Bittium

Bittium Corporation Financial Statement Bulletin January-December 2022

Net sales Net sales growth

82.5

-5.1%

Operating result Operating result, % of net sales

0.3

0.4%



The Operating Profit of the Last Quarter was 11% of Net Sales, Operating Result for the Year 2022 declined from the Previous Year

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

Summary October-December 2022

- Net sales were EUR 27.6 million (EUR 30.1 million), representing an 8.1 percent decrease year-on-year.
- The share of product-based net sales was EUR 20.9 million (EUR 23.0 million), representing 75.8 percent of the net sales. The share of Medical Technologies products was EUR 5.1 million (EUR 7.4 million), and the share of Defense & Security products was EUR 15.8 million (EUR 15.5 million).
- The share of services-based net sales was EUR 6.7 million (EUR 7.1 million), representing 24.2 percent of the net sales. The share of Connectivity Solutions R&D services was EUR 4.2 million (EUR 4.6 million).
- EBITDA was EUR 5.8 million (EUR 6.6 million).
- The operating result was EUR 3.0 million (EUR 3.7 million).
- The result for the period was EUR 3.5 million, and earnings per share were EUR 0.098 (result for the period EUR 4.3 million and earnings per share EUR 0.121).
- Cash flow from operating activities was EUR 0.1 million (EUR 4.2 million).
- Net cash flow was EUR -2.7 million (EUR 2.2 million).

Summary January-December 2022

- Net sales were EUR 82.5 million (EUR 86.9 million), representing a 5.1 percent decrease year-on-year.
- The share of product-based net sales was EUR 57.4 million (EUR 63.1 million), representing 69.6 percent of the net sales. The share of Medical Technologies products was EUR 22.6 million (EUR 27.8 million), and the share of Defense & Security products was EUR 34.8 million (EUR 35.3 million).
- The share of services-based net sales was EUR 25.1 million (EUR 23.8 million), representing 30.4 percent of the net sales. The share of Connectivity Solutions R&D services was EUR 15.2 million (EUR 15.5 million).
- EBITDA was EUR 11.0 million (EUR 13.7 million).
- Operating result was EUR 0.3 million (EUR 3.2 million).
- Result for the period was EUR 0.3 million, and earnings per share were EUR 0.007 (result for the period EUR 3.3 million and earnings per share EUR 0.093).
- Cash flow from operating activities was EUR 8.0 million (EUR 8.3 million).
- Net cash flow was EUR -3.0 million (EUR -2.6 million).
- The order backlog was EUR 28.1 million (EUR 29.5 million)



The Board of Directors of Bittium Corporation proposes to the Annual General Meeting of shareholders to be held on April 12,
 2023, resolve to pay EUR 0.05 per share as a dividend based on the adopted balance sheet for the financial period of January 1 December 31, 2022

GROUP (MEUR)	10-12/2022	10-12/2021	1-12/2022	1-12/2021
	3 months	3 months	12 months	12 months
NET SALES	27.6	30.1	82.5	86.9
Change of net sales, %	-8.1 %	37.8 %	-5.1 %	10.8 %
EBITDA	5.8	6.6	11.0	13.7
EBITDA, % of net sales	21.1 %	21.9 %	13.4 %	15.7 %
OPERATING PROFIT / LOSS	3.0	3.7	0.3	3.2
Operating profit / loss, % of net sales	10.7 %	12.4 %	0.4 %	3.7 %
RESULT OF THE PERIOD FROM CONTINUING OPERATIONS	3.5	4.3	0.3	3.3
CASH AND OTHER LIQUID ASSETS	19.0	22.0	19.0	22.0
EQUITY RATIO (%)	69.7 %	72.4 %	69.7 %	72.4 %
EARNINGS PER SHARE (EUR)	0.098	0.121	0.007	0.093

Bittium's CEO Hannu Huttunen

The fourth quarter was strong as it is typical for Bittium. The operating result exceeded our 10 percent operating profit target. The net sales for the fourth quarter were EUR 27.6 million, which was 8.1% less than the previous year, mainly due to the decrease in product-based net sales, especially in the Medical Technologies business unit. The product-based net sales of the Defense & Security business, on the other hand, increased slightly from the previous year. Service-based net sales also decreased slightly from a year ago.

Overall, the year 2022 was challenging for Bittium. Net sales decreased from the previous year and were EUR 82.5 million. Product-based net sales decreased especially due to delivery difficulties caused by a shortage of components for Medical Technologies products. The weaker-than-planned development of Medical Technologies net sales was also affected by the delay in the medical device approval of Bittium Respiro, a home sleep apnea measuring solution. Looking at the entire year, the net sales of Defense & Security products remained at the previous year's level. Net sales growth was slowed down by the longer-than-expected trial use phases of several Tough Mobile 2-based information security solutions.

The service-based net sales of 2022 increased slightly compared to the previous year, especially thanks to the increase in the service-based net sales of the Defense & Security business. The net sales of Connectivity Solutions R&D services, on the other hand, remained at the same level compared to the previous year.

The operating profit for the whole year 2022 was EUR 0.3 million. The weakening of the operating result was especially affected by the temporary decrease in the net sales of the Medical Technologies product business due to the lack of components and the continued investments in sales and marketing, as well as in product development, to ensure the future growth of the business.

The order backlog grew during the last quarter and was 28.1 million euros at the end of the year.

The war in Ukraine or the sanctions against Russia have no direct financial impact on Bittium's business, and Bittium does not have business in Russia, Ukraine, or Belarus. The world political situation caused by the war is reflected in the defense market when countries increase their defense budgets. New defense forces modernization projects are starting again, which has also reflected Bittium as a positive increase in demand for tactical communication system products and information security solutions. Last year was very active with numerous customer and partner meetings. We got to participate in several tenders, and we will continue to participate in several new tenders regarding the modernization of tactical communications of different states. In accordance with the nature of the market, the bidding stages of these new modernization projects are quite slow and can take several years.



Last year, Finland started the process to join the military alliance NATO. Joining NATO would strengthen our competitive position, especially in tenders from NATO countries.

In the domestic defense market, we continued to supply the Defense Forces with tactical communication products and received an order for the multi-year development of software versions of tactical communication systems' waveform and radio platform software in order to maintain the best possible performance. The field testing of the software-based Tough SDR radios and their waveforms continued. We received an order from the Defense Forces for Tough SDR radios. In addition, we received a continuation order for the development of the waveform of the Tough SDR radios, which will be multi-year.

2022 was a very active year in the international defense and security markets. Product deliveries, integration, and testing of tactical communication system products continued to customers in Austria and Estonia, as well as to other international customers. During the past year, a new promising market area has emerged: international companies developing air defense and sensor systems. In addition, several pilots of Tough SDR radios started in different parts of Europe and Asia. We also continued our cooperation in the ESSOR project with Bittium Tough SDR radios with good results. The interoperability tests performed in the summer with the new ESSOR High Data Rate Waveform were successful.

We expanded the tactical communication product range and launched the new Bittium Tough VoIP Field Phone™ 2, which enables reliable communication in demanding operating environments. The information secure Bittium Tough Mobile™ smartphone product family was also supplemented with the new Bittium Tough Mobile™ 2 Tactical solution, which enables military mobile communication, released in June.

Interest in Bittium Tough Mobile 2 smartphones has increased in the governmental market due to the Russian war of aggression and numerous data security attacks. We have applied for NATO security approval for our Tough Mobile 2 solution and expect to receive it during 2023. We believe that approval will increase sales of the solution.

The importance of remote care and remote monitoring is further emphasized by the insufficiency of medical care resources and cost pressures, which positively affect the demand for Bittium's medical technology products and services. The worldwide component shortage significantly slowed down the manufacturing and delivery of the devices. Due to strict delivery time requirements, we also could not accept all orders.

Bittium has medical device approval processes ongoing in many countries. The new European product safety regulation for medical devices, MDR (Medical Device Regulation, EU 2017/745), has caused a backlog of quality system audits and device approvals and thus delay in application turnaround times. In December, we received MDR approval for Bittium Respiro, a home sleep apnea test and analysis solution. FDA (Food and Drug Administration) medical device approval for Respiro in the North American market is expected during the first half of 2023.

We made good progress in increasing the European sales of Bittium Faros™ ECG measuring devices. However, a significant part of the product deliveries of the past year was still made to Preventice Solutions (a subsidiary of Boston Scientific Group), a customer offering remote monitoring services in the US ECG market. We expanded the Faros product family with a new ECG measuring device that measures ECG with one battery charge continuously for at least 14 days. The new version makes it easier to diagnose arrhythmias thanks to the extended measurement time. The device also enables earlier discharge of patients and better conditions to quickly detect and react to possible arrhythmias.

In the neurophysiology market, the piloting of Bittium BrainStatus™ EEG measuring devices continued and new ones started. There are Finnish and European university hospitals that are testing the use of BrainStatus in their intensive care units. The market for BrainStatus is just opening up as the recommendations for intensive care are changing in a more demanding direction regarding EEG measurement.

Last year, we established a separate Clinical Advisory Board to support the business of our healthcare technology products. The Clinical Advisory Board brings us medical expertise and an international forum for the continuous development of our products. Based on this expertise, feedback, and clinical research, we have the opportunity to develop even more competitive solutions.

During the past year, the net sales of R&D services remained at the same level compared to the previous year. The market has recovered from the coronavirus pandemic, and we have been able to do active sales and marketing work. The demand for R&D services focused on the Industrial IoT, Telecom, and MedTech technology markets, where companies seek wireless connectivity for their products. Several customer projects were successfully completed, and new ones were started. The goal of the Connectivity Solutions business is to focus on growing the international customer base.

The availability of labor is still a challenge. In particular, there are too few software experts compared to the demand, and the competition for employees has increased the mobility of the workforce. During the past year, we have invested in building an employer image, which has contributed to the recruitment of new employees.



I would like to thank our customers, employees, shareholders, and partners for the past year. We have strengthened and focused our business units to become even more independent, with the aim of starting to report independent business units from 2024 at the latest. We believe this will bring more transparency and added value to both owners and other stakeholders.

Outlook for 2023

Market Outlook 2023

The global disruption in the availability of electronic components that followed the coronavirus pandemic has had a slowing effect on the development of the company's business and sales in 2021 and 2022. The company estimates that the markets are recovering, and that the component shortage will ease during 2023.

About 70 percent of Bittium's net sales in total are generated from products and related systems, and the uncertainties related to product deliveries cause significant uncertainty for the accumulation of Bittium's net sales and operating result during the year 2023.

More information about Bittium's market outlook is presented in this report in the section "Market Outlook" as well as on the company's internet pages at www.bittium.com.

Financial Outlook 2023

Bittium expects the net sales in 2023 to grow and the operating result to improve from the previous year (net sales EUR 82.5 million in 2022 and operating result EUR 0.3 million in 2022). Cash flow in 2023 is expected to be positive. Due to the shortage of components, the first quarter of 2023 will be weak.

Long-term Financial Targets

Bittium aims for an average annual net sales growth of more than 10 percent and an operating profit level of 10 percent and estimates that it will achieve these goals in 2024.

Strategy Implementation in 2022

Bittium's goal is to be a major international supplier of secure and reliable communication solutions for the defense and authority markets, a leading supplier of industrial connectivity solutions and R&D services, and a major supplier of measurement and remote diagnostics solutions for the measurement and analysis of biosignals.

At the beginning of 2022, Bittium started developing its operations towards independent business units. On December 21, 2022, the company announced that it will continue to develop its operations towards independent business units with the aim of starting business-specific segment reporting by the beginning of 2024 at the latest. Although the technological know-how needed in the company's operations is similar, the business units' customers and market dynamics are very different. The goal of the development is to bring business management and decision-making closer to the market and thus improve the speed of decision-making and strengthen the company's position in the markets. The change also speeds up the adaptation of the business units to the surrounding market situations, enabling the creation of ever-increasing added value for customers.

The three business units are: Medical Technologies, Defense & Security, and Connectivity Solutions.

• The Medical Technologies business unit consists of three business areas, which are measuring and analyzing the electrical activity of the heart (ECG) (Cardiac), measuring and analyzing the electrical activity of the brain (EEG) (Neuro), and Home Sleep Apnea Testing (Sleep). In the coming years, alongside the product business, the company will invest in diversifying the software business



and increasing the turnover it generates. In the Medical Technologies business, the focus will be on increasing the international customer base and market shares.

- In the Defense & Security business unit, the company offers secure communication solutions for the authority, defense, and other professional user markets. The business consists of tactical communication solutions targeted to the defense market and high-security communication solutions targeted to the authorities. Over the past years, the company has made significant investments to expand its product portfolio. The products and systems are now internationally at a very competitive level in terms of coverage and technical features. In the next phase, the company will utilize the previously made product development investments and invest strongly in international sales and marketing. The company's goal is to significantly grow the international product business and achieve an internationally significant position as a provider of tactical communication and high-security communication solutions.
- In the Connectivity Solutions business unit, the company offers its customers product development services and wireless connectivity solutions for the development of new innovative products in a secure and developing wireless environment. In the coming years, the company will focus on growing its international customer base in the Telecom, Industrial IoT, and MedTech market segments.

Bittium has made significant product development investments in its own products and solutions between 2018 and 2022. These product development investments have been completed, and the company is moving from product development-focused product portfolio expansion to international business expansion and growth. Bittium is aiming for international growth in the product business in both tactical communication solutions and medical technology products and services in the coming years.

Bittium continues to explore inorganic growth opportunities and is ready to invest in acquisitions that support the company's growth strategy.

Market Environment and Business Development in January-December 2022

Defense & Security Business Unit

The world's political situation changed significantly in February after Russia attacked Ukraine. The outbreak of war caused several countries to increase their defense budgets.

In the first phase, the increased defense funds have been allocated mainly to consumables, but the gradually increased budgets will also be allocated to the modernization and development projects of the defense forces of different countries, and new defense force modernization projects are starting in different parts of the world. Bittium is involved in several new tenders regarding the modernization of tactical communications in different countries. In accordance with the nature of the market, the bidding stages of these new projects are quite slow and can take several years.

Finland started the process to join the military alliance NATO. A possible accession to NATO will strengthen Bittium's market position, especially in tenders from NATO countries. Bittium's tactical communication products have very high-quality technical solutions for use in NATO countries, and NATO countries have been potential customers of Bittium even without Finland joining NATO. In addition, joining would enable Bittium to implement NATO waveforms and encryption solutions, if necessary, and would offer the opportunity to participate in the research programs of NATO countries.

In the domestic defense market, field testing of Bittium Tough SDR™ radios and their waveforms, as well as preparations for the large-scale deployment of the radios, continued throughout the year 2022. Bittium received continuation order for the development of the radios' waveform. The project will be multi-year. In November, the Finnish Defence Forces ordered Bittium Tough SDR Handheld and Vehicular radios for around 4.3 million euros.

Deliveries of other tactical communication products to the Finnish Defense Forces were also continued. Bittium received orders in accordance with framework agreements for both Bittium Tactical Wireless IP Network™ (TAC WIN) software radio system products and Bittium Tough Comnode™ devices. Some of the deliveries were made in 2022 and some will be made in 2023. Bittium also supplied the Finnish Defense Forces with system support for the TAC WIN and Tough VoIP systems and further developed the new software version of



the TAC WIN system. This ongoing development effort continues to improve the performance of the TAC WIN system's waveform and radio platform software based on observations made in field trials and training use, as well as waveform research conducted by Bittium.

The year 2022 has been busy in the international defense and authority markets. Product deliveries, integration and testing of tactical communication system products continued to customers in Austria and Estonia, as well as to other international customers. During the past year, a new promising market area has emerged: international companies developing air defense and sensor systems. In addition, several pilots of Tough SDR radios started in different parts of Europe and Asia.

We also continued the ESSOR collaboration with Bittium Tough SDR radios with good results. The interoperability tests performed in the summer with the new ESSOR High Data Rate Waveform were successful. Bittium's radios flexibly used Bittium's own broadband and narrowband waveforms as well as the ESSOR waveform for tactical data transmission.

During the past year, Bittium expanded the tactical communication product range with the new Bittium Tough VoIP Field Phone™ 2. Field Phone 2 is a new generation VoIP phone that enables reliable communication in demanding operating environments. Bittium Tough VoIP Field Phone 2 complements the existing Tough VoIP product family, meeting customers' need for a new generation field phone.

The secure Bittium Tough Mobile™ smartphone product family was supplemented with the new Bittium Tough Mobile™ 2 Tactical solution, which was released in June, and is aimed at the defense market. The comprehensive solution enables the soldier's mobile communication to be connected to either the Bittium Tough SDR Handheld™ radio or third-party tactical radios. The solution is compatible with various battle management systems, which enables real-time and efficient sharing of situational awareness in tactical networks.

The demand for Bittium Tough Mobile 2 smartphones and related data security software in the official market has increased with the Russian war of aggression and numerous data security attacks. Deliveries of phones and their various variants to the domestic and international markets continued. At the end of the year, Bittium delivered Tough Mobile 2 smartphones to the Swedish company Tutus. The delivery was a continuation of the cooperation between the companies, which has developed a mobile solution with a high level of information security, which combines Bittium's secure Bittium Tough Mobile 2 smartphone platform and the Tutus encryption solution approved by the Swedish government. Tutus has delivered this mobile solution, especially designed as a tool for critical communication and for a mobile environment, to a major Swedish authority.

The features of the Tough Mobile 2 smartphone and related security software were further developed, and the company has applied for NATO security approval for its solution, which is expected to be received during 2023. The approval is believed to increase sales of the solution.

Medical Technologies Business Unit

The medical technology market has recovered from the uncertainty caused by the coronavirus pandemic. The importance of remote care and remote monitoring is still growing with the inadequacy of medical care resources and cost pressures. Remote monitoring and remote diagnostics solutions bring relief to these problems, which will in the future support the development of sales of Bittium's medical remote diagnostics solutions.

Bittium has medical device approvals in progress in many different countries. The new European Medical Device Product Safety Regulation, or MDR (Medical Device Regulation, EU 2017/745), entered into full force on May 26, 2021. The change has caused a backlog of quality system audits and device approvals, and thus a delay in application turnaround times.

In December, Bittium Respiro™, the advanced home sleep apnea test and analysis solution, received MDR approval. Respiro focuses on nighttime polygraphy measurement at home and records and analyzes typical breathing disorders during sleep. Respiro uses artificial intelligence to speed up the analysis work. It supports various sensor configurations and service models, thanks to which it adapts to varying measurement needs and different business models.

Respiro's FDA (Food and Drug Administration) medical device approval for the North American market has progressed and approval is expected during the first half of 2023.

The component shortage significantly slowed down the manufacture and deliveries of devices, but also the reception of orders. The reason for the decrease in order intake is the existing contracts with our largest customers, according to which we are obliged to deliver the ordered products within a certain time after the order.

The demand for Bittium Faros™ ECG measuring devices increased in the European market during the past year. A significant part of the product deliveries of the past year was still made to Preventice Solutions (a subsidiary of Boston Scientific Group), a customer offering remote monitoring services in the US ECG market. At the beginning of the year, Bittium and Preventice signed an agreement according to



which Bittium will continue the supply contract for BodyGuardian® MINI devices that monitor cardiac arrhythmias to Preventice. In addition, the cooperation in the development of new ECG technology tailored to the use of Preventice Solutions continues.

The Bittium Faros product family was expanded with the new Bittium Faros 180L ECG measuring device, which measures the ECG continuously for at least 14 days on one battery charge. The new version improves the diagnosis of arrhythmias due to the extended measurement time. The device also enables patients to be discharged earlier and better conditions to quickly detect and react to possible arrhythmias.

In the neurophysiology market, the pilots of the Bittium BrainStatus™ EEG measurement devices progressed, and new pilots started. There are e.g., Finnish and European university hospitals that test the use of BrainStatus in their intensive care units. The market for BrainStatus in intensive care is just opening as the recommendations for intensive care are slowly changing to a more demanding direction regarding FEG measurement.

In October, Bittium announced it has established a Clinical Advisory Board to support the business of its healthcare technology products. The Clinical Advisory Board brings Bittium medical expertise and an international forum for the continuous development of products. Its task is to provide feedback and conduct clinical research on Bittium's products, and to assist Bittium with its own expertise in developing even more competitive solutions.

Connectivity Solutions Business Unit

During the past year, the net sales of R&D services remained at the same level as in the previous year. The market has recovered from the coronavirus pandemic and active sales and marketing have been done again. The most demand for R&D services was in the Industrial IoT, Telecom, and MedTech technology markets, where companies seek wireless connectivity for their products. Many customer projects were successfully completed, and new ones were started. The aim of the Connectivity Solutions business is to focus on growing the international customer base, especially in the Telecom, Industrial IoT, and MedTech market segments.

During the past year, Bittium introduced a new Cellular IoT solution to the market. It offers IoT devices direct connectivity to cloud services over mobile networks. The solution can be used to update the local connectivity of existing IoT devices to 4G/5G connectivity or to integrate 4G/5G connectivity into new IoT devices being developed. The solution is based on software modules, the reuse of which improves the competitiveness of Bittium's design services, enabling the implementation of connectivity projects for the customer faster and more cost-effectively.

The availability of labor is still a challenge, and no change is expected. In particular, there are too few software experts compared to the demand, and the competition for employees has increased the mobility of the workforce. During the past year, the company has invested in building an employer image, which has contributed to the recruitment of new employees.

Financial Performance in January-December 2022

Bittium's net sales in January-December 2022 decreased by 5.1 percent year-on-year to EUR 82.5 million (EUR 86.9 million).

The share of product-based net sales was EUR 57.4 million (EUR 63.1 million), representing 69.6 percent of the net sales. The share of Medical Technologies products was EUR 22.6 million (EUR 27.8 million) and the share of Defense & Security products and systems was EUR 34.8 million (EUR 35.3 million). The decline in product-based net sales was caused by component availability difficulties.

The share of services-based net sales was EUR 25.1 million (EUR 23.8 million), representing 30.4 percent of the net sales. The share of Connectivity Solutions R&D services was EUR 15.2 million (EUR 15.5 million), resulting mainly from R&D services for wireless telecommunication customers.

EBITDA was EUR 11.0 million (EUR 13.7 million).

R&D investments were EUR 22.3 million (EUR 19.8 million), representing 27.0 percent of net sales (22.8 percent) of which EUR 6.6 million were capitalized in the balance sheet, being EUR 0.4 million less than a year ago.



The operating result in January-December 2022 was EUR 0.3 million (EUR 3.2 million). The weakening of the operating result was especially caused by the temporary decrease in the net sales of the Medical Technologies product business due to the component shortage and the continued investments in sales and marketing, and in product development to ensure the future growth of the business.

Cash flow from operating activities was EUR 8.0 million (EUR 8.3 million). Net cash flow during the period was EUR -3.0 million, including as the most significant items EUR 6.6 million R&D investments into own products and EUR 1.4 million dividend payment (EUR -2.6 million, including as the most significant item EUR 7.0 million R&D investments into own products, and EUR 1.1 million dividend payment).

The equity ratio was 69.7 percent (72.4 percent).

Net gearing was 3.0 percent (0.2 percent).

The order backlog at the end of the year was EUR 28.1 million (EUR 29.5 million).

Half Year Figures

GROUP'S NET SALES AND OPERATING RESULT, MEUR	2H/22	1H/22	2H/21	1H/21
Net sales	41.4	41.0	47.2	39.7
Operating profit (loss)	0.6	-0.2	3.9	-0.7
Result before taxes	0.2	-0.7	3.6	-1.0
Result for the period	0.9	-0.6	4.4	-1.0

DISTRIBUTION OF NET SALES BY PRODUCT AND SERVICES, MEUR AND $\%$	2H/22	1H/22	2H/21	1H/21
Product-based net sales	30.2	27.2	35.2	27.9
	72.9 %	66.3 %	74.5 %	70.3 %
Services-based net sales	11.2	13.8	12.0	11.8
	27.1 %	33.7 %	25.5 %	29.7 %

DISTRIBUTION OF PRODUCT-BASED NET SALES, MEUR AND %	2H/22	1H/22	2H/21	1H/21
Defense & Security products	18.9	15.9	20.8	14.5
	62.6 %	58.5 %	59.3 %	51.8 %
Medical Technologies products	11.3	11.3	14.3	13.5
	37.4 %	41.5 %	40.7 %	48.2 %

DISTRIBUTION OF SERVICES-BASED NET SALES, MEUR AND %	2H/22	1H/22	2H/21	1H/21
Connectivity Solutions R&D services	7.2	8.0	7.7	7.8
	64.0 %	57.8 %	63.8 %	66.6 %
Other service-based net sales	4.0	5.8	4.4	3.9
	36.0 %	42.2 %	36.2 %	33.4 %

DISTRIBUTION OF NET SALES BY MARKET AREAS,	2H/22	1H/22	2H/21	1H/21
MEUR AND %				



Asia	0.7	0.5	0.3	0.3
	1.8 %	1.3 %	0.6 %	0.6 %
North and South America	12.9	10.4	14.9	14.4
	31.1 %	25.4 %	31.5 %	36.4 %
Europe	27.8	30.1	32.0	25.0
	67.1 %	73.3 %	67.9 %	62.9 %

Quarterly Figures

GROUP'S NET SALES AND OPERATING RESULT, MEUR	4Q/22	3Q/22	2Q/22	1Q/22	4Q/21
Net sales	27.6	13.8	22.7	18.4	30.1
Operating profit (loss)	3.0	-2.4	0.8	-1.0	3.7
Result before taxes	2.8	-2.6	0.6	-1.2	3.5
Result for the period	3.5	-2.6	0.6	-1.2	4.3

DISTRIBUTION OF NET SALES BY PRODUCT AND SERVICES, MEUR AND %	4Q/22	3Q/22	2Q/22	1Q/22	4Q/21
Product-based net sales	20.9	9.3	15.8	11.4	23.0
	75.8 %	67.3 %	69.7 %	62.0 %	76.5 %
Services-based net sales	6.7	4.5	6.9	7.0	7.1
	24.2 %	32.7 %	30.3 %	38.0 %	23.5 %

DISTRIBUTION OF PRODUCT-BASED NET SALES, MEUR AND $\%$	4Q/22	3Q/22	2Q/22	1Q/22	4Q/21
Defense & Security products	15.8 75.5 %	3.1 33.6 %	8.2 51.6 %	7.8 68.2 %	15.5 67.6 %
Medical Technologies products	5.1	6.2	7.7	3.6	7.4
	24.5 %	66.4 %	48.4 %	31.8 %	32.4 %

DISTRIBUTION OF SERVICES-BASED NET SALES, MEUR AND %	4Q/22	3Q/22	2Q/22	1Q/22	4Q/21
Connectivity Solutions R&D services	4.2	3.0	3.7	4.3	4.6
	62.4 %	66.4 %	54.6 %	60.9 %	64.8 %
Other service-based net sales	2.5	1.5	3.1	2.7	2.5
	37.6 %	33.6 %	45.4 %	39.1 %	35.2 %

DISTRIBUTION OF NET SALES BY MARKET AREAS, MEUR AND %	4Q/22	3Q/22	2Q/22	1Q/22	4Q/21
Asia	0.5	0.3	0.2	0.3	0.2
	1.8 %	1.9 %	0.9 %	1.7 %	0.6 %
North and South America	7.6	5.3	6.6	3.8	8.8
	27.7 %	38.1 %	29.1 %	20.8 %	29.2 %
Europe	19.5	8.3	15.9	14.2	21.1
	70.6 %	60.0 %	70.0 %	77.4 %	70.2 %



Statement of Financial Position and Financing

The figures presented in the statement of financial position of December 31, 2022, are compared with the statement of the financial position of December 31, 2021 (MEUR).

	Dec 31, 2022	Dec 31, 2021
Non-current assets	85.0	85.9
Current assets	84.6	80.3
Total assets	169.7	166.1
Share capital	12.9	12.9
Other capital	102.8	103.9
Total equity	115.8	116.8
Non-current liabilities	21.7	21.5
Current liabilities	32.2	27.8
Total equity and liabilities	169.7	166.1
Cash flow of the review period:	1-12/2022	1-12/2021
+ profit of the period +/- Adjustment of accrual basis items	11.7	15.2
+/- Change in net working capital	-2.9	-6.2
- interest, taxes, and dividends	-0.8	-0.7
= net cash from operating activities	8.0	8.3
- net cash from investing activities	-8.0	-8.4
- net cash from financing activities	-3.0	-2.5
= net change in cash and cash equivalents	-3.0	-2.6

The number of gross investments in the period under review was EUR 9.5 million. Net investments for the review period totaled to EUR 9.4 million. The total amount of depreciation during the period under review was EUR 10.7 million. The amount of interest-bearing debt, including finance lease liabilities, was EUR 22.4 million at the end of the reporting period (EUR 22.3 million). Bittium's equity ratio at the end of the period was 69.7 percent (72.4 percent).

The Group's liquidity remained good despite the uncertainty caused by the coronavirus pandemic and the global disruption in the availability of electronic components. Securing cash flow has not required any special adjustment measures and no significant changes have been identified in the credit risks of trade receivables.

Cash and other liquid assets at the end of the reporting period were EUR 19.0 million (EUR 22.0 million). Net cash flow during the period was EUR -3.0 million. The net cash flow resulted from EUR 6.6 million investments made into own product development and EUR 1.4 million dividend payment as the most significant items (EUR -2.6 million including EUR 7.0 million investments made into own product development, and EUR 1.1 million dividend payment as the most significant item).

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. The 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 September 30, 2025. At the end of the review period, no limits from these facilities were in use.

Bittium follows a hedging strategy that has the 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 based on accounts receivable, accounts payable, order book, and budgeted net currency cash flow.

Research and Development



Bittium continued to make significant investments to develop its own products and product platforms. In January-December 2022, the R&D investments were EUR 22.3 million (EUR 19.8 million), representing 27.0 percent of the net sales (22.8 percent).

The R&D investments focused mainly on developing medical technology products, developing tactical communication system and its products for the defense industry, and developing different types of special terminal products for authorities and their related security software.

The capitalized R&D investments are related to the investments in developing the software-defined radio-based tactical radios, Bittium Tough SRD™ product family, further development of tactical communication networks, and development of medical technology products.

R&D INVESTMENTS, (MEUR)

	1-12 2022	1-12 2021
	12 months	12 months
Total R&D investments	22.3	19.8
Capitalized R&D investments	-6.6	-7.0
Depreciations and impairment of R&D investments	5.9	5.5
Cost impact on income statement	21.5	18.3
R&D investments, % of net sales	27.0 %	22.8 %

CAPITALIZED R&D INVESTMENTS IN BALANCE SHEET, MEUR	1-12 2022	1-12 2021
	12 months	12 months
Balance sheet value in the beginning of the period	48.1	46.6
Additions during the period	6.6	7.0
Depreciations and impairment of R&D investments	-5.9	-5.5
Balance sheet value at the end of the period	48.8	48.1

Personnel

The Bittium group employed an average of 641 people in January-December 2022 (664 employees). At the end of December 2022, the company had 625 employees (653 employees).

Changes in the Company's Management

Mr. Antti Näykki (45 years), B.Eng. Embedded Systems, was appointed as Senior Vice President, Medical Technologies Product and Service Area in Bittium Corporation and as a member of Bittium Corporation's Management Group, effective on February 1, 2022. Mr. Näykki has worked at Bittium since 2019, among other things, as responsible for business development, and as the head of the Medical Technologies product management. In his new position as Senior Vice President of Medical Technologies Product and Service Area, he reports to Mr. Hannu Huttunen, CEO of Bittium Corporation. Prior to Bittium, Mr. Näykki worked as Managing Director of Jutel Oy and in various sales and management positions at Exfo and Nethawk.

Mr. Arto Pietilä, the Senior Vice President of the Medical Technologies Product and Service Area and member of the Corporations' Management Group, retires as planned.



As of February 1, 2022, Bittium Corporation's management group consists of the following persons: Mr. Hannu Huttunen, CEO (Chairman); Mr. Pekka Kunnari, CFO; Mr. Kari Jokela, CLO; Mrs. Karolina Malmi, Vice President Communications and Marketing; Mr. Jari Sankala, Senior Vice President Defense & Security; Mr. Tommi Kangas, Senior Vice President Connectivity Solutions; Mr. Antti Näykki, Senior Vice President Medical Technologies; and Mr. Jari-Pekka Innanen, Vice President, Engineering.

On October 17, 2022, Mr. Hannu Huttunen, the CEO of Bittium Corporation announced that he will leave his position as CEO of the Company. The Board of Directors of Bittium Corporation initiated a search for a new CEO with the goal of having a new CEO selected by the beginning of next year. Mr. Hannu Huttunen will continue in his position until then with the full support of the Company's Board of Directors. It has been agreed that Mr. Huttunen will continue as an Advisor to the Company's Board of Directors until the end of 2023.

On December 9, 2022. the Board of Directors of Bittium Corporation appointed Mr. Johan Westermarck, Lic. Sc. (Econ), M.Sc. (Eng), as the Company's CEO as of April 1, 2023. Mr. Westermarck has most recently served as CEO of Citec Group Oy Ab. Before this, Westermarck worked in several business management positions, such as the CEO of Maintpartner Group and management positions in the business operations of Eltel Networks Oy and Ahlstöm Machinery Oy. The current CEO of Bittium Corporation, Hannu Huttunen will continue in his position until March 31, 2023, after which he will continue as an advisor to the company's Board of Directors until the end of 2023.

Share and Share Capital

The shares of Bittium Corporation are quoted on Nasdaq Helsinki. The Company has one series of shares. All shares entitle their holders to dividends of equal value. Each share has one vote. The share does not have a nominal value. The Company's shares have been entered into the Euroclear Finland Ltd.'s book-entry securities system.

At the end of the financial period, the fully paid share capital of the Company entered into the Finnish Trade Register was EUR 12,941,269.00 and the total number of the shares was 35,702,264. The accounting par value of the Company's share is EUR 0.10. The Company does not have its own shares in its possession.

MARKET VALUES OF SHARES (EUR)	1-12/2022	1-12/2021
	12 months	12 months
Highest	6.08	7.89
Lowest	3.47	4.93
Average	4.71	6.18
At the end of period	3.98	5.30
Market value of the stock. (MEUR)	141.9	189.2
Trading value of shares. (MEUR)	44.0	83.2
Number of shares traded. (1.000 pcs)	9 346	13 464
Related to average number of shares %	26.2	37.7

Incentive Systems

Employee Profit-Sharing Plan



In 2022, Bittium had an employee profit-sharing plan that applies to all employees, excluding those covered by other short-term bonus plans. According to the 2022 profit-sharing plan, a separately defined part of Bittium's operating profit will be distributed to employees as a profit-sharing bonus in proportion to salaries. The goal of the system is to enable the company's success to be shared with employees and to engage employees.

Variable Pay

The variable pay is paid based on the achievement of goals. In 2022, earning period for the variable pay was the calendar year. The targets are determined separately for each earning period. The setting of targets and the review of their achievement is decided on a one-overone basis. The criteria for the short-term merit pay are the financial and strategic targets of the Company. In addition, part of the targets can be personal targets, which may vary between duties. The scope of the variable pay system includes company executives. In addition, those working in sales positions have separate reward systems related to sales goals.

Management Share-Based Incentive Plan

The management of the Bittium group's share-based long-term incentive scheme comprises a Performance Share Plan ("PSP"). The objectives of the Performance Share Plan are to align the interests of Bittium's management with those of the Company's shareholders and, thus, to promote shareholder value creation in the long term, commit the management to achieving Bittium's strategic targets, and the retention of Bittium's management. The Performance Share Plan consists of three annually commencing three-year performance share plans, PSP 2020-2022, PSP 2021-2023, and PSP 2022-2024, each with a one-year performance period, which is followed by the payment of the share reward and a two-year transfer restriction period. The commencement of each plan is, however, subject to a separate Board decision. Further information can be found on the company's internet pages at the address www.bittium.com.

On February 10, 2022, the Board of Directors of Bittium Corporation decided on the new period in the share-based long-term incentive scheme for the Bittium group's management. The members of Bittium's Management Group are eligible to participate in the third PSP 2022–2024 plan. The performance measures based on which the potential share reward under PSP 2022-2024 will be paid are the revenue growth and cash flow before financial items of Bittium. A precondition for the payment of the share reward is, in addition, that the employment relationship of the participant with Bittium continues at the time the reward is paid. The potential reward will be paid in shares of Bittium. If all the performance targets set for the third plan, PSP 2022 – 2024, are fully achieved, the aggregate maximum number of shares to be paid based on this second plan is approximately 122,100 shares (gross before the withholding of the applicable payroll tax). The aggregate gross value of PSP 2022 – 2024, estimated based on the volume-weighted average quotation of Bittium's share during the period H2/2021, is approximately EUR 0.7 million.

On March 24, 2022, Bittium Corporation's Board of Directors decided on the payment of the Company's share-based incentive system's share bonuses to the Company's management. Share premiums were paid in Bittium Corporation shares that can be acquired at the price formed in public trading. The decision was about the second Performance Share Plan (PSP 2021-2023) of the share-based incentive scheme. In the Share Issue, 13,467 new shares of the Company were issued without consideration to the management entitled to share rewards according to the terms and conditions of the share-based incentive scheme. A total of eight (8) persons from the Company's management group were in the target group of the payment.

Shareholders

Larges Shareholders	Number of	% of
	shares	shares
1. Veikkolainen Erkki	1 817 665	5,09 %
2. Ponato Oy	1 501 300	4,21 %
3. Hulkko Juha	1 419 370	3,98 %
4. Mutual Pension Insurance Company Varma	1 365 934	3,83 %
5. Mutual Pension Insurance Company Ilmarinen	1 296 529	3,63 %
6. Skandinaviska Enskilda Banken AB	740 314	2,07 %
7. Investment Fund Taaleritehdas Mikro Markka	700 000	1,96 %



8. Hilden Kai Jalmari	658 000	1,84 %
9. Citibank Europe PLC	590 119	1,65 %
10. Mutual Pension Insurance Company Elo	500 000	1,40 %

At the end of December 2022, Bittium Corporation had 21,927 shareholders. The ten largest shareholders owned 29.7 percent of the shares. Private ownership was 70.1 percent. The percentage of foreign and nominee-registered shareholders was 4.1 percent at the end of December 2022.

Flagging Notifications

On October 26, 2022, Bittium Corporation received a notification under Chapter 9, Section 5 of the Finnish Securities Market Act (FSMA), according to which Mr. Erkki Veikkolainen had acquired 40,000 shares in Bittium Corporation. In connection with the completion of the share purchase, Mr. Erkki Veikkolainen's aggregate amount of direct and indirect holdings in Bittium Corporation's shares and votes exceeded the five percent limit on October 25, 2022.

According to the notification, the aggregate holdings of Mr. Erkki Veikkolainen in Bittium Corporation on October 25, 2022, amounted to a total of 1,817,665 shares, corresponding to 5.09 percent of the total number of shares and voting rights of Bittium Corporation. The share stock of Bittium Corporation consists of 35,702,264 shares, each entitling one vote.

Decisions of the Annual General Meeting 2022

Bittium Corporation's Annual General Meeting was held on April 6, 2022, at 1.00 pm at the company's headquarters in Oulu, Finland. Shareholders and their proxy representatives could participate in the meeting and exercise their rights only by voting in advance and by making counterproposals and presenting questions in advance. The meeting could not be attended on-site. The Annual General Meeting was arranged in accordance with an exceptional meeting procedure based on the temporary legislation to limit the spread of the Covid-19 pandemic (375/2021) approved by the Finnish Parliament.

Use of the Profits Shown on the Balance Sheet and Authorizing the Board of Directors to Decide on the Distribution of Dividend

In accordance with the proposal of the Board of Directors, the Annual General Meeting decided that, based on the balance sheet for the financial year January 1, 2021 - December 31, 2021, a dividend of EUR 0.04 per share will be distributed. The dividend was paid to shareholders who on the dividend record date of April 8, 2022, were registered in the company's shareholders' register held by Euroclear Finland Oy. The dividend was paid on April 19, 2022. All the shares in the company were entitled to the dividend with the exception of shares possibly held by the company on the dividend record date.

Election and Remuneration of the Members of the Board of Directors

The Annual General Meeting decided that the Board of Directors shall comprise five (5) members. Mr. Erkki Veikkolainen, Ms. Riitta Tiuraniemi, Mr. Veli-Pekka Paloranta, Mr. Petri Toljamo, and Mr. Pekka Kemppainen 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.

At its assembly meeting held on April 6, 2022, the Board of Directors elected Mr. Erkki Veikkolainen as the Chairman of the Board of Directors. Further, the Board has resolved to keep the Audit Committee. Ms. Riitta Tiuraniemi (Chairman of the committee), Mr. Petri Toljamo, and Mr. Veli-Pekka Paloranta were elected as members of the Audit Committee.

The Annual General Meeting resolved that 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 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 of the members of the Board of Directors will be paid at once as Bittium Corporation's shares acquired for the price formed in public trading, through share issue or, in special circumstances if share-based remuneration cannot be paid for some reason, in money. The shares will be acquired according to the share purchase program of the company. A member of the Board of Directors may not transfer the shares received as remuneration before his/her membership in the Board of Directors has ended.

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, APA, will act as the 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 number of own shares to be repurchased shall not exceed 3,500,000 shares, which corresponds to approximately 9.80 percent of all of the shares in the company as of the date of the General Meeting. Only the unrestricted equity of the company can be used to repurchase its shares based on 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 their 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 14, 2021, to decide on the repurchase of the company's own shares.

The authorization is effective until June 30, 2023.

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 number of shares to be issued shall not exceed 3,500,000 shares, which corresponds to approximately 9.80 percent of all of the shares in the company as of the date of the General Meeting. The Board of Directors decides on all the conditions of the issuance of shares and 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 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 14, 2021, 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, 2023.

Proposal by the Board of Directors on the Use of the Profit Shown on the Balance Sheet and the Payment of the Dividend

On December 31, 2022, the parent company's distributable funds amounted to EUR 118,265,062.42, of which EUR 1 839,891.91 is profit for the last financial year. The Board of Directors proposes that the Annual General Meeting to be held on April 12, 2023, resolve to pay EUR 0.05 per share as a dividend based on the balance sheet to be adopted for the financial period January 1, 2022 - December 31, 2022.



The dividend will be paid to the shareholders who are registered in the company's register of shareholders as maintained by Euroclear Finland Ltd on the dividend record date, April 14, 2023. The Board of Directors proposes that the dividend be paid on April 21, 2023.

Bittium Corporation follows a dividend policy that takes into account the Corporation's net income, financial status, need for capital, and financing of growth.

Significant Events after the Reporting Period

There were no significant events after the reporting period.

Risks and Uncertainties

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

Russia's war of aggression against Ukraine and the subsequent global geopolitical instability combined with high inflation, supply chain challenges, and European energy market problems have caused various supply and demand-related risks and increased uncertainty.

Especially the global disruption in the availability of electronic components and their price development has caused fast changes in the company's operating environment. The company monitors the development of the situation and actively strives to ensure the availability of components required for product deliveries. Poor availability of components can have a detrimental effect on the progress of the ability to deliver products.

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 or in situations where there will be no orders in the forecast quantities, 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 accumulate 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 in the 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 the 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, a 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 also result in 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 the management of intellectual property rights, on the one hand, related to accessibility on commercially acceptable terms of certain technologies in 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 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 also be 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 on July 1, 2015, and started using the new trademark. The registration and the use of the new trademark can include customary risks involved when taking a new trademark into use.

Financing Risks

Global economic uncertainty may lead to payment delays, increase the risk of 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. Bittium has a EUR 20.0 million senior loan and EUR 10.0 million committed overdraft credit facility agreement with Nordea Bank Plc. The 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 September 30, 2025.

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.

Sustainability and Corporate Responsibility

Bittium is committed to responsible and sustainable business through its sustainability program. The sustainability program is based on the company's strategy, values, stakeholders' expectations, and megatrends in the operating environment, which include digitization and the aging of the population as well as information security.



Bittium's new sustainability program is valid for the years 2022–2025. The company's sustainability work focuses on three key themes: personnel, customers and information security, and the environment. Ethical principles and responsible business practices are the basis of all activities.

Sustainability is part of Bittium's organizational culture and way of working. The company identifies and manages liability-related risks as part of the company's risk management, which emphasizes the role of the company's Management Group and the Board of Directors in implementing measures in daily operations.

More information about Bittium's sustainability can be found on the company's internet pages at www.bittium.com.

Sustainability Report 2022 will be published in connection with the Annual Report on March 20, 2023.

Market Outlook

Bittium's customers operate in various industries, each of them having its 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 competencies accrued over time and the long history of developing mobile communication solutions, Bittium is in a good position to offer customized solutions to its customers. Over thirty years of experience and extensive competence in measuring biosignals also act as a basis for medical technology solutions.

The global coronavirus pandemic and the worldwide disruption in the availability of electronic components that followed the pandemic have had a slowing effect on the development of the company's business and sales in 2021 and 2022. The market is slowly recovering and the company believes that the component shortage will ease during 2023.

The world's geopolitical situation, problems in logistics chains, inflation and deteriorating economic development create uncertainty in the market outlook.

The factors affecting the demand for Bittium's products and services are described below:

Defense, Public Safety, and Information Security Markets

- In the defense market's tactical communications sector, the governments' defense forces and other authorities need networks that troops, who are more and more constantly on the move, can use and transfer growing amounts of data securely. This creates demand for Bittium Tactical Wireless IP Network™ (TAC WIN) broadband network, Bittium Tough SDR™ handheld and vehicular radios, and for other Bittium's IP-based (Internet Protocol) tactical communication solutions that fulfill the needs of data transfer of moving troops and individual soldiers.
- Russia's war of aggression against Ukraine has also increased the defense budgets of various countries and has had a favorable
 effect on demand in the defense market. In the first phase, the increased defense appropriations have been allocated mainly to
 consumables. In the future, the increased budgets will also be aimed at the modernization and development projects of the
 defense forces of different countries, which may have a positive effect on the demand for Bittium's tactical communication
 solutions.
- Finland's possible NATO membership will have a positive effect on the demand for Bittium's defense and official products.
- Bittium continues its efforts to export tactical data transfer products to international markets and aims to get new international customers during 2023. The development of sales is moderate due to the long sales cycles of the defense industry.
- 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 in secure mobile devices is increasing. The sales of secure terminal products are expected to develop moderately according to the nature of public safety markets.
- The global component shortage affects the availability of various components used in products, which affects the company's ability to deliver products to its customers on the agreed schedule. The component shortage is expected to ease within 2023.



Telecommunication and Digitalization

- In mobile telecommunications, the implementation of 5G is accelerating. 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 the development of product variants. Different needs for satellite communication solutions increase the demand for Bittium's product development know-how with the addition of new players to the traditional supplier network. The demand for Bittium's R&D services is also increased by the need to develop new devices utilizing 5G technology.
- As digitalization evolves, secure IoT (Internet of Things) has become a significant development area in almost every industry. The increasing need for companies to digitalize their operations, collect data wirelessly, and transfer it to the internet and cloud services generate a need for Bittium's services and customized solutions. To this end, the market needs secure devices, for both demanding industrial and leisure applications, which collect information from the sensors used by the device and create a reliable wireless connection to the Internet and cloud services. The deployment of 5G technology is expanding and the number of digitalized devices increases continuously. The devices will also feature new and more advanced features that will create demand for design services. Therefore, the integration of different systems and technologies plays an important role in enabling complete digitalization services. There are several learning systems and devices under development that use different kinds of artificial intelligence (AI) technologies to ease and speed up the processing of large data amounts.
- Technological development and new innovations enable the development of new devices and applications for monitoring health
 and well-being, which increases the demand for Bittium's product development service expertise. Bittium's experience in medical
 devices, sports applications, and wearable devices, combined with wireless connectivity expertise, enables competitiveness also
 in providing design services for health, well-being, and sports equipment.
- Labor competition for both equipment design and software experts is fierce and it is expected to continue in the market in 2023 as well.

Medical ECG, EEG, and Sleep Apnea Remote Monitoring Market

- The medical technology market is undergoing significant development in patient care, especially outside hospitals. There is an increasing focus on the prevention of diseases and health problems through early diagnosis and the discharge of patients at an earlier stage to reduce hospital and treatment days. These actions significantly increase efficiency in health care processes and lower costs.
- A prerequisite for early hospital discharge is the enabling of accurate and precise follow-up and measurement opportunities in home conditions, which would be enabled through remote monitoring. Remote monitoring and remote diagnostics also enable specialists' diagnoses regardless of time and place. Also, evolving artificial intelligence-based algorithms become more common in supporting physicians in making diagnoses. Remote monitoring and remote diagnostics make it possible and faster to obtain more accurate diagnoses, which, in turn, speeds up the start of the right kind of treatment. The market change will enable several new providers to join the overall care service chain, without compromising the quality of specialist services.
- For remote monitoring and remote diagnostics, Bittium provides its Bittium Faros™ product family for remote heart monitoring, Bittium BrainStatus™ for measuring the electrical activity of the brain, home sleep apnea testing solution Bittium Respiro™, and different kinds of diagnostics software offered by Bittium.
- During the coronavirus pandemic, non-urgent patients seeking treatment and examinations decreased. Several hospitals, treatment facilities and service providers in the health care sector switched to more extensive use of remote diagnostics solutions. The pandemic will accelerate the introduction of digital remote services in hospitals and care facilities, creating a positive development in the demand for remote monitoring products and services.
- The global component shortage affects the availability of various components used in the products, which affects the company's ability to deliver products to its customers on the agreed schedule. The component shortage is expected to ease by the end of 2023.



Financial Calendar 2023

In 2023, Bittium Corporation will publish financial reports for half a year and the entire financial year and business reviews for the reporting periods January-March and January-September. The structure of the business reviews is lighter than the structure of financial reports.

- Financial Statement Bulletin 2022: February 10, 2023, at 8.00 am (CET+1)
- Business Review January-March 2023: April 27, 2023, at 8.00 am (CET+1)
- Half Year Financial Report January-June 2023: August 4, 2023, at 8.00 am (CEST+1)
- Business Review January-September 2023: October 20, 2023, at 8.00 am (CET+1)

Bittium Corporation will publish the 2022 Annual Report including the Financial Statements, Report by the Board of Directors, and Auditor's Report, as well as Corporate Governance Statement and Sustainability Report on March 20, 2023.

The actual general meeting is planned to be held on Wednesday, April 12, 2023, at 1:00 pm (CET+1). Materials related to the general meeting are compiled on Bittium's website.

Invitation to a Press Conference

Bittium will hold a webcast regarding the Financial Statement 2022 for media, analysts, and institutional investors on Friday, February 10, 2023, at 9.00 am (CET+1). The conference will be held in Finnish. Bittium will also hold a webcast for media, analysts, and institutional investors in English on the same day at 11.00 am (CET+1).

Link to the Finnish webcast: https://bittium.videosync.fi/tilinpaatos_2022

Link to the English webcast: https://bittium.videosync.fi/financial statement 2022

Recordings of both webcasts and the presentation will be available after the conference on Bittium's website at www.bittium.com/investors.

Oulu, February 10, 2023

Bittium Corporation
The Board of Directors

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Distribution:

Nasdaq Helsinki Major media



Bittium Corporation Condensed Financial Statements and Notes January – December 2022

The consolidated financial statement has been prepared in accordance with International Financial Reporting Standards (IFRS). The Financial Statement of 2022 has been audited and the auditing report has been dated on February 10, 2023.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME (MEUR)	1-12/2022	1-12/2021
Continuing operations	12 months	12 months
NET SALES	82.5	86.9
Other operating income	2.7	2.6
Work performed by the undertaking for its own purpose and capitalized	0.5	0.5
Raw materials	-20.2	-23.3
Personnel expenses	-39.5	-39.0
Depreciation	-10.7	-10.5
Other operating expenses	-14.8	-13.9
Share of results of the associated companies	-0.2	-0.1
OPERATING PROFIT (LOSS)	0.3	3.2
Financial income and expenses	-0.8	-0.7
PROFIT BEFORE TAX	-0.4	2.5
Income tax	0.7	0.8
PROFIT FOR THE PERIOD FROM CONTINUING OPERATIONS	0.3	3.3
Discontinued operations		
Profit for the year from discontinued operations		
PROFIT FOR THE PERIOD	0.3	3.3
Other comprehensive income:		
Items that may be reclassified subsequently to the statement of income		
Exchange differences on translating foreign operations	0.2	0.2
Other comprehensive income for the period total	0.2	0.2
TOTAL COMPREHENSIVE INCOME FOR THE PERIOD	0.5	3.6
Profit for the year attributable to		
Equity holders of the parent	0.3	3.3
Total comprehensive income for the period attributable to		



For the halders of the marrie	0.5	3.6
Equity holders of the parent	0.5	5.0
Earnings per share from continuing operations, EUR		
Basic earnings per share	0.007	0.093
Diluted earnings per share	0.007	0.093
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	0.007	0.093
Diluted earnings per share	0.007	0.093
Average number of shares, 1000 pcs	35 702	35 700
Average number of shares, diluted, 1000 pcs	35 702	35 700

CONSOLIDATED STATEMENT OF FINANCIAL POSITION (MEUR)	Dec 31, 2022	Dec 31, 2021
ASSETS		
Non-current assets		
Property, plant and equipment	19.7	20.9
Goodwill	5.8	5.8
Intangible assets	50.1	49.9
Other financial assets	1.1	1.4
Other long-term receivables	0.9	1.1
Deferred tax assets	7.4	6.7
Non-current assets total	85.0	85.9
Current assets		
Inventories	24.2	18.8
Trade and other receivables	41.4	39.4
Financial assets at fair value through profit or loss	5.7	5.7
Cash and short term deposits	13.3	16.3
Current assets total	84.6	80.3
TOTAL ASSETS	169.7	166.1
EQUITY AND LIABILITIES		
Equity attributable to equity holders of the parent		
Share capital	12.9	12.9
Invested non-restricted equity fund	26.0	26.0
Translation difference	1.3	1.1



Retained earnings	75.6	76.8
Total equity	115.8	116.8
Non-current liabilities		
Deferred tax liabilities	0.2	0.2
Provisions		
Interest-bearing liabilities	21.3	21.1
Other non-current liabilities	0.2	0.2
Advances received		
Non-current liabilities total	21.7	21.5
Current liabilities		
Trade and other payables	26.4	23.1
Provisions	4.7	3.5
Interest-bearing loans and borrowings	1.1	1.2
Current liabilities total	32.2	27.8
Total liabilities	53.9	49.3
TOTAL EQUITY AND LIABILITIES	169.7	166.1

CONSOLIDATED STATEMENT OF CASH FLOWS (MEUR)	1-12/2022	1-12/2021
	12 months	12 months
CASH FLOW FROM OPERATING ACTIVITIES		
Profit for the year from continuing operations	0.3	3.3
Profit for the year from discontinued operations		
Adjustment of accrual basis items	11.5	11.9
Change in net working capital	-2.9	-6.2
Interest paid on operating activities	-0.9	-0.8
Interest received from operating activities	0.1	0.1
Income taxes paid	-0.0	-0.1
NET CASH FROM OPERATING ACTIVITIES	8.0	8.3
CASH FLOW FROM INVESTING ACTIVITIES		
Acquisition of business unit, net of cash acquired		
Purchase of property, plant and equipment	-1.0	-1.0
Purchase of intangible assets	-7.1	-7.5
Purchase of investments/associated companies		
Sale of property, plant and equipment		
Sale of intangible assets		
NET CASH FROM INVESTING ACTIVITIES	-8.0	-8.4
CASH FLOW FROM FINANCING ACTIVITIES		



Borrowings		
Repayment of borrowing		
Payment of finance liabilities	-1.4	-1.4
Dividend paid and repayment of capital	-1.4	-1.1
Purchases of own shares	-0.1	
NET CASH FROM FINANCING ACTIVITIES	-3.0	-2.5
NET CHANGE IN CASH AND CASH EQUIVALENTS	-3.0	-2.6
Cash and cash equivalents at beginning of period	22.0	24.7
Cash and cash equivalents at end of period	19.0	22.0

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

	А	В	С	D	E	F
Shareholders equity on Jan. 1, 2021	12.9	26.0	0.9	74.5		114.2
Comprehensive income for the period						
Profit for the period				3.3		3.3
Exchange differences on translating foreign operations			0.2			0.2
Total comprehensive income for the period			0.2	3.3		3.6
Transactions between the shareholders						
Distribution of dividends				-1.1		-1.1
Share-related compensation				0.1		0.1
Total transactions between the shareholders				-1.0		-1.0
Other changes				0.0		0.0
Shareholders equity on Dec. 31, 2021	12.9	26.0	1.1	76.8		116.8



	А	В	С	D	E	F
Shareholders equity on Jan. 1, 2022	12.9	26.0	1.1	76.8		116.8
Comprehensive income for the period						
Profit for the period				0.3		0.3
Exchange differences on translating foreign operations			0.2			0.2
Total comprehensive income for the period			0.2	0.3		0.5
Transactions between the shareholders						
Distribution of dividends				-1.4		-1.4
Purchases of own shares				-0.1		-0.1
Share-related compensation				0.1		0.1
Total transactions between the shareholders				-1.5		-1.5
Other changes				-0.0		-0.0
Shareholders equity on Dec. 31, 2022	12.9	26.0	1.3	75.6		115.8

NOTES TO FINANCIAL STATEMENTS

ACCOUNTING PRINCIPLES FOR THE FINANCIAL STATEMENT:

The consolidated financial statement has been prepared in accordance with International Financial Reporting Standards (IFRS).

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.

IAS 1 Presentation of Financial Statements standard does not specify the concept of operating profit. Bittium has defined the operating profit as follows: The operating profit is the net of turnover added with other operating income, subtracted with the raw materials and external services, adjusted with the change in stocks and work performed by the undertaking for its own purpose, subtracted with the personnel expenses, depreciations and possible reductions in value as well as other business expenses. All other items are presented below the operating profit. The share of profits in associated companies, currency changes and changes in derivative instruments are included in the operating profit if they arise from the business; otherwise they are presented in the financial income and expenses.

The definitions of the other 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



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)	1-12/2022	1-12/2021
	12 months	12 months
Net sales		
Europe	57.9	57.0
Americas	23.3	29.3
Asia	1.3	0.5
Net sales total	82.5	86.9

RELATED PARTY TRANSACTIONS	1-12/2022	1-12/2021
	12 months	12 months
Employee benefits for key management and stock options expenses total, continuing operations	1.6	1.6

The Management of Bittium Corporation has a Share-Based Incentive Scheme. The Performance Share Plan consists of three annually commencing three-year performance share plans, PSP 2020-2022, PSP 2021-2023 and PSP 2022-2024, each with a one-year performance period, which is followed by the payment of the share reward and a two-year transfer restriction period. The commencement of each plan, is, however, subject to a separate Board decision. The performance measures based on which the potential share reward under PSP 2022-2024 will be paid are the revenue growth and cash flow before financial items of Bittium. A precondition for the payment of the share reward is, in addition, that the employment relationship of the participant with Bittium continues at the time the reward is paid. The potential reward will be paid in shares of Bittium.

SHARE-BASED REMUNARATION OF THE MANAGEMENT	
Form of the reward	Shares
Grant date	9.2.2022
Total amount of the shares at the most	122 100
Share price at the grant date, EUR	5.20
Total expenses of the reward at the most, EUR million	0.7
Execution	In shares



CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME BY QUARTER (MEUR) Continuing operations	10-12/2022 3 months	7-9/2022 3 months	4-6/2022 3 months	1-3/2022 3 months	10-12/2021 3 months
NET SALES	27.6	13.8	22.7	18.4	30.1
Other operating income	0.9	0.5	0.7	0.7	0.8
Work performed by the undertaking for its own purpose and capitalized	0.0	0.1	0.3	0.1	0.1
Raw materials	-8.2	-3.1	-5.9	-3.1	-9.1
Personnel expenses	-9.9	-8.0	-10.4	-11.2	-10.5
Depreciation	-2.9	-2.5	-2.6	-2.6	-2.9
Other operating expenses	-4.7	-3.1	-3.8	-3.2	-4.7
Share of profits in associated companies	0.0	-0.0	-0.1	-0.1	-0.1
OPERATING PROFIT (LOSS)	3.0	-2.4	0.8	-1.0	3.7
Financial income and expenses	-0.1	-0.2	-0.2	-0.2	-0.2
PROFIT BEFORE TAX	2.8	-2.6	0.6	-1.2	3.5
Income tax	0.7	0.0	0.0	0.0	0.8
PROFIT FOR THE PERIOD FROM CONTINUING OPERATIONS	3.5	-2.6	0.6	-1.2	4.3
Discontinued operations					
Profit for the period from discontinued operations					
PROFIT FOR THE PERIOD	3.5	-2.6	0.6	-1.2	4.3
Other comprehensive income	-0.5	0.3	0.3	0.1	0.0
TOTAL COMPREHENSIVE INCOME FOR THE PERIOD	3.0	-2.3	0.9	-1.1	4.3
Profit for the period attributable to:					
Equity holders of the parent	3.5	-2.6	0.6	-1.2	4.3
Total comprehensive income for the period attributable to:					
Equity holders of the parent	3.0	-2.3	0.9	-1.1	4.3

CONSOLIDATED STATEMENT OF CASH FLOWS BY	10-12/2022	7-9/2022	4-6/2022	1-3/2022	10-12/2021
QUARTER	3 months	3 months	3 months	3 months	3 months
Net cash from operating activities	0.1	2.0	2.9	3.0	4.2
Net cash from investing activities	-2.4	-2.0	-2.0	-1.7	-1.6
Net cash from financing activities	-0.3	-0.4	-1.9	-0.4	-0.3
Net change in cash and cash equivalents	-2.7	-0.3	-1.0	1.0	2.2



FINANCIAL PERFORMANCE RELATED RATIOS	1-12/2022	1-12/2021
	12 months	12 months
STATEMENT OF COMPREHENSIVE INCOME (MEUR)		
Net sales	82.5	86.9
Operating profit (loss)	0.3	3.2
Operating profit (loss). % of net sales	0.4	3.7
Profit before taxes	-0.4	2.5
Profit before taxes. % of net sales	-0.5	2.9
Profit for the period from continuing operations	0.3	3.3
PROFITABILITY AND OTHER KEY FIGURES		
Interest-bearing net liabilities. (MEUR)	3.4	0.2
Net gearing%	3.0	0.2
Equity ratio. %	69.7	72.4
Gross investments. (MEUR)	9.5	9.6
Average personnel during the period. continuing operations	641	664
Personnel at the period end. continuing operations	625	653

AMOUNT OF SHARE ISSUE ADJUSTMENT (1.000 pcs)	Dec. 31. 2022	Dec. 31. 2021
At the end of period	35 702	35 702
Average for the period	35 702	35 700
Average for the period diluted with stock options	35 702	35 700

1-12/2022	1-12/2021
12 months	12 months
0.007	0.093
0.007	0.093
0.007	0.093
0.007	0.093
	0.007 0.007



Equity *) per share	3.24	3.27
*) Equity attributable to equity holders of the parent		

MARKET VALUES OF SHARES (EUR)	1-12/2022	1-12/2021
	12 months	12 months
Highest	6.08	7.89
Lowest	3.47	4.93
Average	4.71	6.18
At the end of period	3.98	5.30
Market value of the stock. (MEUR)	141.9	189.2
Trading value of shares. (MEUR)	44.0	83.2
Number of shares traded. (1.000 pcs)	9 346	13 464
Related to average number of shares %	26.2	37.7

SECURITIES AND CONTINGENT LIABILITIES (MEUR)	Dec. 31. 2022	Dec. 31. 2021
AGAINST OWN LIABILITIES		
Floating charges		
Mortgages are pledged for liabilities totaled		
Guarantees	3.0	3.0
Rental liabilities		
Falling due in the next year	0.1	0.0
Falling due after one year		
Other contractual liabilities		
Falling due in the next year	2.5	1.4
Falling due after one year	0.7	1.4
Material purchase commitments	13.9	18.2
NOMINAL VALUE OF CURRENCY DERIVATIVES (MEUR)	Dec. 31. 2022	Dec. 31. 2021
Foreign exchange forward contracts		
Market value	0.0	0.0
Nominal value	1.4	5.0