

# Bittium

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## Bittium Corporation Half Year Financial Report January-June 2019

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Net sales

Net sales growth

**33.1**

MEUR

**+16.8** %

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Operating result

Operating result, % of net sales

**1.7**

MEUR

**5.0** %

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## Net sales and operating result grew in January-June 2019

Unless otherwise mentioned, the figures in brackets refer to the corresponding period in the previous year.

### Summary January-June 2019

- The net sales increased by 16.8 percent year-on-year to EUR 33.1 million (EUR 28.3 million).
- The share of the product-based net sales was EUR 18.6 million, representing 56.1 percent of the net sales (EUR 11.8 million) and the share of the services-based net sales was EUR 14.5 million, representing 43.9 percent of the net sales (EUR 16.5 million).
- EBITDA was EUR 4.7 million (EUR 1.3 million). The adoption of IFRS 16 standard increased EBITDA by EUR 0.3 million.
- Operating profit was EUR 1.7 million (operating loss of EUR -0.8 million).
- Cash flow from operating activities was EUR -1.2 million (EUR -10.5 million).
- Net cash flow was EUR 2.6 million (EUR -32.4 million). Net cash flow included a withdrawal of a EUR 20.0 million bank loan.
- Result for the period was EUR 1.5 million and earnings per share were EUR 0.042 (result for the period EUR -0.8 million from continuing operations and earnings per share EUR -0.022).

GROUP (MEUR)	1-6/2019 6 months	1-6/2018 6 months
NET SALES	33.1	28.3
Change of net sales, %	16.8 %	4.3 %
EBITDA	4.7	1.3
EBITDA, % of net sales	14.3 %	4.7 %
OPERATING PROFIT / LOSS	1.7	-0.8
Operating profit / loss, % of net sales	5.0 %	-2.9 %
RESULT OF THE PERIOD FROM CONTINUING OPERATIONS	1.5	-0.8
CASH AND OTHER LIQUID ASSETS	33.4	30.5
EQUITY RATIO (%)	71.7 %	84.4 %
EARNINGS PER SHARE (EUR)	0.042	-0.022

### Outlook for 2019

The amount of wireless data transfer applications is expanding and diversifying. Also the amount of data transfer and the need for secure data transfer are growing. These all create demand for Bittium's leading edge technology products and solutions. The digitalization of healthcare and remote care are becoming more common, enhancing the healthcare services and creating demand for Bittium's medical technology products and solutions. In order to enable strong international growth in a long term, Bittium invests significantly in developing its own products and solutions as well as its sales network. Bittium further aims at growing the net sales based on its own products and product platforms.

Bittium expects that the net sales in 2019 will grow from previous year (EUR 62.8 million) and the operating profit to be better than in the previous year (2.8 million). Due to the product deliveries focusing on the second half of the year, the accumulation of the operating result is expected during the second half of the year like in the previous year, but not as strongly as in 2018. In addition, the level of operating result in 2019 will be impacted by the investments in own products and product platforms started in 2017.

More information about Bittium's market outlook is presented in the section "Market outlook" in this report.

More information about other uncertainties regarding the outlook is presented in this report in the section "Risks and uncertainties" and on the company's internet pages at [www.bittium.com](http://www.bittium.com).

## Bittium's CEO Hannu Huttunen

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During the first half of 2019 the net sales developed well and impacted positively the profitability. Operating profit was slightly higher than expected partly due to the earlier than estimated product deliveries.

According to our strategy we continued significant investments into the product business. Net sales of the product based business grew strongly, resulting mainly from the growth of the tactical communication system and medical technology products sales.

In June we launched a new ultra secure Bittium Tough Mobile 2 smartphone. The product deliveries will start in autumn. The core of the information security of the new Bittium Tough Mobile 2 is its multilayered security structure and it is designed for customers with ultra security needs. The new phone will be positioned next to Bittium Tough Mobile 1, which has authority approval for using and sending confidential information wirelessly.

The development of Bittium Tough SDR soldier and vehicle radios, designed for defense market, has been taking slightly longer than estimated but we still aim at delivering the first products by the end of this year. Small in size and cost-effective radios are the latest technology and bring our customers significant new efficiency. In order to finalize the ongoing R&D projects, we will continue investing significantly in our product development also in 2019.

The services-based net sales decreased year-on-year affected by the typical variation of timing of R&D project's beginning and ending, as well as the company's own significant large R&D projects that tie experts into internal product development. The demand for 5G development work has stabilized and we have continued efforts in increasing new customers and application areas.

## Financial Performance in January-June 2019

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Bittium's net sales in January-June 2019 grew by 16.8 percent year-on-year to EUR 33.1 million (EUR 28.3 million).

The share of the product-based net sales increased to 56.1 percent and was EUR 18.6 million (EUR 11.8 million), which resulted mainly from the product deliveries of the tactical communication system, medical technology products, and Bittium Tough Mobile smartphones and their related security software. The growth of the product based net sales was affected by the growth of the product sales and partly earlier than estimated product deliveries.

The share of the services-based net sales decreased to 43.9 percent and was EUR 14.5 million (EUR 16.5 million). The decrease in the services business net sales was caused by the typical variation of timing of R&D project's beginning and ending, as well as the company's own significant large R&D projects that tie experts into internal product development.

Operating profit was EUR 1.7 million (operating loss of EUR -0.8 million).

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME, MEUR	1-6 2019	1-6 2018
	6 months	6 months
Net sales	33.1	28.3
Operating profit / loss	1.7	-0.8
Financial income and expenses	-0.2	0.0
Result before tax	1.5	-0.8
RESULT FOR THE PERIOD	1.5	-0.8
TOTAL COMPREHENSIVE INCOME FOR THE PERIOD	1.5	-0.8
Result for the period attributable to:		
Equity holders of the parent	1.5	-0.8
Total comprehensive income for the period attributable to:		
Equity holders of the parent	1.5	-0.8
Earnings per share from continuing operations, EUR	0.042	-0.022

- Cash flow from operating activities was EUR -1.2 million (EUR -10.5 million).
- Net cash flow during the period was EUR 2.6 million. As the most significant items the net cash flow includes withdrawing a EUR 20 million bank loan, EUR 8.6 million investments made into own product development and the EUR 5.4 million dividend payment (EUR -32.4 million. The negativity of the net cash flow resulted from the increase in the inventories and growth of the accounts receivables, which increased the amount of the net working capital by EUR 9.3 million. In addition, the net cash flow includes EUR 7.4 million investments made into own product development and the EUR 10.7 million dividend payment).
- Equity ratio was 71.7 percent (84.4 percent).
- Net gearing was -10.1 percent (-27.9 percent).

## Half Year Figures

GROUP'S NET SALES AND OPERATING RESULT, MEUR	1H/19	2H/18	1H/18	2H/17
Net sales	33.1	34.5	28.3	24.5
Operating profit (loss)	1.7	3.7	-0.8	-3.4
Result before taxes	1.5	3.5	-0.8	-3.4
Result for the period	1.5	4.8	-0.8	-2.4

DISTRIBUTION OF NET SALES BY PRODUCT AND SERVICES, MEUR AND %	1H/19	2H/18	1H/18	2H/17
Product based net sales	18.6	19.0	11.8	9.1
	56.1 %	54.9 %	41.8 %	37.2 %
Services based net sales	14.5	15.6	16.5	15.2
	43.9 %	45.1 %	58.2 %	62.0 %
Other net sales				0.2
				0.8 %

<b>DISTRIBUTION OF NET SALES BY MARKET AREAS, MEUR AND %</b>	<b>1H/19</b>	<b>2H/18</b>	<b>1H/18</b>	<b>2H/17</b>
Asia	0.2 0.5 %	0.4 1.1 %	0.5 1.7 %	1.0 4.2 %
Americas	5.8 17.5 %	5.0 14.6 %	3.0 10.6 %	1.4 5.8 %
Europe	27.1 82.0 %	29.1 84.3 %	24.8 87.7 %	22.0 90.0 %

## Research and Development

Bittium continued significant investments in its own products and product platforms. In January-June 2019 the investments were 38.8 percent of net sales.

The investments focused mainly on expanding the tactical communication product portfolio targeted to defense industry and on the development of different terminal products and their related software targeted for Mobile Security and Public Safety markets. In 2017, Bittium started to develop new software-defined radio based Bittium Tough SDR™ product family that includes tactical Bittium Tough SDR handheld and Bittium Tough SDR vehicle radios. In addition, Bittium continued to develop secure smartphones and the related security software. The investments were also continued into the further development of the medical technology products.

A significant part of the capitalized R&D investments is related to developing tactical communication handheld and vehicle radios, further development of the secure smartphones and the related security software, as well as further development of medical technology products.

<b>R&amp;D INVESTMENTS, MEUR</b>	<b>1-6 2019 6 months</b>	<b>1-6 2018 6 months</b>
Total R&D investments	12.8	10.6
Capitalized R&D investments	-8.6	-7.4
Depreciations and impairment of R&D investments	0.7	0.1
Cost impact on income statement	4.9	3.3
R&D investments, % of net sales	38.8 %	37.4 %

<b>CAPITALIZED R&amp;D INVESTMENTS IN BALANCE SHEET, MEUR</b>	<b>1-6 2019 6 months</b>	<b>1-6 2018 6 months</b>
Balance sheet value in the beginning of the period	26.6	11.9
Additions during the period	8.6	7.4
Acquisitions of the business		
Depreciations and impairment of R&D investments	-0.7	-0.1
Balance sheet value at the end of the period	34.5	19.1

## Business Development in January-June 2019

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During the first half of the year, Bittium launched a new ultra secure Bittium Tough Mobile 2 smartphone. The core of the information security of the new Bittium Tough Mobile 2 is its multilayered security structure, which is based on the hardened Android™ 9 Pie operating system, unique hardware solutions, and the information security features and software integrated in the source code. The multilayered information security ensures that both the data stored in the device and data transfer are protected as effectively as possible.

Bittium also announced a new Multicontainer feature for the Bittium Tough Mobile smartphone. It enables the use of several secure container workspaces. The users of secure workspaces can safely download approved applications from their own organizations' application libraries. It enables the users to easily handle confidential information of several organizations as well as their personal data and applications with the same Bittium Tough Mobile smartphone.

Also a new version of Bittium SafeMove® software with important new features to support cyber resilient field operations under disruptions was launched.

During the first half of the year Bittium started the customization work related to the delivery of the tactical backbone network for its customer in Austria, and continued the strong cooperation with the Finnish Defense Forces. Three purchase orders were received from the Finnish Defense Forces during the first half of the year. The first purchase order was EUR 3.4 million, for maintenance and further development of Bittium TAC WIN™ and Bittium Tough VoIP™ systems during 2019-2020. The second purchase order was EUR 11.5 million in total, for Bittium TAC WIN™ products and Bittium Tough Comnode™ terminals. The third purchase order was for porting the European ESSOR (European Secure Software-defined Radio) program's OC1 (Operational Capability 1) phase wideband waveform to the Bittium Tough SDR radios that will be delivered to the Finnish Defence Forces. The porting of the waveform to the national software-defined radios enables compatibility between radios used in European coalition operations, in accordance with the goals of the ESSOR programme. The value of the purchase order was approximately EUR 1.1 million. The purchase order also included options for the years 2020-2021 with the total value of approximately EUR 2.5 million.

Based on the supply agreement signed in the beginning of 2018 Bittium continued delivering customized ECG measuring devices for the leading remote monitoring services providing company in the US during the first half of the year. In addition Bittium won several new customers in Australia, Asia and Europe.

In March Bittium launched Bittium HolterPlus™ remote cardiac monitoring solution. Bittium HolterPlus solution extends the physician's reach outside of the hospital or medical institution by remotely monitoring the discharged patient from for example home or nursing home. Bittium HolterPlus allows the remotely monitored patient's ECG measurement data to be stored and transferred securely from the monitoring device to the medical remote diagnosis service platform. From the platform the ECG recording can be downloaded to analysis software for a cardiologist to diagnose, after which the treating physician receives the diagnosis and possible instructions for further patient care.

In the R&D services business Bittium continued developing 5G technology and different kind of connectivity solutions for its customers, mainly in Europe.

In June Bittium was granted the ISO 27001:2013 Information Security Management Certificate that includes Bittium's business and support processes, information security, personnel and premises safety, as well as continuous improvement methods. ISO 27001:2013 specifies the requirements for establishing, implementing, maintaining and continually improving an information security management system within the context of the organization. It also includes requirements for the assessment and treatment of information security risks tailored to the needs of the organization.

## Significant Events during the Reporting Period

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February 14, 2019 – Bittium Wireless Ltd, a subsidiary of Bittium Corporation, received a purchase order from the Finnish Defence Forces for products included in the Software Defined Radio based Bittium Tactical Wireless IP Network™ (TAC WIN) system and Bittium Tough Comnode™ terminals, which are meant for tactical communications. The total value of the purchase order is EUR 11.5 million of which the share of the Bittium TAC WIN system's products is EUR 9.9 million and the share of the Bittium Tough Comnode terminals is EUR 1.6 million.

The share of the purchase order including Bittium TAC WIN system's products is based on the Framework Agreement signed by Bittium and the Finnish Defence Forces on August 9, 2017. According to the Framework Agreement, the Finnish Defence Forces will order products included in the Software Defined Radio based Bittium TAC WIN system during the years 2018-2020. If materialized in full, the total value of the Framework Agreement is EUR 30 million. Finnish Defence Forces will issue separate purchase orders for the products each year. The products ordered in February will be delivered to the Finnish Defence Forces during the year 2019.

The share of the purchase order including Bittium Tough Comnode terminals is based on the Framework Agreement signed by Bittium and the Finnish Defence Forces on November 5, 2018. According to the Framework Agreement, the Finnish Defence Forces will order Bittium Tough Comnode terminals and related accessories during the years 2018-2022. If materialized in full, the total value of the Framework Agreement is EUR 8.3 million. Finnish Defence Forces will issue separate purchase orders in several batches during the validity of the Framework Agreement. The products ordered in February will be delivered to the Finnish Defence Forces during the year 2019.

## Significant Events after the Reporting Period

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There were no significant events after the reporting period.

## Market Outlook

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Bittium's customers operate in various industries, each of them having their own industry specific factors driving the demand. A common factor creating demand among the whole customer base is the growing need for higher quality and secure data transfer. Due to the technology competences accrued over time and long history in developing mobile communication solutions, Bittium is in a good position to offer customized solutions for its customers. Over thirty years of experience and extensive competence in measuring of biosignals also act as a basis for medical technology solutions.

The following factors are expected to create demand for Bittium's products and services in 2019 and beyond:

- In the defense sector's tactical communication market the governments' defense forces and other authorities need networks that troops, who are more and more constantly on the move, can use for transferring growing amounts of data securely. This creates demand for Bittium Tactical Wireless IP Network (TAC WIN) broadband network and for other Bittium's IP-based (Internet Protocol) tactical communications solutions, as well as for Bittium's new tactical communication handheld and vehicle radios that fulfill the needs of data transfer of moving troops or individual soldiers. Bittium continues its efforts to bring its defense market targeted products and services also to the international defense markets and aims to get new international customers for its tactical communication system in 2019. Due to the long sales cycles driven by purchasing programs of national governments, it takes time to receive significant purchase orders.
- The use of LTE technology, smartphones and applications continue to increase in special verticals such as public safety creating demand for Bittium Tough Mobile secure LTE smartphone and other customized special terminals based on Bittium's own product platform. The awareness of mobile security risks is growing and the interest towards secure mobile devices is increasing. The implementation of LTE-based devices in Public Safety markets has been slower than expected due to the delay of the device functionalities required by the authorities and due to the slow progress of the market. The sale of the secure terminal products is expected to develop moderately according to the nature of public safety markets.
- Using public network connections in portable devices is increasing also in demanding professional use, such as in the public sector. This creates requirements for network connections to be easy to use and secure. The products in the Bittium SafeMove product family enable the ease of use of the devices and security in demanding use.
- In the mobile telecommunications, the demand for 5G technology development work has stabilized significantly and the implementation of 5G is accelerating in pace. Investments in developing new features continue and the importance of software development in the 5G network development expands. This creates demand for Bittium's R&D services. There is a wide range of frequencies allocated for the 5G technology thus creating the need to develop multiple products to cover the market and creating demand for R&D services for development of product variants. Also the development of new devices utilizing 5G technology increases the demand for Bittium's services.
- As the digitalization evolves, the secure IoT (Internet of Things) has become a significant development area in many industries. The increasing need of companies to digitalize their operations, collect data wirelessly and transfer it to the internet and cloud

services generate need for Bittium's services and customized solutions. For this there is a need for secure connected devices for consumers' free-time applications and demanding industrial usage that collect information through their sensors and connect the devices securely to the internet and cloud services. New IoT radio systems are being used all over the world and the amount of digitalized devices continuously increases. The devices have new further developed features that generate demand for R&D services. Along with the 5G technology is being used, there will also be new features in the IoT that enable i.e. remote control of machines. Therefore the integration of different systems and technologies play an important role in enabling the complete digitalization service. To ease and speed up the processing of large data amounts there are different kinds of learning systems and devices under development that use different kinds of artificial intelligence (AI) technologies.

- The heart and brain failures are among the most frequent causes of serious complications and recognizing those symptoms early on, based on information gathered by measuring, enable the start of the effective treatment in time. Also the prevention of diseases and health problems are being increasingly invested in. In the healthcare technology market there is ongoing a significant change in the patient care both inside the hospitals as well as in homecare. The repatriation of patients is being pursued earlier than before which may enable significant cost savings in the healthcare. A prerequisite for early repatriation is the enabling of accurate and precise follow-up and measurement in home conditions through remote monitoring. For this purpose Bittium offers its Bittium Faros product family for remote heart monitoring and Bittium BrainStatus for measuring the electrical activity of the brain. One of the growing application areas in the wireless and remote systems is healthcare technology that enables implementing these changes for its part. Remote monitoring and remote diagnostics together with wireless and remote-controllable systems bring effectiveness to the healthcare performance and cut costs as the diagnosis from specialists are available regardless of time and place. This enables also new service providers to enter the chain of medical treatment services offering wider availability of medicine, without bargaining the quality of specialists i.e. cardiologists and neurologists.

## Risks and Uncertainties

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Bittium has identified a number of business, market and finance related risk factors and uncertainties that can affect the level of sales and profits.

### Market Risks

The global economic uncertainty may affect the demand for Bittium's services, solutions and products and provide pressure on e.g. pricing. In the short term such uncertainty may affect, in particular, the utilization and chargeability levels and average hourly prices of R&D services. Growing political uncertainty may also affect the demand for Bittium's services, solutions and products and the price competitiveness in the different geographical areas. Bittium is also increasingly exposed to legal, economic, political and regulatory risks related to the countries in which its suppliers and other cooperation partners are located. Such risks may result in delays in deliveries, currency losses, elevated costs, or litigations and related costs.

As Bittium's customer base includes, among others, companies operating in the field of telecommunication, defense and other authorities, as well as companies delivering products to them, and companies operating in the healthcare sector, the company is exposed to market changes in these industries.

A significant part of Bittium's net sales accumulates from selling products and R&D services to defense and other authorities, as well as companies delivering products to them. Deviation in anticipated business development with such customer concentrations may translate as a significant deviation in Bittium's outlook, both in terms of net sales and operating result, during the ongoing financial period and thereafter.

Bittium seeks to expand its customer base on a longer term and reduce dependence on individual companies and hence the company would thereby be mainly affected by the general business climate in the industries of the companies belonging to Bittium's customer base instead of the development of individual customer relationships. The more specific market outlook has been presented in this report in the "Market outlook" section.

### Business Related Risks

Bittium's operative business risks are mainly related to following items: uncertainties and short visibility on customers' product program decisions, their make or buy decisions and on the other hand, their decisions to continue, downsize or terminate current product programs, execution and management of large customer projects, ramping up and down project resources, availability of personnel in labor markets, accessibility on commercially acceptable terms and on the other hand successful utilization of the most important technologies and components, competitive situation and potential delays in the markets, timely closing of customer and supplier contracts

with reasonable commercial terms, delays in R&D projects, realization of expected return on capitalized R&D investments, obsolescence of inventories and technology risks in product development causing higher than planned R&D costs, and risks related to the ramp-up of product manufacturing. Revenues expected to come from either existing or new products and customers include normal timing risks. Bittium has certain significant customer projects and deviation in their expected continuation could result also significant deviations in the company's outlook. In addition, there are typical industry warranty and liability risks involved in selling Bittium's services, solutions and products.

Bittium's product delivery business model faces such risks as high dependency on actual product volumes, timing risks and potential delays in the markets. The above-mentioned risks may manifest themselves as lower amounts of products delivered or higher costs of production, and ultimately, as lower profit. Bringing Bittium's products to international defense and other authorities markets may take longer than anticipated because the projects are typically long and the purchasing programs are prepared in the lead of national governments and within the available financing. Once a supplier has been selected, product deliveries are typically executed over several years.

Some of Bittium's businesses operate in industries that are heavily reliant on patent protection and therefore face risks related to management of intellectual property rights, on the one hand related to accessibility on commercially acceptable terms of certain technologies in the Bittium's products and services, and on the other hand related to an ability to protect technologies that Bittium develops or licenses from others from claims that third parties' intellectual property rights are infringed. Additionally, parties outside of the industries operate actively in order to protect and commercialize their patents and therefore in their part increase the risks related to the management of intellectual property rights. At worst, claims that third parties' intellectual property rights are infringed, could lead to substantial liabilities for damages. In addition, the progress of the customer projects and delivery capability may be also affected by potential challenges in global accessibility of key technologies and components on commercially acceptable terms, as well as by the acceptance of the necessary export licenses. The company changed its name to Bittium Corporation as of July 1, 2015 and started using the new trademark. The registration and the use of the new trademark can include customary risks involved in taking in use a new trademark.

## Financing Risks

Global economic uncertainty may lead to payment delays, increase the risk for credit losses and weaken the availability and terms of financing. To fund its operations, Bittium relies mainly on income from its operative business and may from time to time seek additional financing from selected financial institutions. In May 2019 Bittium Corporation has agreed with Nordea Bank Finland Plc and OP Corporate Bank Plc on financing arrangement where total financing amount has been raised from EUR 30.0 million to EUR 40.0 million. With the financing arrangement, Bittium has EUR 20.0 million senior loan and EUR 10.0 million committed overdraft credit facility agreement with Nordea. Maturity date for the senior loan is May 24, 2024 and the credit limit agreement is valid until May 24, 2024. Bittium has EUR 10.0 million committed overdraft credit facility agreement with OP Corporate Bank Plc valid until May 24, 2022. These agreements include customary covenants related to, among other things, equity ratio, transferring property and pledging. There is no assurance that additional financing will not be needed in case of investments, networking capital needs or clearly weaker than expected development of Bittium's businesses. Customer dependency in some parts of Bittium's business may translate as an accumulation of risk with respect to outstanding receivables and ultimately with respect to credit losses.

## Statement of Financial Position and Financing

The figures presented in the statement of financial position of June 30, 2019, are compared with the statement of the financial position of December 31, 2018 (MEUR).

	30.6.2019	31.12.2018
Non-current assets	74.6	65.9
Current assets	75.7	66.5
Total assets	150.3	132.4
Share capital	12.9	12.9
Other capital	93.2	97.1
Total equity	106.2	110.0
Non-current liabilities	22.3	1.9
Current liabilities	21.8	20.5
Total equity and liabilities	150.3	132.4

Cash flow of the review period :	1-6/2019	1-12/2018
+ profit of the period +/- Adjustment of accrual basis items	4.7	7.9
+/- Change in net working capital	-5.7	-8.4
- interest, taxes and dividends	-0.2	-0.0
= net cash from operating activities	-1.2	-0.5
- net cash from investing activities	-10.1	-19.8
- net cash from financing activities	13.9	-11.7
= net change in cash and cash equivalents	2.6	-32.0

The amount of gross investments in the period under review was EUR 12.2 million. Net investments for the review period totaled to EUR 12.1 million. The total amount of depreciation during the period under review was EUR 3.0 million. The amount of interest-bearing debt, including finance lease liabilities, was at the end of the reporting period EUR 22.7 million (EUR 1.5 million). Bittium's equity ratio at the end of the period was 71.7 percent (84.7 percent).

Cash and other liquid assets at the end of the reporting period were EUR 33.4 million (EUR 30.9 million). Net cash flow during the period was EUR 2.6 million. The net cash flow resulted as the most significant items from the withdrawal of a EUR 20 million bank loan, the EUR 8.6 million investments made into own product development and the EUR 5.4 million dividend payment (EUR -32.0 million. As the most significant item the net cash flow includes EUR 15.1 million investments made into own product development and the EUR 10.7 million dividend payment).

Bittium has a EUR 20.0 million senior loan and a EUR 10.0 million committed overdraft credit facility agreement with Nordea Bank Finland Plc. Maturity date for the senior loan is May 24, 2024 and the credit limit agreement is valid until May 24, 2024. Bittium has EUR 10.0 million committed overdraft credit facility agreement with OP Corporate Bank Plc valid until May 24, 2022. At the end of the review period, EUR 0.0 million of these facilities were in use.

Bittium follows a hedging strategy that has an objective to ensure the business margins in changing market circumstances by minimizing the influence of exchange rates. According to the hedging strategy principles, the net position in the currency is hedged when it exceeds the euro limit defined in the hedging strategy. The net position is determined on the basis of accounts receivable, accounts payable, order book and budgeted net currency cash flow.

## Personnel

The Bittium group employed an average of 674 people in between January and June 2019. At the end of June 2019, the company had 680 employees (674 employees at the end of 2018).

## Changes in the Company's Management

March 1, 2019 - Mr. Klaus Mäntysaari, Senior Vice President Connectivity Solutions of Bittium Corporation, a member of Bittium Management Group, decided to leave to another company. Mr. Mäntysaari has been working for Bittium since 2004 in several positions in the wireless services business. He continued at Bittium until April 30, 2019. The search for a new Vice President of Connectivity Solutions has been started and for the present Mr. Hannu Huttunen, CEO of the company, is leading the Connectivity Solutions business.

As of May 1, 2019 Bittium management group consists of following persons: Mr. Hannu Huttunen, CEO (chairman); Mr. Pekka Kunnari, CFO; Mr. Kari Jokela, CLO; Ms. Karoliina Fyrstén, Director, Corporate Communications and Marketing, Mr. Sammy Loitto, Senior Vice President Sales, and heads of product and service areas: Mr. Jari Sankala, Senior Vice President, Defense and Security; Mr. Arto Pietilä, Senior Vice President, Medical Technologies; and Mr. Jari-Pekka Innanen, Vice President, Engineering.

## Flagging Notifications

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There were no changes in the ownership during the period under review that would have caused flagging notifications which are obligations for disclosure in accordance with Chapter 2, section 9 of the Securities Market Act.

## Notifications of Managers' Transactions

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There were no managers transactions during the reporting period.

## Decisions of the Annual General Meeting of Bittium Corporation

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The Annual General Meeting of Bittium Corporation was held on April 10, 2019, at 1.00 p.m. at the University of Oulu, Saalastinsali, Pentti Kaiteran katu 1, 90570 Oulu, Finland. The Annual General Meeting approved the annual accounts for the financial year 2018 and discharged the company's management from liability.

## Use of the Profits Shown on the Balance Sheet and Payment of Dividend

The Annual General Meeting decided in accordance with the proposal of the Board of Directors to pay EUR 0.05 per share as dividend based on the adopted balance sheet for the financial period of January 1, 2018 - December 31, 2018, representing approximately half of the result of the financial period, and in addition, EUR 0.10 per share as additional dividend, totaling altogether to EUR 0.15 per share. The dividend was paid to the shareholders who are registered as shareholders in the company's register of shareholders as maintained by Euroclear Finland Ltd on the dividend record date, April 12, 2019. The dividend was paid on April 23, 2019.

## Election and remuneration of the Members of the Board of Directors

The Annual General Meeting decided that the Board of Directors shall comprise six (6) members. Ms. Riitta Tiuraniemi, Mr. Seppo Mäkinen, Mr. Juha Putkiranta, Mr. Petri Toljamo and Mr. Erkki Veikkolainen were re-elected as members of the Board of Directors for a term of office expiring at the end of the next Annual General Meeting. Further, Mr. Pekka Kempainen was elected as the new member of the Board of Directors for a corresponding term of office.

At its assembly meeting held on April 10, 2019, the Board of Directors elected Mr. Erkki Veikkolainen Chairman of the Board. Further, the Board resolved to keep the Audit Committee. Mr. Juha Putkiranta (Chairman of the committee) and Ms. Riitta Tiuraniemi were elected as members of the Audit Committee and authorized public accountant Seppo Laine was invited to the Audit Committee as external advisor of the Board of Directors.

The following monthly remuneration shall be paid to the members of the Board of Directors: to the chairman of the Board of Directors EUR 3,150 and to the other members of the Board of Directors EUR 1,800 each. In addition, the members of the Board of Directors are entitled to compensation for attending Board meetings as follows: the chairman of the Board EUR 875 for each meeting and other members EUR 500 for each meeting. In addition, the members of the Board of Directors are entitled to compensation for attending Committee meetings as follows: the chairman of the Committee EUR 600 for each meeting and other Committee members EUR 400 for each meeting. Travel expenses of the members of the Board of Directors shall be reimbursed in accordance with the Company's travel policy. The General Meeting also decided that 50 percent of the total amount of the monthly remuneration will be paid at once as Bittium Corporation's shares acquired for the price formed in public trading, and the shares will be acquired according to the share purchase program of the company.

## **Election and Remuneration of the Auditor**

Ernst & Young Oy, authorized public accountants, was re-elected auditor of the Company for a term of office ending at the end of the next Annual General Meeting. Ernst & Young Oy has notified that Mr. Jari Karppinen, authorized public accountant, will act as responsible auditor. It was decided that the remuneration to the auditor shall be paid against the auditor's reasonable invoice.

## **Authorizing the Board of Directors to Decide on the Repurchase of the Company's own Shares**

The General Meeting authorized the Board of Directors to decide on the repurchase of the Company's own shares as follows.

The amount of own shares to be repurchased shall not exceed 3,500,000 shares, which corresponds to approximately 9.81 percent of all of the shares in the company. Only the unrestricted equity of the company can be used to repurchase own shares on the basis of the authorization.

Own shares can be repurchased at a price formed in public trading on the date of the repurchase or otherwise at a price formed on the market.

The Board of Directors decides how own shares will be repurchased. Own shares can be repurchased using, inter alia, derivatives. Own shares can be repurchased otherwise than in proportion to the shareholdings of the shareholders (directed repurchase).

The authorization cancels the authorization given by the General Meeting on April 11, 2018 to decide on the repurchase of the company's own shares. The authorization is effective until June 30, 2020.

## **Authorizing the Board of Directors to Decide on the Issuance of Shares as well as the Issuance of Special Rights Entitling to Shares**

The General Meeting authorized the Board of Directors to decide on the issuance of shares and special rights entitling to shares referred to in Chapter 10 Section 1 of the Companies Act as follows.

The amount of shares to be issued shall not exceed 3,500,000 shares, which corresponds to approximately 9.81 percent of all of the shares in the company.

The Board of Directors decides on all the conditions of the issuance of shares and of special rights entitling to shares. The authorization concerns both the issuance of new shares as well as the transfer of treasury shares. The issuance of shares and of special rights entitling to shares may be carried out in deviation from the shareholders' pre-emptive rights (directed issue).

The authorization cancels the authorization given by the General Meeting on April 11, 2018 to decide on the issuance of shares as well as the issuance of special rights entitling to shares referred to in Chapter 10 Section 1 of the Companies Act. The authorization is effective until June 30, 2020.

## **Annual Report, Sustainability Report, Corporate Governance Statement and Salary and Remuneration Report**

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On March 20, 2019 Bittium published its Annual Report 2018. The report includes Sustainability Report, Corporate Governance Statement, Report by the Board of Directors and Salary and Remuneration Report from the year 2018.

The reports are available at the company's internet pages at <https://www.bittium.com> both in Finnish and in English. The Annual Report and Sustainability Report are available also at <https://annualreport.bittium.com>.

## Invitation to a Press Conference

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Bittium will hold a webcast and telephone conference regarding the Half Year Financial Report January-June 2019 for media, analysts and institutional investors on August 8, 2019, at 9.00 am (CEST+1). The conference will be held in Finnish. Bittium will also hold a webcast and telephone conference for media, analysts and institutional investors in English on the same day at 11.00 am (CEST+1).

Link to the Finnish webcast: <https://bittium.videosync.fi/2019-q2-tulokset>

Link to the English webcast: <https://bittium.videosync.fi/2019-q2-results>

Dial-in numbers for the conference call are: FI: +358 981 710 310, SE: +46 856 642 651, UK: +44 333 300 08 04 ja US: +1 631 913 14 22 and the PIN code is 87033397#

A recordings of the both webcasts and the presentation will be available after the conference on Bittium's website at [www.bittium.com/investors](http://www.bittium.com/investors).

Oulu, August 8, 2019

Bittium Corporation  
The Board of Directors

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**Distribution:**

Nasdaq Helsinki  
Major media

# Bittium Corporation Condensed Financial Statements and Notes January – June 2019

(unaudited)

The Half-year Financial Report has been prepared in accordance with IAS 34 Interim Financial Reporting.

<b>CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME (MEUR)</b>	<b>1-6/2019</b>	<b>1-6/2018</b>	<b>1-12/2018</b>
<b>Continuing operations</b>	<b>6 months</b>	<b>6 months</b>	<b>12 months</b>
NET SALES	33.1	28.3	62.8
Other operating income	0.4	0.6	1.3
Work performed by the undertaking for its own purpose and capitalized	0.1	0.1	0.3
Raw materials	-6.1	-3.7	-10.2
Personnel expenses	-16.1	-16.5	-29.7
Depreciation	-3.0	-2.2	-4.6
Other operating expenses	-6.7	-7.5	-17.1
Share of profits in associated companies	0.1	0.1	0.1
<b>OPERATING PROFIT (LOSS)</b>	<b>1.7</b>	<b>-0.8</b>	<b>2.8</b>
Financial income and expenses	-0.2	0.0	-0.1
<b>PROFIT BEFORE TAX</b>	<b>1.5</b>	<b>-0.8</b>	<b>2.7</b>
Income tax	0.0	0.0	1.3
<b>PROFIT FOR THE PERIOD FROM CONTINUING OPERATIONS</b>	<b>1.5</b>	<b>-0.8</b>	<b>4.0</b>
<b>Discontinued operations</b>			
Profit for the year from discontinued operations			
<b>PROFIT FOR THE PERIOD</b>	<b>1.5</b>	<b>-0.8</b>	<b>4.0</b>
Other comprehensive income:			
Items that may be reclassified subsequently to the statement of income			
Exchange differences on translating foreign operations	0.0	0.0	0.0
Other comprehensive income for the period total	0.0	0.0	0.0
<b>TOTAL COMPREHENSIVE INCOME FOR THE PERIOD</b>	<b>1.5</b>	<b>-0.8</b>	<b>4.1</b>
Profit for the year attributable to			
Equity holders of the parent	1.5	-0.8	4.0
<b>Total comprehensive income for the period attributable to</b>			

Equity holders of the parent	1.5	-0.8	4.1
Earnings per share from continuing operations, EUR			
Basic earnings per share	0.042	-0.022	0.113
Diluted earnings per share	0.042	-0.022	0.113
Earnings per share from discontinued operations, EUR			
Basic earnings per share			
Diluted earnings per share			
Earnings per share from continuing and discontinued operations, EUR			
Basic earnings per share	0.042	-0.022	0.113
Diluted earnings per share	0.042	-0.022	0.113
Average number of shares, 1000 pcs	35 693	35 693	35 693
Average number of shares, diluted, 1000 pcs	35 693	35 693	35 693

<b>CONSOLIDATED STATEMENT OF FINANCIAL POSITION (MEUR)</b>	<b>June 30. 2019</b>	<b>June 30. 2018</b>	<b>Dec. 31. 2018</b>
<b>ASSETS</b>			
Non-current assets			
Property, plant and equipment	24.6	23.4	23.4
Goodwill	5.8	5.8	5.8
Intangible assets	37.3	22.5	29.7
Other financial assets	1.8	1.4	1.6
Other non-current receivables	1.4	1.7	1.6
Deferred tax assets	3.7	2.5	3.7
Non-current assets total	74.6	57.3	65.9
Current assets			
Inventories	17.7	13.7	14.6
Trade and other receivables	24.5	25.2	21.1
Financial assets at fair value through profit or loss	5.7	24.6	21.6
Cash and short term deposits	27.8	6.0	9.3
Current assets total	75.7	69.4	66.5
<b>TOTAL ASSETS</b>	<b>150.3</b>	<b>126.7</b>	<b>132.4</b>
<b>EQUITY AND LIABILITIES</b>			
Equity attributable to equity holders of the parent			
Share capital	12.9	12.9	12.9
Invested non-restricted equity fund	26.0	26.0	26.0
Translation difference	1.1	1.1	1.1
Retained earnings	66.2	65.3	70.1

Total equity	106.2	105.2	110.0
Non-current liabilities			
Deferred tax liabilities	0.4	0.3	0.4
Provisions			
Interest-bearing liabilities	21.5	0.5	0.8
Other non-current liabilities	0.4	0.5	0.5
Advances received	0.1	0.2	0.2
Non-current liabilities total	22.3	1.5	1.9
Current liabilities			
Trade and other payables	18.9	17.8	18.1
Financial liabilities at fair value through profit or loss		0.1	
Provisions	1.7	1.4	1.6
Interest-bearing loans and borrowings	1.2	0.7	0.7
Current liabilities total	21.8	20.0	20.5
Total liabilities	44.1	21.5	22.4
<b>TOTAL EQUITY AND LIABILITIES</b>	<b>150.3</b>	<b>126.7</b>	<b>132.4</b>

<b>CONSOLIDATED STATEMENT OF CASH FLOWS (MEUR)</b>	<b>1-6/2019</b>	<b>1-6/2018</b>	<b>1-12/2018</b>
	<b>6 months</b>	<b>6 months</b>	<b>12 months</b>
<b>CASH FLOW FROM OPERATING ACTIVITIES</b>			
Profit for the year from continuing operations	1.5	-0.8	4.0
Profit for the year from discontinued operations			
Adjustment of accrual basis items	3.2	2.3	3.8
Change in net working capital	-5.7	-12.0	-8.4
Interest paid on operating activities	-0.5	-1.2	-1.4
Interest received from operating activities	0.3	1.2	1.3
Income taxes paid	-0.0	-0.0	0.1
<b>NET CASH FROM OPERATING ACTIVITIES</b>	<b>-1.2</b>	<b>-10.5</b>	<b>-0.5</b>
<b>CASH FLOW FROM INVESTING ACTIVITIES</b>			
Purchase of property, plant and equipment	-1.2	-2.7	-3.7
Purchase of intangible assets	-8.8	-8.0	-16.0
Purchase of investments/associated companies	-0.3	0.0	-0.2
Sale of investments/associated companies	0.1	0.0	0.0
Sale of property, plant and equipment			0.0
Sale of intangible assets	0.0	0.0	0.0
<b>NET CASH FROM INVESTING ACTIVITIES</b>	<b>-10.1</b>	<b>-10.7</b>	<b>-19.8</b>
<b>CASH FLOW FROM FINANCING ACTIVITIES</b>			

Borrowings	20.0	0.1	0.1
Repayment of borrowing		-0.1	-0.1
Payment of finance liabilities	-0.7	-0.5	-0.9
Dividend paid	-5.4	-10.7	-10.7
<b>NET CASH FROM FINANCING ACTIVITIES</b>	<b>13.9</b>	<b>-11.2</b>	<b>-11.7</b>
NET CHANGE IN CASH AND CASH EQUIVALENTS	2.6	-32.4	-32.0
Cash and cash equivalents at beginning of period	30.9	62.9	62.9
Cash and cash equivalents at end of period	33.4	30.5	30.9

## CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (MEUR)

A = Share capital

B = Invested non-restricted equity fund

C = Translation difference

D = Retained earnings

E = Non-controlling interests

F = Total equity

	A	B	C	D	E	F
Shareholders equity on Jan. 1. 2018	12.9	26.0	1.0	76.7		116.7
Comprehensive income for the period						
Profit/loss for the period				-0.8		-0.8
Exchange differences on translating foreign operations			0.0			0.0
Total comprehensive income for the period			0.0	-0.8		-0.8
Transactions between the shareholders						
Distribution of dividends				-10.7		-10.7
Total transactions between the shareholders				-10.7		-10.7
Other changes				-0.0		-0.0
Shareholders equity on June 30, 2018	12.9	26.0	1.1	65.3		105.2

	A	B	C	D	E	F
Shareholders equity on Jan. 1, 2019	12.9	26.0	1.1	70.1		110.0
Comprehensive income for the period						

Profit/loss for the period				1.5		1.5
Exchange differences on translating foreign operations			0.0			0.0
Total comprehensive income for the period			0.0	1.5		1.5
Transactions between the shareholders						
Distribution of dividends				-5.4		-5.4
Total transactions between the shareholders				-5.4		-5.4
Other changes				-0.0		-0.0
Shareholders equity on June 30, 2019	12.9	26.0	1.1	66.2		106.2

## NOTES TO THE HALF YEAR FINANCIAL REPORTING

### ACCOUNTING PRINCIPLES FOR THE HALF YEAR FINANCIAL REPORTING:

The Half Year Financial Report has been prepared in accordance with IAS 34 Interim Financial Reporting. Bittium Corporation has applied the same accounting principles in the preparation of this Half Year Report as in its Financial Statements for 2018, except for the adoption of new standards and interpretations effective during 2019.

### THE APPLICATION OF IFRS 16 LEASES STANDARD

IFRS 16 Leases standard has come into force on 1st of January 2019. It replaced the former IAS 17 standard and its interpretations. The standard constructs a common model for the accounting treatment of all lease contracts in both lessee's and lessor's financial statements. Bittium adopted the standard using the retrospective approach and did not restate the comparative periods. According to the standard, basically all the Group lease agreements are presented as assets and liabilities in the balance sheet. The adoption of the standard increased the value of assets in the opening balance sheet 1 January 2019 by EUR 1.5 million. The adoption of the IFRS 16 standard did not have material effect on Bittium EBITDA (EUR 0.3 million) nor Bittium operating profit (EUR 0.0 million). The adoption of the IFRS 16 standard increased cash flow from operating activities in the reporting period by EUR 0.2 million and interest-bearing liabilities by EUR 1.3 million.

The other forthcoming revisions or amendments of the standards are not expected to have significant impact on the consolidated financial statements.

### ALTERNATIVE PERFORMANCE MEASURES

In this report, Bittium uses alternative performance measures in accordance with the guidelines issued by the European Securities and Markets Authority (ESMA). Alternative performance measures are derived from performance measures reported in accordance to International Financial Reporting Standards (IFRS). Alternative performance measures are used to better reflect the operational business performance and to enhance comparability between financial periods. They are reported in addition to, but not substituting, the performance measures reported in accordance with the IFRS. The definitions of the common alternative performance measures are listed below.

EBITDA = Operating profit + depreciations

Net gearing % =  $\frac{\text{Interest-bearing liabilities - cash and deposits and short-term investments} \times 100}{\text{Total equity}}$

Equity per share =

Equity attributable to equity holders of the parent

Share issue adjusted number of the shares at the end of the period

## SEGMENT-INFORMATION (MEUR)

Bittium Corporation does not have segments that require reporting according to IFRS 8 standard.

NET SALES OF GEOGRAPHICAL AREAS (MEUR)	1-6/2019 6 months	1-6/2018 6 months	1-12/2018 12 months
Net sales			
Europe	27.1	24.8	53.9
Americas	5.8	3.0	8.0
Asia	0.2	0.5	0.9
Net sales total	33.1	28.3	62.8

RELATED PARTY TRANSACTIONS	1-6/2019 6 months	1-6/2018 6 months	1-12/2018 12 months
Employee benefits for key management and stock options expenses total. continuing operations	0.6	0.6	1.5

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME BY HALF-YEAR (MEUR) Continuing operations	1-6/2019 6 months	7-12/2018 6 months	1-6/2018 6 months	7-12/2017 6 months
NET SALES	33.1	34.5	28.3	24.5
Other operating income	0.4	0.7	0.6	1.1
Work performed by the undertaking for its own purpose and capitalized	0.1	0.2	0.1	0.5
Raw materials	-6.1	-6.5	-3.7	-3.7
Personnel expenses	-16.1	-13.2	-16.5	-15.1
Depreciation	-3.0	-2.5	-2.2	-2.0
Other operating expenses	-6.7	-9.6	-7.5	-8.8
Share of profits in associated companies	0.1	0.0	0.1	0.0
OPERATING PROFIT (LOSS)	1.7	3.7	-0.8	-3.4
Financial income and expenses	-0.2	-0.1	0.0	0.0
PROFIT BEFORE TAX	1.5	3.5	-0.8	-3.4
Income tax	0.0	1.3	0.0	1.0

PROFIT FOR THE PERIOD FROM CONTINUING OPERATIONS	1.5	4.8	-0.8	-2.4
<b>Discontinued operations</b>				
Profit for the period from discontinued operations				0.4
PROFIT FOR THE PERIOD	1.5	4.8	-0.8	-2.0
Other comprehensive income	0.0	0.0	0.0	-0.1
TOTAL COMPREHENSIVE INCOME FOR THE PERIOD	1.5	4.8	-0.8	-2.1
Profit for the period attributable to:				
Equity holders of the parent	1.5	4.8	-0.8	-2.0
Total comprehensive income for the period attributable to:				
Equity holders of the parent	1.5	4.8	-0.8	-2.1

CONSOLIDATED STATEMENT OF CASH FLOWS BY HALF-YEAR	1-6/2019	7-12/2018	1-6/2018	7-12/2017
	6 months	6 months	6 months	6 months
Net cash from operating activities	-1.2	10.0	-10.5	-0.5
Net cash from investing activities	-10.1	-9.2	-10.7	-9.5
Net cash from financing activities	13.9	-0.5	-11.2	-0.5
Net change in cash and cash equivalents	2.6	0.3	-32.4	-10.5

FINANCIAL PERFORMANCE RELATED RATIOS	1-6/2019	1-6/2018	1-12/2018
	6 months	6 months	12 months
STATEMENT OF COMPREHENSIVE INCOME (MEUR)			
Net sales	33.1	28.3	62.8
Operating profit (loss)	1.7	-0.8	2.8
Operating profit (loss), % of net sales	5.0	-2.9	4.5
Profit before taxes	1.5	-0.8	2.7
Profit before taxes, % of net sales	4.5	-2.9	4.3
Profit for the period from continuing operations	1.5	-0.8	4.0
PROFITABILITY AND OTHER KEY FIGURES			
Interest-bearing net liabilities, (MEUR)	-10.7	-29.4	-29.4
Net gearing, %	-10.1	-27.9	-26.7
Equity ratio, %	71.7	84.4	84.7
Gross investments, (MEUR)	12.2	11.2	21.2

Average personnel during the period, continuing operations	674	654	660
Personnel at the period end, continuing operations	680	683	674

AMOUNT OF SHARE ISSUE ADJUSTMENT (1.000 pcs)	Jun. 30. 2019	Jun. 30. 2018	Dec. 31. 2018
At the end of period	35 693	35 693	35 693
Average for the period	35 693	35 693	35 693
Average for the period diluted with stock options	35 693	35 693	35 693

STOCK-RELATED FINANCIAL RATIOS (EUR)	1-6/2019 6 months	1-6/2018 6 months	1-12/2018 12 months
Earnings per share from continuing operations. EUR			
Basic earnings per share	0.042	-0.022	0.113
Diluted earnings per share	0.042	-0.022	0.113
Earnings per share from discontinued operations. EUR			
Basic earnings per share			
Diluted earnings per share			
Earnings per share from continuing and discontinued operations. EUR			
Basic earnings per share	0.042	-0.022	0.113
Diluted earnings per share	0.042	-0.022	0.113
Equity *) per share	2.97	2.95	3.08
*) Equity attributable to equity holders of the parent			

MARKET VALUES OF SHARES (EUR)	1-6/2019 6 months	1-6/2018 6 months	1-12/2018 12 months
Highest	8.03	6.30	8.10
Lowest	6.08	4.93	4.71
Average	6.98	5.65	5.98
At the end of period	6.24	4.97	7.61
Market value of the stock, (MEUR)	222.7	177.4	271.6
Trading value of shares, (MEUR)	31.0	32.9	75.4
Number of shares traded, (1.000 pcs)	4 448	5 818	12 608

Related to average number of shares %	12.5	16.3	35.3
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<b>SECURITIES AND CONTINGENT LIABILITIES (MEUR)</b>	<b>Jun. 30. 2019</b>	<b>Jun. 30. 2018</b>	<b>Dec. 31. 2018</b>
<b>AGAINST OWN LIABILITIES</b>			
Floating charges		1.0	1.0
Mortgages are pledged for liabilities totaled		0.2	0.1
Guarantees	0.1	0.2	0.1
Rental liabilities			
Falling due in the next year	0,0	0,5	0,6
Falling due after one year		0,8	0,9
Other contractual liabilities			
Falling due in the next year	2,4	2,4	2,4
Falling due after one year	1,6	2,6	2,3
Material purchase commitments	9,8	7,0	12,6

<b>NOMINAL VALUE OF CURRENCY DERIVATIVES (MEUR)</b>	<b>Jun. 30. 2019</b>	<b>Jun. 30. 2018</b>	<b>Dec. 31. 2018</b>
<b>Foreign exchange forward contracts</b>			
Market value	0.0	-0.1	0.0
Nominal value	1.5	2.0	0.0