet NGN GmbH, Cologne, was merged into QSC AG. This merger took effect by entry in the Commercial Register on 6 July 2017.

QSC AG founded Plusnet GmbH by company agreement dated 5 October 2017 and provided this company with share capital of € 999k. The share capital was paid up in cash by QSC AG. Plusnet GmbH was entered in the "B" Commercial Register at Cologne District Court on 24 October 2017.

### 35 SEGMENT REPORTING

In accordance with the provisions of IFRS 8, the basis for identifying segments consists of the Company's internal organisational structure as used by corporate management for business administration decisions and performance assessments. This results in the following segments: Telecommunications, Outsourcing, Consulting and Cloud.

**Cloud.** QSC pools all activities relating to its Pure Enterprise Cloud (PEC) and the Internet of Things (IoT) in its Cloud segment. The Pure Enterprise Cloud, which has been developed on an in-house basis since 2015, comprises a modular system of cloud technologies, software solutions and service components, as well as network and infrastructure services. Furthermore, the Cloud segment also includes the IoT business activities pooled at Q-loud. This subsidiary of QSC offers companies an extensive range of products and services enabling them to network appliances and implement digital business models in the Internet of Things. Its end-to-end range of services includes transformation consulting, software and hardware competence, standard hardware, a proprietary IoT platform, security solutions and smart product manufacturing.

**Outsourcing.** This segment offers traditional outsourcing services to companies wishing to outsource their IT and data storage to QSC. As soon as cloud-based outsourcing services are provided, the respective revenues are allocated to the Cloud segment. As well as IT service offerings, the Outsourcing segment also includes the underlying IP-VPNs necessary to guarantee end-to-end quality.

**Consulting.** QSC advises companies on how to optimise their business processes with two key focuses on SAP and Microsoft. As an SAP full-service provider, in this segment QSC performs services in the fields of basic operations, application management, implementation, user support and maintenance, as well as in managing the necessary software licenses. The Microsoft consulting services range from needs analysis to consulting, design and implementation services through to operations and ongoing optimisation measures.

**Telecommunications (TC).** Here, QSC offers a broad range of voice and data communication solutions. These include internet connections with asymmetric ADSL2+ lines, symmetric SDSL lines and premium internet access via wireless local loop (WLL) networks. In this segment, QSC also offers All-IP telephony connections (voice over IP) and corresponding telephony systems. Furthermore, the range of services also includes further forms of voice telephony, including open call-by-call and preselect offerings and value added services.

The segment contribution is the key segment performance indicator referred to by the management. This is defined as EBITDA before general and administrative expenses and other operating income and expenses. For income statement purposes, the cost of revenues is thus allocated in full to the respective segment, as are sales and marketing expenses. The direct and indirect allocation of costs to individual segments is consistent with internal reporting and management structures.

Indirect cost allocation is primarily based on resource utilisation by the respective segments. The Management Board does not receive any regular information about segment-specific capital expenditure, assets and liabilities, general and administrative expenses, depreciation and amortisation and other operating income and expenses as components of the respective segment earnings figures.

€ 000s	Telecom- munications	Outsourcing	Consulting	Cloud	Group
<b>2017 financial year</b>					
<b>Net revenues</b>	<b>188,736</b>	<b>101,951</b>	<b>39,407</b>	<b>27,773</b>	<b>357,867</b>
Cost of revenues	(132,722)	(78,385)	(32,865)	(22,118)	(266,090)
<b>Gross profit</b>	<b>56,014</b>	<b>23,566</b>	<b>6,542</b>	<b>5,655</b>	<b>91,777</b>
Sales and marketing expenses	(14,526)	(6,276)	(1,187)	(5,177)	(27,166)
<b>Segment contribution</b>	<b>41,488</b>	<b>17,290</b>	<b>5,355</b>	<b>478</b>	<b>64,611</b>
General and administrative expenses					(27,040)
Depreciation and amortisation (including non-cash share-based compensation)					(31,148)
Other operating income and expenses					686
<b>Operating earnings (EBIT)</b>					<b>7,109</b>
Financial income					247
Financial expenses					(4,658)
<b>Earnings before taxes</b>					<b>2,698</b>
Taxes on income					2,425
<b>Net income</b>					<b>5,123</b>

€ 000s	Telecom- munications	Outsourcing	Consulting	Cloud	Group
<b>2016 financial year</b>					
<b>Net revenues</b>	<b>210,194</b>	<b>117,439</b>	<b>40,252</b>	<b>18,094</b>	<b>385,979</b>
Cost of revenues	(148,272)	(85,878)	(33,565)	(15,194)	(282,909)
<b>Gross profit</b>	<b>61,922</b>	<b>31,561</b>	<b>6,687</b>	<b>2,900</b>	<b>103,070</b>
Sales and marketing expenses	(19,202)	(7,222)	(1,474)	(5,068)	(32,966)
<b>Segment contribution</b>	<b>42,720</b>	<b>24,339</b>	<b>5,213</b>	<b>(2,168)</b>	<b>70,104</b>
General and administrative expenses					(31,823)
Depreciation and amortisation (including non-cash share-based compensation)					(50,157)
Other operating income and expenses					(1,224)
<b>Operating earnings (EBIT)</b>					<b>(13,100)</b>
Financial income					196
Financial expenses					(6,030)
<b>Earnings before taxes</b>					<b>(18,934)</b>
Taxes on income					(6,120)
<b>Net income</b>					<b>(25,054)</b>

Revenues include € 11,525k generated with non-German EU customers (mainly UK: € 3,888k; Netherlands: € 3,298k; Austria: € 1,379k) and € 1,789k with non-EU customers (mainly Switzerland: € 997k). All other revenues were generated in Germany.

### 36 STOCK OPTION PLANS

Since 1999, QSC has incepted a total of eight stock option plans providing for the issue of convertible bonds with a nominal amount of € 0.01 each to employees, Management Board members, advisors and suppliers. Convertible bonds are allocated by the Management Board, which additionally required the consent of the Supervisory Board for allocations to advisors and suppliers. The Supervisory Board alone decides on allocations to members of the Management Board of QSC AG.

Participants in these plans are entitled to subscribe convertible bonds in return for payment of the nominal amount of € 0.01 and to convert each convertible bond into a no-par registered share in return for payment of the exercise price. The exercise price for the convertible bond corresponds to the stock market price of the share on the issue date. The convertible bonds have an eight-year term and are subject to a four-year lockup period following subscription. As of the balance sheet date on 31 December 2017, the SOP 2006, SOP 2012 and SOP 2015 plans were active.

Convertible bonds outstanding within the SOP 2006 plan may only be converted until May 2019 at the latest. The conversion right provided for by the SOP 2006 plan may only be exercised if at least one of the following conditions is met: the stock market price of the share has outperformed the comparative TecDAX index in relative terms between subscription of the convertible bond and exercising of the conversion right or the stock market price of the share has risen by at least 10% between subscription of the convertible bond and exercising of the conversion right.

Convertible bonds allocated within the SOP 2012 plan may only be subscribed until 15 May 2017 at the latest. Subscriptions within the SOP 2015 plan, which is solely available to Management Board members, are still possible until 26 May 2020. The conversion right provided for by these SOP plans may only be exercised at the earliest after the expiry of a four-year waiting period and only if at least one of the following two conditions is met: the share price is at least 20% higher than the conversion price or the share has outperformed the TecDAX in relative terms since the subscription date.

No personnel expenses have been recognised pursuant to IFRS 2 for the convertible bonds resulting from the 2000, 2000A, 2001 and 2002 SOP plans, none of which is now utilisable. No option values had to be calculated in the 2016 and 2017 financial years for the SOP 2006 plan. The option values for the convertible bonds issued in the SOP 2012 and SOP 2015 plans were determined as of the grant date using the Black-Scholes option pricing model. Reference was made to the following assumptions:

	2017	2016
<b>SOP 2012</b>		
Expected average term of the SOP 2012	8 years	8 years
Average risk-free interest rate	0.08%	-0.25%
Volatility (1 year)	38.47%	41.43%
Average fair value of options in €	0.73	0.81
Fair value of convertible bonds granted for the year in €	521,210	264,579

	2017	2016
<b>SOP 2015</b>		
Expected average term of the SOP 2015	-	8 years
Average risk-free interest rate	-	0.24% to -0.16%
Volatility (1 year)	-	41.71% to 44.08%
Average fair value of options in €	-	0.54
Fair value of convertible bonds granted for the year in €	-	217,238

Volatility was determined on the basis of daily closing prices over a historical period of twelve months. In the 2017 financial year, convertible bonds were only subscribed from the 2012 stock option plan.

The distribution of the convertible bonds outstanding under all plans as of 31 December 2016 and 31 December 2017 is as follows:

	Number of convertible bonds	Weighted average exercise price in €
<b>Outstanding at 31 December 2015</b>	<b>2,679,712</b>	<b>2.54</b>
Newly issued in 2016	727,000	1.49
Lapsed in 2016	(189,183)	2.60
Exercised in 2016	(10,000)	1.98
<b>Outstanding at 31 December 2016</b>	<b>3,207,529</b>	<b>2.30</b>
Newly issued in 2017	718,200	1.76
Lapsed in 2017	(127,500)	2.00
Exercised in 2017	-	-
<b>Outstanding at 31 December 2017</b>	<b>3,798,229</b>	<b>2.21</b>

The exercise prices of the remaining 3,798,229 convertible bonds outstanding range from € 1.10 to € 5.00, while the remaining term for exercising them ranges from directly exercisable through to 14 May 2025 at the latest. The exercise price is set upon subscription and cannot be changed subsequently. Depending on the development in its share price, the Company expects the outstanding convertible bonds to be converted at the latest by 2025.

As of the balance sheet date, 492,029 of the outstanding convertible bonds were directly exercisable. The remaining convertible bonds were subject to the agreed lockup periods.

In the financial year under report, expenses of € 570k were incurred for non-cash share-based compensation (2016: € 508k).

### 37 RELATED PARTY TRANSACTIONS

**Compensation of members of the management in key positions.** Compensation of members of the management in key positions (members of the Management and Supervisory Boards) includes salaries, expense reimbursements, settlements, benefits in kind and expenses incurred for stock option plans.

€ 000s	2017	2016
<b>Compensation of management members</b>		
Short-term benefits	2,308	2,022
Post-employment benefits	-	-
Other long-term benefits	(458)	550
Termination benefits	942	-
Share-based compensation	199	106
<b>Compensation of management members</b>	<b>2,991</b>	<b>2,678</b>

Other long-term benefits relate to the claim to variable compensation resulting from the multi-year targets agreed for the Management Board. The variable compensation claim for this multi-year target, which was identified after the end of the assessment period (2015 to 2017 financial years) and is due for payment in the 2018 financial year, amounts to € 419k. In the two previous years, QSC initially reported a total amount of € 877k (2015: € 327k; 2016: € 550k) based on preliminary calculations performed at the time.

**Transactions with members of the management in key positions.** The Management Board members active at the end of the 2017 financial year hold voting rights for 440,000 shares. Supervisory Board members have a total of 31,107,394 shares, corresponding to around 25.05% of voting rights.



In 2017, QSC maintained business relations with companies in which members of its own Management and Supervisory Boards act as shareholders. IAS 24 states that individuals or companies constitute related parties when one of the parties has the possibility of controlling or exercising significant influence over the other party. All contracts with these companies require Supervisory Board approval and are concluded on customary market terms. Members of QSC's Management and Supervisory Boards are shareholders in the following companies:

€ 000s	Net revenues	Expenses	Payments received	Payments made
<b>2017 financial year</b>				
IN-telegence GmbH	262	115	346	125
Teleport Köln GmbH	16	1	20	2
QS Communication Verwaltungs Service GmbH	-	154	-	203
<b>2016 financial year</b>				
IN-telegence GmbH	422	170	498	203
Teleport Köln GmbH	25	1	32	1
QS Communication Verwaltungs Service GmbH	-	170	-	169

€ 000s	Receivables	Payables
<b>31 December 2017</b>		
IN-telegence GmbH	38	12
Teleport Köln GmbH	3	-
QS Communication Verwaltungs Service GmbH	-	12
<b>31 December 2016</b>		
IN-telegence GmbH	73	-
Teleport Köln GmbH	4	-
QS Communication Verwaltungs Service GmbH	-	31

IN-telegence GmbH is a provider of value added services in the telecommunications industry and mainly draws on network services from QSC. Subsidiaries of QSC AG also draw on a low volume of value added services from IN-telegence. Teleport Köln GmbH supports QSC in installing end customer connections and also draws on QSC's telecommunications services. QS Communication Verwaltungs Service GmbH advises QSC in the development of concepts and software for cloud-based services. The expenses incurred relate to advisory services.

### 38 DEFERRED AND CURRENT TAXES

QSC used an aggregate tax rate of 32.40% (2016: 32.32%) to calculate deferred taxes. The change in this rate was chiefly due to higher trade tax multipliers. The deferred tax expenses and income for the period and the allocation of temporary differences are presented below:

€ 000s	Assets		Liabilities		Consolidated income statement	
	2017	2017	2016	2016	2017	2016
<b>Deferred tax assets and liabilities</b>						
Intangible assets	546	7,114	859	7,996	570	3,024
Property, plant and equipment	1,292	1,456	2,119	1,920	(363)	(313)
Other assets	597	-	448	-	149	66
Other receivables	2,000	797	2,896	494	(1,199)	1,510
Inventories	324	-	74	-	249	(198)
Deferred income	-	226	6	358	127	(354)
Accrued pensions and other provisions	1,635	-	1,162	-	748	11
Change in market price of derivatives	524	-	784	-	46	6
Other liabilities	117	3,198	205	4,201	914	(203)
<b>Total deferred taxes on temporary differences</b>	<b>7,035</b>	<b>12,791</b>	<b>8,553</b>	<b>14,970</b>	<b>1,242</b>	<b>3,550</b>
<b>Total deferred taxes on loss carryovers</b>	<b>13,170</b>	<b>-</b>	<b>11,568</b>	<b>-</b>	<b>1,602</b>	<b>(8,105)</b>
<b>Total deferred taxes before netting</b>	<b>20,205</b>	<b>12,791</b>	<b>20,121</b>	<b>14,970</b>		
Netting	12,399	12,399	14,195	14,195		
<b>Total deferred taxes</b>	<b>7,806</b>	<b>392</b>	<b>5,926</b>	<b>775</b>		

The temporary differences in conjunction with interests in subsidiaries for which no deferred tax liabilities are recognised amounted to € 3,545k in the 2017 financial year (2016: € 5,926k). The following table presents the reconciliation of the expected income tax expenses to the actual income tax expenses. The expected income tax expenses are calculated by multiplying earnings before taxes with the assumed tax rate.

€ 000s	2017	2016
<b>Reconciliation</b>		
<b>Earnings before taxes</b>	<b>2,698</b>	<b>(18,934)</b>
Tax rate	32,40%	32,32%
Expected tax expenses	874	(6,119)
Tax effects of		
Changes in write-downs of deferred taxes recognised for loss carryovers	(3,001)	6,739
Changes in permanent differences	-	3,433
Non-deductible operating expenses in connection with investments in corporations	-	1,202
Non-deductible operating expenses	339	713
Tax-exempt income	-	(196)
Non-period income (expenses)	(537)	322
Changes in tax rates	(35)	(21)
Other items	(65)	47
<b>Reconciled tax expenses</b>	<b>(2,425)</b>	<b>6,120</b>

Reconciled tax expenses consist of € 419k for current income tax expenses (of which: € 537k for current income tax income relating to previous years) and € 2,844k for deferred tax income (2016: deferred tax expenses of € 4,555k). Tax expenses of € 581k were recognised directly in equity in the 2017 financial year in connection with actuarial gains and losses (2016: tax income of € 239k).

As of 31 December 2017, corporate income tax loss carryovers at QSC AG came to € 370 million (2016: € 374 million), while trade tax loss carryovers totalled € 356 million (2016: € 362 million). These tax losses can basically be offset to an unlimited extent against future taxable income. QSC recognised deferred tax assets totalling € 13.2 million on loss carryovers as of 31 December 2017 (2016: QSC AG: € 11.5 million; FTAPI Software GmbH: € 0.1 million). In recognising and measuring deferred tax assets on loss carryovers, it is assumed that tax loss carryovers totalling € 39.0 million can be used at QSC for corporate income tax purposes in the medium term (2016: QSC AG: € 33.6 million; FTAPI Software GmbH: € 0.2 million).

For trade tax purposes, it is assumed that trade tax loss carryovers totalling € 42.2 million can be used on the level of QSC AG in the medium term (2016: QSC AG: € 37.4 million; FTAPI Software GmbH: € 0.2 million). The Company's long-term planning provides for the sustainable generation of taxable income. Given historical developments and the planning uncertainties resulting from the transformation process at the group of companies, however, only that portion of taxable income expected in a foreseeable period of three years has been accounted for (2016: three years). No deferred tax assets have been recognised in the balance sheet for remaining corporate income tax and trade tax loss carryovers not yet used. Due to the sale of the shares held in FTAPI Software GmbH, unlike in the previous year no current or deferred tax assets or liabilities relating to that company have been recognised as of 31 December 2017.

### 39 LEGAL DISPUTES

Neither QSC AG nor its group companies are involved in any court or arbitration proceedings that could materially impact on their economic position.

### 40 LEASES AND FUTURE PAYMENT OBLIGATIONS

**Leases (QSC as lessee).** The companies included in consolidation are party to various operating lease arrangements as lessee, mostly for technical space and offices, technical equipment and vehicles.

The Company concludes partial amortisation agreements without purchase options or price indexing clauses but with extension options in some cases and an average lease term of two to five years.

As of 31 December, future minimum lease payments under non-cancellable operating leases were as follows:

€ 000s	2017	2016
<b>Operating lease arrangements</b>		
Up to 1 year	12,171	30,071
1 to 5 years	20,265	28,359
Over 5 years	3,395	-
<b>Operating lease arrangements</b>	<b>35,831</b>	<b>58,430</b>

The previous year's figures also included obligations resulting from contractual relationships for leased lines.

In the 2017 financial year, QSC recognised expenses of € 8,380k for operating leases (2016: € 26,588k). These have been reported under cost of revenues.

**Leases (QSC as lessor) – operating leases.** Arrangements similar to operating leases are in place with customers, mainly for the rental of data centre space, disk storage devices and shared hardware resources. The Company concludes partial amortisation agreements without purchase options or price indexing clauses and an average lease term of three to five years (with extension options in some cases). The Company will receive the following future minimum lease payments under the non-cancellable components of operating lease arrangements.

€ 000s	2017	2016
<b>Operating lease arrangements</b>		
Up to 1 year	27,509	24,071
1 to 5 years	42,928	32,858
Over 5 years	1,816	5,978
<b>Operating lease arrangements</b>	<b>72,253</b>	<b>62,907</b>

To measure future minimum lease payments, all customers were taken into account to whom services were already provided at the reporting date and from whom payments were already contractually agreed at the balance sheet date. In 2017, an amount of € 29,197k (2016: € 29,176k) was recognised under revenues as rental payments.

**Leases (QSC as lessor) – finance leases.** Pursuant to IFRIC 4 requirements, QSC is also deemed to be the lessor in specific multiple element arrangements. Future minimum lease payments from customers under finance lease arrangements can be reconciled to their present value as follows:

€ 000s	2018	2019–2022	from 2023	Total
<b>Future minimum lease payments</b>				
Lease payments	2,379	2,487	-	4,866
Discounted amounts	(24)	(26)	-	(50)
<b>Present values</b>	<b>2,355</b>	<b>2,461</b>	<b>-</b>	<b>4,816</b>

Lease payments received in 2017 totalled € 4,443k (2016: € 5,129k).

**Purchase commitments.** Purchase commitments for future investments amounted to € 1,914k as of the balance sheet date (2016: € 2,070k) and mainly involved purchase orders for property, plant and equipment.

#### 41 OBJECTIVES AND METHODS USED IN FINANCIAL RISK MANAGEMENT AND CAPITAL MANAGEMENT

In connection with its business activities, QSC is subject to a number of financial risks that are intrinsically linked with its business activities. QSC combats these risks with a comprehensive risk management system, which is an integral component of its business processes and corporate decisions. The key elements of this system are a Group-wide planning and controlling process, Group-wide policies and reporting systems, as well as Group-wide risk reporting. The Management Board lays down the principles of the Company's financial policies annually and monitors the risk management system. Further information about risk management can be found in the Group Management Report.

Financial liabilities mainly comprise trade payables and liabilities due to banks. The main purpose of these financial liabilities is to finance the Company's operating activities. Financial assets directly resulting from business activities relate in particular to trade receivables and cash and cash equivalents. No derivatives were traded in the 2017 financial year.

The main risks to which QSC is exposed due to its use of financial instruments include interest rate risk, credit risk and liquidity risks. Since no material transactions are executed in foreign currencies, there are no material foreign currency risks. There were no material risk clusters in the past financial year. The strategies and procedures used to manage these risks are presented below.

**Market interest risk.** QSC is exposed to the risk of changes in market interest rates. This risk primarily results from the Company's floating-interest short-term liabilities due to banks, as well as from floating-interest liquidity. As of 31 December 2017, floating-rate financial liabilities accounted for 64.0% of total financial liabilities.

The promissory note loan had a total volume of € 135,000k as of 31 December 2017 (an amount of € 10,000k was repaid in 2017). It comprises five tranches with terms of five and seven years and is subject to floating interest rates (€ 87,500k in three tranches) and fixed interest rates (€ 47,500k in two tranches). To hedge the interest rate risk, in parallel with the placement of the promissory note loan QSC also concluded three interest swaps with nominal volumes totaling € 87,500k and identical terms running until 20 May 2019 (nominal: € 76,500k) and 20 May 2021 (nominal: € 11,000k).

The interest swaps meet IAS 39 hedge accounting requirements (cash flow hedges). In respect of their terms and floating interest rates, the interest swaps are congruent with the tranches of the promissory note loan thereby hedged. The underlying effectiveness assessment is performed as of each balance sheet date using the hypothetical derivative method.

The negative fair value of the interest swaps amounted to € 1,617k as of the balance sheet date (2016: € 2,425k) and has been recognised under other long-term financial liabilities. The fair value measurement of the interest swaps was performed by the intermediary bank. This is derived either from the mid-market price or, when expressed as a bid and asked price, from the indicative price at which the bank would have terminated and concluded or bought back and sold the financial instrument on the relevant marketplace at the close of business on the respective measurement date. To account for the change in the value of the interest swap before deferred taxes an amount of € 945k was recognised under OCI in the consolidated statement of comprehensive income in the 2017 financial year (2016: € 8k).

An amount of € 135k was recognised for hedge ineffectiveness in the income statement in the period under report (2016: € 0k). The payments expected for the hedge include interest payments for the hedged item and the hedging relationship. These are incurred on an ongoing basis over the term and recognised under interest expenses.

The interest swaps enable the cash flows from those tranches of the hedged item with floating interest rates to be fully hedged throughout the respective term with regard to interest rate risk. Accounting for the hedge, QSC thus de facto pays fixed interest of 2.26% on those tranches of the promissory note loan with floating interest rates, as a result of which any changes in market interest rates will not have any net impact on the Company's interest expenses. However, any change in the level of interest rates by +/-100 base points would change the fair value of the hedging instruments by € 471k and € -2,802k respectively. In the statement of comprehensive income, this would impact on the volume of income offset against equity and thus on shareholders' equity.

Furthermore, QSC had committed credit lines from a syndicated loan agreement concluded on 11 March 2016. This revolving credit facility has an amount of € 70,000k and a term running until 11 March 2021. No amounts had been drawn down from this facility as of 31 December 2017. The interest rate amounts to Euribor plus a margin dependent on the Company's financial and earnings position.

The following table presents the sensitivity of consolidated earnings before taxes to any reasonably possible change in interest rates in respect of floating-rate liquidity as of 31 December 2017:

	Increase/decrease in base points	Impact on earnings before taxes € 000s
2017	+ 100	330
2017	- 100	(6)
2016	+ 100	542
2016	- 100	(10)

**Credit risk.** QSC is exposed to the risk of payment defaults on the part of customers and issuers. The Company makes efforts to ensure that it only enters into business dealings with credit-worthy customers and thus attempts to exclude this risk from the outset. To this end, credit-worthiness checks are performed before the respective contract is concluded. Once business relations have been initiated, receivables balances are monitored to reduce potential default risks. Maximum default risks are limited to the carrying amounts of the receivables disclosed in Note 18. QSC expects non-impaired receivables to be collectible.

**Liquidity risk.** QSC monitors its risk of a liquidity shortfall with monthly liquidity planning. This accounts for the remaining terms of available financial assets and the expected cash flows from operating activities. The Company aims to maintain a balance between ensuring permanent availability of liquidity and safeguarding its flexibility by drawing on short and long-term liabilities and financing arrangements.

With regard to the promissory note loan, due to the full hedging of interest rate risks with opposing interest swaps (cash flow hedge), QSC has to pay de facto fixed interest of € 3,248k per annum for the periods through to 2019 and € 981k per annum thereafter. QSC intends to uphold the hedge relationship through to the maturity of the respective hedged items and hedging instruments. The expected cash flows for the hedged promissory note loan therefore involve ongoing interest payments and repayment of the liabilities for the underlying instruments upon their respective maturities. The cash flows for the underlying and hedge transactions have therefore been presented jointly in the chart below.

As of 31 December 2017, short-term and long-term financial liabilities had the following maturities. These disclosures are based on the expected undiscounted payments.

€ 000s	Carrying amount	Due by end of 2018	Due by end of 2019	Due by end of 2020	Due by end of 2021	Due by end of 2022	Due after 2022	Total
Liabilities under financing and								
finance lease arrangements	371	306	76	-	-	-	-	382
Trade payables	36,513	34,873	1,640	-	-	-	-	36,513
Liabilities due to banks	136,412	3,541	101,980	982	35,367	-	-	141,869
Interest swaps*	1,617	-	-	-	-	-	-	-
Other short-term and								
long-term financial liabilities	755	718	4	8	-	8	17	755
<b>At 31 December 2017</b>	<b>175,668</b>	<b>39,438</b>	<b>103,700</b>	<b>990</b>	<b>35,367</b>	<b>8</b>	<b>17</b>	<b>179,519</b>

\* As well as the corresponding balance sheet line items, "Liabilities due to banks" also includes interest swaps.



€ 000s	Carrying amount	Due by end of 2017	Due by end of 2018	Due by end of 2019	Due by end of 2020	Due by end of 2021	Due after 2021	Total
Liabilities under financing and								
finance lease arrangements	1,722	1,377	306	76	-	-	-	1,758
Trade payables	24,890	24,890	-	-	-	-	-	24,890
Liabilities due to banks	149,415	6,393	3,770	112,052	982	35,367	-	158,564
Interest swaps*	2,425	-	-	-	-	-	-	-
Other short-term and								
long-term financial liabilities	1,994	1,867	100	10	8	-	9	1,994
<b>At 31 December 2016</b>	<b>180,446</b>	<b>34,527</b>	<b>4,175</b>	<b>112,138</b>	<b>990</b>	<b>35,367</b>	<b>9</b>	<b>187,206</b>

\* As well as the corresponding balance sheet line items, "Liabilities due to banks" also includes interest swaps.

**Capital management.** The primary objective of QSC's capital management is to ensure sufficient equity, a strong credit rating and the ability to maintain its business operations in an independent and flexible manner. Capital is monitored by reference to the following key figures: equity ratio and net liquidity. The equity ratio is calculated by dividing equity by total assets. Net liquidity corresponds to interest-bearing liabilities less cash and cash equivalents (excluding cash and cash equivalents at the disposal group).

€ 000s	2017	2016
<b>Capital management</b>		
Liabilities under financing and finance lease arrangements	(371)	(1,722)
Liabilities due to banks	(136,412)	(149,415)
<b>Interest-bearing liabilities</b>	<b>(136,783)</b>	<b>(151,137)</b>
Plus cash and cash equivalents	61,881	67,336
<b>Net liquidity</b>	<b>(74,902)</b>	<b>(83,801)</b>
Shareholders' equity	89,528	86,348
Total assets	297,084	306,003
<b>Equity ratio</b>	<b>30%</b>	<b>28%</b>

## 42 FINANCIAL INSTRUMENTS

**Disclosures on the balance sheet.** Given that the carrying amounts largely correspond to fair values, no separate disclosures have been made on the respective fair values. This does not apply for the promissory note loan included under other financial liabilities, for which the fair value exceeded its carrying amount by € 3.6 million as of 31 December 2017.

€ 000s	Carrying amount	Loans and receivables	Fair value – hedging instruments	Other financial liabilities
<b>31 December 2017</b>				
<b>Assets not measured at fair value</b>				
Cash and cash equivalents	61,881	x		
Long-term trade receivables	2,461	x		
Short-term trade receivables	52,278	x		
<b>Liabilities measured at fair value</b>				
Interest swaps – hedge accounting	1,617		x	
<b>Liabilities not measured at fair value</b>				
Trade payables and other liabilities	37,330			x
Other financial liabilities	136,820			x
<b>31 December 2016</b>				
<b>Assets not measured at fair value</b>				
Cash and cash equivalents	67,336	x		
Long-term trade receivables	2,435	x		
Short-term trade receivables	45,816	x		
<b>Liabilities measured at fair value</b>				
Interest swaps – hedge accounting	2,425		x	
<b>Liabilities not measured at fair value</b>				
Trade payables and other liabilities	26,051			x
Other financial liabilities	151,169			x

**Fair value disclosures for instruments with recurring measurement.** At the end of each reporting period, QSC AG ascertains whether any reclassifications are required between the levels of the measurement hierarchy. No reclassifications were made in the reporting period from 1 January 2017 to 31 December 2017.

Class	Measurement hierarchy level	Fair value in € 000s at 31 Dec. 2017	Description of measurement method
Liabilities due to banks	2	140,049	The liabilities are measured by first forecasting the expected cash flows based on the provisions of the respective contracts and then discounting these to account for risk. The risk-adjusted discount rate comprises an interbank interest rate (6M Euribor) and a QSC-specific risk premium derived from credit default swap rates for a peer group. The peer group has a BBB rating.
Interest swaps – hedge accounting	2	1,617	The fair value of interest derivatives is determined on the basis of present value models including market information (interest structure curves). The fair value measurement of interest swaps was performed by the intermediary bank; the fair value is derived either from the mid-market price or, if expressed as a bid and ask price, from the indicative price at which the bank would have bought back and sold the financial instrument at the close of business on the relevant marketplace on the respective measurement date.

**Disclosures on the consolidated income statement.** The following interest income and expenses and the following net gains and losses on financial instruments are included in the consolidated income statement.

€ 000s	Interest in- come/interest expenses	Fair value change	Impairments	Payments received on retired receivables	Net result 2017	Net result 2016
Loans and receivables	113	-	201	43	357	214
Other financial liabilities						
not measured at fair value	(2,673)	-	-	-	(2,673)	(4,234)
Fair value – hedging instruments	(1,097)	(135)	-	-	(1,231)	(851)

€ 000s	Interest in- come/interest expenses	Fair value change	Impairments	Payments received on retired receivables	Net result 2016	Net result 2015
Loans and receivables	147	-	37	30	214	1,123
Other financial liabilities						
not measured at fair value	(4,234)	-	-	-	(4,234)	(5,197)
Fair value – hedging instruments	(851)	-	-	-	(851)	(652)

#### 43 DECLARATION PURSUANT TO § 161 AKTG REGARDING CONFORMITY WITH THE GERMAN CORPORATE GOVERNANCE CODE

The declaration pursuant to § 161 of the German Stock Corporation Act (AktG) regarding QSC's conformity with the German Corporate Governance Code in the version dated 5 May 2015 in the period since taking effect on 7 February 2017 has been issued by the Management and Supervisory Boards and is permanently and publicly available on the Company's website. Future amendments to the rules relevant for conformity with the German Corporate Governance Code will be posted on the QSC website without delay.

#### 44 AUDITOR'S FEES

The fee paid to KPMG AG Wirtschaftsprüfungsgesellschaft for the audit of financial statements referred above all to the audit of the consolidated and annual financial statements of QSC AG, as well as to audits of the financial statements of various subsidiaries, including the key audit focuses agreed with the Supervisory Board. Furthermore, an audit of the internal control system at service companies was conducted pursuant to ISAE 4302. In addition, a contract audit was

performed to ascertain compliance with contractual terms. Other services relate to advisory services involving a quality assurance review of the accounting guidelines compiled by QSC AG and other audit-related advisory services.

€ 000s	2017	2016
<b>Auditor's fees</b>		
Audit of financial statements (of which for previous years)	367 (6)	494 (150)
Other certification services	1	10
Tax advisory services	-	45
Other services	23	24
<b>Auditor's fees</b>	<b>391</b>	<b>573</b>

#### 45 COMPENSATION OF THE MANAGEMENT AND SUPERVISORY BOARDS

Total Management Board compensation for the 2017 financial year came to € 2,412k, as against € 1,973k in the previous year. This comprises fixed compensation of € 1,100k (2016: € 1,100k), ancillary benefits of € 140k (2016: € 138k), variable compensation of € 1,172k (2016: € 518k) and share-based compensation of € 0k (2016: € 217k).

The breakdown of total compensation by individual Management Board member can be found in the compensation tables included in the Compensation Report within the Group Management Report. This report also includes extensive information about the compensation system and about payments committed to active Management Board members in the event of the premature termination of their activities. Compensation of former Management Board members came to € 942k in the 2017 financial year (2016: € 0k).

The following table presents individualised information about the number of shares and convertible bonds held by members of the Management Board:

	Shares		Convertible bonds	
	31 Dec. 2017	31 Dec. 2016	31 Dec. 2017	31 Dec. 2016
Jürgen Hermann	400,000	400,000	350,000	350,000
Stefan A. Baustert	40,000	40,000	200,000	200,000
Udo Faulhaber (until 31 December 2017)	-	-	150,000 <sup>1</sup>	150,000
Felix Höger (until 31 December 2017)	-	-	150,000 <sup>1</sup>	150,000

<sup>1</sup> Holdings at the time of retirement from the Management Board.

During the period of their Management Board activity, Udo Faulhaber and Felix Höger purchased and sold shares in the Company via the stock exchange in the 2017 calendar year (please also see the corresponding directors' dealings notifications made pursuant to Article 19 of the European Market Abuse Directive on QSC's website).

As in the previous year, the Supervisory Board received compensation totalling € 315k for its activity in the 2017 financial year. The breakdown of overall compensation by individual Supervisory Board member and further details can be found in the Compensation Report within the Group Management Report. This report also includes information about the compensation system and an overview of the shares and convertible bonds held by Supervisory Board members. The actuarial present value of provisions for vested claims to pensions for former Management Board members amounts to € 1,960k prior to the offsetting of an asset value of € 1,486k for a reinsurance policy.

## 46 RISKS

Risks are presented in detail in the Risk Report within the Group Management Report.

## 47 PROPOSED APPROPRIATION OF PROFIT

The Management and Supervisory Boards have decided to propose to the Annual General Meeting that a dividend of € 0.03 per share be paid to shareholders.

## 48 DIRECTORS AND OFFICERS

**Management Board.** The members of the Management Board in the 2017 financial year were as follows:

Management Board member	
Jürgen Hermann	Chief Executive Officer
Stefan A. Baustert	Chief Financial Officer
Udo Faulhaber	Chief Sales and Consulting Officer (until 31 December 2017)
Felix Höger	Chief Technology and Operations Officer (until 31 December 2017)

**Supervisory Board.** The members of the Supervisory Board in the 2017 financial year were as follows:

Supervisory Board member	
Dr. Bernd Schlobohm	Businessman, Chairman
Dr. Frank Zurlino	Managing Partner at Horn & Company, Deputy Chairman
Ina Schlie	SVP Digital Government – Government Relations MEE, SAP SE
Gerd Eickers	Businessman
Anne-Dore Ahlers	Chairwoman of the Works Council, Employee Representative
Cora Hödl	Head of Infrastructure & Voice at TC Technology Department, Employee Representative

The term of office of the Supervisory Board ends upon the conclusion of the Annual General Meeting approving the actions of the Company's directors and officers for the 2017 financial year.

Cologne, 13 March 2018

QSC AG  
The Management Board



Jürgen Hermann  
Chief Executive Officer



Stefan A. Baustert  
Chief Financial Officer

## STATEMENT OF RESPONSIBILITY

To the best of our knowledge, and in accordance with the applicable reporting principles, the Consolidated Financial Statements give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group, and the Group Management Report includes a fair review of the development and performance of the business and the position of the Group, together with a description of the principal opportunities and risks associated with the expected development of the Group.

Cologne, 13 March 2018

QSC AG  
The Management Board



Jürgen Hermann  
Chief Executive Officer



Stefan A. Baustert  
Chief Financial Officer



## INDEPENDENT AUDITOR'S REPORT

To QSC AG, Cologne

### Report on the Audit of the Consolidated Financial Statements and of the Group Management Report

#### Opinions

We have audited the consolidated financial statements of QSC AG, Cologne, and its subsidiaries (the Group), which comprise the consolidated balance sheet as at 31 December 2017, and the consolidated statement of income, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the financial year from 1 January to 31 December 2017, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the group management report of QSC AG, Cologne, for the financial year from 1 January to 31 December 2017. In accordance with the German legal requirements we have not audited the content of the Group's non-financial statement and the corporate governance statement as well as the unaudited marked disclosures of the corporate governance statement, which are included in the sections 'Non-financial statement' and 'Corporate governance statement' of the group management report.

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

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to Section 315e (1) HGB [Handelsgesetzbuch: German Commercial Code] and, in compliance with these requirements, give a true and fair view of the assets, liabilities and financial position of the Group as at 31 December 2017, and of its financial performance for the financial year from 1 January to 31 December 2017, and
- the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our opinion on the group management report does not cover the content of the Group's non-financial statement and the corporate governance statement as well as the unaudited marked disclosures in the corporate governance statement mentioned above.

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

### **Basis for the Opinions**

We conducted our audit of the consolidated financial statements and of the group management report in accordance with Section 317 HGB and the EU Audit Regulation No. 537/2014 (referred to subsequently as "EU Audit Regulation") and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Article 10 (2) point (f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Article 5 (1) of the EU Audit Regulation. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinions on the consolidated financial statements and on the group management report.

### **Key Audit Matters in the Audit of the Consolidated Financial Statements**

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

### **Impairment testing of recognised goodwill**

For the accounting policies applied, we refer to the disclosures made by the Company in the notes to the consolidated financial statements in note no. 4. The assumptions underlying the measurement are presented in the notes to the consolidated financial statements under note no. 16.

## THE FINANCIAL STATEMENT RISK

Goodwill of EUR 55.6 million is recognised in the consolidated balance sheet of QSC AG. This corresponds to 18.7% of total assets.

Impairment of goodwill is tested annually at the level of the Telecommunications, Consulting and Cloud business segments. For this purpose, the carrying amount of the assets is compared with their recoverable amount for the respective business segment. If the carrying amount exceeds the recoverable amount, an impairment loss is recognised. For the impairment test, the Company determines the value in use. The reporting date for the impairment test is 31 December 2017.

Impairment testing of goodwill is complex and based on a range of assumptions that require judgement. These include the expected business and earnings development of the business segments for the next three years, the assumed long-term growth rates and the discount rate used. Based on the impairment tests conducted, the Company did not identify any need to recognise impairment losses. The Company's sensitivity analyses determined that a reasonably possible change to revenue performance would cause a decline in the recoverable amount.

There is the risk for the financial statements that an impairment loss existing as at the reporting date will not be recognised. There is also the risk that the related disclosures in the notes are not complete and appropriate.

## OUR AUDIT APPROACH

By involving our valuation experts, we have also assessed the appropriateness of the key assumptions and calculation methods of the Company. For this purpose we discussed the expected business and earnings development and the assumed long-term growth rates with those responsible for operational planning. As the impairment test at QSC was carried out by an external independent expert, we also confirmed the competence, professional skills and impartiality of the external independent expert that had been engaged and obtained an understanding of the nature of their work.

We also reconciled this with the budget prepared by the management board and approved by the supervisory board.

Furthermore, we confirmed the accuracy of the Company's previous forecasts by comparing the budgets of previous financial years with actual results and by analysing deviations. Since even small changes to the discount rate can have a significant impact on the results of impairment testing, we compared the assumptions and parameters used by the independent expert underlying the segment-specific discount rate discount rate, in particular the risk-free rate, the market

risk premium and the beta coefficient, with our own assumptions and publicly available data. To ensure the computational accuracy of the valuation model used, we verified the Company's calculations. In addition, we also critically evaluated the assessment of the valuation model made by the independent expert and reconciled their findings with our own findings. In order to take account of forecast uncertainty, we examined the impact of potential changes in material assumptions related to measurement on value in use (sensitivity analysis) by calculating alternative scenarios and comparing these with the values stated by the Company. The findings of the calculation were subsequently evaluated by comparing the computationally derived value of equity, which results from the total of value in use less net financial liabilities, with the market capitalisation of the shares of QSC AG (as at 31 December 2017). In the course of our audit we also investigated whether all relevant assets and liabilities were fully taken into account and objectively allocated to the individual operating segments in an appropriate manner. Finally, we assessed whether the disclosures in the notes regarding impairment of goodwill were appropriate. This also included an assessment of the appropriateness of disclosures in the notes according to IAS 36.134(f) on sensitivity in the event of a reasonably possible change in the key assumptions used for measurement.

## OUR OBSERVATIONS

The calculation method used for impairment testing of goodwill is appropriate and in line with the accounting policies to be applied.

The Company's assumptions and parameters used for measurement are within an acceptable range and are balanced as a whole.

The related disclosures in the notes are complete and appropriate.

## OTHER INFORMATION

Management is responsible for the other information. The other information comprises:

- the Group's non-financial statement and the corporate governance statement,
- the unaudited disclosures marked in the corporate governance statement and
- the remaining parts of the annual report, with the exception of the audited consolidated financial statements and group management report and our auditor's report.

Our opinions on the consolidated financial statements and on the group management report do not cover the other information, and consequently we do not express an opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the group management report or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

### **Responsibilities of Management and the Supervisory Board for the Consolidated Financial Statements and the Group Management Report**

Management is responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group. In addition, management is responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so. Furthermore, management is responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, management is responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

The supervisory board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the group management report.

## **Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report**

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Section 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report.

We exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.
- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems.
- Evaluate the appropriateness of accounting policies used by management and the reasonableness of estimates made by management and related disclosures.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw

attention in the auditor's report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our opinions.
- Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with [German] law, and the view of the Group's position it provides.
- Perform audit procedures on the prospective information presented by management in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by management as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, the related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

## Other Legal and Regulatory Requirements

### Further Information pursuant to Article 10 of the EU Audit Regulation

We were elected as group auditor by the annual general meeting on 24 May 2017. We were engaged by the chairperson of the accounting and audit committee of the supervisory board on 22 November 2017. We have been the group auditor of QSC AG, Cologne, without interruption since the financial year 2008.

We declare that the opinions expressed in this auditor's report are consistent with the additional report to the audit committee pursuant to Article 11 of the EU Audit Regulation (long-form audit report).

### German Public Auditor Responsible for the Engagement

The German Public Auditor responsible for the engagement is Charlotte Salzmann.

Cologne, 13 March 2018

KPMG AG  
Wirtschaftsprüfungsgesellschaft

[Original German version signed by:]

Salzmann  
Wirtschaftsprüferin  
[German Public Auditor]

Klaaßen  
Wirtschaftsprüfer  
[German Public Auditor]



# INDEX

## B

Balance sheet	79, 98–99, 125 ff.
---------------	--------------------

## C

Capital expenditure	74
Cloud	24, 27–28, 71, 76–77
Colocation	25, 28, 73
Compensation report	40 ff.
Compliance	65 ff.
Consulting	24–25, 28, 72–73, 77
Corporate governance	32 ff.
Customers	26 ff., 58

## D

Data protection	56 ff.
Debt	74, 135 ff.
Dividend	21, 164

## E

Earnings per share	76, 123–124
EBIT	76
EBITDA	74, 76
Employees	58 ff.
Environment	63–64

## F

Free cash flow	74
----------------	----

## I

Internet of Things	24, 28, 71
--------------------	------------

## K

Key performance indicators	31, 74
----------------------------	--------

## L

Liquidity	74, 79
-----------	--------

## M

Management Board	10, 32–33
Market	68–69, 89–90

## O

Opportunities	92–93
Outlook	89 ff.
Outsourcing	24, 72, 77

## R

Research and development	29–30
--------------------------	-------

## S

Segment reporting	71 ff., 76 ff., 145 ff.
Shareholders	19–20
Shareholders' equity	79, 99–100, 133–134
Shares	18 ff.
Statement of cash flows	78, 102, 143
Statement of income	75–76, 96, 120 ff.
Strategy	27 ff.
Supervisory Board	11 ff., 33 ff.

## T

Telecommunications	25, 73, 77–78
Training	60

## BUILDING BLOCKS OF DIGITAL COMMUNICATION

---



### IR Newsletter

Reports, news, highlights: Our newsletter keeps you up-to-date on all key developments. Register at: [www.qsc.de/go/en-ir-newsletter](http://www.qsc.de/go/en-ir-newsletter)

---



### Twitter

Be the first to hear the news, read interesting contributions and keep track of daily closing prices at [twitter.com/QSCIRen](https://twitter.com/QSCIRen). All QSC news at [twitter.com/QSCAGPresse](https://twitter.com/QSCAGPresse)

---



### Corporate Blog

Our blog offers an informative overview of the latest topics and events in our sector. QSC's experts allow you to peek behind the scenes. [blog.qsc.de](http://blog.qsc.de)

---



### Digitales Wirtschaftswunder

The German blog about digital transformation in the SME segment – with specialist contributions and expert opinions: [digitales-wirtschaftswunder.de](http://digitales-wirtschaftswunder.de)

---



### Slideshare

You can also find our presentations on our quarterly results and other company topics at the world's largest platform for this kind of information: [www.slideshare.net/QSCAG](http://www.slideshare.net/QSCAG)

---



### Facebook

QSC has long been present and active in the world's largest social network. Visit us at: [www.facebook.com/QSCAG](http://www.facebook.com/QSCAG)

---



### Xing

Shareholders can also connect to QSC on this business platform and find out more about their company: [www.xing.com/companies/QSCAG](http://www.xing.com/companies/QSCAG)

---



### Youtube

Short films offer insights into QSC's strategy and day-to-day work. Find out more about our customers, employees and Management Board at: [www.youtube.com/QSCGermany](http://www.youtube.com/QSCGermany)

---

## CONTACT

---

### QSC AG

Arne Thull  
 Head of Investor Relations  
 Mathias-Brüggen-Strasse 55  
 50829 Cologne  
 T +49 221 669-8724  
 F +49 221 669-8009  
 invest@qsc.de  
 www.qsc.de

## CALENDAR

---

### Quarterly Statement Q1 2018

7 May 2018

### Annual General Meeting

12 July 2018

### Quarterly Report Q2 2018

6 August 2018

### Quarterly Statement Q3 2018

12 November 2018

### Editorial responsibility

QSC AG, Cologne

### Design

sitzgruppe, Düsseldorf

### Photography

Marcus Pietrek, Düsseldorf

### Print

das druckhaus, Korschenbroich



ClimatePartner<sup>o</sup>  
 climate neutral

Print product | ID 53124-1803-1003

This translation is provided as a convenience only. Please note that the German-language original of this Annual Report is definitive.



For further information: [www.qsc.de](http://www.qsc.de)