Bittium Corporation Half Year Financial Report January-June 2017



Net sales in January-June 2017 decreased by 12.8 percent year-on-year and operating result was negative

Summary January-June 2017

- The net sales decreased by 12.8 percent year-on-year to EUR 27.1 million (EUR 31.1 million, 1H 2016).
- The share of the product-based net sales was EUR 7.2 million (EUR 5.3 million, 1H 2016) and the share of the services-based net sales was EUR 19.7 million (EUR 25.6 million, 1H 2016).
- Operating loss was EUR -2.8 million (operating profit of EUR 0.7 million, 1H 2016).
- Net cash flow was EUR -21.5 million (EUR -15.1 million, 1H 2016).
- Result for the period was EUR -2.4 million and earnings per share were EUR -0.067 (result for the period EUR 0.9 million and earnings per share EUR 0.026, 1H 2016).

GROUP (MEUR)	1-6/2017	1-6/2016	2016
	6 months	6 months	12 months
NET SALES	27.1	31.1	64.2
Change of net sales, %	-12.8%	2.3%	13.0 %
EBITDA	-0.9	2.1	5.8
EBITDA, % of net sales	-3.3%	6.7%	9.0%
OPERATING PROFIT / LOSS	-2.8	0.7	2.5
Operating profit / loss, % of net sales	-10.2%	2.2%	4.0 %
RESULT OF THE PERIOD FROM CONTINUING OPERATIONS	-2.4	0.9	3.5
CASH AND OTHER LIQUID ASSETS	73.4	107.7	94.9
EQUITY RATIO (%)	87.8%	88.5%	87.0 %
EARNINGS PER SHARE (EUR)	-0.067	0.026	0.098

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.

Bittium's CEO Hannu Huttunen

The net sales of the first half of the year decreased by 12.8 percent from previous year and was EUR 27.1 million. The net sales of service business decreased as expected and was EUR 19.7 million being EUR 5.9 million less than in the corresponding period last year. The decrease in the services business net sales was caused by the termination of significant customer cooperation with a global network equipment manufacturer. Despite of the termination of the cooperation the demand for Bittium's R&D services developed positively during the first half of the year. It was, however, not able to replace the decrease in the service-based net sales.

In line with our strategy we continued investments into our product business and the product-based net sales turned to growth. The share of the product-based net sales was EUR 7.2 million which was EUR 1.9 million more than in the corresponding period last year. The increase in the net sales resulted from the product portfolio extension to medical remote diagnostics as well as from the increased deliveries of Bittium Tough Mobile[™] LTE smartphones.

The R&D investments in own products and product platforms were 23.7 percent of net sales. The investments focused mainly on extending the tactical communication product offering targeted for defense industry as well as on different terminal products and their related software development targeted for mobile security and public safety markets. We started to develop new software-defined radio based Bittium Touch SDR[™] product family that includes tactical handheld and vehicle radios and we continued to develop Bittium Tough Mobile smartphone and its next generation research. We aim growth especially in the international defense and public safety, and mobile security markets.

The operating loss was EUR -2.8 million. The loss was caused by the decrease in the net sales and significant investments in R&D to enable long-term future growth.

Outlook for 2017

Bittium will continue to look for inorganic growth opportunities in all its product and service areas and is prepared to invest in acquisitions that support its growth strategy. The growing need for wireless connectivity, increasingly growing amount of data transfer and the need for secure data transfer create demand for Bittium's competence, products and product platforms. In a long term Bittium still has good conditions to grow profitably. Bittium aims further at growing net sales based on its products and product platforms.

Bittium has announced earlier that it targets 10 percent annual growth in net sales and to reach EBIT level 10 percent of net sales in the year 2017 at the latest. The company believes that in the coming years it is able to grow its net sales even more than the earlier announced target, and therefore sets up a target to exceed the annual 10 percent growth target of the net sales. However, Bittium believes, that during the year 2017 it is not yet able to reach the targets set for the growth in the net sales and EBIT level. The reason for this is the termination of significant customer cooperation with a global network equipment manufacturer. To this extent this kind of extensive and rapid decrease in the services business net sales is impossible to be replaced with other projects in a short term, which effects directly the development of net sales and operating result in 2017. In addition, the operating profit level of the year 2017 is also affected by the investments started to enable future growth.

Bittium expects that the net sales in 2017 will be at the same level as in the previous year (EUR 64.2 million, in 2016). The operating result is expected to be negative (EUR 2.5 million, in 2016).

More information about Bittium's market outlook is presented in the section "Market outlook" in this Half Year Financial Report.

More information about other uncertainties regarding the outlook is presented in this Half Year Financial Report in the section "Risks and uncertainties" and on the company's internet pages at <u>www.bittium.com</u>.



Invitation to a press conference

Bittium will hold a press conference on the Half Year Financial Report January-June 2017 for media, analysts and institutional investors in Restaurant Savoy, Eteläesplanadi 14, Helsinki, Finland, on Wednesday, August 9, 2017 at 9.00am (CEST+1). The press conference will be held in Finnish.

Bittium will also hold a telephone conference on the same day at 10.00am. The dial-in number for the conference call is +44 203 059 8125. The confirmation code is "Bittium". The conference can also be followed live as an audiocast, accessible at <u>www.bittium.com/investors</u>. The conference call will be held in English. A recording of the audiocast and the presentation will be available after the conference on Bittium's website at <u>www.bittium.com/investors</u>.

Bittium

Bittium specializes in the development of reliable, secure communications and connectivity solutions leveraging its 30 year legacy of expertise in advanced radio communication technologies. Bittium provides innovative products and services, customized solutions based on its product platforms and R&D services. Complementing its communications and connectivity solutions, Bittium offers proven information security solutions for mobile devices and portable computers. Starting from November 2016, Bittium offers its customers also healthcare technology products and services in biosignal measuring in the areas of cardiology, neurology, rehabilitation, occupational health and sports medicine. Net sales in 2016 were EUR 64.2 million and operating profit was EUR 2.5 million. Bittium is listed on Nasdaq Helsinki. www.bittium.com

Bittium Corporation's Half Year Financial Report January-June 2017

Financial performance in January-June 2017

Bittium's net sales during January-June 2017 decreased by 12.8 percent year-on-year to EUR 27.1 million (EUR 31.1 million, in 1-6 2016).

The share of the product-based net sales was EUR 7.2 million (EUR 5.3 million, in 1-6 2016), which resulted mainly from the product deliveries of the tactical communication system, product deliveries of Bittium Tough Mobile LTE smartphones and related security software, and deliveries of products for measuring and monitoring biosignals. The increase in the product-based net sales year-on-year resulted mainly from product sales in the medical business acquired at the end of 2016 and increased deliveries of Bittium Tough Mobile LTE smartphones.

The share of the services-based net sales was EUR 19.7 million (EUR 25.6 million, in 1-6 2016). The decrease in the services business net sales was caused by the termination of significant customer cooperation with a global network equipment manufacturer. Bittium has won new R&D services projects for wireless products, however, it has not been able to replace the decrease in the net sales in total.

Operating loss was EUR -2.8 million (operating profit of EUR 0.7 million, in 1-6 2016). The loss was caused by the decrease in the net sales and significant R&D investments.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME, MEUR	1-6/2017	1-6/2016	2016
	6 months	6 months	12 months
Net sales	27.1	31.1	64.2
Operating profit / loss	-2.8	0.7	2.5
Financial income and expenses	0.3	0.3	0.6
Result before tax	-2.4	0.9	3.1
RESULT FOR THE PERIOD FROM CONTINUING OPERATIONS	-2.4	0.9	3.5
RESULT FOR THE PERIOD FROM DISCONTINUING OPERATIONS	1.3		
RESULT FOR THE PERIOD	-1.1	0.9	3.5
TOTAL COMPREHENSIVE INCOME FOR THE PERIOD	-1.2	0.9	3.5
Result for the period attributable to:			
Equity holders of the parent	-1.1	0.9	3.5
Total comprehensive income for the period attributable to:			
Equity holders of the parent	-1.2	0.9	3.5
Earnings per share from continuing operations, EUR	-0.067	0.026	0.098

• Cash flow from operating activities was EUR 0.4 million (EUR 0.1 million, in 1-6 2016).

• Net cash flow was EUR -21.5 million, including the EUR 10.7 million dividend payment in April and the investments made into the company's new office building in Oulu, Finland (EUR -15.1 million, in 1-6 2016, including the EUR 10.7 million dividend payment and the investments made into the company's new office building in Oulu, Finland).



- Equity ratio was 87.8 percent (88.5 percent, June 30, 2016).
- Net gearing was -60.6 percent (-83.0 percent, June 30, 2016).

Half year figures

GROUP'S NET SALES AND OPERATING RESULT, MEUR	1H/17	2H/16	1H/16
Net sales	27.1	33.1	31.1
Operating profit (loss)	-2.8	1.9	0.7
Result before taxes	-2.4	2.2	0.9
Result for the period	-2.4	2.6	0.9

DISTRIBUTION OF NET SALES BY MARKET AREAS, MEUR AND %	1H/17	2H/16	1H/16
Asia	0.3	0.2	0.5
	1.1%	0.7%	1.5%
Americas	4.5	6.7	5.5
	16.4%	20.2%	17.6%
Europe	22.4	26.2	25.1
	82.5%	79.1%	80.8%

Research and development

Bittium continued its R&D investments in own products and product platforms. The investments increased significantly during January-June 2017 and were 23.7 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. Bittium started to develop new software-defined radio based Bittium Touch SDR™ product family that includes tactical Bittium Tough SDR handheld and Bittium Tough SDR vehicle radios. In addition Bittium continued to develop Bittium Tough Mobile smartphone and its next generation research. The company aims growth especially in the international defense and public safety, and mobile security markets.

A significant part of these capitalized R&D investments is related to the further development of the Bittium Tough Mobile smartphone and the related security software and investments related to developing tactical communication handheld and vehicle radios.

R&D INVESTMENTS, MEUR	1-6 2017	1-6/2016	2016
	6 months	6 months	12 months
Total R&D investments	6.4	3.6	6.9
Capitalized R&D investments	-2.3	-0.7	-0.9
Depreciations and impairment of R&D investments	0.2	0.1	0.3
Cost impact on income statement	4.3	3.0	6.3
R&D investments, % of net sales	23.7%	11.5%	10.8 %



CAPITALIZED R&D INVESTMENTS IN BALANCE SHEET, MEUR	1-6 2017	1-6/2016	2016
	6 months	6 months	12 months
Balance sheet value in the beginning of the period	6.4	5.6	5.6
Additions during the period	2.3	0.7	0.9
Acquisitions of the business			0.2
Depreciations and impairment of R&D investments	-0.2	-0.1	-0.3
Balance sheet value at the end of the period	8.5	6.2	6.4

Business development in January-June 2017

The share of the services-based net sales decreased as expected caused by the termination of significant customer cooperation with a global network equipment manufacturer during the first half of the year. Despite of decreased net sales caused by the termination of the cooperation, the demand for Bittium's R&D services developed positively, however, it wasn't able to replace the decrease in the net sales in total.

The product development project for the Mexican Ministry of Communication and Transportation, started in May 2015, has continued according to plans. Bittium develops Android-based mobile devices that use both terrestrial and satellite connection for their MEXSAT system. The R&D phase was completed during summer 2017 and the first product orders are expected to come shortly.

Bittium aims at growth in international defense, public safety and mobile security markets. The company continued R&D investments to develop product business and the product-based net sales turned to growth. 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, such as the development of Bittium Tough Mobile smartphone and its next generation research.

On August 8, 2017 Bittium announced to expand its tactical communication product portfolio with new software-defined radio based Bittium Touch SDR[™] product family that includes tactical Bittium Tough SDR handheld and Bittium Tough SDR vehicle radios. The new product family expands Bittium's tactical communication product portfolio to radios that bring broadband data transfer and voice to all mobile troops; from combat vehicles to all the way to an individual soldier.

The deliveries of the Bittium Tough Mobile secure LTE smartphone were carried on and Bittium participated in several security and public safety exhibitions abroad in order to extend its customer base abroad. At the Critical Communications Europe exhibition in February Bittium launched a new Confidential classification level version of the Bittium Tough Mobile with its back-end system. Bittium Tough Mobiles unique dual-boot functionality for the Confidential classification level makes it possible to operate the device with two completely separate operating systems: Public and Confidential. The operating system classified as Public is meant for personal communications with access to e.g. social media applications. The operating system classified as Confidential is completely isolated and hardened for secure authority and information security use. The entity enables the user to have only one device for calls and messaging for both personal and for demanding information security needs, thus eliminating the need to carry two separate devices. Although the awareness of security threats thereafter secure mobile devices has increased, the development of security and public safety markets has been somewhat slower than expected. Bittium estimates that the amount of product sales of Bittium Tough Mobile will remain slightly less than expected.

The cooperation with the Finnish Defense Forces continued. In January, Bittium signed a contract with the Finnish Defence Forces for the delivery of Bittium Tough Mobile LTE smartphones and related Bittium Secure Suite back-end system classified for Confidential level. The contract signifies a strategic decision to reinforce the information security of the wireless communications of the Finnish Defence Forces. Bittium Tough Mobile smartphones and the related back-end system will be used in different and diverse functions within the Finnish Defence Forces. In order for a phone and a related back-end system to achieve the Confidential level classification, there are specific information security requirements regarding the processing of classified information, secure wireless transfer of files, and other possible communication, which need to be met. Bittium Tough Mobile and its back-end system are currently being tested by the National Cyber Security Centre Finland, operating under the Finnish Communications Regulatory Authority, for getting the approval for the national classification level Confidential.

The development of the tactical communication system Bittium Tactical Wireless IP Network[™] (TAC WIN), used by the Finnish Defence Forces, continued and the product deliveries for this communication system were continued also during the first half of the year. In March, Bittium received a purchase order from the Finnish Defence Forces for further development of the software package (waveform) for the Bittium TAC WIN system. Bittium also received a purchase order from the Finnish Defence Forces for the Bittium TAC WIN system products, which are meant for tactical communications. Both orders are part of the renewal of the Finnish Army's M18 command, control and communications system, where the Software-Defined Radio based Bittium TAC WIN system forms the core of the Army's tactical wireless IP network.

In June, Bittium received a purchase order for supplying the Finnish Air Force with Bittium TAC WIN system. The order is part of the modernization of the radio network performance of the Air Force's bases with a Software-Defined Radio based IP radio system. With the order the use of the Bittium TAC WIN system within the Finnish Defence Forces' branches expands to the Air Force.

The long-standing cooperation between Bittium and Finnish Defense Forces is about to get continuation as on July 6, 2017 the Finnish Minister of Defence Jussi Niinistö authorized Finnish Defence Forces to purchase Bittium TAC WIN system products. Bittium and Finnish Defence Forces plan to sign a Framework Agreement for the delivery of Bittium TAC WIN products, that covers years 2018-2020, with the total value of the agreement being EUR 30 million (excl. VAT) if materialized in full.

In addition on August 8, 2017 Bittium and Finnish Defence Forces signed a letter of intent concerning the purchase of new software defined radio (SDR) based tactical radios and the preparations of the purchase. The letter of intent encompasses products belonging to the new Bittium Tough SDR product family: tactical handheld radio Bittium Tough SDR Handheld[™] and tactical vehicular radio Bittium Tough SDR Vehicular[™]. The products are intended for renewing the Finnish Defence Forces' existing stock of field radios with modern, SDR based broadband data transfer radios to support the reformed combat doctrine. According to the letter of intent, Bittium will develop the products with their own R&D investments and the Finnish Defence Forces will support the development work by ensuring that the products are suitable for their purposes and by making preparations for the purchase of the products.

The letter of intent does not bind the parties into making a purchase agreement. Making the purchase agreement requires that the Finnish Ministry of Defence first authorizes the purchase, based on which Bittium and the Finnish Defence Forces would then make a separate purchase agreement. Based on the letter of intent, if materialized in full, the total value of the purchase agreement would be approximately EUR 130 million distributed over about 10 years.

Bittium continued efforts to bring its products and services, targeted to defense industry, to the international defense markets and Bittium received a purchase orders for a tactical communications system from its customer in Asia and Europe.

The development of the medical technology business was continued and in June, Bittium Medanalytics Oy, part of Bittium group, and Coronaria Hoitoketju's subsidiary Coronaria Analyysipalvelut Oy, signed agreements according to which Bittium Medanalytics Oy sold its remote diagnostic service business to Coronaria Analyysipalvelut Oy. According to the agreement Bittium supplies its web-based service kardiolog.fi used in monitoring cardiac abnormalities to Coronaria's use. Kardiolog.fi service is used by more than 70 Finnish health centers and private medical centers. The net sales of Bittium Medanalytics Ltd in 2016 was EUR 0.4 million.

Further, Bittium Technologies Ltd, part of Bittium group, acquired 25 percent of the shares in Coronaria Analyysipalvelut Oy. Through this joint ownership Bittium and Coronaria aim at gaining synergies from Bittium's device and system development and the interfaces formed by Coronaria's clinical medicine and services.

In May, Bittium Faros ECG-measuring devices' built-in algorithms for detection of arrhythmias have received medical device approval in Europe. The algorithms can be used to automatically identify sequences from the heart measurement data. Early detection of atrial fibrillation can be used to predict the risk of brain stroke and to prevent its emergence with timely treatment initiation.

Significant events during the reporting period

The company has no significant events during the reporting period.

Significant events after the reporting period

On July 6, 2017 Bittium announced that the Finnish Minister of Defence Jussi Niinistö had authorized Finnish Defence Forces to purchase Bittium Tactical Wireless IP Network[™] (TAC WIN) system products. Bittium and Finnish Defence Forces plan to sign a Framework Agreement for the delivery of Bittium TAC WIN products, that covers years 2018-2020, with the total value of the agreement being EUR 30 million (excl. VAT) if materialized in full. According to the Framework Agreement, Finnish Defence Forces would issue separate purchase orders for the products each year. The Framework Agreement will not have an effect on Bittium's financial outlook for the year 2017.

The Framework Agreement will be a continuation to the long cooperation between Finnish Defence Forces and Bittium. It will continue the renewal of the Finnish Defence Forces' command, control and communications system, where the Software-Defined Radio based Bittium TAC WIN system acts as the backbone for tactical data transfer.

On August 8, 2017 Bittium announced that Bittium Wireless Ltd, a subsidiary of Bittium Corporation, and the Finnish Defence Forces have signed a letter of intent concerning the purchase of new software defined radio (SDR) based tactical radios and the preparations of the purchase. The letter of intent encompasses products belonging to the new Bittium Tough SDR product family: tactical handheld radio Bittium Tough SDR Handheld[™] and tactical vehicular radio Bittium Tough SDR Vehicular[™]. The products are intended for renewing the Finnish Defence Forces' existing stock of field radios with modern, SDR based broadband data transfer radios to support the reformed combat doctrine. The tactical radios are compatible with Bittium Tactical Wireless IP Network[™] (TAC WIN) SDR based system already used by the Finnish Defence Forces.

According to the letter of intent, Bittium will develop the products with their own R&D investments and the Finnish Defence Forces will support the development work by ensuring that the products are suitable for their purposes and by making preparations for the purchase of the products.

The letter of intent does not bind the parties into making a purchase agreement. Making the purchase agreement requires that the Finnish Ministry of Defence first authorizes the purchase, based on which Bittium and the Finnish Defence Forces would then make a separate purchase agreement. Based on the letter of intent, if materialized in full, the total value of the purchase agreement would be approximately EUR 130 million distributed over about 10 years. The letter of intent is in force until the binding purchase agreement comes into effect or until December 31, 2019. Should the purchase materialize in full, it would have a significant impact on Bittium's net sales from the year 2019 onward. The letter of intent does not have an effect on Bittium's financial outlook for the year 2017.

Outlook for 2017

Bittium will continue to look for inorganic growth opportunities in all its product and service areas and is prepared to invest in acquisitions that support its growth strategy. The growing need for wireless connectivity, increasingly growing amount of data transfer and the need for secure data transfer create demand for Bittium's competence, products and product platforms. In a long term Bittium still has good conditions to grow profitably. Bittium aims further at growing net sales based on its products and product platforms.

Bittium has announced earlier that it targets 10 percent annual growth in net sales and to reach EBIT level 10 percent of net sales in the year 2017 at the latest. The company believes that in the coming years it is able to grow its net sales even more than the earlier announced target, and therefore sets up a target to exceed the annual 10 percent growth target of the net sales. However, Bittium believes, that during the year 2017 it is not yet able to reach the targets set for the growth in the net sales and EBIT level. The reason for this is the termination of significant customer cooperation with a global network equipment manufacturer. To this extent this kind of extensive and rapid decrease in the services business net sales is impossible to be replaced with other projects in a short term, which effects directly the development of net sales and operating result in 2017. In addition, the operating profit level of the year 2017 is also affected by the investments started to enable future growth.

Bittium expects that the net sales in 2017 will be at the same level as in the previous year (EUR 64.2 million, in 2016). The operating result is expected to be negative (EUR 2.5 million, in 2016).

More information about Bittium's market outlook is presented in the section "Market outlook" in this Half Year Financial Report.

More information about other uncertainties regarding the outlook is presented in this Half Year Financial Report in the section "Risks and uncertainties" and on the company's internet pages at <u>www.bittium.com</u>.

Market outlook

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 and measuring 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.

The following factors are expected to create demand for Bittium's products and services in 2017 and beyond:

- In the mobile telecommunications, the 4G technology development work has decreased significantly. However, the development of 5G technology has started very well creating demand for Bittium's R&D services. The development of 5G technology is just at its early phase, and will not replace the amount of the 4G development work yet. In the long term the demand for R&D service for the network equipment manufacturers is expected to grow, however, to remain at a lower level than in previous years.
- 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. Also 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 use of LTE technology, smartphones and applications continues 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. Also the interest towards LTE-SAT-hybrid devices with terrestrial and satellite connections has grown to further improve the functionality of authorities' critical connections. The implementation of LTE-based devices in Public Safety markets has been slower than expected due to the delay of the device processor functionalities required by the authorities. 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 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 2017. Due to the long sales cycles driven by purchasing programs of national governments, it takes time to receive significant purchase orders.
- Heart problems and brain strokes are among the most frequent causes of death. Recognizing the symptoms early on, based on information gathered by measuring, enable the start of the effective treatment fast. 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. One of the growing application areas in the IoT segment is healthcare technology that enables implementing these changes for its part. A perquisite 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 Faros product family for heart remote monitoring and NeurOne product family for measuring the electrical activity of brain.



Risks and uncertainties

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

In the ongoing financial period, 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'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, the company is exposed to market changes in these industries.

In October 2016, Bittium has received information according to which significant customer cooperation with a global mobile network equipment manufacturer will reduce during the year 2017. A significant part of Bittium's net sales has accumulated from selling R&D services to this mobile communications equipment manufacturer. The termination of customer cooperation will have a negative effect on Bittium's net sales and operating result in 2017. A significant part of Bittium's net sales still 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 the 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 Half Year Financial 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. The information received by Bittium about the termination of significant customer cooperation with a global mobile network equipment manufacturer during 2017 will have a negative effect on Bittium's net sales and operating result in 2017. 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. Currently Bittium has a committed overdraft credit facility agreement of EUR 10.0 million with Nordea Bank Finland Plc and a committed overdraft credit facility agreement of EUR 10.0 million with Pohjola Bank Plc. From these agreements intended for general financing purposes, EUR 10.0 million are valid until December 31, 2018 and EUR 10.0 million until December 31, 2019. 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 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, 2017, are compared with the statement of the financial position of December 31, 2016 (MEUR).

	30.6.2017	31.12.2016
Non-current assets	38.3	30.3
Current assets	100.4	123.0
Total assets	138.7	153.3
Share capital	12.9	12.9
Other capital	105.8	117.7
Total equity	118.7	130.6
Non-current liabilities	2.0	3.1
Current liabilities	18.0	19.6
Total equity and liabilities	138.7	153.3
Cash flow of the review period :	1-6/2017	1-12/2016
+ profit of the period +/- Adjustment of accrual basis items	-1.2	5.0
+/- Change in net working capital	1.4	-7.6
- interest, taxes and dividends	0.2	0.9
= net cash from operating activities	0.4	-1.7
- net cash from investing activities	-9.0	-14.5
- net cash from financing activities	-12.9	-11.6
= net change in cash and cash equivalents	-21.5	-27.9

Net cash from operating activities in January-June 2017 includes operative cash flows from both continuing and discontinuing operations.

The amount of gross investments in the period under review was EUR 10.3 million. Net investments for the review period totaled to EUR 9.8 million. The total amount of depreciation during the period under review was EUR 1.9 million. The amount of interest-bearing debt, including finance lease liabilities, was at the end of the reporting period EUR 1.5 million (EUR 3.2 million on December 31, 2016). Bittium's equity ratio at the end of the period was 87.8 percent (87.0 percent on December 31, 2016).



Cash and other liquid assets at the end of the reporting period were EUR 73.4 million (EUR 94.9 million on December 31, 2016).

In March 2017, Bittium renewed a total of EUR 20.0 million binding credit facility agreements essentially on the old terms from which EUR 10.0 million are valid until December 31, 2018 and EUR 10.0 million until December 31, 2019. 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 605 people in between January and June 2017. At the end of June 2017, the company had 619 employees (623 employees at the end of 2016). A significant part of Bittium's personnel are R&D engineers.

Flagging notifications

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

May 9, 2017: Name of the person subject to the notification requirement: Erkki Veikkolainen, member of the Board of Directors. Notification type: initial notification. Nature of transaction: Receipt of a Share-Based Incentive. Transaction date: May 5, 2017. Aggregated transactions: volume 2 625 shares, volume weighted average price: EUR 6.39000.

May 9, 2017: Name of the person subject to the notification requirement: Staffan Simberg, member of the Board of Directors. Notification type: initial notification. Nature of transaction: Receipt of a Share-Based Incentive. Transaction date: May 5, 2017. Aggregated transactions: volume 1 500 shares, volume weighted average price: EUR 6.39000.

May 9, 2017: Name of the person subject to the notification requirement: Seppo Mäkinen, member of the Board of Directors. Notification type: initial notification. Nature of transaction: Receipt of a Share-Based Incentive. Transaction date: May 5, 2017. Aggregated transactions: volume 1 500 shares, volume weighted average price: EUR 6.39000.

May 9, 2017: Name of the person subject to the notification requirement: Juha Putkiranta, member of the Board of Directors. Notification type: initial notification. Nature of transaction: Receipt of a Share-Based Incentive. Transaction date: May 5, 2017. Aggregated transactions: volume 1 500 shares, volume weighted average price: EUR 6.39000.

May 9, 2017: Name of the person subject to the notification requirement: Kirsi Komi, member of the Board of Directors. Notification type: initial notification. Nature of transaction: Receipt of a Share-Based Incentive. Transaction date: May 5, 2017. Aggregated transactions: volume 1 500 shares, volume weighted average price: EUR 6.39000.

May 9, 2017: Name of the person subject to the notification requirement: Tero Ojanperä, member of the Board of Directors. Notification type: initial notification. Nature of transaction: Receipt of a Share-Based Incentive. Transaction date: May 5, 2017. Aggregated transactions: volume 1 500 shares, volume weighted average price: EUR 6.39000.



Decisions of the Annual General Meeting of Bittium Corporation

The Annual General Meeting of Bittium Corporation, held on April 12, 2017 at the address the University of Oulu, Saalastinsali, Pentti Kaiteran katu 1, 90590 Oulu, Finland. The Annual General Meeting approved the annual accounts for the financial year 2016 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 and EUR 0.25 per share as additional dividend based on the adopted balance sheet for the financial period January 1, 2016 – December 31, 2016. 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 Tuesday, April 18, 2017. The dividend was paid on Tuesday, April 25, 2017.

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. Kirsi Komi, Mr. Seppo Mäkinen, Mr. Juha Putkiranta, Mr. Staffan Simberg 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. Tero Ojanperä was elected as a new member of the Board of Directors for a corresponding term of office.

At its assembly meeting held on April 12, 2017, the Board of Directors elected Mr. Erkki Veikkolainen Chairman of the Board. Further, the Board resolved to keep the Audit Committee. Staffan Simberg (Chairman of the committee) and Kirsi Komi 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 3,500 and to the other members of the Board of Directors EUR 2,000 each. In addition, the members of the Board of Directors are entitled to compensation for attending Board 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 40 per cent 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 notified that Mr. Juhani Rönkkö, 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 per cent 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).

Bittium Corporation Half Year Financial Report January-June 2017



The authorization cancels the authorization given by the General Meeting on April 19, 2016 to decide on the repurchase of the company's own shares. The authorization is effective until June 30, 2018.

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 7,000,000 shares, which corresponds to approximately 19.61 per cent 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 19, 2016 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, 2018.

Oulu, August 9, 2017 Bittium Corporation The Board of Directors

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Major media

Bittium Corporation Condensed Financial Statements and Notes January – June 2017

(unaudited)

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

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME (MEUR)	1-6/2017	1-6/2016	1-12/2016
Continuing operations	6 months	6 months	12 months
NET SALES	27.1	31.1	64.2
Other operating income	1.0	0.9	1.9
Change in work in progress and finished goods			
Work performed by the undertaking for its own purpose and capitalized	0.1	0.2	0.4
Raw materials	-2.2	-2.3	-5.1
Personnel expenses	-18.0	-17.7	-35.5
Depreciation	-1.9	-1.4	-3.3
Other operating expenses	-9.0	-10.0	-20.1
OPERATING PROFIT (LOSS)	-2.8	0.7	2.5
Financial income and expenses	0.3	0.3	0.6
PROFIT BEFORE TAX	-2.4	0.9	3.1
Income tax	0.0	0.0	0.4
PROFIT FOR THE PERIOD FROM CONTINUING OPERATIONS	-2.4	0.9	3.5
Discontinued operations			
Profit for the year from discontinued operations	1.3		
PROFIT FOR THE PERIOD	-1.1	0.9	3.5
Other comprehensive income:			
Items that may be reclassified subsequently to the statement of income			
Exchange differences on translating foreign operations	-0.0	-0.1	-0.0
Other comprehensive income for the period total	-0.0	-0.1	-0.0
TOTAL COMPREHENSIVE INCOME FOR THE PERIOD	-1.2	0.9	3.5
Profit for the year attributable to			
Equity holders of the parent	-1.1	0.9	3.5
Total comprehensive income for the period attributable to			

Equity holders of the parent	-1.2	0.9	3.5
Earnings per share from continuing operations, EUR			
Basic earnings per share	-0.067	0.026	0.098
Diluted earnings per share	-0.067	0.026	0.098
Earnings per share from discontinued operations, EUR			
Basic earnings per share	0.035		
Diluted earnings per share	0.035		
Earnings per share from continuing and discontinued operations, EUR			
Basic earnings per share	-0.032	0.026	0.098
Diluted earnings per share	-0.032	0.026	0.098
Average number of shares, 1000 pcs	35 693	35 646	35 670
Average number of shares, diluted, 1000 pcs	35 693	35 646	35 670

CONSOLIDATED STATEMENT OF FINANCIAL POSITION (MEUR)	June 30, 2017	June 30, 2016	Dec. 31, 2016
ASSETS			
Non-current assets			
Property, plant and equipment	17.9	6.9	12.6
Goodwill	6.3	1.4	6.7
Intangible assets	11.1	8.0	9.3
Other financial assets	1.4	0.1	0.1
Deferred tax assets	1.5	1.2	1.5
Non-current assets total	38.3	17.6	30.3
Current assets			
Inventories	5.9	2.3	4.1
Trade and other receivables	21.1	19.4	24.0
Financial assets at fair value through profit or loss	67.2	66.5	66.9
Cash and short term deposits	6.2	41.2	28.0
Current assets total	100.4	129.4	123.0
TOTAL ASSETS	138.7	147.0	153.3
EQUITY AND LIABILITIES			
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	1.2
Retained earnings	78.7	88.0	90.6

Total equity	118.7	128.0	130.6
Non-current liabilities			
Deferred tax liabilities	0.4	0.1	0.5
Provisions	0.0	1.1	0.0
Interest-bearing liabilities	0.6	0.8	2.0
Other non-current liabilities	0.9		0.5
Non-current liabilities total	2.0	2.1	3.1
Current liabilities			
Trade and other payables	16.0	15.0	16.2
Provisions	1.2	1.1	2.2
Interest-bearing loans and borrowings	0.9	0.8	1.2
Current liabilities total	18.0	16.9	19.6
Total liabilities	20.0	19.0	22.7
TOTAL EQUITY AND LIABILITIES	138.7	147.0	153.3

CONSOLIDATED STATEMENT OF CASH FLOWS (MEUR)	1-6/2017	1-6/2016	1-12/2016
	6 months	6 months	12 months
CASH FLOW FROM OPERATING ACTIVITIES			
Profit for the year from continuing operations	-2.4	0.9	3.5
Profit for the year from discontinued operations	1.3		
Adjustment of accrual basis items	-0.1	1.2	1.5
Change in net working capital	1.4	-2.2	-7.6
Interest paid on operating activities	0.0	-0.3	-0.4
Interest received from operating activities	0.2	0.5	0.9
Other financial income and expenses, net received	0.0	0.0	0.0
Income taxes paid	-0.0	-0.0	0.4
NET CASH FROM OPERATING ACTIVITIES	0.4	0.1	1.7
CASH FLOW FROM INVESTING ACTIVITIES			
Acquisition of business unit, net of cash acquired		-1.0	-6.4
Purchase of property, plant and equipment	-6.2	-2.2	-7.0
Purchase of intangible assets	-2.4	-0.8	-1.2
Sale of property, plant and equipment	0.1		0.0
Sale of intangible assets	0.1		
Purchase of investments/affiliated companies	-0.7		
NET CASH FROM INVESTING ACTIVITIES	-9.0	-4.0	-14.5
CASH FLOW FROM FINANCING ACTIVITIES			
Share-option plans exercised		0.0	0.0

Repayment of borrowing	-1.	7 -0.1	-0.1
Payment of finance liabilities	-0.	-0.4	-0.9
Dividend paid and repayment of capital	-10.	-10.7	-10.7
NET CASH FROM FINANCING ACTIVITIES	-12.	-11.2	-11.6
NET CHANGE IN CASH AND CASH EQUIVALENTS	-21.	5 -15.1	-27.9
Cash and cash equivalents at beginning of period	94.) 122.8	122.8
Cash and cash equivalents at end of period	73.4	107.7	94.9

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	В	с	D	Ε	F
Shareholders equity on Jan. 1, 2016	12.9	25.9	1.2	97.5		137.6
Comprehensive income for the period						
Profit for the period				0.9		0.9
Exchange differences on translating foreign operations			-0.1			-0.1
Total comprehensive income for the period			-0.1	0.9		0.9
Transactions between the shareholders						
Distribution of dividends				-10.7		-10.7
Share option plans exercised		0.0				0.0
Share-related compensation				0.2		0.2
Total transactions between the shareholders		0.0		-10.5		-10.4
Other changes				-0.0		-0.0
Shareholders equity on June 30, 2016	12.9	26.0	1.1	88.0		128.0

	А	В	С	D	E	F
Shareholders equity on Jan. 1, 2017	12.9	26.0	1.2	90.6		130.6
Comprehensive income for the period						
Profit for the period				-1.1		-1.1
Exchange differences on translating foreign operations			-0.0			-0.0
Total comprehensive income for the period			-0.0	-1.1		-1.2
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, 2017	12.9	26.0	1.1	78.7		118.7

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 2016, except for the adoption of new standards and interpretations effective during 2017. The changes did not have material impact on the Half Year Report.

THE APPLICATION OF IFRS 15 REVENUE FROM CONTRACTS WITH CUSTOMERS STANDARD

IFRS 15 Revenue from Contracts with Customers, coming in force on 1st of January 2018, will provide the frame for revenue recognition. IFRS 15 will cover the IAS 18 Revenue and IAS 11 Construction contracts standards currently in force. Bittium Group has been working on estimating the impacts of the new standard since the financial year 2015. The new standard provides more focus especially to those contracts which include multiple elements of revenue. The revenue of the various elements is recognized over a long-term period and possibly by element basis. The Bittium Group has already applied multi-element principles as presented in the new standard. Bittium continues to specify the impacts of the revenue recognition standard in detail, and estimate impact on the notes of the financial statement. Our current understanding is that the new standard does not have any substantial impact on the timing principles of the revenue recognition or on the revenue recognition process at Bittium.

ALTERNATIVE PERFORMANCE MEASURES

In addition to the key ratios defined in the IFRS standards, Bittium may use some alternative performance measures in the financial reporting. The definitions of the common alternative performance measures are listed below.

EBITDA =	Operating profit + depreciations
Net gearing % =	Interest-bearing liabilities - cash and deposits and short-term investments x 100 Total equity

Bittium Corporation Half Year Financial Report January-June 2017



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)	1-6/2017	1-6/2016	1-12/2016
	6 months	6 months	12 months
Net sales			
Europe	22.4	25.1	51.3
Americas	4.5	5.5	12.2
Asia	0.3	0.5	0.7
Net sales total	27.1	31.1	64.2

RELATED PARTY TRANSACTIONS	1-6/2017	1-6/2016	1-12/2016
	6 months	6 months	12 months
Employee benefits for key management and stock options expenses total, continuing operations	0.6	0.7	1.6

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME BY QUARTER (MEUR) Continuing operations	1-6/2017 6 months	7-12/2016 6 months	1-6/2016 6 months
NET SALES	27.1	33.1	31.1
Other operating income	1.0	1.0	0.9
Change in work in progress and finished goods			
Work performed by the undertaking for its own purpose and capitalized	0.1	0.2	0.2
Raw materials	-2.2	-2.7	-2.3
Personnel expenses	-18.0	-17.8	-17.7
Depreciation	-1.9	-1.9	-1.4
Other operating expenses	-9.0	-10.1	-10.0
OPERATING PROFIT (LOSS)	-2.8	1.9	0.7
Financial income and expenses	0.3	0.4	0.3



PROFIT BEFORE TAX	-2.4	2.2	0.9
Income tax	0.0	0.4	0.0
PROFIT FOR THE PERIOD FROM CONTINUING OPERATIONS	-2.4	2.6	0.9
Discontinued operations			
Profit for the period from discontinued operations	1.3		
PROFIT FOR THE PERIOD	-1.1	2.6	0.9
Other comprehensive income	-0.0	0.0	-0.1
TOTAL COMPREHENSIVE INCOME FOR THE PERIOD	-1.2	2.6	0.9
Profit for the period attributable to:			
Equity holders of the parent	-1.1	2.6	0.9
Total comprehensive income for the period attributable to:			
Equity holders of the parent			
	-1.2	2.6	0.9

	1-6/2017	7-12/2016	1-6/2016
CONSOLIDATED STATEMENT OF CASH FLOWS BY QUARTER	6 months	6 months	6 months
Net cash from operating activities	0.4	-1.8	0.1
Net cash from investing activities	-9.0	-10.5	-4.0
Net cash from financing activities	-12.9	-0.5	-11.2
Net change in cash and cash equivalents	-21.5	-12.8	-15.1

FINANCIAL PERFORMANCE RELATED RATIOS	1-6/2017	1-6/2016	1-12/2016
	6 months	6 months	12 months
STATEMENT OF COMPREHENSIVE INCOME (MEUR)			
Net sales	27.1	31.1	64.2
Operating profit (loss)	-2.8	0.7	2.5
Operating profit (loss). % of net sales	-10.2	2.2	4.0
Profit before taxes	-2.4	0.9	3.1
Profit before taxes. % of net sales	-9.0	3.0	4.9
Profit for the period from continuing operations	-2.4	0.9	3.5
PROFITABILITY AND OTHER KEY FIGURES			
Interest-bearing net liabilities. (MEUR)	-72.0	-106.2	-91.8



Net gearing%	-60.6	-83.0	-70.3
Equity ratio. %	87.8	88.5	87.0
Gross investments. (MEUR)	10.3	4.6	18.5
Average personnel during the period. continuing operations	605	543	569
Personnel at the period end. continuing operations	619	570	623

AMOUNT OF SHARE ISSUE ADJUSTMENT (1.000 pcs)	Jun. 30. 2017	Jun. 30. 2016	Dec. 31. 2016
At the end of period	35 693	35 693	35 693
Average for the period	35 693	35 646	35 670
Average for the period diluted with stock options	35 693	35 646	35 670

STOCK-RELATED FINANCIAL RATIOS (EUR)	1-6/2017	1-6/2016	1-12/2016
	6 months	6 months	12 months
Earnings per share from continuing operations. EUR			
Basic earnings per share	-0.067	0.026	0.098
Diluted earnings per share	-0.067	0.026	0.098
Earnings per share from discontinued operations. EUR			
Basic earnings per share	0.035		
Diluted earnings per share	0.035		
Earnings per share from continuing and discontinued operations. EUR			
Basic earnings per share	-0.032	0.026	0.098
Diluted earnings per share	-0.032	0.026	0.098
Equity *) per share	3.33	3.59	3.66
*) Equity attributable to equity holders of the parent			

MARKET VALUES OF SHARES (EUR)	1-6/2017 6 months	1-6/2016 6 months	1-12/2016 12 months
Highest	7.88	7.14	7.40
Lowest	5.67	5.15	5.15

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Average	6.59	6.04	6.05
At the end of period	7.28	5.55	5.67
Market value of the stock. (MEUR)	259.8	198.1	202.4
Trading value of shares. (MEUR)	37.4	81.1	126.4
Number of shares traded. (1.000 pcs)	5 666	13 425	20 888
Related to average number of shares %	15.9	37.7	58.6

SECURITIES AND CONTINGENT LIABILITIES (MEUR)	Jun. 30. 2017	Jun. 30. 2016	Dec. 31. 2016
AGAINST OWN LIABILITIES			
Floating charges	2.9	3.0	3.6
Guarantees	5.4	5.6	2.3
Rental liabilities			
Falling due in the next year	1.3	2.3	2.2
Falling due after one year	0.2	1.3	0.2
Other contractual liabilities			
Falling due in the next year	1.8	2.2	2.1
Falling due after one year	0.0	0.3	0.0
Mortgages are pledged for liabilities totaled	1.2	2.0	3.2
Material purchase commitments	8.9		3.6

NOMINAL VALUE OF CURRENCY DERIVATIVES (MEUR)	Jun. 30. 2017	Jun. 30. 2016	Dec. 31. 2016
Foreign exchange forward contracts			
Market value	0.1	-0.0	-0.0
Nominal value	5.0	3.0	5.0