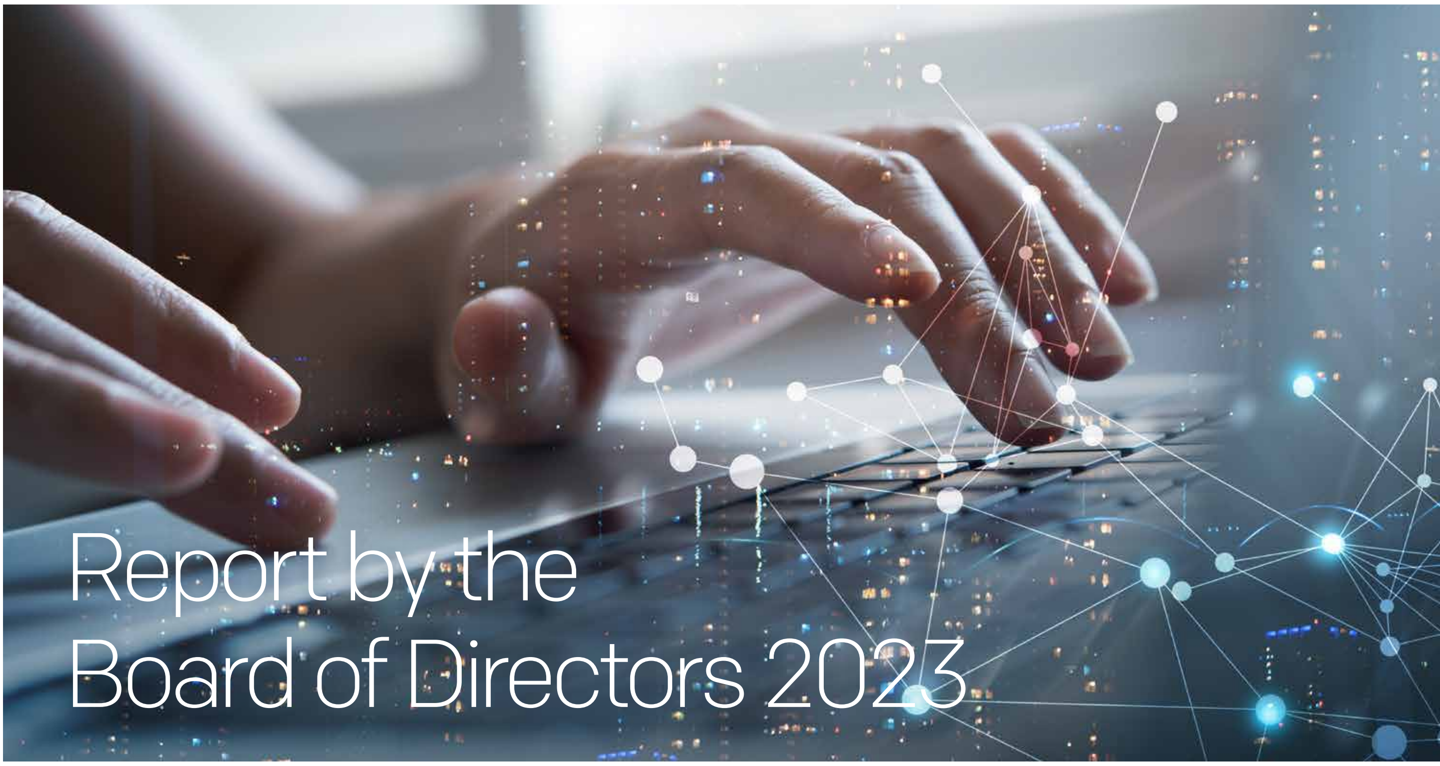
Report by the Board of Directors and Financial Statements 2023

Bittium

Contents



Report by the Board of Directors 2023

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

Year 2023 in Short

Net Sales and Operating Profit in 2023 Decreased Year-on-Year. Actions Taken to Improve the Financial Performance Will Be Effective from 2024 onwards.

Bittium's net sales in January-December 2023 decreased by 8,8 percent year-on-year to EUR 75.2 million (EUR 82.5 million).

The share of product-based net sales was EUR 45.8 million (EUR 57.4 million), representing 60.9 percent of the net sales. The share of Medical products was EUR 21.8 million (EUR 22.6 million), and the share of Defense & Security products and systems was EUR 24.0 million (EUR 34.8 million). The decline in the product-based net sales was mainly caused by the delays in Medical technology product deliveries resulting from the component shortage in the beginning of the year, weaker than expected development of product sales outside of the US, and delays in regulatory approvals of medical devices. In addition, the slower-than-estimated progress of multi-year projects in the Defense business and thus the timing of orders and product deliveries affected negatively to the development of net sales.

The share of services-based net sales was EUR 29.5 million (EUR 25.1 million), representing 39.1 percent of the net sales. The share of Engineering Services' R&D services was EUR 17.0 million (EUR 15.2 million), resulting from the progressing digitalization in our customers' businesses and the new customers won last year.

R&D investments were EUR 20.2 million (EUR 22.3 million), representing 26.9 percent of net sales (27.0 percent), of which EUR 7.2 million were capitalized in the balance sheet (EUR 6.6 million).

In the fourth quarter, there were non-recurring items of EUR 3.2 million in total, including non-recurring costs of EUR 0.7 million due to changes negotiations and non-recurring write-down of EUR 2.5 million due to the impairment of inventory. The inventory write-down was aimed, in accordance with the principle of prudence, at those components of the Defense & Security and Medical Business Segments whose minimum order quantity has been too large compared to the current demand forecast or the turnover rate has been very low.

EBITDA was EUR 5.2 million (EUR 11.0 million), including above-mentioned EUR 3.2 million non-recurring costs.

The operating result was EUR -4.3 million (EUR 0.3 million). In addition to the decline in the net sales, the operating result was affected by the above-mentioned non-recurring costs of EUR 3.2 million.

Result for the period was EUR -5.4 million, and earnings per share were EUR -0.153, including above-mentioned non-recurring items of EUR 3.2 million (result for the period EUR 0.3 million and earnings per share EUR 0.007).

Resulting from the change negotiations and other cost measures taken, Bittium

will achieve approximately EUR 6.0 million annual cost savings in total, from which EUR 0.8 million realized during 2023. The total cost savings the company estimates to achieve in 2024 in full.

Cash flow from operating activities was EUR 1.2 million (EUR 8.0 million). Net cash flow during the period was EUR -10.7 million, including EUR -4.3 million operating loss, EUR 7.2 million R&D investments into own products, EUR 3.0 million increase in the net working capital, and EUR 1.8 million dividend payment as the most significant items weakening the cash flow (EUR -3.0 million, including EUR 6.6 million R&D investments into own products, and EUR 1.4 million dividend payment as the most significant items).

The equity ratio was 69.6 percent (69.7 percent). Net gearing was 13.2 percent (3.0 percent).

The order backlog at the end of the year was EUR 27.6 million (EUR 28.1 million).

Financial Performance in January–December 2023

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME, MEUR	2023 12 months	2022 12 months
Net sales	75.2	82.5
Operating profit / loss	-4.3	0.3
Financial income and expenses	-1.0	-0.8
Result before tax	-5.3	-0.4
Result for the period	**-5.4**	**0.3**
Total comprehensive income for the period	**-5.5**	**0.5**
Result for the period attributable to:		
Equity holders of the parent	-5.4	0.3
Total comprehensive income for the period attributable to:		
Equity holders of the parent	-5.5	0.5
Earnings per share from continuing operations, EUR	-0.153	0.007

Half Year Figures

GROUP'S NET SALES AND OPERATING RESULT, MEUR	2H/23	1H/23	2H/22	1H/22
Net sales	39.6	35.6	41.4	41.0
Operating profit (loss)	-1.1	-3.2	0.6	-0.2
Result before taxes	-1.6	-3.6	0.2	-0.7
Result for the period	-1.8	-3.6	0.9	-0.6

DISTRIBUTION OF NET SALES BY PRODUCT AND SERVICES, MEUR AND %	2H/23	1H/23	2H/22	1H/22
Product based net sales	24.4	21.4	30.2	27.2
	61.6%	60.0%	72.9%	66.3%
Services based net sales	15.2	14.2	11.2	13.8
	38.4%	40.0%	27.1%	33.7%

DISTRIBUTION OF PRODUCT-BASED NET SALES, MEUR AND %	2H/23	1H/23	2H/22	1H/22
Defense & Security products	13.8	10.2	18.9	15.9
	56.4%	47.9%	62.6%	58.5%
Medical products	10.7	11.1	11.3	11.3
	43.6%	52.1%	37.4%	41.5%

DISTRIBUTION OF SERVICES-BASED NET SALES, MEUR AND %	2H/23	1H/23	2H/22	1H/22
Engineering Services R&D services	8.1	8.9	7.2	8.0
	53.2%	62.3%	64.0%	57.8%
Other service-based net sales	7.1	5.4	4.0	5.8
	46.8%	37.7%	36.0%	42.2%

DISTRIBUTION OF NET SALES BY MARKET AREAS, MEUR AND %	2H/23	1H/23	2H/22	1H/22
Asia	0.3	0.5	0.7	0.5
	0.9%	1.4%	1.8%	1.3%
North and South America	10.7	10.2	12.9	10.4
	27.0%	28.6%	31.1%	25.4%
Europe	28.6	24.9	27.8	30.1
	72.1%	70.0%	67.1%	73.3%

Quarterly Figures

GROUP'S NET SALES AND OPERATING RESULT, MEUR	4Q/23	3Q/23	2Q/23	1Q/23	4Q/22
Net sales	25.7	13.9	20.7	14.9	27.6
Operating profit (loss)	1.0	-2.1	0.3	-3.5	3.0
Result before taxes	0.7	-2.4	0.1	-3.7	2.8
Result for the period	0.6	-2.4	0.1	-3.7	3.5

DISTRIBUTION OF NET SALES BY PRODUCT AND SERVICES, MEUR AND %	4Q/23	3Q/23	2Q/23	1Q/23	4Q/22
Product based net sales	16.8	7.6	13.3	8.0	20.9
	65.3%	54.9%	64.5%	53.7%	75.8%
Services based net sales	8.9	6.3	7.3	6.9	6.7
	34.7%	45.1%	35.5%	46.3%	24.2%

DISTRIBUTION OF PRODUCT-BASED NET SALES. MEUR AND %	4Q/23	3Q/23	2Q/23	1Q/23	4Q/22
Defense & Security products	11.4	2.3	5.8	4.5	15.8
	68.2%	30.5%	43.2%	55.6%	75.5%
Medical products	5.3	5.3	7.6	3.6	5.1
	31.8%	69.5%	56.8%	44.4%	24.5%

DISTRIBUTION OF SERVICES-BASED NET SALES, MEUR AND %	4Q/23	3Q/23	2Q/23	1Q/23	4Q/22
Engineering Services R&D services	4.3	3.8	4.3	4.6	4.2
	48.2%	60.4%	59.1%	65.8%	62.4%
Other service-based net sales	4.6	2.5	3.0	2.4	2.5
	51.8%	39.6%	40.9%	34.2%	37.6%

DISTRIBUTION OF NET SALES BY MARKET AREAS, MEUR AND %	4Q/23	3Q/23	2Q/23	1Q/23	4Q/22
Asia	0.1	0.3	0.3	0.2	0.5
	0.4%	1.8%	1.3%	1.5%	1.8%
North and South America	6.0	4.7	6.9	3.3	7.6
	23.5%	33.6%	33.2%	22.2%	27.7%
Europe	19.6	9.0	13.5	11.4	19.5
	76.2%	64.6%	65.5%	76.2%	70.6%

Statement of Financial Position and Financing

The figures presented in the statement of financial position of December 31, 2023, are compared with the statement of the financial position of December 31, 2022 (MEUR).

	Dec. 31, 2023	Dec. 31, 2022
Non-current assets	84.6	85.0
Current assets	73.1	84.6
Total assets	**157.7**	**169.7**
Share capital	12.9	12.9
Other capital	94.6	102.8
Total equity	107.6	115.8
Non-current liabilities	1.8	21.7
Current liabilities	48.3	32.2
Total equity and liabilities	**157.7**	**169.7**

CASH FLOW OF THE REVIEW PERIOD	1–12/2023	1–12/2022
+ profit of the period +/- adjustment of accrual basis items	5.1	11.7
+/- change in net working capital	-3.0	-2.9
- interest, taxes and dividends	-0.9	-0.8
= net cash from operating activities	1.2	8.0
- net cash from investing activities	-7.7	-8.0
- net cash from financing activities	-4.2	-3.0
= net change in cash and cash equivalents	-10.7	-3.0

The number of gross investments in the period under review was EUR 9.4 million (EUR 9.5 million). Net investments for the review period totaled to EUR 9.2 million (EUR 9.4 million). The total amount of depreciation during the period under review was EUR 9.5 million (EUR 10.7 million). The amount of interest-bearing debt, including finance lease liabilities, was EUR 22.6 million at the end of the reporting period (EUR 22.4 million). Bittium's equity ratio at the end of the period was 69.6 percent (69.7 percent).

The group's liquidity remained good despite that the business developed weaker than expected, and the cash flow was clearly negative. Inventories and accounts receivable were at a high level at the end of the financial year. Securing cash flow has not required special adjustment measures, and no significant changes have been identified in the credit risks of customer receivables.

Cash and other liquid assets at the end of the reporting period were EUR 8.3 million (EUR 19.0 million). Net cash flow during the period was EUR -10.7 million. The net cash flow resulted from EUR -4.3 million operating loss, EUR 7.2 million investments made into own R&D, EUR 3.0 million increase in net working capital, and EUR 1.8 million dividend payment as the most significant items weakening the cash flow (EUR -3.0 million including EUR 6.6 million investments made into own product development, and EUR 1.4 million dividend payment).

Bittium has a EUR 20.0 million senior loan and a EUR 10.0 million committed overdraft credit facility agreement with Nordea Bank Finland Plc. 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. The company has started negotiations to arrange refinancing for financial instruments maturing on May 24, 2024.

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 2023, the R&D investments were EUR 20.2 million (EUR 22.3 million), representing 26.9 percent of the net sales (27.0 percent).

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

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

On October 30, 2023, Bittium announced its updated strategy concerning years 2024 and 2025. In the strategy the company is seeking a change from a R&D organization to a customer-oriented, growth-oriented operating model through its segment organizations.

Between 2016 and 2023, the company's two Business Segments, Defense & Security and Medical, have invested strongly in the development of their own products. This has maintained the company's high average annual R&D investment level of around EUR 20 million, corresponding to an average of approximately 25 percent of the company's annual net sales. In both product-oriented Business Segments, the large product development projects have proceeded into commercial phase. During the next two years period, these segments will now focus on continuous improvement of the competitiveness of existing products and development of features, which is the highly important to competitiveness in both Business Segments. In addition, the company will use development cooperation with other companies in its product development in the future.

R&D INVESTMENTS, (MEUR)	1–12/2023	1–12/2022
Total R&D investments	**20.2**	**22.3**
Capitalized R&D investments	-7.2	-6.6
Depreciations and impairment of R&D investments	5.6	5.9
Cost impact on income statement	18.6	21.5
R&D investments, % of net sales	26.9 %	27.0%

CAPITALIZED R&D INVESTMENTS IN THE BALANCE SHEET, MEUR	1–12/2023	1–12/2022
Balance sheet value in the beginning of the period	48.8	48.1
Additions during the period	7.2	6.6
Depreciations and impairment of R&D investments	-5.6	-5.9
Balance sheet value at the end of the period	50.5	48.8

Strategy Implementation and Other Significant Events in 2023

At the beginning of 2022, Bittium started developing its operations towards independent business units with the aim of starting business-specific segment reporting by the beginning of 2024 at the latest. With the change, the company seeks a clearer focus for its operations, growth, and improvement of its ability to generate results. The renewal was completed during 2023, and the company will start segment reporting based on the new structure from the beginning of 2024.

The technological know-how needed in all the company's businesses is similar, but the businesses, customers and market dynamics are very different. The stronger independence of the businesses strengthens Bittium's ability to serve its customers in a more customer-oriented manner and improves the speed of decision-making in each business, strengthening the company's position in each market. It also speeds up the responsiveness of business operations to the surrounding market changes, enabling the production of ever-increasing added value for customers.

During 2023, the company continued to work to strengthen its business functions to enable the formation of independent businesses. As part of this development, the company changed its organizational structure to serve its independent business units more efficiently. The operations of the entire group were reorganized by transferring, among other things, the previously jointly centralized group functions to a large extent to the Business Segments in accordance with the needs of each segment. This significantly lightened the company's cost structure at the group level.

In the second half of the year, the company went through significant change negotiations due to production, financial and reorganization related reasons. Change negotiations started on August 23, 2023, as part of the company's measures to improve its profitability and develop its operations towards independent business units. The negotiations concerned all of the company's subsidiaries in Finland and included approximately 600 employees. As a result of the negotiations, the company dismissed 61 employees and laid off 8 employees for the time being.

As part of the company's actions to improve financial performance, all the company's processes, operating methods, and cost structure were reviewed and modified to enable profitable growth. The company also decided to close its offices in Mexico and Singapore and terminate the activities of its subsidiaries operating in these countries (Bittium Mexico S.A. de C.V. and Bittium Singapore Pte. Ltd.). The closure of the offices has not had an impact on the company's ability to serve its customers or deliver its products to its customers in South America or Asia.

Through dismissals and temporary layoffs and other cost-saving measures, the company will achieve annual savings of approximately EUR 6.0 million in total, of which EUR 0.8 million were realized during 2023. The company estimates to achieve the cost savings in full during 2024. As a result of the decisions and measures taken, the company recorded a total of EUR 0.7 million in non-recurring costs resulting from the changes in its income statement for the fourth quarter of 2023.

Profit Warning (announced on September 15, 2023)

On September 15, 2023, Bittium Corporation lowered its financial outlook for the year 2023. The company expected the net sales in 2023 to be at the same level or lower than in the previous year (EUR 82.5 million in 2022), and the operating result to be lower than in the previous year (EUR 0.3 million in 2022). Cash flow in 2023 was expected to be negative.

The main reason for the decrease in net sales and operating result was the delivery volumes of tactical communication products and security solutions in the Defense & Security business unit, which were realizing along the year at a slower pace and with lower volumes than earlier expected. Due to the decrease in the net sales and operating result, the cash flow in 2023 was expected to be negative.

Updated Strategy – from R&D House towards Profitable Growth Company

On October 30, 2023, Bittium announced its updated strategy concerning the years 2024 and 2025. Bittium's main goals are to achieve an average annual net sales growth of more than 10 percent and an operating profit level of 10 percent. The updated strategy will enable the achievement of the set goals.

In accordance with the updated strategy, the company has three Business Segments: Medical, which focuses on measuring biosignals and remote monitoring, Defense & Security, which offers products and services to the defense and security markets, and Engineering Services, which offers R&D services. Group operations that were previously centralized are now also largely divided into the company's three Business Segments, best meeting the needs of each segment. This was an essential change to optimize the operation of more independent businesses.

The company's updated strategy has three main focus areas. The first one is a change from a product development organization to a customer-centric, growth-oriented operating model through its segment organizations. Secondly, the company focuses strongly on its current products and increasing their market shares. The R&D work is mainly concentrated on further improving the competitiveness and productivity of these products. Thirdly, the company seeks to increase efficiency in its own operating methods and has streamlined its cost structure, which is expected to significantly improve the company's profitability and cash flow.

Between 2016 and 2023, the company's two Business Segments, Defense & Security and Medical, have strongly invested in the development of their own products. This has maintained the company's high average annual R&D investment level of around EUR 20 million, corresponding to an average of approximately 25 percent of the company's annual net sales. Both product-oriented Business Segments will now focus on continuous improvement of the competitiveness of existing products and development of their features. Continuous product improvement is highly important to competitiveness of both Business Segments. In addition, the company will use development cooperation with other companies in its product development in the future. In the R&D oriented operational model the cost structure in the company has been heavy due to the large R&D projects.

Medical Business Segment

The Medical Business Segment consists of three business areas, which are the measurement and analysis of the electrical activity of the heart (ECG), the measurement and analysis of the electrical activity of the brain (EEG), and the measurement and analysis of sleep apnea. In business, the focus is specifically on further improving the competitiveness, and productivity of the products, as well as on the efficiency of operations.

In the medical technology market, significant development is taking place regarding the treatment of patients, especially outside hospitals. Increasing efforts are being made to prevent diseases and health problems with the help of early diagnostics. The aim is to discharge patients at an even earlier stage to reduce hospital and treatment days. These significantly increase the efficiency of healthcare processes, reduce costs, and improve the treatment experience. The prerequisite for the prevention of health problems and early discharge is enabling accurate monitoring and measurement in home conditions with the help of remote monitoring.

The offering of the Medical Business Segment focuses on remote monitoring solutions. Bittium has solid and proven world-class biosignal processing technology expertise. In the coming years, the company will focus on its product business to also increase the amount of recurring net sales, both with the help of software and various multi- and single-use products. In the medical business, the focus will be on cooperation with existing international key customers to increase market shares together, and on acquiring new customers.

Defense & Security Business Segment

The Defense & Security Business Segment consists of three business areas that are defense industry products (Defense Products), defense industry product development services (Defense Services) and secure products and services (Security). Bittium's business consists of tactical communication solutions aimed at the defense market and high security communication solutions aimed at authorities and the professional user market.

Russia's war of aggression against Ukraine has increased the defense budgets of various countries and increased the states' interest to modernize their tactical communication systems. The defense forces of different countries and other authorities need networks for tactical data transmission, where increasingly mobile network users can reliably and securely transfer growing amounts of data. Finland's NATO membership is also expected to have a positive effect on the demand for Bittium's defense and secure products, especially in NATO countries. Bittium has superior waveform quality and secure wireless technology integrated with hardware and software intended for defense and authorities' use.

Over the past years, the company has made significant investments to expand its product portfolio. The products and systems are now at an internationally very competitive level, both in terms of coverage and technical characteristics. In the future, the company will focus on the continuous improvement of the competitiveness of existing products and the development of features to ensure the preservation of competitiveness. The company will put emphasize strongly in its key customers and invest in international sales and marketing to pursue new customers. The company's goal is to grow significantly the international product business and achieve an internationally significant position as a provider of tactical communication and high security communication solutions.

Engineering Services Business Segment

In the Engineering Services Business Segment, Bittium offers its customers R&D services and wireless connectivity solutions for the development of innovative products in a secure and evolving wireless environment. The company has focused its R&D service offering around radio technologies and embedded devices. Bittium has world-class expertise in wireless technologies and comprehensive product development throughout the whole product life cycle.

In the mobile telecommunications, investments in the development of new features continue, and the importance of software development regarding the development of 5G networks is strengthened. Along with digitization, secure IoT (Internet of Things) is a significant development area in almost all industries, where the demand is created by the growing need of companies to digitize their operations, collect data wirelessly and transfer data to cloud services, as well as monitor and control devices and systems remotely. Also, the goal of western companies to shift the focus of R&D to an increasing extent, e.g., to Europe, creates more demand for companies offering R&D services and wireless connectivity solutions.

In the coming years, Bittium will continue to grow its international customer base, especially in the Industry IoT market segment. The company will also invest in developing strategic partnerships with its current customers.

Long-term financial goals (as announced on October 30, 2023)

Bittium kept its long-term financial goals unchanged. The company aims for an average annual net sales growth of more than 10 percent and an operating profit level of 10 percent and estimated to achieve these goals in 2024.

Capital Markets Day 2023

Bittium organized a Capital Markets Day on October 30, 2023, where the company's updated strategy was reviewed. A recording of the event and the materials of the presentations are available on Bittium's IR pages at: **https://www.bittium.com/investors**.

Segment-based Financial Reporting

In December 2023, the Board of Directors of Bittium Corporation decided that the company will change its financial reporting to be based on a new segment structure as of January 1, 2024. The new segment reporting is based on the updated strategy.

In the new reporting structure, there will be four reporting segments: the three Business Segments (Defense & Security, Medical, and Engineering Services), and, in addition, the company decided to report the Group Functions as a separate, fourth segment. The goal of adopting the new reporting structure is to improve the transparency into the company's Business Segments and their development.

The new Group Functions segment includes group administration, strategic projects, and stock market listing related functions, as well as renting premises owned by the group. Group Functions charge rent from Business Segments for the premises. In addition to this, Group Functions produces common services for the Business Segments, which are reasonable to be managed centrally. For these services, the Business Segments pay a service fee in proportion to the amount of each segments' personnel. The CEO, CFO, CDO, Vice President, Communications and Sustainability, and CLO are responsible for the Group Functions. Altogether, there are approximately 50 employees in Group Functions.

The reportable financial indicators of the new segments are net sales, EBITDA, EBITDA % of net sales, operating result, operating result % of net sales, R&D investments, capitalized R&D investments, new orders and order backlog, and the amount of personnel. The first financial report based on these new segments will be Bittium Corporation's Business Review January–March 2024, to be published on April 26, 2024, at 8.00 am (CET+1). Adjusted comparative segment information from 2023 will be published in the same Business Review report.

Seamless and Secure Connectivity Program

At the end of March, Bittium launched the Seamless and Secure Connectivity program, the purpose of which is to enable end-to-end connections in various operational areas with reliable, secure, and fault-tolerant connectivity architectures and products, including life-cycle services for products and solutions. Business Finland awarded development funding of EUR 10 million to the program in the challenger competition of Veturi-companies, and EUR 20 million to the ecosystem companies and research partners surrounding the program. The four-year program led by Bittium will last until 2026.

The Seamless and Secure Connectivity program enables comprehensive development of strategically important themes for Bittium. These themes include, e.g., encryption and information security technologies and remote medical diagnostics (ECG, EEG, and sleep apnea) including measuring of biosignals, digitalization of services, increase in wireless connectivity and data secure connections.

In connection with the program, the first two co-innovation projects were launched during 2023: CISSAN, which is part of the EU CELTIC-Next program, creating algorithms to reduce IoT security threats, and Photon-Wear, which aims to develop optical detection methods for physical parameters and biomarkers. In total, there have been around 50 partner companies or research institutes in the ecosystem discussions so far, and several co-innovation projects are expected to be launched from the projects also during 2024.

Market Environment and Business Development in January–December 2023

Defense & Security Business

The world's political situation changed significantly in February 2022 as Russia attacked Ukraine. The outbreak of war caused several countries to increase their defense budgets, which has had an increasing effect on the demand for defense sector products and services. The interest in modernizing the states tactical communication systems to meet the needs of modern warfare has also grown.

Interest in Bittium's tactical communication solutions has remained on a high level, and the ongoing international customer pilots have progressed well. Bittium is involved in several tenders regarding tactical communication products and systems, which may take several years, depending on the scope of each project. The feedback on Bittium's products in the field tests has been positive, and we expect the results of the ongoing tenders during the current year.

Close cooperation with the Finnish Defense Forces continued. Bittium's tactical backbone network and the related products and radios are used by all defense branches of the Defense Forces, supporting the modern way of fighting, where the mobility and management of the forces on the move and effective communication are essential. In 2023, product delivery volumes remained low compared to the corresponding time of the previous year caused by the slow progress in several customer projects during last year. This is typical in multi-year customer projects, where the annual delivery quantities vary between the different phases of the project.

On November 14, 2023, Bittium and Finnish Defense Forces signed a new framework agreement for the purchase of products intended for tactical communication. The contract concerns the purchase of Bittium Tactical Wireless IP Network™ (TAC WIN) software radio system products and Bittium Tough Comnode™ communication equipment and related accessories during the years 2023–2028. The Framework Agreement has a maximum value of EUR 51.6 million, and based on the Agreement, the Finnish Defence Forces will issue separate purchase orders in several batches during the validity period of the Agreement. The first order based on this Framework Agreement was placed on December 21, 2023, with a value of EUR 3.7 million. The delivery of the ordered products started in 2023.

The deployment of Bittium Tough SDR™ software-defined radios has progressed according to the plans of the Defence Forces, with the aim of ensuring the performance of the equipment during 2024 to start a wider deployment of the radios. The waveform development of the radios and the development of new functionalities for the customer continued as planned.

In December, the Finnish Defense Forces ordered development work from Bittium for a new software-based router intended for tactical communication. The software router enables the formation of even larger network entities for the tactical communication needs of the mobile forces. The value of the order was approximately EUR 4.4

million, and the development work will be carried out during the years 2024 and 2025.

In Austria, the deployment of Bittium's tactical communication systems by the local army continued and the delivery of system products and the integration and testing of products and systems continued.

The discussions about cooperation with international companies developing air defense and sensor systems progressed.

In November, NATO approved the ESSOR High Data Rate Waveform, developed by the a4ESSOR consortium, as a standard for tactical communication interoperability (STANAG 5651). Bittium has been one of the partners of the industrial a4ESSOR consortium since its foundation. With the ratification of the standard, the waveform will be available to all NATO member countries, thus enabling faster and more secure data transfer in both national and coalition forces' operations. Bittium provides the waveform to its customers together with Bittium Tough SDR™ product family radios.

With Finland's NATO membership, interest in Bittium's products has increased, and the membership is expected to strengthen the company's competitive position, especially in tenders for NATO countries. The membership also enables Bittium to implement NATO waveforms and encryption solutions, if necessary, and offers the opportunity to participate in the research programs of NATO countries.

Bittium has applied for a NATO information security listing for its secure Bittium Tough Mobile™ 2 C solution. The solution meets the criteria required for information security listing, but the listing is delayed due to the work backlog of the authorities updating the listing. Bittium has currently no information on the progress of the list update. Entering the list of NATO-approved devices is expected to have a positive effect on the sales of the solution.

Interest in secure Bittium Tough Mobile™ mobile phones and information security-related software has increased due to numerous data security attacks. The sales volume of the devices increased during 2023. Phones, their background systems, and software were delivered to several European countries for authorities' usage. The Bittium Tough Mobile™ 2 Tactical solution developed for military use has also aroused interest among the defense administration authorities of different countries, and several system pilots started during 2023.

Medical Business

The A component shortage significantly slowed down the manufacturing and deliveries of medical technology products at the beginning of the year, and the production of Bittium Faros™ ECG devices was very limited for several months. In April–May, production volumes were increased, and the manufacturing of products continued with better capacity in May–June. The deliveries continued in the second quarter as planned, and the shortage of components eased towards the end of the year, as expected. In the second half of the year, the sales of medical technology devices outside of US market developed slower than estimated. The development of sales is affected by the insurance policies related to treatment reimbursement, which vary between different countries affecting the development pave of remote diagnostics market. In addition, entering new markets is affected by obtaining the medical device regulatory approvals, that may take up to more than a year depending on the approval.

Most product deliveries of Faros ECG devices were still made to the US customer Boston Scientific Cardiac Diagnostics (CDx) (previously known as Preventice). CDx is one of the leading providers of ECG measurement services in the US.

In the neurophysiology market, the piloting of Bittium BrainStatus™ EEG measuring devices in intensive care units continued in Finland and abroad. The change in recommendations for intensive care regarding EEG measurement is expected to have a positive effect on the demand for BrainStatus.

Product deliveries of the home sleep apnea test and measurement solution Bittium Respiro™ continued in Europe, and the feedback from our customers' clinical trials has been positive. Respiro's sales are expected to strengthen during the current year and form one significant growth driver in the Medical Business Segment in the future. In November, Bittium and ResMed started a collaboration regarding the distribution of Bittium Respiro to hospitals and treatment centers. The signed distributor agreement concerns the Bittium Respiro™ measuring device and its accessories as well as the Bittium Respiro Analyst™ analysis software and service platform, giving ResMed the right to resell them. The agreement does not include exclusive rights and it covers the right to resell the solution in Great Britain, Ireland, Switzerland, Finland, Norway, and Sweden. ResMed is a leading provider of cloud-based medical devices whose solutions are transforming the care of people with sleep apnea, COPD, and other chronic respiratory diseases.

Bittium is applying for a sales license for Respiro for the US market from the Food and Drug Administration (FDA). The current estimate of the amount of work and the time needed for it is at least one year. The requirements of the FDA authority have grown and become stricter in recent years. The overall duration of the sales license process is affected by the authority's further interpretation of possible additional material needs.

Bittium is undergoing regulatory approval processes for its medical devices in several different countries. As necessary, the company will apply for a new European medical device approval (MDR) for its medical technology products already in production, which are approved according to the current standard (MDD). Decisions on applying for MDR approvals for existing products will be made on a business basis, or if significant changes are made to the products that require a new approval process.

Engineering Services Business (Previously Connectivity Solutions)

Despite the prevailing cost-saving pressure in the markets among our customers, Bittium's R&D services sales grew during 2023. The accelerating digitalization in various industries increased the need for design services. Especially in the Industrial IoT technology market, the growing need for cloud communication creates a need for companies to add wireless connectivity to their products. The increase of European companies focusing their R&D geographically on Europe, has also had a positive effect on the sales growth of Bittium's R&D services, especially of the device design.

Cooperation with customers continued well. Several customer projects were successfully completed, and the company's customer portfolio expanded during the past year with several new customers in the transport, traffic, and professional tool markets, among others. Customer projects include, for example, the designing of a remotely controlled system and its connectivity solution, designing of connectivity parts for a traffic control system, and designing of measuring devices and their connectivity solutions intended for professional use.

Significant Events after the Reporting Period

On January 24, 2024, Antti Näykki, Senior Vice President, Medical Business Segment, Bittium Corporation (Engineer, Embedded Systems) was appointed as Vice President, Group Business Development as of February 1, 2024. He continues as a member of Bittium Corporation's management group. In this role, Näykki focuses on building Bittium's long-term growth. He is also responsible for the management of the group's research activities, supply chains and quality, as well as human resources and information management. Näykki reports to CEO Johan Westermarck.

Laura Kauppinen, Bittium Corporation's Chief Development Officer (PhD, Psychology) was appointed as Senior Vice President, Medical Business Segment as of February 1, 2024. Kauppinen continues as a member of Bittium Corporation's management group. Kauppinen focuses on implementing the updated strategy to enable profitable growth in the Medical business. Kauppinen reports to CEO Johan Westermarck.

As of February 1, 2024, Bittium Corporation's management group includes following persons: CEO Johan Westermarck (Chairman), CFO Antti Keränen, CLO Kari Jokela, Vice President Communications and Sustainability Karoliina Malmi, Vice President Group Business Development Antti Näykki, and the heads of Business Segments: Tommi Kangas, Senior Vice President, Defense & Security Business Segment, Jari Inget, Vice President, Engineering Services Business Segment, and Laura Kauppinen, Senior Vice President, Medical Business Segment.

On January 31, 2024, following the recommendation of the Audit Committee, Bittium Corporation's Board of Directors proposes to the Annual General Meeting to be held on April 10, 2024, that, based on the competitive tendering of the audit, the audit firm PricewaterhouseCoopers Oy be appointed as the Company's auditor for the financial year 2024. If PricewaterhouseCoopers Oy is selected as the auditor of the Bittium Corporation, Sami Posti, Authorized Public Accountant, will act as the principal auditor, as stated by the firm. PricewaterhouseCoopers Oy will also serve as the assurance provider for the Bittium Corporation's sustainability reporting for the financial year 2024.

Outlook for 2024

Bittium expects the net sales in 2024 to be EUR 85–95 million (EUR 75.2 million in 2023) and the operating result to be EUR 7.0–9.5 million (operating loss of EUR -4.3 million in 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**.

Market Outlook

Bittium's customers operate in various industries, each 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 connectivity 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 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 NATO membership is expected to have a positive effect on the demand for Bittium's defense and official products, especially among NATO member countries.

Bittium continues its efforts to export tactical communications' products to international markets and aims to get new international customers during 2024. The long sales cycles of the defense industry affect sales development and forecasting.

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 smartphone and other customized special terminals based on Bittium's own product platform, as well as for secure software solutions. The awareness of mobile security risks is growing, and the interest in secure mobile devices and software solution is increasing. The sales of secure terminal products are expected to develop moderately according to the nature of public safety markets.

Telecommunication and Digitalization

In mobile telecommunications, the implementation of 5G is accelerating. 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 and IoT radio technologies are 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.

Focusing the R&D work of western companies to Europe, can be seen as an increase in demand for Bittium's R&D services, especially in terms of device design Demand for R&D services is affected by customers' cost-saving pressures in various industry segments.

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 measuring biosignals, as well as remote monitoring and diagnostics, Bittium provides its Bittium Faros™ product family for remote ECG monitoring, Bittium BrainStatus™ for measuring the electrical activity of the brain, home sleep apnea test solution Bittium Respiro™, and different kinds of diagnostics software offered by Bittium.

Regulation by the authorities has a strong role in bringing medical devices to the market. The requirements vary for different countries and the processes are long-term. Bittium has several regulatory approvals for its medical devices in progress in different countries. The company has achieved medical device approval of the new MDR standard level in the EU region for the Bittium Respiro™ product family that measures sleep apnea. Bittium has also applied for a medical device sales license for the Respiro product family from the US Food and Drug Administration (FDA). The schedule is affected by additional clinical studies determined by the FDA authority. The estimated duration of the additional work is at least one year.

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, increased interest rates, challenges in supply chains, and problems in the European energy market have caused various risks related to demand and supply and increased uncertainty.

The global disruption in the availability of electronic components and their price development caused changes in the company's ability to deliver products to its customers still in the beginning of 2023. The company continues to monitor the development of the situation and actively strives to ensure the availability of components required for product deliveries.

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. Access to the medical device market requires and may be delayed due to required regulatory approvals.

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, including increased interest rates. 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. The company has started negotiations to arrange refinancing for financial instruments maturing on May 24, 2024.

These agreements include customary covenants related to, among other things, equity ratio, transferring property, and pledging. There is no assurance that additional financing will not be needed in case of investments, networking capital needs, or clearly weaker than expected development of Bittium's businesses. Customer dependency in some parts of Bittium's business may translate as an accumulation of risk with respect to outstanding receivables and ultimately with respect to credit losses.

Statement of Non-Financial Information

Bittium is an international technology company that offers socially useful technical innovations that improve communication connections, create security and promote healthcare.

The company 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: 1. personnel, 2. customers and information security, and 3. 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.

During 2023 Bittium stated preparing for the entry into force of the EU's new sustainability directive. As part of this, the company will carry out a double materiality analysis, based on which the group will update its sustainability program in 2024.

Key Operating Principles

Bittium's operations are based on values, ethical principles, and a Code of Conduct. The code of conduct is part of the orientation program for new employees. Over the next few years, Bittium aims to bind all its partners and suppliers to the Code of Conduct through contracts. Bittium will update its Code of Conduct and other politics during 2024.

Bittium´s partners are expected to comply with Bittium´s Code of Conduct principles and the supplier manual (Bittium Supplier Manual), which state, for example, Bittium´s policies and requirements regarding the selection of suppliers and quality control. Bittium reviews the principles of sustainable operation of suppliers and partners and audits them according to the defined criteria. In 2023, compliance with the guidelines has been assessed based on suppliers' self-assessments and critical supplier audits.

Export control is an important part of the company's operations and a prerequisite for cooperation between authorities and customers. By closely monitoring the changing legislation in different market areas and by following the regulations, Bittium promotes the responsible message of Finnish technology. During 2023, Bittium has specified the export control procedures in cooperation with the authorities.

Environmental Matters

Responsibility for the environment, climate change mitigation and resource-efficient solutions are an important part of Bittium´s operations and development. In accordance with its environmental policy, Bittium is committed to minimizing the environmental impact in the production, use and disposal of the products it designs. Bittium´s products are designed to be long-lasting, repairable, and recyclable. Since Bittium´s business is mainly focused on the beginning of the products´ life cycle, its environmental impact is very small. The biggest environmental impact is caused by recycling the product.

In the new responsibility program, Bittium focuses on monitoring three environmental indicators that measure the environmental effects of operations: the development of the carbon dioxide equivalent (CO_2ekg), the development of the energy used (Mwh) and the percentage share of renewable energy in the total energy use.

The most significant areas in reducing Bittium´s carbon footprint are the recycling of waste generated from operations, the utilization of renewable energy sources, and increasing the environmental awareness of the personnel.

The Scope 1 carbon dioxide emissions (travel and waste) of Bittium´s offices in Finland were 206.8 tCO_2 in 2023 (204.0 tCO_2 in 2022) and the Scope 2 emissions (heating and electricity) were 413.1 tCO_2e (563.5 tCO_2e in 2022). Bittium´s total energy consumption decreased by 13.1 percent and was 3,331 MWh (3,827 MWh in 2022). Regarding the office space in Oulu, about 5.6 percent of the energy used was produced with solar energy on an annual basis (goal >5 percent). The share of renewable energy in the energy used in Finnish offices was 38 percent (38 percent in 2022).

Bittium´s waste utilization rate was 99,9 percent last year (goal > 95 percent).

Social Issues and Employees

Bittium does not allow discrimination or unequal treatment based on gender, age, origin, religion or belief, opinion, sexual orientation, disability, or any other reason related to the person. The equality plan was updated during 2023. Its most important measures are paying attention to the equality of wages and career development, the openness of recruitment, and the systematic support of the working careers of aging employees.

The key measure of the annual employee survey was the staff engagement index, the goal of which for the years 2023–2025 has been set at 4.0 (scale 1–5), but for the year 2023 the goal was not reached. As expected, the result reflects the change negotiations held at the end of 2023.

Bittium's position as a technological pioneer requires that the personnel actively maintain and develop their own expertise, both in terms of basic skills and the related common ways of doing things, as well as the latest technologies, tools, legislation, and other regulations of the rapidly changing operating environment, and that they have a vision of the trends in the development of technology and the operating environment. The goal in competence development is continuous development and learning while working.

The most typical work ability risks in the field are musculoskeletal disorders as well as coping at work and mental well-being. Bittium invests in good work ergonomics and occupational health care services that support the well-being of the personnel, as well as other personnel benefits. In 2023, Bittium's Finnish companies reported 11 workplace accidents, one of which resulted in a short, temporary incapacity for work.

Respect for Human Rights and Fighting Corruption and Bribery

Bittium respects human rights in all its business operations, avoids violating human rights and intervenes in possible negative human rights impacts caused by its operations in accordance with the UN´s guiding principles for companies and human rights. At Bittium, monitoring the realization of human rights is mainly related to the activities of subcontractors and suppliers. Bittium takes care of the responsibility of the company´s supply chain, e.g., in terms of supplier requirements and material reports related to materials and components. Personnel training is part of ensuring responsible procurement. During 2023, Bittium has not been notified of any suspicions related to minerals in conflict areas.

Because of Bittium´s market and business areas, corruption is one of the key risks related to social responsibility. Bittium does not accept any form of bribery or corruption in its own operations or those of its partners. The company has internal and external guidelines drawn up to prevent anti-corruption activities, and an electronic self-study module on anti-corruption activities has been implemented for new employees. The company uses a monitoring tool to identify corruption or other ambiguities of partners, and the company´s stakeholders have a channel where they can anonymously report violations of anti-corruption rules. In 2023, the company did not become aware of any suspected corruption.

In the spring of 2023, Bittium implemented a notification channel in accordance with the whistleblowing directive. The company has precise processes for following up and handling notifications, and notifications are investigated urgently and confidentially, protecting the identity of the person making the notification. The channel did not receive any announcements during the year.

EU Taxonomy Disclosure

The EU Taxonomy

To reach the goal of EU Green Deal and EU´s climate and energy objectives for 2030, EU Taxonomy Regulation was published to establish a classification scheme for economic activities based on their environmental sustainability. It sets six environmental objectives and requires all companies falling within the scope of the Non-Financial Reporting Directive to report certain indicators detailing the extent to which their activities are sustainable according to these objectives and criteria.

Bittium's Approach to Taxonomy Alignment and Taxonomy Eligibility

Bittium has determined the taxonomy-eligible economic activities and aligned activities by the following process:

- Identifying economic activities and processes across the business of the Bittium as per NACE classification (Classification according to the Statistical Classification of Economic Activities in the European Community).
- Evaluating whether the identified economic activities are suitable to the economic activity descriptions included in the Annex I and II of the Climate Delegated Act. When suitable, such activities are determined as taxonomy-eligible activities.
- Assessing whether the identified eligible activities meet the substantial contribution criteria, "Do No Significant Harm´ (DNSH) criteria and determining compliance with minimum safeguards.

Bittium has identified the following economic activities in its business operations as taxonomy-eligible:

- Environmental objective 1 (Climate change mitigation): category 8.1 Data processing, server space rental and related activities,
- Environmental objective 2 (Climate change adaptation): category 8.1 Data processing, server space rental and related activities, and
- Environmental objective 4 (Circular economy): category 1.2 Manufacture of electrical and electronic equipment, category 4.1. Provision of IT/OT data-driven solutions, and category 5.2 Sale of spare parts.

Bittium solutions that offer data processing services and server space rental services are carefully checked based on the description of category 8.1 of environmental objective 1 (climate change mitigation). Bittium interpreted the matter strictly and stated that solutions using Bittium's own data center fit this description and are therefore taxonomy-eligible. The company was unable to confirm with sufficient evidence the extent to which the current operation meets the requirements defined in the criteria for sufficient contribution. For this reason, the company decided that its operations are taxonomy-eligible, but not taxonomy-aligned.

In addition to the design and development of own products related to programming, Bittium offers versatile IT expertise and services. Such activities include, for example, software development, development of connectivity solutions, research, and consulting services. In 2022, Bittium defined these activities as taxonomy-eligible activities according to environmental objective 2 (climate change adaptation) in category 8.2 Software, consulting and related activities and reported the related key figures accordingly. In 2023, the EU Commission issued the EU Commission note C/2023/305 on eligibility/alignment-related reporting, which includes special instructions for reporting the net sales of businesses falling under the category 8.2. According to this instruction, Bittium's taxonomy report for 2023 does not include net sales accumulated from the activities related to category 8.2.

Bittium manufactures several of its own electrical and electronic devices for measuring biosignals and remote monitoring as well as for the defense and security markets. These functions include Bittium's own electrical and electronic devices, design, development, production, and maintenance of accessories, as well as the maintenance of device software, in addition to the maintenance of the device structure. These business activities are aligned with the description of Environmental objective 4 (Circular economy) category 1.2 Manufacture of electrical and electronic equipment, and therefore are taxonomy-eligible. Bittium was unable to confirm with sufficient evidence that any of these activities meet the requirements defined in the criteria for substantial contribution. Therefore, the company chose a conservative interpretation and decided that the functions in question are not taxonomy-aligned.

Bittium offers various software products and solutions related to information technology. Such functions are checked based on description of Environmental objective 4 (Circular economy) category 4.1. Provision of IT/OT data-driven solutions. Activities in which the following are manufactured, developed, installed, put into use, maintained or repaired, or expert services are provided, including technical consulting on the design or monitoring of the following are defined as taxonomy-eligible. Among Bittium's activities, production and delivery of its own software products and solutions related to information technology, maintenance, implementation services for software products in the customer's environments, customer training related to implementation, support services and expert services have been defined as taxonomy-eligible. Bittium cannot confirm with sufficient evidence that any of these activities meet the requirements defined in the criteria for substantial contribution. Therefore, the company chose a conservative interpretation and decided that the activities in question are not taxonomy-aligned.

As part of product sales, Bittium offers repair services, which include the sale of spare parts for certain products. The separately identifiable spare part sales in question have been defined as taxonomy-eligible based on the description of Environmental objective 4 (Circular Economy) category 5.2 Sale of spareparts. Bittium chose a conservative interpretation and decided that repair services that include component exchanges but are not identified as spare part sales do not qualify as taxonomy-aligned activities. The company was unable to establish with sufficient evidence that any of these activities meet the requirements defined in the criteria for substantial contribution. Therefore, the company chose a conservative interpretation and decided that the activities in question are not taxonomy-aligned.

Accounting Policy for Financial KPIs

Bittium did not identify taxonomy-aligned activities, so the taxonomy-aligned net sales, capital expenditure, and operating expenditure is 0%.

Net Sales

- Bittium has calculated the net sales (note 2 of the Financial Statements) in accordance with the delegated act on the provision of information. The criteria correspond to the principles regarding the preparation of financial statements of the IFRS 15 standard.
- With regards to environmental objective 1 (climate change mitigation) category 8.1 Data processing, server space rental and related activities, Bittium has found eligible net sales, and it is reported in the table on the next pages. Solutions using Bittium's own data center fit this description.
- Regarding the environmental objective 4 (Circular Economy) category 1.2 Manufacture of electrical and electronic equipment, Bittium has found eligible net sales, and it is reported in the tableon the next pages. Bittium's sales of electronic equipment in both the Defense & Security and Medical business segments fit this description.
- Regarding the environmental goal 4 (Circular economy) category 4.1 Provision of IT/OT data-driven solutions, Bittium has found eligible net sales, and the data is reported in the table on the next pages . Bittium's information technology sector's own software product license sales and maintenance-related net sales in both the Defense & Security and Medical business segments fit this description.

Capital Expenditure

- In this taxonomy report, the costs incurred from the acquisition of tangible and intangible assets and right-of-use assets are counted as capital expenditures (note 11 of the financial statements).
- Bittium has calculated the capital expenditure in accordance with the delegated act on the provision of information. At the same time, it has defined the absolute capital expenditures used in taxonomy reporting as gross investments.
- According to Bittium, capital expenditures allocated to its taxonomy-eligible net sales, such as investments in measurement devices and manufacturing equipment, can be classified as taxonomy-eligible capital expenditures.
- According to the guidelines of the EU Taxonomy Regulation, Bittium's capital expenditure was EUR 9.36 million in 2023.
- Bittium's taxonomy-eligible capital expenditures were EUR 0.28 million in 2023.

Operating Expenditure

- In this taxonomy report, direct expenses related to research and development, product delivery and facility maintenance, which have not been capitalized by the company, are counted as operating expenditures.
- Bittium has calculated the operating expenses in accordance with the delegated act on the provision of information and determined that the operating expenses allocated to the taxonomy-eligible net sales can be classified as taxonomy-eligible operating expenses.
- According to the guidelines of the EU Taxonomy Regulation, Bittium's operating expenses were EUR 73.45 million in 2023.
- Bittium's taxonomy-eligible operating expenses were EUR 43.29 million in 2023.

Bittium will continue to develop the taxonomy evaluation and reporting practice in 2024. Bittium aims to increase the share of sustainable business practices. As the field of application of the reporting practices expands and the practices become clearer, the company expects that the proportion of its taxonomy-eligible and taxonomy-aligned activities will increase in the future.

Sales revenue

				Substantial Contribution Criteria						DNSH Criteria									
Economic activities	Codes	Absoolute turnover	Proportion of turnover	1.Climate change mitigation	2.Climate change adaptation	3. Water and marine resources	4. Circular economy	5. Pollution	6. Biodiversity and ecosystems	1.Climate change mitigation	2.Climate change adaptation	3. Water and marine resources	4. Circular economy	5. Pollution	6. Biodiversity and ecosystems	Minimum Safeguards	Proportion of Taxonomy aligned (A.1.) or eligible (A.2.) turnover	Category Enabling activities	Category Transitional activities
		M€	%	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	E	T
A. TAXONOMY-ELIGIBLE ACTIVITIES																			
A.1 Environmentally sustainable activities (taxonomy-aligned)																			
Not found	NA	0,00	0,0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Turnover of environmentally sustainable activities (taxonomy-aligned) (A.1)		0,00	0,0	%	%	%	%	%	%								0%		
of which enabling		0,00	0,0	%	%	%	%	%	%								%		
of which transitional		0,00	0,0	%													%		
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																			
				EL;N/EL(f)	EL;N/EL(f)	EL;N/EL(f)	EL;N/EL(f)	EL;N/EL(f)	EL;N/EL(f)										
Data processing, hosting and related activities	CCM 8.1	0,23	0%	EL													0%		
Manufacture of electrical and electronic equipment	CE 1.2	36,38	48%				EL										0%		
Provision of IT/OT data-driven solutions	CE 4.1	11,75	16%				EL										0%		
Sale of spare parts	CE 5.2	0,34	0%				EL										0%		
Turnover of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		48,70	65%	0.3%	29%	0%	71%	0%	0%								0%		
Total (A1 + A2)		**48,70**	**65%**	**0.3%**	**29%**	**0%**	**71%**	**0%**	**0%**								**0%**		
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																			
Turnover of Taxonomy-non-eligible activities		26,55	35%																
Total (A + B)		**75,28**	**100%**																

Capital expenditure

				Substantial Contribution Criteria						DNSH Criteria									
Economic activities	Codes	Absoolute turnover	Proportion of turnover	1.Climate change mitigation	2.Climate change adaptation	3. Water and marine resources	4. Circular economy	5. Pollution	6. Biodiversity and ecosystems	1.Climate change mitigation	2.Climate change adaptation	3. Water and marine resources	4. Circular economy	5. Pollution	6. Biodiversity and ecosystems	Minimum Safeguards	Proportion of Taxonomy aligned (A.1.) or eligible (A.2.) turnover	Category Enabling activities	Category Transitional activities
		M€	%	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	E	T
A. TAXONOMY-ELIGIBLE ACTIVITIES																			
A.1 Environmentally sustainable activities (taxonomy-aligned)																			
NA		0,00	0,0	0	0	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CapEx of environmentally sustainable activities (taxonomy-aligned) (A.1)		0,00	0,0														0%		
of which enabling		0,00	0,0	%	%	%	%	%	%								0%		
of which transitional		0,00	0,0	%													0%		
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																			
				EL;N/EL(f)	EL;N/EL(f)	EL;N/EL(f)	EL;N/EL(f)	EL;N/EL(f)	EL;N/EL(f)										
Computer programming, consultancy and related activities	CCA 8.2	0,03	0%		EL												2%		
Manufacture of electrical and electronic equipment	CE 1.2	0,25	3%				EL										0%		
CapEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		0,28	3%	0%	11%	0%	89%	0%	0%								2%		
Total (A1 + A2)		**0,28**	**3%**	**0 %**	**11%**	**0%**	**89%**	**0%**	**0%**								**2%**		
B. TAXONOMY-NON ELIGIBLE ACTIVITIES																			
CapEx of Taxonomy-non-eligible activities		9,08	97%																
Total (A + B)		**9,36**	**100%**																

Operational expenditure

Economic activities	Codes	Absolute turnover	Proportion of turnover	Substantial Contribution Criteria: 1.Climate change mitigation	2.Climate change adaptation	3. Water and marine resources	4. Circular economy	5. Pollution	6. Biodiversity and ecosystems	DNSH Criteria: 1.Climate change mitigation	2.Climate change adaptation	3. Water and marine resources	4. Circular economy	5. Pollution	6. Biodiversity and ecosystems	Minimum Safeguards	Proportion of Taxonomy aligned (A.1.) or eligible (A.2.) turnover	Category Enabling activities	Category Transitional activities
		M€	%	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	E	T
A. TAXONOMY-ELIGIBLE ACTIVITIES																			
A.1 Environmentally sustainable activities (taxonomy-aligned)																			
Not found		0,00	0,0	0	0	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OpEx of environmentally sustainable activities (taxonomy-aligned) (A.1)		0,00	0,0														0%		
of which enabling		0,00	0,0	%	%	%	%	%	%								0%		
of which transitional		0,00	0,0	%													0%		
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																			
				EL;N/ EL(f)	EL;N/ EL(f)	EL;N/ EL(f)	EL;N/ EL(f)	EL;N/ EL(f)	EL;N/ EL(f)										
Computer programming, consultancy and related activities	CCA 8.2	10,47	14 %		EL												30%		
Manufacture of electrical and electronic equipment	CE 1.2	24,60	33%				EL										0%		
Provision of IT/OT data-driven solutions	CE 4.1	8,23	11%				EL										0%		
OpEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		43,29	59%	0%	24%	0%	75%	0%	0%								30%		
Total (A1 + A2)		**43,29**	**59%**	**0%**	**24%**	**0%**	**75%**	**0%**	**0%**								**30%**		
B. TAXONOMY-NON ELIGIBLE ACTIVITIES																			
OpEx of Taxonomy-non-eligible activities		30,16	41%																
Total (A + B)		**73,45**	**100%**																

Personnel

The Bittium group employed an average of 601 people in January–December 2023 (641 employees). At the end of December 2023, the company had 526 employees (625 employees).

Changes in the Company's Management

Laura Kauppinen (PhD. Psychology) was appointed as Chief Development Officer (CDO) of Bittium Corporation and a member of the management group as of June 1, 2023. In addition, her areas of responsibility include human resources, information management, operations including purchasing, logistics and production, as well as quality and environmental functions, and corporate technology services. She reports to CEO Johan Westermarck. Laura Kauppinen has previously worked as a Chief Development Officer at Citec and in several group management positions for the past 20 years, e.g., Executive Vice President, Corporate Development and Administration at Maintpartner and Vice President, HR and Communications at Eltel.

Antti Keränen (M.Sc. Econ) was appointed as Chief Financial Officer (CFO) of Bittium Corporation and a member of the management group as of June 1, 2023. He reports to CEO Johan Westermarck. Keränen joins Bittium from the capital investment company Sentica Partners, where he has worked for almost 15 years and served as Investment Director for the last 9 years. Before this, he has worked in corporate finance positions at Kaupthing Bank.

Pekka Kunnari, CFO of Bittium Corporation and a member of the management team, decided to leave the company and continue his career outside Bittium. Jari-Pekka Innanen, Vice President, Engineering Services of Bittium Corporation, and a member of the management group, continued at Bittium in another assignment.

As of June 1, 2023, Bittium Corporation's management group included the following persons: CEO Johan Westermarck (Chairman), CFO Antti Keränen, CLO Kari Jokela, Vice President, IR, Communications and Marketing Karoliina Malmi, CDO Laura Kauppinen, and the heads of business units: Jari Sankala (Defense & Security), Tommi Kangas (Connectivity Solutions) and Antti Näykki (Medical Technologies).

On August 14, 2023, Jari Sankala, Senior Vice President, Defense & Security Business Unit of Bittium Corporation, and member of Bittium Corporation's management group, decided to leave the company and continue his career outside of Bittium. Tommi Kangas (Master of Engineering, machine automation), Senior Vice President, Connectivity Solutions Business Unit and a member of Bittium Corporation's management group took over to lead the Defense & Security Business Unit for the time being. While Kangas is focusing on the Defense & Security Business Unit, Jari Inget (MSc. Electrical Engineering) was appointed as the interim Vice President, Connectivity Solutions Business Unit. Inget represented the Connectivity Solutions Business Unit in Bittium Corporation's management group. Inget has a long history in the Connectivity Solutions Business Unit in various management positions, most recently as business director. Both Tommi Kangas and Jari Inget report to Johan Westermarck, CEO of Bittium Corporation.

As of August 14, 2023, Bittium Corporation's management group included following persons: CEO Johan Westermarck (Chairman), CFO Antti Keränen, CLO Kari Jokela, Karoliina Malmi Vice President, Investor Relations, Communications and Marketing, CDO Laura Kauppinen, and the heads of business units: Antti Näykki, Senior Vice President, Medical Technologies; Tommi Kangas, Senior Vice President, Defense & Security (acting); and Jari Inget, Vice President, Connectivity Solutions (acting).

On December 21, 2023, the company announced that the nominations announced on August 14, 2023, of Tommi Kangas as interim Head of the Defense & Security Business Segment and Jari Inget as interim Head of the Engineering Services Business Segment, are no longer temporary, as both continue heading their respective Business Segments and as members of Bittium Corporation's Management Group.

As of December 21, 2023, Bittium Corporation's Management Group included CEO Johan Westermarck, CFO Antti Keränen, CLO Kari Jokela, Vice President, Communications and Sustainability Karoliina Malmi, CDO Laura Kauppinen, and the heads of the Business Segments: Antti Näykki, Senior Vice President, Medical Business Segment, Tommi Kangas, Senior Vice President, Defense & Security Business Segment, and Jari Inget, Vice President, Engineering Services Business Segment.

Changes in the Company's Management after the Review Period

On January 24, 2024, Antti Näykki, Senior Vice President, Medical Business Segment, Bittium Corporation (Engineer, Embedded Systems) was appointed as Vice President, Group Business Development as of February 1, 2024. He continues as a member of Bittium Corporation's management group. In this role, Näykki focuses on building Bittium's long-term growth. He is also responsible for the management of the group's research activities, supply chains and quality, as well as human resources and information management. Näykki was responsible for Bittium Corporation's business development during the years 2019–2021 and in his new role continues to advance the company's profitable growth strategy. Näykki reports to CEO Johan Westermarck.

On January 24, 2024, Laura Kauppinen, Bittium Corporation's Chief Development Officer (PhD, Psychology) was appointed as Senior Vice President, Medical Business Segment as of February 1, 2024. Kauppinen continues as a member of Bittium Corporation's management group. Kauppinen started at Bittium in June 2023 as Chief Development Officer, leading the group's strategy update and a significant change process with the target to turn Bittium into a healthy company. In her new role, Kauppinen focuses on implementing the updated strategy to enable profitable growth in the Medical business. Kauppinen reports to CEO Johan Westermarck.

As of February 1, 2024, Bittium Corporation's management group includes following persons: CEO Johan Westermarck (Chairman), CFO Antti Keränen, CLO Kari Jokela, Vice President Communications and Sustainability Karoliina Malmi, Vice President Group Business Development Antti Näykki, and the heads of Business Segments: Tommi Kangas, Senior Vice President, Defense & Security Business Segment, Jari Inget, Vice President, Engineering Services Business Segment, and Laura Kauppinen, Senior Vice President, Medical Business Segment.

Incentive Systems

Management Share-Based Incentive Plan

On June 19, 2023, the Board of Directors of Bittium Corporation decided on the establishment of a new share-based long-term incentive scheme for the Company's management. It comprises a Performance Share Plan ("PSP"). The objectives of the PSP 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, to commit the management to achieving Bittium's strategic targets and the retention of Bittium's management.

The PSP consists of three annually commencing three-year performance share plans, PSP 2023–2025, PSP 2024–2026, and PSP 2025–2027, 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 the following two plans, PSP 2024–2026, and PSP 2025–2027, is, however, subject to a separate Board decision.

Eligible to participate in the first plan, PSP 2023–2025, are the members of Bittium's Management Group. The performance measure based on which the potential share reward under the first plan, PSP 2023–2025, will be paid is the revenue growth 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 and in cash.

The aggregate maximum number of shares to be paid based on the whole PSP is 750,000 shares (gross before the withholding of the applicable taxes). The aggregate gross value of the plan, estimated based on the volume-weighted average quotation of Bittium's share during the year 2022, is approximately EUR 3.5 million.

More information about the share-based incentive system can be found on the company's website at **https://www.bittium.com**.

A One-Off Matching Share Plan for the CEO of Bittium Corporation

On April 27, 2023, the Board of Directors of Bittium Corporation decided on the establishment of a one-off fixed Matching Share Plan for the Chief Executive Officer (CEO) of Bittium. The aim of the Plan is through share ownership to align the interests of the CEO with those of the company's shareholders and to promote shareholder value creation in the long term as well as the retention of the CEO with the company.

The fixed Matching Share Plan was a one-off plan, in which the CEO was expected to purchase shares of Bittium Corporation with at least the value of 200,000 euros at a price formed in public trading on Nasdaq Helsinki. The shares were purchased after the publication date of Bittium Corporation's Business Review January-March 2023. Bittium Corporation matched the share investment by way of the CEO received matching shares without consideration with a net value of 100,000 euros. The matching shares were paid in listed shares of Bittium Corporation.

In addition to the matching shares, the company paid the payroll tax and other taxes and tax-like charges payable in connection with the Plan. Based on the current value of the company's share the estimated aggregate number of matching shares to be delivered under the Plan was approximately 25,000 shares. The matching shares received by the CEO based on the Plan will be subject to a transfer restriction (lock-up) of three years.

On June 1, 2023, Bittium Corporation announced that it had transferred a total of 23,854 of its own shares held by the company free of charge as a share bonus to the company's CEO based on a fixed-amount additional share program. The transfer of own shares was carried out as a directed free share issue decided by Bittium Corporation's Board of Directors. The Board's decision was based on the share issuance authorization given by the annual general meeting on April 12, 2023.

Other Incentive Systems

In addition, the company has a performance bonus system, the reward of which is paid based on the achievement of goals, as well as a profit-sharing plan, which applies to all personnel, excluding those covered by other short-term bonus systems.

Authorizations of the Board of Directors at the End of the Reporting Period

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 corresponded to approximately 9.80 percent of all the shares in the company as at the date of the General Meeting. Based on the authorization, the company's own shares may only be repurchased with unrestricted equity. The company's own shares may 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 the shares will be repurchased. Among other things, derivatives may be used in the acquisition. Own shares may be repurchased otherwise than in proportion to the shareholdings of the shareholders (directed repurchase).

The authorization revokes the authorization given by the Annual General Meeting on April 6, 2022, to decide on the repurchase of the company's own shares. The authorization is valid until June 30, 2024.

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 Finnish Companies Act as follows.

The number of shares to be issued based on the authorization shall not exceed 3,500,000 shares in total, which corresponded to approximately 9.80 percent of all the shares in the company as at the date of the General Meeting. The Board of Directors decides on all the terms and conditions of the issuance of shares and special rights entitling to shares. The authorization concerns both the issuance of new shares and the transfer of the company's own shares. The issuance of shares and special rights entitling to shares may be carried out in deviation from the shareholders' pre-emptive subscription rights (directed issue).

The authorization revokes the authorization given by the Annual General Meeting on April 6, 2022, to decide on the issuance of shares and the issuance of special rights entitling to shares referred to in Chapter 10, Section 1 of the Finnish Companies Act. The authorization is valid until June 30, 2024.

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.

Share Buy-Back Program

The Board of Directors of Bittium Corporation has decided on May 17, 2023, to launch a share buy-back program concerning Bittium's own shares based on the authorization to repurchase own shares granted by the Annual General Meeting held on April 12, 2023.

Acquisitions of own shares started on May 19, 2023, and ended on October 3, 2023. The repurchases of the own shares began on May 19, 2023, and ended on October 3, 2023. During that period, Bittium repurchased 240,000 of its own shares for the total value of EUR 980,112.00 and an average price per share EUR 4.0838. The shares were acquired at the market price quoted at the time of acquisition in trading organized by Nasdaq Helsinki Ltd on a regulated market. The shares acquired through the buy-back program are intended to be used for meeting obligations arising from share-based rewards to the Company's management under the Company's current and possible future incentive arrangements.

On December 31, 2023, Bittium held 216,146 treasury shares, which corresponds to around 0.61 percent of all the shares in the Company.

Market Values of Shares

MARKET VALUES OF SHARES (EUR)	1–12/2023 12 months	1–12/2022 12 months
Highest	5.20	6.08
Lowest	3.31	3.47
Average	4.22	4.71
At the end of period	4.81	3.98
Market value of the stock (MEUR)	170.7	141.9
Trading value of shares (MEUR)	17.0	44.0
Number of shares traded (1,000 pcs)	4,021	9,346
Related to average number of shares, %	11.3	26.2

Shareholders

LARGEST SHAREHOLDERS, DECEMBER 29, 2023	Number of shares	% of shares
1. Veikkolainen Erkki	1,822,112	5.1%
2. Ponato Oy	1,501,300	4.2%
3. Hulkko Juha	1,419,370	4.0%
4. Varma Mutual Pension Insurance Company	1,365,934	3.8%
5. Ilmarinen Mutual Pension Insurance Company	1,296,529	3.6%
6. Special Investment Fund Aktia Mikro Markka	700,000	2.0%
7. Skandinaviska Enskilda Banken AB	698,499	2.0%
8. Hildén Kai Jalmari	658,000	1.8%
9. Citibank Europe PLC	592,844	1.7%
10. Elo Mutual Pension Insurance Company	503,000	1.4%

At the end of December 2023, Bittium Corporation had 22,030 shareholders. The ten largest shareholders owned 29.6 percent of the shares. Private ownership was 69.6 percent. The percentage of foreign and nominee-registered shareholders was 4.0 percent at the end of December 2023.

Flagging Notifications
During the review period, there were no changes related to ownership relationships that would have led to the notification obligation required by Section 2:9 of the Securities Market Act, i.e., the so-called flagging notification.

The Board, Board Committees and the Auditor

The Annual General Meeting held on April 12, 2023, 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 organizing meeting held on April 12, 2023, the Board of Directors elected Mr. Erkki Veikkolainen as the Chairman of the Board of Directors. Further, the Board of Directors resolved that it will continue to have an 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.

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 principal auditor. It was decided that the remuneration to the auditor shall be paid against the auditor's reasonable invoice.

Corporate Governance Statement

The Board of Directors has issued the corporate governance statement separate from this report.

Dividend from 2022

In accordance with the proposal of the Board of Directors, the Annual General Meeting held on April 6, 2022, decided that, based on the balance sheet for the financial year January 1, 2021–December 31, 2022, a dividend of EUR 0.05 per share will be distributed. The dividend was paid to shareholders who on the dividend record date of April 14, 2023, were registered in the company´s shareholders´ register held by Euroclear Finland Oy. The dividend was paid on April 21, 2023. 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.

Consolidated Statement of Comprehensive Income

Continuing operations, 1000 EUR	Notes	Jan. 1–Dec. 31, 2023	Jan. 1–Dec. 31, 2022
NET SALES	1, 2	**75,247**	**82,464**
Other operating income	3	3,108	2,740
Change in work in progress and finished goods			
Work performed by the undertaking for its own purpose and capitalized		255	496
Raw materials		-20,198	-20,227
Personnel expenses	6	-39,094	-39,463
Depreciation	7	-9,479	-10,699
Other operating expenses	4	-14,168	-14,784
Share of results of the associated companies	14	32	-185
OPERATING PROFIT		**-4,296**	**342**
Financial income and expenses	8	-967	-761
PROFIT BEFORE TAX		**-5,263**	**-419**
Income tax	9	-168	672
PROFIT FOR THE YEAR FROM CONTINUING OPERATIONS		**-5,431**	**253**
Profit for the year from discontinued operations			
PROFIT FOR THE YEAR		**-5,431**	**253**
Other comprehensive income:			
Items that will not be reclassified to statement of income			
Re-measurement gains (losses) on defined benefit plans			
Income tax effect			
Items that may be reclassified subsequently to the statement of income			
Exchange differences in translating foreign operations		-61	212
TOTAL COMPREHENSIVE INCOME FOR THE YEAR		**-5,492**	**466**
Profit for the year attributable to			
Equity holders of the parent		-5,431	253
Total		**-5,431**	**253**
Total comprehensive income for the year attributable to			
Equity holders of the parent		-5,492	466
Total		**-5,492**	**466**
Earnings per share for profit attributable to the shareholders of the parent company	10		
Earnings per share from continuing operations, EUR			
Basic earnings per share		-0.153	0.007
Diluted earnings per share		-0.153	0.007
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		-0.153	0.007
Diluted earnings per share		-0.153	0.007
Average number of shares, 1000 pcs		35,609	35,702
Average number of shares, diluted, 1000 pcs		35,609	35,702

Consolidated Statement of Financial Position

1000 EUR	Notes	Dec. 31, 2023	Dec. 31, 2022
Non-current assets			
Property, plant, and equipment	11	18,221	19,664
Goodwill	12	5,828	5,836
Intangible assets	12	51,246	50,114
Investments in associated companies	14	1,042	1,010
Other financial assets	15	112	112
Non-current receivables	18	730	856
Deferred tax assets	16	7,415	7,416
Total		**84,595**	**85,008**
Current assets			
Inventories	17	26,621	24,196
Trade and other receivables	18	38,111	41,435
Financial assets at fair value through profit or loss	19	1	5,696
Cash and short-term deposits	20	8,331	13,320
Total		**73,064**	**84,647**
Total assets		**157,659**	**169,656**
Equity and liabilities			
Equity attributable to equity holders of the parent	21		
Share capital		12,941	12,941
Translation differences		1,257	1,318
Invested non-restricted equity fund		25,953	25,953
Retained earnings		67,433	75,561
Total		**107,585**	**115,774**
Non-controlling interests			
Total equity		**107,585**	**115,774**
Non-current liabilities			
Deferred tax liabilities	16	114	156
Interest-bearing loans and borrowings (non-current)	24	1,470	21,335
Other non-current liabilities, non-interest bearing	26	200	192
Total		**1,785**	**21,684**
Current liabilities			
Trade and other payables	26	22,397	26,427
Provisions	23	4,795	4,662
Interest-bearing loans and borrowings (current)	24	21,098	1,110
Total		**48,290**	**32,198**
Total liabilities		**50,075**	**53,882**
Total equity and liabilities		**157,659**	**169,656**

Consolidated Statement of Cash Flows

1000 EUR	Notes	Jan. 1–Dec. 31, 2023	Jan. 1–Dec. 31, 2022
Cash flow from operating activities			
Profit for the year from continuing operations		**-5,431**	**253**
Profit for the year from discontinued operations			
Adjustments			
Effects of non-cash business activities	28	9,430	11,366
Finance costs	8	1,455	851
Finance income	8	-488	-90
Income tax	9	168	-672
Change in net working capital			
Change in short-term receivables	18	3,461	-1,613
Change in inventories	17	-2,267	-4,571
Change in interest-free short-term liabilities	26	-4,167	3,295
Interest paid on operating activities		-1,381	-850
Interest and dividends received from operating activities		488	90
Income taxes paid		-57	-38
Net cash from operating activities		**1,211**	**8,021**
Cash flow from investing activities			
Purchase of property, plant, and equipment	11	-329	-955
Purchase of intangible assets	12	-7,391	-7,092
Net cash from investing activities		**-7,720**	**-8,047**
Cash flows from financing activities			
Payment of finance lease liabilities	24		
Dividend paid and capital repayment	24, 25	-1,344	-1,425
Dividend paid and capital repayment		-1,785	-1,428
Purchases of own shares		-1,046	-144
Net cash from financing activities		**-4,176**	**-2,997**
Net change in cash and cash equivalents	20	**-10,684**	**-3,023**
Cash and cash equivalents on 1 January		19,016	22,039
Change in fair value of investments			
Cash and cash equivalents at the end of the year		**8,332**	**19,016**

Consolidated Statement of Changes in Equity

1000 EUR	Equity attributable to equity holders of the parent: Share capital	Invested non-restricted equity fund	Translation difference	Retained earnings	Non-controlling interests	Total
Shareholders' equity Jan. 1, 2023	**12,941**	**25,953**	**1,318**	**75,561**	**0**	**115,774**
Comprehensive income for the period						
Profit for the period				-5,431		-5,431
Exchange differences on translating foreign operations			-61			-61
Total comprehensive income for the period	**0**	**0**	**-61**	**-5,431**	**0**	**-5,492**
Transactions between the shareholders						
Dividend distribution				-1,785		-1,785
Purchases of own shares				-1,046		-1,046
Share-related compensation				165		165
Total transactions between the shareholders				**-2,666**		**-2,666**
Other changes				**-31**		**-31**
Shareholders' equity Dec. 31, 2023	**12,941**	**25,953**	**1,257**	**67,433**	**0**	**107,585**
Shareholders' equity Jan. 1, 2022	**12,941**	**25,953**	**1,106**	**76,814**	**0**	**116,815**
Comprehensive income for the period						
Profit for the period				253		253
Exchange differences on translating foreign operations			212			212
Total comprehensive income for the period	**0**	**0**	**212**	**253**	**0**	**466**
Transactions between the shareholders						
Dividend distribution				-1,428		-1,428
Purchases of own shares				-144		-144
Share-related compensation				74		74
Total transactions between the shareholders				**-1,498**		**-1,498**
Other changes				**-9**		**-9**
Shareholders' equity Dec. 31, 2022	**12,941**	**25,953**	**1,318**	**75,561**	**0**	**115,774**

Notes to the Consolidated Financial Statements

Corporate Information

The company's field of activities is the development, production and selling of software, equipment and other products for the automotive and electronics industry, the production of R&D services and other services as well as other industrial operations. The company may administer product and other rights and conduct research and development operations, hold and trade securities and real-estate and conduct other investment activities.

The parent company of the Group is Bittium Corporation, which is a Finnish public company. The parent company is domiciled in Oulu and its registered address is Ritaharjuntie 1, 90590 Oulu.

Accounting Principles for the Consolidated Accounts

Basis of Preparation

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) as well as the SIC and IFRIC interpretations in force on December 31, 2023. The financial statements are presented in thousands of euros. The consolidated financial statements have been prepared on a historical cost basis unless otherwise indicated.

The auditor has not certified or audited the 2023 ESEF financial statements prepared in accordance with the European Commission's technical regulatory standard to be published in accordance with Chapter 7, Section 5 of the Securities Markets Act.

Consolidation Principles

The consolidated financial statements of Bittium include the financial statements of the parent company Bittium Corporation and its subsidiaries.

Subsidiaries

The consolidated financial statements include Bittium Corporation and its subsidiaries' financial statements. Subsidiaries are companies in which the Bittium Corporation has a controlling interest. A controlling interest arises when the Group holds more than half of the voting rights or it otherwise has the power to govern the financial and operating policies of the entity. The existence of potential voting rights is taken into account in assessing the conditions under which control arises whenever instruments conferring potential voting rights can be exercised at the review date.

Associated Companies

An associated company is a company in which the Group has a significant influence. A significant influence exists, when the Group has a right to participate in the decision-making regarding financing or operative business of the associated company but has no sole or common control of such decisions. In the consolidated financial statements, the investments in the associated companies are accounted for using the equity method according to the IAS 28 Investments in Associates and Joint Ventures Joint Arrangements standard. The investment in associated companies is recorded using the acquisition price, adjusted for the Group's share of changes in the associated companies' equity after the date of acquisition. If the Group's share of associated companies' losses exceeds the carrying amount of the investment, the investment in the associated company in the balance sheet shall be written off. The losses exceeding the carrying amount are consolidated only if the Group has a binding obligation of covering the associated companies' liabilities. Investments in the associated companies include the goodwill emerging upon the acquisition. The unrealized profits or losses between the Group and the associated companies are eliminated according to the share of the Group's ownership.

The Group's share of results in the associated companies is recorded as an item above the operating result if the result arises from the operative business. The Group's share of associated companies' other comprehensive income is recorded in the other items of comprehensive income in the consolidated statement of profit and loss.

The carrying value of investments in the associated companies is tested by comparing the carrying amount and the recoverable amount of the associated companies. An impairment loss is recognized if the carrying amount of the investment in associated companies exceeds the recoverable amount. An impairment loss is recognized in the income statement.

Elimination of Intra-Group Transactions

Intra-Group share ownership has been eliminated by means of the purchase method. Acquired subsidiaries are included in the consolidated financial statements from the time when the Group has obtained control and divested subsidiaries up to the time when control ceases. The excess of the acquisition cost of the subsidiary shares over the fair value of the net assets acquired is allocated partly to the identifiable assets and liabilities. Any excess is recorded as goodwill. For business combinations that occurred before the implementation of IFRS, in 2004, the carrying amount of the goodwill has been treated according to the Finnish GAAP in accordance with the exemption under IFRS 1. According to IFRS, goodwill is not amortized but tested annually for impairment.

Intra-Group transactions, receivables, liabilities and margins are eliminated in the preparation of the consolidated financial statements.

Foreign Currency Transactions

Figures relating to the financial statements of Group entities are measured in the currency that is the currency of each entity's main operating environment ("functional currency"). The consolidated financial statements are presented in euros, which is the functional currency of the Group's parent company.

Transactions denominated in foreign currency are recorded in euros using the exchange rate on the date of the transaction. Monetary items denominated in foreign currency are translated to euros using the European Central Bank exchange rates at the balance sheet date. Gains and losses arising from transactions denominated in foreign currency and the translation of monetary items are recorded in the income statement.

Income statements and cash flows of subsidiaries, whose functional and reporting currency is not the euro, are translated into euros at the average exchange rates during the financial period. Their balance sheets are translated at the exchange rates prevailing at the balance sheet date. Translating the profit for the period using different rates in the income statement and the balance sheet leads to a translation difference that is recorded in equity. The translation differences arising from the elimination of the cost of foreign subsidiaries are recorded in equity. When a subsidiary is sold, the cumulative translation differences are entered into the income statement as part of the capital gain or loss.

Cumulative exchange differences arising from the translation of internal long-term loans, which are in actual terms net investments in foreign operations, are taken directly to a separate component of equity.

The goodwill arising from the acquisition of foreign operations as well as fair value adjustments made to the carrying amounts of the assets and liabilities of said foreign operations in connection with an acquisition are treated as the assets and liabilities of said foreign operations and translated to euros using the exchange rates at the balance sheet date.

Property, Plant and Equipment

Property, plant, and equipment are measured at historical cost less depreciation and impairment losses. Assets of acquired companies are stated at their fair values at the date of acquisition.

Assets are depreciated using the straight-line or reducing balance method over their useful life.

The residual value of assets and their useful life are reviewed periodically in connection with each set of financial statements and the interim report and, if necessary, they are adjusted to reflect changes that have occurred in the expectations for the asset's useful life. Ordinary repair and maintenance costs are charged to the income statement during the financial year in which they incurred. Gains and losses on sales and disposals are determined by comparing the received proceeds with the carrying amount and are included in the operating profit.

Intangible Assets

Goodwill
After January 1st, 2004, the cost of goodwill is the excess of the cost of the business combination over the acquirer's interest in the net fair value of the identifiable assets. The goodwill arising from the business combinations prior to this represents the amount recorded under previous GAAP, which has been used as the deemed cost. The classification and accounting treatment of these business combinations has not been adjusted when the Group's opening IFRS balance sheet has been prepared.

Goodwill is tested annually or, if necessary, more frequently to determine any impairment. For this purpose, goodwill has been allocated to cash-generating units. The recoverable amount of a cash generating unit is compared to its carrying amount, and an impairment loss is recognized if the carrying amount of the assets exceeds the recoverable amount. An impairment loss is recognized in the income statement.

Research and Development Expenditure
Research expenditures are recorded as an expense as they are incurred. Expenditure on development activities is capitalized if they meet the criteria defined in IAS 38 Intangible Asset. Capitalized development expenses include mainly materials, supplies and direct labor costs. They are amortized on a systematic basis over their expected useful lives.

Capitalized development expenses are reviewed for potential impairment regularly by comparing the carrying amount to their recoverable amount. Significant changes in the technological environment are taken into account. If the carrying amount of the development expenses is greater than the recoverable amount, an impairment loss is recognized immediately.

Other Intangible Assets
Patents, trademarks, licenses, and other intangible assets having a finite useful life are entered in the balance sheet and the amortized expense is recorded in the income statement over their useful life. If indications on possible impairment exist, the recoverable amount is determined and an impairment loss is recognized if necessary. Intangible assets with an indefinite useful life are not amortized but tested annually or, if necessary, more frequently to determine any impairment.

Inventories

Inventories are stated at the lower of initial cost or net realizable value. Net realizable value is the estimated selling price in the normal course of business less the estimated costs of sale. The value of raw material inventory is determined using a weighted average cost formula. The initial cost of finished and semi-finished products comprise raw material, direct labor, and other direct expenses as well as an appropriate share of fixed and variable production overheads, based on the normal capacity of the production facilities.

Borrowing Costs

Borrowing costs are recognized in the income statement as they accrue, according to the existing IFRS standards.

Government Grants

Government grants are recognized when there is reasonable assurance that the Group will comply with the conditions attaching to them and the grant will be received. Government grants received from public corporations are presented as other income in the income statement.

Leases

According to the IFRS 16 Leases standard, in principle all lease contracts of the Group are recognized as assets and liabilities in Group's Balance Sheet. When the Group is a lessee, lease liabilities are recognized at the present value of the future lease payments at the contact date which the leased asset is available for use by the group. Lease payments are discounted by using lessee's incremental borrowing rate. Corresponding asset to the lease liability is recognized on the historical cost basis. According to the historical cost basis model, depreciation and amortization costs are deducted from the initially recognized right-of-use asset. When adjustments to lease payments take effect, the lease liability is reassessed and adjusted against the right-of-use asset.

The Group determines the lease term as a period when a lease contract cannot be terminated. In determining the lease term, all facts and circumstances are considered that create an economic incentive to exercise an extension option, or not exercise a termination option. The Group adjusts the lease term if the period when a lease contract cannot be terminated changes. Payments associated with short-term leases and all leases of low-value assets may be recognized on a straight-line or other systematic basis as an expense in profit or loss.

The right-of-use assets are presented within the same line item as the corresponding underlying assets would be presented if they were owned. Lease liabilities are included in interest-bearing liabilities.

Impairment of Assets

At each balance sheet date (including interim reports) the Group estimates whether there is any indication that an asset may be impaired. If any such indication exists, the recoverable amount of the asset is estimated. The recoverable amount is estimated annually regardless of any indication of impairment to the following assets: investments, goodwill, intangible assets with an indefinite useful life and for intangible assets which are not yet ready for use. The recoverable amount is based on the future discounted net cash flows, which are equivalent with the expected cash flows generated by the asset.

An impairment loss is recognized whenever the carrying amount of an asset exceeds its recoverable value. The loss is booked to the income statement. A previously recognized impairment loss is reversed only if there has been a change in the estimates used to determine the recoverable amount. However, the reversal must not cause that the adjusted value is higher than the carrying amount that would have been determined if no impairment loss had been recognized in prior years. Impairment losses recognized for goodwill will under no circumstances be reversed.

Employee Benefits

Pension Liabilities
Group companies in different countries have pension plans in accordance with local conditions and practices. The plans are classified as either defined contribution plans or defined benefit plans.

In Finland, the Group has organized pension coverage for its staff through independent pension insurance companies. The Finnish system under the Employees' Pensions Act and the disability portion are treated as a defined contribution plan. The contributions to defined contribution plans are charged to the income statement in the year to which they relate. After this, the Group has no other obligations for additional payment. Also, the pension arrangements of the foreign subsidiaries are classified as defined contribution plans.

Share-Based Payment

The Group has applied IFRS 2 Share-Based Payment standard. The Group has incentive plans in which part of the remuneration for the Board of Directors is paid in shares of Bittium. The managing directors of the Group also have an incentive plan in which the fair value of equity-settled share-based payments granted are recognized as an employee expense with a corresponding increase in equity. The fair value of cash-settled share-based payments is valued at each reporting period closing date and the changes in fair value of liability are recognized as an expense when incurred. The fair value is measured at the grant date and spread over the vesting period during which the employees become unconditionally entitled to the awards. Share-based incentives are measured at fair value at the time they are granted and entered as an expense in the income statement when the right is granted.

Provisions

A provision is recognized when the Group has a legal or constructive obligation as a result of a past event, it is probable that a payment obligation will be realized or cause a financial loss and the amount of the obligation can be estimated reliably. Provisions can arise from restructuring plans, onerous contracts, warranty repairs and allowances ,and from environmental, litigation or tax risks.

The amount recognized as a provision is the best estimate of the expenditure required to settle the present obligation at the balance sheet date. If the time value of money is material, provisions will be discounted.

If a reimbursement can be obtained from a third party for part of the obligation, the reimbursement is treated as a separate asset when it is virtually certain that the reimbursement will be received.

Taxes

Tax expense in the Group's income statement comprises the current tax and change in deferred taxes of each group company. Current tax is calculated based on the taxable income using the tax rate that is enacted in each country at the balance sheet date.

Deferred tax liability is calculated on the temporary differences between the carrying amounts and the amounts used for taxation purposes. Deferred tax assets are recognized for deductible temporary differences and tax losses to the extent that it is probable that taxable profit will be available against which tax credits and deductible temporary differences can be utilized. In calculating deferred tax liabilities and assets, the tax base which is in force at the time of preparing the financial statements or which has been enacted by the balance sheet date for the following period, has been applied.

Revenue Recognition

Bittium identifies and reviewes the customer contracts and the revenue recognition principles for the different contract elements using the five step method presented in IFRS 15. According to Bittium principles, the signed contracts and purchase orders are customer contracts in accordance with IFRS 15. Frame contracts and Letters of intent can be classified as customer contracts only when the conditions of the contract are otherwise fully in accordance with the IFRS 15.

Bittium has recognized following IFRS 15 contract elements: product and license sales, sales of R&D services, maintenance and support services of products and extended warranties of the products. Bittium has listed prices for the products and their maintenance and support services as well as for their extended warranties. If the contract does not define a single price of a contract element, the price can be estimated using the market price method or using a cost base method. The prices for the sales of services are defined in each service contract. Bittium has not activated any costs of gaining a contract nor has it allocated them for the projects or products as part of the revenue to be recognized. These additional costs have been minor and the possible assets borne as a result would have a depreciable lifetime of less than one year.

The revenue of the services is recognized as the service has been performed. In this case, the contract element is delivered over time. Revenue from long-term construction contracts is recognized based on the stage of completion when the outcome of the project can be reliably measured. The stage of completion is measured by using the cost-to-cost method under which the percentage of completion is defined as the ratio of costs incurred to total estimated costs. This requires accurate forecasting of future sales and costs during the lifetime of the contract. The forecasts are a basis for the revenue recognized and they contain the latest estimates of the contract sales, costs, and the risks related to the contract. The forecasts are also subject to remarkable changes due to possible changes in contract scope, cost estimate changes, and changes in customers' plans as well as other factors affecting the forecast.

The following matrix states the different aspects of estimating and classifying the revenue recognition of different contract elements:

Type of Contract	Contract Element	The Principle for Revenue Recognition and Possible Estimates
Sales of services	Customer contract, fixed price	Percentage of completion is defined as the ratio of costs incurred to total estimated costs.
Sales of services	Customer contract based on time, price per hours	Revenue is based on the work performed, recognition based on regular invoicing.
Product/licence sales	Product, off the shelf	The revenue based on product delivery as the customer has achieved control of the goods delivered.
Product/licence sales	Product, customized	The revenue based on product delivery as the customer has achieved control of the goods delivered. The customization work is accrued over time according to the percentage of completion or based on the time as mentioned above in the sales of services.
Product/licence sales	Product + maintenance	The revenue is based on product delivery as the customer has achieved control of the goods delivered. Maintenance accrued over the maintenance period.
Product/licence sales	Product support services	Over time, based on the work done.
Other contracts	Rental agreements	During the rental period, according to the rental agreement.

The revenue of product sales is recognized when the significant risks and rewards normally connected with ownership, have been transferred to the buyer. Neither the Group retains a continuing managerial involvement to the degree usually associated with ownership, nor effective control of these goods. In this case, the contract element is transferred at a point in time. Sales are presented net of indirect sales taxes and discounts.

In case Bittium receives prepayments from customers, the income related to them is recognized according to the abovementioned principles. For product warranties Bittium makes warranty provisions that are reversed over time during the warranty periods. The extended warranties paid separately are accrued as income over time during the warranty period.

Assets Held for Sale and Discontinued Operations

The Group classifies a non-current asset or disposal as held for sale if its carrying amount will be recovered principally through a sale transaction rather than through continuing use. Non-current assets and asset items related to discontinued operations, which are classified as held for sale, are measured at the lower of their carrying amount and fair value less costs to sell. Depreciation and amortization on these asset items are discontinued at the time of classification. Profit after tax and gain on sale of discontinued operation is presented as a separate line item in the consolidated income statement.

Financial Assets, Financial Liabilities and Derivative Contracts

The hedge accounting according to the IFRS 9 Financial Instruments standard has not been applied for the financial statement period or for the comparative period.

As presented in IFRS 9, Bittium has three classes of financial assets and liabilities: those measured at amortized cost, financial assets and liabilities at fair value through other comprehensive income and financial assets, and liabilities at fair value through statement of income. The classification is made based on the business models and based on the analysis of cash flows. The financial assets and liabilities are classified as they are initially recorded. After this, no reclassifications are made unless the business model of asset management changes. At the financial statement date, Bittium had a marginal amount of financial assets other than those measured at amortized cost. As an exception to this, the cash and short-term deposits include a low-risk short-term investment portfolio that is assessed at fair value through a statement of income.

The financial assets are written off when:
- The agreement-based right for the cash flows of the financial asset is terminated or;
- The group has either transferred all the relevant risks and rewards related to the financial assets or has transferred its control outside the group.

The Impairment of Financial Assets

IFRS 9 has a small effect on the assessment of group financial assets. Based on the simplified approach allowed by IFRS 9 standard the group assesses and writes off the amount of expected credit losses from accounts receivables. There are no significant financing components contained into Bittiums' accounts receivables.

For assessing the expected credit losses, Bittium applies a provision matrix that is based on historical realized loss rates adjusted by forward-looking estimates of the lifetime of accounts receivables. All the components of the provision matrix are updated for each reporting date. The expected credit losses are presented in the group of provisions in the balance sheet. The changes in the expected credit losses are presented in the profit and loss statement.

Cash and Short-Term Deposits

Cash comprises cash on hand, bank deposits, and other highly liquid investments with low risk. Assets classified as cash and short-term deposits have a maximum maturity of three months from the date of acquisition. Cash and bank deposits are measured at amortized cost, and the short-term investment portfolio is assessed at fair value through a statement of income.

Financial Liabilities

Financial liabilities include trade and other payables, loans, and other financial liabilities. All financial liabilities are measured at amortized cost. The loans are initially recognized at fair value. Transaction costs are entered in the profit and loss. Subsequently, the loans are measured at the amortized cost by using the effective interest rate.

Financial liabilities are not reclassified after the initial recognition. Non-current financial liabilities are due after one year whereas current financial liabilities are due within one year.

Financial liabilities are disposed of as the liability related to the contract is declared void, canceled, or due. As the terms of the financial liability are substantially changed or when a new contract with the existing creditor is made, the change is entered as disposal of the old liability and as an entry of a new liability. The changes in the balance sheet values are entered through profit and loss.

Significant Accounting Estimates and Judgments

The preparation of financial statements requires management to make estimates and assumptions about the future that affects the reported amounts. Used estimates and assumptions are based on prior experience and presumptions, which reflect the circumstances and expectations prevailing at the time of the preparation of the financial statements. Materiality and judgment in assessing the effect of uncertainties and the application of accounting principles have been observed in the preparation of the financial statements.

The management has exercised judgment during the financial year in applying e.g. in assessing the future cost forecasts in the percentage of completion projects, assessing the value of intangible assets in business acquisitions, and also when assessing the future prospects of Group companies in conjunction with standards IAS 12 Income Taxes and IAS 36 Impairment of Assets. Based on the management judgment, the majority of the capitalized R&D investments are depreciated over their expected useful lives. Part of the capitalized R&D investments is depreciated based on the production amounts of the goods.

Financial statements may include non-recurring income or expenses that are not related to normal operative business or that occur only infrequently. Such items are among others sales profits or losses, substantial changes in asset values, like impairment or reversal of impairment, substantial restructuring costs, or other substantial items that are considered non-recurring by the management. The substantiality of the item is based on the item's euro amount and the relative share of the total value of the asset.

The Application of New and Revised IFRS Regulations

The consolidated financial statements are prepared in accordance with International Financial Reporting Standards (IFRS) effective at the end of the period. The new, revised, or amended IFRS regulations did not have a significant impact on the consolidated financial statements during the period. The other forthcoming revisions or amendments of the standards are not expected to have a significant impact on the consolidated financial statements.

Notes to the Consolidated Financial Statements

1. OPERATING SEGMENTS

Bittium has one reporting business segment, the Wireless business, that includes product and services areas supporting each other. These areas are as follows: Defence & Security, Engineering Services, and Medical.

The wireless business is focused on creating reliable and secure communication and connectivity solutions, as well as on developing healthcare technology solutions for biosignal measuring. For its customers, Bittium offers innovative products and solutions based on its product platforms and R&D services. Bittium also offers high-quality information security solutions for mobile devices and portable computers. For customers in biosignal measuring in the areas of cardiology, neurology, rehabilitation, occupational health, and sports medicine, Bittium offers healthcare technology products and services.

The highest operative decision-making body of the company is the Board of Directors of Bittium, which is responsible for allocating resources to and evaluating the results of Bittium's operating segment. The income statement and balance sheet information of the Wireless business are equivalent to the corresponding information of the Bittium group.

Wireless

Geographical areas

Bittium operates in three geographical areas which are Europe, Americas and Asia. In presenting the geographical information, the revenue is based on the geographical location of customers. Geographical assets are based on the geographical location of the assets.

Geographical areas
Jan. 1–Dec. 31, 2023

1000 EUR	Finland	Other Europe	Americas	Asia	Eliminations	Group total
Net sales						
Sales to external customers	32,102	21,401	20,894	850		75,247
Non-current assets	76,968		213			77,180
Total non-current assets *)	**76,968**		**213**			**77,180**
*) does not include deferred tax assets						
Capital expenditure						
Tangible assets	-1,443					-1,443
Intangible assets	1,132					1,132
Investments	32					32
Goodwill			-8			-8
Non-current receivables	-125					-125

Geographical areas
Jan. 1–Dec. 31, 2022

1000 EUR	Finland	Other Europe	Americas	Asia	Eliminations	Group total
Net sales						
Sales to external customers	39,857	18,026	23,322	1,259		82,464
Non-current assets	77,372		220			77,592
Total non-current assets *)	**77,372**		**220**			**77,592**
*) does not include deferred tax assets						
Capital expenditure						
Tangible assets	-1,226		-1			-1,227
Intangible assets	171					171
Investments	-273					-273
Goodwill			13			13
Non-current receivables	-225					-225

Information of primary customers

Group's revenues from the 10 largest customers in period 1.1.–31.12.2023 were EUR 54.8 million (EUR 62.0 million in 2022) representing 72.8 percent of the net sales (75.1 percent in 2022).

Group had two customers in period 1.1.–31.12.2023 having income separately over 10 percent of Group's revenue. Income from these customers were EUR 20.8 million and EUR 16.7 million.

Notes to the Consolidated Financial Statements

2. NET SALES

1000 EUR	2023	2022
Services	29,456	25,054
Products	45,791	57,410
Other		
Total	**75,247**	**82,464**

The services include project sales with fixed prices and hourly rates.
The product sales include all the sales affected by products:
the sales of products, product maintenance, extended warranties, and licence sales.

Construction contracts

The contract revenue is recognized in the income statement in proportion to the stage of completion of the contract. The stage of completion is defined as the ratio of costs incurred to total estimated costs. The turnover of construction contracts is, depending on the contract elements, recognized over time or at a point in time. The principles of revenue recognition based on IFRS 15 are presented in detail in the accounting principles of the consolidated financial statements.

Income recognized from construction contracts	8,399	9,188
Net sales other	66,848	73,276
Total	**75,247**	**82,464**

Income recognized over time based on the stage of completion of long-term construction contracts	8,399	9,188
Revenue recognized from long-term construction contracts in progress amounted to	6,203	4,954
Advances received from long-term construction contracts recognized in the balance sheet amounted to	718	772
Receivables recognized from long-term construction contracts amounted to	2,162	1,382

The net sales by geographical areas is presented in the Note 1.

3. OTHER OPERATING INCOME

1000 EUR	2023	2022
Government grants	2,998	2,635
Other income	110	105
Total	**3,108**	**2,740**

4. OTHER OPERATING EXPENSES

External services	1,961	1,530
Voluntary staff expenses	1,597	1,190
Premises expenses	1,126	1,094
Travel expenses	1,111	1,048
IT expenses	3,304	3,096
Other expenses	5,070	6,826
Total	**14,168**	**14,784**
Expense relating to short-term leases under IFRS 16	163	157
More information about Leases in Note 11.		
Auditor's charges		
Ernst & Young		
Auditing	58	67
Tax advice		1
Other services	13	4
Total	**71**	**72**
Others		
Auditing	29	24
Tax advice	10	7
Other services	1	
Total	**40**	**30**

Notes to the Consolidated Financial Statements

1000 EUR	2023	2022
5. DEPRECIATIONS AND IMPAIRMENTS		
Depreciations		
Intangible assets		
Capitalized development expenditure	5,608	5,897
Intangible rights	525	430
Customer relations and technology	119	173
Other intangible assets	49	289
Tangible assets		
Buildings and constructions	759	753
Machinery and equipment	2,418	3,157
Total	**9,479**	**10,699**
Depreciation on property, plant, and equipment acquired by leases		
Buildings and constructures	364	358
Machinery and equipment	978	1,063
More information about Leases in Note 11.		
6. EMPLOYEE BENEFIT EXPENSES AND NUMBER OF PERSONNEL		
Number of personnel		
Average number of personnel during the fiscal period		
Continuing operations	601	641
Personnel expenses 1000 EUR		
Personnel expenses		
Managing Director	539	353
Board of Directors *	175	176
Other salaries and wages	36,672	36,650
Salaries capitalized to development expenses	-6,037	-5,399
Total	**31,350**	**31,780**
Pension expenses, defined contribution plans	6,411	6,422
Other personnel expenses	1,333	1,261
Total	**39,094**	**39,463**

*Including the share-based incentives. Further information in the Note 31.

1000 EUR	2023	2022
7. RESEARCH AND DEVELOPMENT EXPENSES		
The research and development expenses total	20,229	22,287
Capitalized to the balance sheet	-7,244	-6,647
Recognition as an asset	5,608	5,897
The expensed research and development expenses recognized in the income statement amounted to	**18,593**	**21,537**
8. FINANCIAL EXPENSES (NET)		
Interest expenses	-890	-390
Interest income	191	17
Dividend income		0
Exchange gains and losses	-330	-309
Change of financial assets and liabilities at fair value through profit or loss		
Other financial expenses	-235	-152
Other financial income	297	72
Total	**-967**	**-761**
Interest expenses on lease liabilities under IFRS 16	-50	-22

More information about Leases in Note 11.

9. INCOME TAXES		
Income taxes, current year	-163	-164
Other taxes	-18	-8
Income taxes, previous years	-17	-18
Deferred taxes	30	862
Total	**-168**	**672**

A reconciliation between the effective tax rate and domestic tax rate (20.0 percent) of the Group:

Profit before taxes	**-5,431**	**-419**
Tax at the domestic tax rate	604	198
Effect of tax rates of foreign subsidiaries	-2	-6
Taxes for prior years	-17	-18
Tax free income	802	190
Non-deductible expenses	-418	-1,026
Utilization of deferred tax assets from previous years	303	529
Reassessment of deferred tax assets	30	862
The deferred tax assets from tax losses	-1,452	
Others	-18	-58
Income taxes in the consolidated income statement	**-168**	**672**

Notes to the Consolidated Financial Statements

	2023	2022
10. EARNINGS PER SHARE		
Basic		
Basic earnings per share amounts are calculated by dividing net profit for the year attributable to ordinary equity holders of the parent by the weighted average number of ordinary shares outstanding during the year.		
Profit attributable to the equity holders of the parent, continuing operations (1,000 EUR)	-5,431	253
Profit attributable to the equity holders of the parent, discontinued operations (1,000 EUR)	0	0
Profit attributable to the equity holders of the parent, continuing and discontinued operations (1,000 EUR)	-5,431	253
Weighted average number of ordinary shares during the financial year (1,000 PCS)	35,609	35,702
Basic earnings per share, continuing operations, EUR	**-0.153**	**0.007**
Basic earnings per share, discontinued operations, EUR	**0.000**	**0.000**
Basic earnings per share, continuing and discontinued operations, EUR	**-0.153**	**0.007**
Diluted		
Diluted earnings per share are calculated by dividing the net profit attributable to ordinary equity holders of the parent by the weighted average number of ordinary shares outstanding during the year plus the weighted average number of ordinary shares that would be issued on the conversion of all the dilutive potential ordinary shares into ordinary shares. The Group had no share-based payment schemes which would have a diluting effect on the number of shares.		
Profit attributable to the equity holders of the parent, continuing operations (1,000 EUR)	-5,431	253
Profit attributable to the equity holders of the parent, discontinued operations (1,000 EUR)	0	0
Profit attributable to the equity holders of the parent, continuing and discontinued operations (1,000 EUR)	-5,431	253
Weighted average number of ordinary shares during the financial year (1,000 PCS)	35,609	35,702
Effect of dilution (1,000 PCS)		
Weighted average number of ordinary shares during the financial year (1,000 PCS)	35,609	35,702
Diluted earnings per share, continuing operations, EUR	**-0.153**	**0.007**
Diluted earnings per share, discontinued operations, EUR	**0.000**	**0.000**
Diluted earnings per share, continuing and discontinued operations, EUR	**-0.153**	**0.007**

11. PROPERTY, PLANT, AND EQUIPMENT

The Group has not revalued property, plant, and equipment, hence the Group has not recognized any impairment losses directly to equity or recorded any reversals of those.

1000 EUR	Dec. 31, 2023	Dec. 31, 2022
Land and water		
Acquisition cost Jan. 1	1,091	1,091
Additions during the period		
Acquisition cost at the end of the period	**1,091**	**1,091**
Carrying amount at the end of the period	**1,091**	**1,091**
Buildings and constructures		
Acquisition cost Jan. 1	20,170	19,450
Translation differences	26	23
Additions during the period	776	697
Disposals during the period	-40	
Acquisition of business unit		
Transfer to assets		
Acquisition cost at the end of the period	**20,932**	**20,170**
Accumulated depreciation Jan. 1	-6,616	-5,840
Translation differences	-26	-23
Depreciation for the period	-759	-753
Depreciations on disposals		
Carrying amount at the end of the period	**13,530**	**13,554**
No revaluations or capitalizations of interest costs have been done.		
Machinery and equipment		
Acquisition cost Jan. 1	64,288	62,297
Translation differences	19	-8
Additions during the period	1,149	2,010
Acquisition of business unit		
Disposals during the period	-86	-11
Transfer to assets		
Acquisition cost at the end of the period	**65,370**	**64,288**
Accumulated depreciation Jan. 1	-59,357	-56,195
Translation differences	-19	8
Depreciation for the period	-2,483	-3,170
Depreciations on disposals		
Carrying amount at the end of the period	**3,511**	**4,931**
Other tangible assets		
Acquisition cost Jan. 1	88	88
Additions during the period		
Disposals during the period		
Acquisition cost at the end of the period	**88**	**88**
Translation differences		
Accumulated depreciation Jan. 1		
Depreciation for the period		
Carrying amount at the end of the period	**88**	**88**

Notes to the Consolidated Financial Statements

1000 EUR	Dec. 31, 2023	Dec. 31, 2022
Property, plant, and equipment total		
Acquisition cost Jan. 1	85,637	82,925
Translation differences	45	15
Additions during the period	1,925	2,707
Acquisition of business unit	0	0
Disposals during the period	-126	-11
Transfer to assets	0	0
Acquisition cost at the end of the period	**87,481**	**85,637**
Accumulated depreciation Jan. 1	-65,973	-62,035
Translation differences	-45	-15
Depreciation for the period	-3,242	-3,923
Depreciations on disposals	0	0
Carrying amount at the end of the period	**18,221**	**19,664**

Leases

The Group had the following amounts of property, plant and equipment acquired by finance leases:

Machinery and equipment		
Acquisition cost	12,614	11,883
Accumulated depreciation	-11,397	-10,419
Carrying amount at the end of the period	1,216	1,464
Buildings and constructures		
Acquisition cost	3,279	2,545
Accumulated depreciation	-1,950	-1,586
Carrying amount at the end of the period	1,329	959

Additions of property, plant, and equipment include assets acquired by leases of EUR 1.6 million in 1.1.–31.12.2023 (EUR 1.6 million in 2022).

12. INTANGIBLE ASSETS

1000 EUR	Dec. 31, 2023	Dec. 31, 2022
Capitalized development expenses		
Acquisition cost Jan. 1	74,601	67,954
Additions during the period	7,244	6,647
Acquisition of business unit		
Acquisition cost at the end of the period	**81,845**	**74,601**
Accumulated depreciation Jan. 1	-25,784	-19,887
Depreciation for the period	-5,608	-5,897
Carrying amount at the end of the period	**50,452**	**48,817**
Intangible rights		
Acquisition cost Jan. 1	6,032	5,719
Additions during the period	141	313
Disposals during the period		
Acquisition of business unit		
Transfer to assets		
Acquisition cost at the end of the period	**6,172**	**6,032**
Accumulated depreciation Jan. 1	-5,117	-4,686
Depreciation for the period	-450	-430
Carrying amount at the end of the period	**606**	**915**
Customer relations and technology		
Acquisition cost Jan. 1	1,780	1,780
Acquisition of business unit		
Acquisition cost at the end of the period	**1,780**	**1,780**
Accumulated depreciation Jan. 1	-1,528	-1,356
Depreciation for the period	-119	-173
Carrying amount at the end of the period	**133**	**252**

Notes to the Consolidated Financial Statements

1000 EUR	Dec. 31, 2023	Dec. 31, 2022
Other intangible assets		
Acquisition cost Jan. 1	4,882	4,876
Translation differences	-4	6
Additions during the period		
Transfer to assets		
Acquisition cost at the end of the period	**4,878**	**4,882**
Accumulated depreciation Jan. 1	-4,752	-4,458
Translation differences	4	-6
Depreciation for the period	-75	-289
Carrying amount at the end of the period	**54**	**130**
Intangible assets total		
Acquisition cost Jan. 1	87,295	80,329
Translation differences	-4	6
Additions during the period	7,385	6,960
Acquisition of business unit	0	0
Disposals during the period	0	0
Transfer to assets	0	0
Acquisition cost at the end of the period	**94,676**	**87,295**
Accumulated depreciation Jan. 1	-37,181	-30,387
Translation differences	4	-6
Depreciation for the period	-6,252	-6,788
Carrying amount at the end of the period	**51,246**	**50,114**
Goodwill		
Acquisition cost Jan. 1	5,836	5,823
Translation differences	-8	13
Additions during the period		
Disposals during the period		
Carrying amount at the end of the period	**5,828**	**5,836**

Impairment Test

Preparation of impairment analysis requires use of numerous estimates. The valuation is inherently judgmental and highly susceptible to change from period to period, because it requires management to make assumptions about future supply and demand related to its individual business units, future sales prices and investment needs and achievable cost levels.

The cash flow forecasts employed in impairment test calculations are based on the budgets for 2024 and the Long Range Plans (LRP) for 2025-2028 approved by management for the strategical period. Cash flows beyond five-year period are calculated by using the terminal value method. Future cash flows are exposed to the risks that are discussed in section "Risks and uncertainties" in the Report by the Board of Directors.

The used discount rate in impairment testing is Weighted Average Cost of Capital (WACC) before tax defined for Bittium. WACC defines average costs of equity and debt by noticing the risks belonging to the each component. The components of WACC are risk-free interest rate, market risk premium, beta, cost of debt, corporate income tax rate and target capital structure. WACC calculated according to these parameters amounted to 9.9 % (9.8 % in 2022). Valuation have applied the perpetual growth of 2 %.

In 2023 business did not reach the forecasted cash flow. This was mainly because of increase in working capital and slower than expected growth and profitability in the business.

The impairment test is done when needed, but at least once a year. Impairment tests made for 2023 financial statements did not indicate need for impairment bookings. Recoverable amounts exceed significantly the book value of goodwill and other assets. The terminal value represents 78 % of business value.

Sensitivity analysis was also carried out during the impairment test. Cash flow forecast was either decreased by 20% or the discount factor was increased by 5%. It was noticed that cash flows are relatively sensitive to increase in discount factor. However, there are no expectations for impairment losses in the future. However, based on sensitivity analysis management does not belive that possible changes to the major assumptions will not lead situation where accumulated cash amount would be below the book value.

Notes to the Consolidated Financial Statements

13. ACQUISITIONS

Acquisitions in 2023
In 2023 or in the comparative period 2022 the Group did not have acquisitions to be reported according to the IFRS standards.

14. SHARES IN ASSOCIATED COMPANIES

Bittium Group owns 25% of Coronaria Analyysipalvelut Oy shares at the end of 2023. 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. Coronaria Analyysipalvelut Oy has been consolidated using the equity method using the information that was available for the Bittium financial statements. The domicile of the company is Oulu.

Bittium Group owns 25% of evismo AG shares at the end of 2023. evismo AG provides medical remote diagnostics services in Switzerland. evismo AG has been consolidated using the equity method using the information that was available for the Bittium financial statements. The domicile of the company is in Zurich.

1000 EUR	2023	2022
Shares in associated companies		
Coronaria Analyysipalvelut Oy	1,021	988
evismo AG	0	0
Other associated companies	22	22
Assets total	**1,042**	**1,010**
Coronaria Analyysipalvelut Oy		
Current assets	688	494
Non-current assets	1,534	1,725
Non-current liabilities	51	76
Turnover	3,631	4,192
Net profit	154	111
evismo AG		
Current assets	532	261
Non-current assets	785	61
Non-current liabilities	2,365	1,045
Turnover	1,172	700
Net profit	-471	-650
Shares in associated companies		
Acquisition cost Jan. 1	1,010	1,283
Translation differences	0	-10
Additions during the period	38	28
Disposals during the period	-6	-291
Carrying amount at the end of the period	**1,042**	**1,010**

Notes to the Consolidated Financial Statements

15. OTHER FINANCIAL ASSETS

1000 EUR	2023	2022
At 1 January	112	112
Additions		
Disposals		
At the closing date	**112**	**112**

16. DEFERRED TAX LIABILITIES AND ASSETS

1000 EUR	Jan. 1, 2023	Recognized in the income statement	Acquisitions and disposals of subsidiaries	Dec. 31, 2023
Deferred tax assets				
Unutilized losses in taxation	526			526
Other items	6,890	-1		6,889
Total	**7,416**	**-1**		**7,415**

On December 31, 2023 the Group had 64.7 million euros tax losses and non-depreciated depreciations of which it had not booked deferred tax receivables in full amount due to the uncertainty of the future profits, their timing, taxation or location. The amount of these non booked deferred tax receivables is approximately 12.9 million euros. The aging of these tax losses begins from year 2024.

1000 EUR	Jan. 1, 2023	Recognized in the income statement	Acquisitions and disposals of subsidiaries	Dec. 31, 2023
Deferred tax liabilities				
Customer and technology assets	156	-42	0	114
Total	**156**	**-42**	**0**	**114**

1000 EUR	Jan. 1, 2022	Recognized in the income statement	Acquisitions and disposals of subsidiaries	Dec. 31, 2022
Deferred tax assets				
Unutilized losses in taxation	526			526
Other items	6,219	671		6,890
Total	**6,745**	**671**	**0**	**7,416**

On December 31, 2022, the Group had 64.6 million euros in tax losses and non-depreciated depreciations of which it had not booked deferred tax receivables in the full amount due to the uncertainty of the future profits, their timing, taxation, or location. The amount of these non-booked deferred tax receivables is approximately 12.9 million euros. The aging of these tax losses begins in the year 2023.

1000 EUR	Jan. 1, 2022	Recognized in the income statement	Acquisitions and disposals of subsidiaries	Dec. 31, 2022
Deferred tax liabilities				
Customer and technology assets	208	-52	0	156
Total	**208**	**-52**	**0**	**156**

Notes to the Consolidated Financial Statements

17. INVENTORIES

1000 EUR	Dec. 31, 2023	Dec. 31, 2022
Raw materials and supplies	17,790	18,255
Work in progress	4,395	3,251
Finished products	4,436	2,690
Other inventories		
Total	**26,621**	**24,196**

During the financial year 1.1.–31.12.2023, group has booked non-recurring write-down of EUR 2.5 million due to the impairment of inventory.

18. TRADE AND OTHER RECEIVABLES (CURRENT)

1000 EUR	Dec. 31, 2023	Dec. 31, 2022
Non-current receivables	730	856
Non-current receivables total	**730**	**856**
Current receivables:		
Trade receivables	32,813	37,242
Receivables from construction contracts	2,162	1,382
Prepaid expenses and accrued income	2,367	1,953
Other receivables	769	858
Current receivables total	**38,111**	**41,435**

Receivables are valued at nominal value or probable current value, whichever is lower.

During the financial year group has booked impairment losses from accounts receivable EUR 0.0 million (EUR 0.0 million 2022).

Age distribution of accounts receivable		
Current	31,196	35,598
Aged Overdue Amounts		
0–3 months	1,580	1,594
4–6 months	4	49
7–12 months	33	2
> 12 months		
Total	**32,813**	**37,242**

19. FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS

1000 EUR	Dec. 31, 2023	Dec. 31, 2022
Interest rate funds		
Balance sheet value on Jan. 1	5,696	5,732
Disposals	-5,695	
Changes in fair value		-36
Balance sheet value at the end of the period	**1**	**5,696**
Financial assets at fair value through profit or loss total		
Balance sheet value on Jan. 1	5,696	5,732
Disposals	-5,695	
Changes in fair value		-36
Balance sheet value at the end of the period	**1**	**5,696**

20. CASH AND SHORT-TERM DEPOSITS

Cash and short-term deposits	8,331	13,320
Total	**8,331**	**13,320**
Cash and cash equivalents at the consolidated cash flow statement consist of:		
Interest rate funds	1	5,696
Cash and short-term deposits	8,331	13,320
Total	**8,332**	**19,016**

Fair value of cash and cash equivalents does not significantly differ from the carrying amount.

Notes to the Consolidated Financial Statements

21. ISSUED CAPITAL AND RESERVES

	Shares 1000 PCS	Share premium 1000 EUR	Premium fund 1000 EUR	Invested non-restricted equity fund 1000 EUR	Total 1000 EUR
On December 31, 2022	35,702	12,941	0	25,953	38,894
On December 31, 2023	35,702	12,941	0	25,953	38,894

Shares and the Share Capital
The shares of Bittium Corporation are listed on the NASDAQ OMX Helsinki Ltd. The Corporation has one series of shares. All the 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 Finnish Central Securities Depository 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 per value of the company's share is EUR 0.10. The company has 216,146 own shares in its possession.

Translation Differences
The translation reserve comprises all foreign exhange differences arising from the transition of the financial statements of foreign subsidiaries.

Dividends
The Board of Directors proposes to the Annual General Meeting that a dividend of EUR 0.03 per share be paid based on the balance sheet to be adopted for the financial year ended December 31, 2023.

The Board of Directors furthermore proposes that the Annual General Meeting would authorize the Board of Directors to decide, at its discretion, on the payment of an extraordinary dividend of EUR 0.03 per share, by October 31, 2024. The Board of Directors expects that this discretionary extraordinary dividend will be paid, unless there is a significant deterioration in the business environment during 2024.

22. SHARE-BASED PAYMENT PLANS

Share-based Remuneration of the Board of Directors
During the financial year 2023, the group has paid of total part remuneration of the board of directors of Bittium Plc by the shares of Bittium. The shares were acquired from the stock exchange. The main terms of the remuneration arrangement are presented in the table below.

Share-based Remuneration of the Board of Directors paid in financial year 2023

Form of the reward	Shares
Grant date	May 3, 2023
Total amount of executed shares	14,611
Share price at the grant date, EUR	4.25
Total expenses of the reward, EUR million	0.062
Vesting conditions	Ownership of the shares was transferred to the recipients at once but the recipients have agreed on the lock-up undertaking until the membership in the board has ceased.
Execution	In shares

Share-based Remuneration of the Management

The Board of Directors of Bittium Corporation has decided on the establishment of a one-off fixed Matching Share Plan for the Chief Executive Officer (CEO) of Bittium (below also the "Plan"). The fixed Matching Share Plan is a one-off plan, in which the CEO is expected to purchase shares of Bittium Corporation with at least the value of 200,000 euros at a price formed in public trading on Nasdaq Helsinki. Bittium Corporation will match the share investment by way of the CEO receiving matching shares without consideration with a net value of 100,000 euros. The matching shares will be paid in listed shares of Bittium Corporation. The matching shares received by the CEO based on the Plan will be subject to a transfer restriction (lock-up) of three years.

Share-based Remuneration of the Management paid in financial year 2023

Form of the reward	Shares
Grant date	June 1, 2023
Total amount of executed shares	23,854
Share price at the grant date, EUR	4.16
Total expenses of the reward, EUR million	0.099
Vesting conditions	Ownership of the shares was transferred to the CEO at once but the matching shares will be subject to a transfer restriction (lock-up) of three years.
Execution	In shares

Share-based Remuneration of the Management, PSP 2023–2025

The Board of Directors of Bittium Corporation has decided on the establishment of a new share-based long-term incentive scheme for the Company's management. It comprises a Performance Share Plan ("PSP"). The PSP consists of three annually commencing three-year performance share plans, PSP 2023–2025, PSP 2024–2026 and PSP 2025–2027, 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 the following two plans, PSP 2024–2026 and PSP 2025–2027, is, however, subject to a separate Board decision. Eligible to participate in the first plan, PSP 2023–2025, are the members of Bittium's Management Group. The performance measure based on which the potential share reward under the first plan, PSP 2023–2025, will be paid is the revenue growth 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 and in cash.

Form of the reward	Shares
Grant date	June 22, 2023
Total amount of the shares at the most	250,000
Share price at the grant date, EUR	4.365
Total expenses of the reward at the most, EUR million	1.1
Execution	In shares

The performance measure for share-based incentive scheme PSP 2023–2025 was not reached and the reward was not booked in financial year 1.1.–31.12.2023.

Notes to the Consolidated Financial Statements

Share-based Remuneration of the Board of Directors

During the financial year 2022, the group has paid of total part remuneration of the board of directors of Bittium Plc by the shares of Bittium. The shares were acquired from the stock exchange. The main terms of the remuneration arrangement are presented in the table below.

Share-based Remuneration of the Board of Directors paid in financial year 2022

Form of the reward	Shares
Grant date	May 5, 2022
Total amount of executed shares	12,247
Share price at the grant date, EUR	5.07
Total expenses of the reward, EUR million	0.062
Vesting conditions	Ownership of the shares was transferred to the recipients at once but the recipients have agreed on the lock-up undertaking until the membership in the board has ceased.
Execution	In shares

Share-based Remuneration of the Management

During the financial year 2022, the group has paid share-based incentive scheme remuneration for the Management of Bittium Plc by the shares of Bittium. Half of the remuneration was paid in cash and half by the new shares issued in directed share issue without consideration. The main terms of the remuneration arrangement are presented in the table below.

Share-based Remuneration of the Management paid in financial year 2022

Form of the reward	Shares
Grant date	March 25, 2022
Total amount of executed shares	13,467
Share price at the grant date, EUR	5.44
Total expenses of the reward, EUR million	0.07
Vesting conditions	Ownership of the shares was transferred to the recipients at once but the recipients have agreed on the lock-up undertaking for two years.
Execution	In shares

Share-based Remuneration of the Management

The Management of Bittium Corporation has a Share-Based Incentive Scheme. The Performance Share Plan (PSP) 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 the following two plans, PSP 2021–2023 and PSP 2022–2024, is, however, subject to a separate Board decision. The performance measures based on which the potential share reward under PSP 2020–2022 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.

Form of the reward	Shares
Grant date	February 10, 2022
Total amount of the shares at the most	122,100
Share price at the grant date, EUR	5.2
Total expenses of the reward at the most, EUR million	0.7
Execution	In shares

23. PROVISIONS

1000 EUR	Guarantee provisions	Expected credit losses	Others	Total
December 31, 2022	4,280	365	16	4,661
Increase in provisions	1,866			1,866
Utilized provisions	-1,668		-8	-1,676
Reversal of untilized provisions	0	-56		-56
December 31, 2022	**4,478**	**309**	**9**	**4,796**
Current provisions	4,478	309	9	4,796
Total	**4,478**	**309**	**9**	**4,796**

24. FINANCIAL LIABILITIES

1000 EUR	Dec. 31, 2023	Dec. 31, 2022
Non-current loans		
Non-current loans from financial institutions		20,000
Finance lease liabilities	1,470	1,335
Total	**1,470**	**21,335**
Current loans		
Current loans from financial institutions	20,000	
Lease liabilities	1,098	1,110
Total	**21,098**	**1,110**
Repayment schedule of long-term loans:		
2023		1,110
2024	21,098	20,703
2025	665	350
2026	395	149
2027	273	58
Later	137	76
Total	**22,568**	**22,446**

Notes to the Consolidated Financial Statements

The interest-bearing non-current loans are distributed by currency as follows:

1000 EUR	Dec. 31, 2023	Dec. 31, 2022
EUR	1,470	21,335
Total	**1,470**	**21,335**

The interest-bearing current loans are distributed by currency as follows:

1000 EUR	Dec. 31, 2023	Dec. 31, 2022
EUR	21,098	1,110
Total	**21,098**	**1,110**

Maturities of the finance lease liabilities:

1000 EUR	Dec. 31, 2023	Dec. 31, 2022
Lease liabilities - Minimum lease payments		
Within one year	1,225	1,159
After one year but no more than five years	1,413	1,306
After five years	92	96
Lease liabilities - Present value of minimum lease payments	2,568	2,446
Within one year	1,098	1,110
After one year but no more than five years	1,397	1,260
After five years	73	76
Future finance charges	162	115
Total amount of finance lease liabilities	2,730	2,561

25. CHANGES IN LIABILITIES ARISING FROM FINANCING ACTIVITIES

1000 EUR	Jan. 1, 2023	Cash flows	New leases	Dec 31, 2023
Lease and financing contracts	22,446	-1,344	1,467	22,568
Total	**22,446**	**-1,344**	**1,467**	**22,568**

26. TRADE AND OTHER PAYABLES

1000 EUR	Dec. 31, 2023	Dec. 31, 2022
Non-current liabilities		
Other non-current liabilities, non-interest bearing		
Non-current advances received		
Other non-current liabilities, non-interest bearing	200	192
Total	**200**	**192**
Current liabilities		
Trade and other payables		
Trade liabilities	5,984	10,251
Accrued liabilities, deferred income	10,342	9,394
Other liabilities	6,070	6,782
Total	**22,397**	**26,427**

Material of accrued expenses and deferred income consists of personnel expenses and other accruals.

The fair value of the other liabilities than derivatives doesn't significantly differ from the initial carrying value, because the impact on discounting is not significant when taking into account the maturities of the loans.

Notes to the Consolidated Financial Statements

27. FINANCIAL RISK MANAGEMENT

Under its normal business activities, Bittium Corporation is exposed to several financial risks. The primary financial risks are foreign exchange rate risk, interest rate risk, investment risk, and default risk. The goal of the Group's financial risk management function is to reduce the adverse effects of price fluctuations and other uncertainties on earnings, balance sheet, and cash flows as well as to ensure sufficient liquidity. In its risk management, the Group uses financial instruments such as forward exchange agreements and interest rate swaps. External professional portfolio managers are employed for investing activities.

The Group's general risk management principles are approved by the Board of Directors. The responsibility for their implementation lies with the group finance department together with operational units. The group finance department identifies and assesses risks and obtains relevant financial instruments for hedging them in close co-operation with the operative units. Management evaluates risk concentrations from the viewpoint of business activities, taking into consideration shared factors between underlying variables such as those arising from changes in economic conditions or other variables. Operations and funding programs executed in the financial markets are mainly concentrated into the parent company. Subsidiaries are mainly funded through intra-company loans and group account overdraft credit limits.

The Group's financial risks are divided into market, default and liquidity risk.

Market risks

Market risks are caused by changes in foreign exchange rates, interest rates, and the price of securities. Fluctuations in these may have an impact on the Group's income statement, cash flow or balance sheet.

Foreign exchange rate risk

The Group operates globally and is exposed to transaction risk from foreign exchange positions as well as to risks due to the translation of investments in different currencies to the functional currency of the parent company. The most relevant currencies for the Group are the euro and the US dollar. Foreign exchange rate risk is caused by commercial activities, monetary items on the balance sheet and net investments in foreign subsidiaries. A business unit's functional currency or generally used currencies (EUR, USD) are used as invoicing currency. Additional information on functional currency and foreign currency conversion is available in the accounting principles section of the consolidated financial statements.

The Group follows a currency strategy that aims at securing the margin of business activities in changing market conditions by minimizing the effect of fluctuations in foreign exchange rates. According to the principles of the currency strategy, surely considered and the most probable net cash flow in a particular currency is hedged as a net position. The cash flow is defined based on the net position of the trade receivables, trade payables, order intake, and forecasted net currency cash flow. According to the currency strategy, the degree of hedging can vary from approximately 50% to 100% of the forecasted net position when the net position exceeds EUR 1 million. The Group could also apply hedge accounting as defined in the IFRS 9 standard. Hedge accounting was not applied during 2023. At the end of the financial period, the counter value of the hedged net position was EUR 2.2 million. During the financial year, the amount of the hedged position has been changing between EUR 1.5–3.5 million.

The Group has hedged the transaction risk related to its income statement, and the translation risk related to equity on the balance sheet or economic risk has not been hedged. Foreign currencies denominated equities of foreign subsidiaries on December 31, 2023, was EUR 2.5 million (EUR 4.5 million in 2022) from which dollar-denominated equities of foreign subsidiaries were EUR 2.2 million (EUR 4.2 million in 2022).

On the closing date, the Group had the following foreign exchange derivative contract nominal amounts outstanding (the nominal amounts do not represent the amounts exchanged by the parties):

1000 EUR	2023	2022
Forward contracts		
Market value	19	33
Nominal value	2,200	1,400

Dollar-denominated assets and liabilities translated to euros using the closing date's value:

1000 EUR	2023	2022
Long-term assets	0	0
Long-term liabilities	0	0
Current assets	5,345	8,049
Current liabilities	3,118	3,825

The table below describes the 10% appreciation or depreciation of the euro against the US dollar, with other variables remaining constant. The sensitivity analysis is based on foreign currency-denominated assets and liabilities as of the closing date. The change in dollar-denominated trade receivables and debt would primarily have been due to fluctuations in the foreign exchange rate.

	Changes in income statement before tax		Changes in equity before tax	
1000 EUR	2023	2022	2023	2022
EUR appreciates	-200	-400	-200	-400
EUR depreciates	200	500	200	500

Notes to the Consolidated Financial Statements

Interest Rate Risk
Part of the Group's debt is tied to fixed interest rates.
At the closing date, the Group had the following fixed interest rate debts outstanding:

1000 EUR	2023	2022
Fixed interest rate debts	2,568	2,446

The table below describes the interest rate risk of debts should there have been a ±1% change in interest rates of short-term reference interest rate debts, with other variables remaining constant. The figures presented indicate the change in yearly interest expense calculated using the average amount of debt during the financial period.

	Changes in income statement before tax		Changes in equity before tax	
1000 EUR	2023	2022	2023	2022
Loan stock January, 1	22,400	22,300		
Loan stock December, 31	22,600	22,400		
Average loan stock	22,500	22,400		
Change in interest	+/- 200	+/- 200	+/- 200	+/- 200

Market Risk of Investment Activities
The Group's interest investments result in interest rate exposure, but their effect is not considered significant. The Group's revenue and operative cash flows are mainly independent of market rate fluctuations.

The Group invests in low-risk interest rate funds and therefore it has not been exposed to the security price risk of fluctuations in the stock markets. According to the Group's principles, investments related to cash management are made in liquid and low-risk money markets or bond instruments and thus have not been hedged using derivatives.

The table below describes the distribution of investments in securities at the closing date.

	2023	2022
Stock shares	0.0%	0.0%
Bonds	0.0%	76.8%
Money market investments	100.0%	23.2%
Total	**100.0%**	**100.0%**

The combined value of the above instruments during the financial period has ranged from approximately EUR 0.0 to EUR 5.8 million. At the closing date their value was approximately EUR 0.0 million. This risk concentration has been managed by investing in well-spread and low-risk money market funds.

The table below describes the price risk of the investments if they had exhibited a ±1% change in a market rate of interest, other variables remaining constant. Financial assets that are recognized at market value in the income statement affect net income. Changes in the value of for-sale financial assets affect equity. In the calculations it is presumed that the Group's investments change with the interest rate level in question. The sensitivity analysis describes the total market risk of investment activity because all investments are in the interest rate instruments.

	Changes in income statement before tax		Changes in equity before tax	
1000 EUR	**2023**	**2022**	**2023**	**2022**
Interest investments	+/- 0	+/- 0	+/- 0	+/- 0

Default risk
Group's credit risks are mainly related to accounts receivable, cash, financial investments and derivatives used in hedging. In it's deposit, financial investment and hedging activities Bittium operates only with well-known partners who have good credit rating.

About 82% of the Group's trade receivables are from ten customers. The other trade receivables are distributed among a wide customer base and across several geographical areas. Credit risk is mitigated, for example, by documentary credits or bank guarantees when needed. Default risk concentration is mainly assessed as a single customer's share of total trade receivables but also according to the receivable's date of maturity.

During the past financial year, the amount of recognized credit losses was approximately EUR 0.0 million (EUR 0.0 million in 2022). The amount of loans granted to affiliated companies were EUR 0.2 million at the end of 2023 (EUR 0.1 million in 2022). Group did not have capital loans granted outside of the Group at the end of 2023 (EUR 0.0 million in 2022).

The amount of the Group's counterparty default risk is consistent with the book value of financial assets at the closing date. For the maturity distribution of trade receivables, see note 19.

Liquidity risk
The Group and business segments strive to continuously evaluate and monitor the amount of liquid funds needed for business operations and loan repayments. The Group strives to guarantee the availability and flexibility of financing by its strong financial position and liquid investments. Bittium has EUR 20.0 million senior loan and EUR 10.0 million committed overdraft credit facility agreement with Nordea Bank Finland Plc. Maturity date for the senior loan is May 24, 2024 and the credit limit agreement is valid until May 24, 2024. Bittium has started negotiations to arrange refinancing for the financial instruments due on 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, interest bearing debt to EBITDA, and transferring property and pledging. These credit facilities were in use EUR 0.0 million at the end of the reporting period. For the maturity distribution of the Group's debt, see note 24.

Capital structure management
The Group strives to optimize its capital structure and thus support business activities by ensuring normal operating conditions under all circumstances. An optimal capital structure also ensures that the cost of capital is minimized.

The capital structure is affected by dividend policy and share issuance. The Group can alter and adjust dividends paid to shareholders as well as share repurchases. The Group can also alter and adjust the amount of shares issued, or make decisions on the sale of assets.

The management has continuously monitored the development of the Group's net gearing and solvency ratio. The Group's interest-bearing net debt at the end of 2023 was EUR 14.2 million (EUR 3.4 million in 2022) and net gearing was 13.2% (3.0% in 2022). The Group's solvency ratio at the end of 2022 was 69.7% (69.7% in 2022).

Notes to the Consolidated Financial Statements

Fair Values of Financial Assets and Liabilities

This section presents the Group's fair valuing principles for all financial instruments. The table below presents book values for each item in detail. Their fair values are not considered to materially differ from the book values presented in the consolidated balance sheets.

1000 EUR	Note	Book value 2023	Fair value 2023	Book value 2022	Fair value 2022
Financial assets					
Other financial assets	15	112	112	112	112
Non-Current receivables	18	730	730	856	856
Trade receivables	18	32,816	32,816	37,242	37,242
Financial assets at fair value through profit or loss	19	1	1	5,696	5,696
Cash and cash equivalents	20	8,329	8,329	13,320	13,320
Currency forwards	19	19	19	33	33
Financial liabilities					
Bank loans	24	20,000	20,000	20,000	20,000
Trade payables and advances received	25	9,059	9,059	13,910	13,910
Currency forwards	26	0	0	0	0

Investments in Shares and Funds and Other Investments
For-sale financial assets consist mainly of money market investments that fair values are based on the quotes of the closing day (IFRS 13 fair value hierarchy level 1; quoted prices (unadjusted) in active markets for identical assets or liabilities).

Derivatives
The fair values of forward contracts are defined based on publicly quoted currency and interest rate information and using commonly accepted valuation methods (IFRS 13 fair value hierarchy level 2; instruments whose fair value is observable either directly (i.e. as prices) or indirectly (i.e. derived from prices)). These calculations have been carried out by an outside professional party.

Bank Loans
Book values are considered to closely approximate fair values.

Trade Receivables and Other Receivables
The original book value of receivables is considered to equal their fair values, since the effect of discounting is non-significant considering the maturities of the receivables.

Trade Payables and Other Debts
The original book value of payables and other debts is considered to equal their fair values, since the effect of discounting is non-significant considering the maturities of the receivables.

28. ADJUSTMENTS TO NET CASH FROM OPERATING ACTIVITIES

1000 EUR	Dec. 31, 2023	Dec. 31, 2022
Business transactions without payments		
Depreciations	9,479	10,699
Share of profits in associated companies	-32	185
Other adjustments	-17	483
Total	**9,430**	**11,366**

29. OPERATING LEASE AGREEMENTS

The Group as Lessee

The total of future minimum lease payments under non-cancellable operating leases for each of the following periods:

1000 EUR	Dec. 31, 2023	Dec. 31, 2022
Not later than one year	53	63
Later than one year and not later than five years		
After five years		

The Group owns its facilities in Oulu and Kuopio. The facilities in other locations are rented. In average the maturities of the lease agreements are from 1 month to 5 years, and normally they include an option to extend the rental period from originally agreed end date. IFRS 16 Leases standard has come into force on 1st of January 2019. According to the standard, in principle all lease contracts of the Group are recognized as assets and liabilities in Group’s Balance Sheet.

Notes to the Consolidated Financial Statements

30. SECURITIES AND CONTINGENT LIABILITIES

1000 EUR	Dec. 31, 2023	Dec. 31, 2022
Against own liabilities		
Floating charges		
Guarantee limits	2,989	2,992
Other contractual liabilities		
Falling due in the next year	2,311	2,504
Falling due after one year	861	708
Mortgages are pledged for liabilities totaled		
Other liabilities (guarantees issued)		
Material purchase commitments	8,152	13,912

31. RELATED PARTY DISCLOSURES

The Group has the following structure:

	Country of incorporation	Owned by Parent %	Owned by Group %
Parent			
Bittium Oyj	Finland		
Subsidiaries			
Bittium Technologies Oy	Finland	100.00	100.00
Bittium Wireless Oy	Finland	0.00	100.00
Bittium Safemove Oy	Finland	0.00	100.00
Bittium Biosignals Oy	Finland	0.00	100.00
Bittium Medanalytics Oy	Finland	0.00	100.00
Kiinteistöosakeyhtiö Oulun Ritaharjuntie 1	Finland	0.00	100.00
Bittium Germany GmbH	Germany	0.00	100.00
Bittium Mexico S.A. de C.V.	Mexico	0.00	100.00
Bittium USA, Inc.	USA	0.00	100.00
Bittium Singapore Pte. Ltd.	Singapore	0.00	100.00

Information on the associated companies is presented in Note 15.

Related party transactions and balances:

1000 EUR	2023	2022
Associated companies		
Net sales	1,462	817
Receivables	953	1,057
Debts	150	204

Related party transactions have occured based on market terms.

1000 EUR	2023	2022
Employee benefits for key management		
Salaries and remuneration		
Managing director of the parent		
Hannu Huttunen 1.1.–31.12.2022, 1.1.–31.3.2023	62	298
Johan Westermarck, 1.4.–31.12.2023	265	
Total	**328**	**298**
Remuneration of the members of the board of the parent,		
the financial committee and the managing directors of the business segments		
Erkki Veikkolainen 1.1.–31.12.2022, 1.1.–31.12.2023	32	32
Riitta Tiuraniemi 1.1.–31.12.2022, 1.1.–31.12.2023	21	22
Pekka Kemppainen 1.1.–31.12.2022, 1.1.–31.12.2023	18	19
Petri Toljamo 1.1.–31.12.2022, 1.1.–31.12.2023	20	21
Veli-Pekka Paloranta 1.1.–31.12.2022, 1.1.–31.12.2023	20	20
Total	**112**	**114**
Share-based incentives		
Board of Directors	62	62
Management	212	142
Total	**274**	**204**

Except for the Remuneration of the Management and the Members of the Board Bittium has not had significant business transactions with its Board, Managing Director, or Members of the Group Executive Board, including the companies that they have control or significant influence in. There have not been any business transactions or open balances between the related parties.

Members of the group executive board	**1,069**	**1,008**

Loans and guarantees to related party

There are no loans or guarantees granted between the related parties.

Notes to the Consolidated Financial Statements

32. KEY RATIOS

	IFRS 2023	IFRS 2022	IFRS 2021	IFRS 2020	IFRS 2019
INCOME STATEMENT, MEUR					
Net sales, MEUR	75.2	82.5	86.9	78.4	75.2
Net sales change, %	-8.8	-5.1	10.8	4.2	19.7
Operating profit/loss, MEUR	-4.3	0.3	3.2	2.1	6.3
% of net sales	-5.7	0.4	3.7	2.7	8.4
Profit/loss for continuing operations before taxes, MEUR	-5.3	-0.4	2.5	1.6	5.9
% of net sales	-7.0	-0.5	2.9	2.1	7.9
Profit for the year from continuing operations, MEUR	-5.4	0.3	3.3	2.2	7.6
% of net sales	-7.2	0.0	3.8	2.8	10.2
Profit after tax for the year from discontinued operations, MEUR					
% of net sales	0.0	0.0	0.0	0.0	0.0
Profit for the year attributable to equity holders of the parent, MEUR	-5.4	0.3	3.3	2.2	7.6
% of net sales	-7.2	0.0	3.8	2.8	10.2
BALANCE SHEET, MEUR					
Non-current assets	84.6	85.0	85.9	86.4	80.5
Inventories	26.6	24.2	18.8	20.9	18.2
Current assets	46.4	60.5	61.4	50.7	55.6
Shareholders' equity	107.6	115.8	116.8	114.2	112.3
Non-current liabilities	1.8	21.7	21.5	21.9	22.1
Current liabilities	48.3	32.2	27.8	21.8	19.9
Balance sheet total	157.7	169.7	166.1	158.0	154.2

	IFRS 2023	IFRS 2022	IFRS 2021	IFRS 2020	IFRS 2019
PROFITABILITY AND OTHER KEY FIGURES					
Return on equity, % (ROE)	-4.9	0.2	2.9	1.9	6.9
Return on investment, % (ROI)	-3.0	0.3	2.3	1.6	5.0
Interest-bearing net liabilities, (MEUR)	14.2	3.4	0.2	-2.1	-12.6
Net gearing, %	13.2	3.0	0.2	-1.9	-11.2
Equity ratio, %	69.6	69.7	72.4	73.1	73.4
Gross investments, (MEUR)	9.4	9.5	9.6	17.4	21.3
Gross investments, % of net sales	12.4	11.6	11.1	22.2	28.3
R&D costs, (MEUR)	20.2	22.3	19.8	22.8	25.1
R&D costs, % of net sales	27.0	27.0	22.8	29.1	33.4
Average personnel during the period, parent and subsidiaries	601	641	664	673	665
STOCK-RELATED FINANCIAL RATIOS					
Earnings per share from continuing operations, EUR					
Basic earnings per share	-0.153	0.007	0.093	0.061	0.214
Diluted earnings per share	-0.153	0.007	0.093	0.061	0.214
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	-0.153	0.007	0.093	0.061	0.214
Diluted earnings per share	-0.153	0.007	0.093	0.061	0.214
Equity per share, EUR	3.03	3.24	3.27	3.20	3.15
Dividend per share, EUR *)	0.03	0.05	0.04	0.03	
Dividend per earnings, %	-19.7	704.5	43.0	50.9	
P/E ratio	-31.5	560.1	56.9	94.8	30.4
Effective dividend yield, %	0.6	1.3	0.8	0.5	
Market values of shares, (EUR)					
Highest	5.20	6.08	7.89	7.67	8.03
Lowest	3.31	3.47	4.93	3.40	5.91
Average	4.22	4.71	6.18	5.74	6.70
At the end of the period	4.81	3.98	5.30	5.79	6.50
Market value of the stock, (MEUR)	170.7	141.9	189.2	206.7	232.0
Trading value of shares					
MEUR	17.0	44.0	83.2	117.9	51.5
1000 PCS	4,021	9,346	13,464	20,557	7,689
Related to the average number of shares, %	11.3	26.2	37.7	57.6	21.5
Adjusted number of the shares at the end of the period (1000 PCS)	35,486	35,702	35,702	35,693	35,693
Adjusted number of the shares average for the period (1000 PCS)	35,609	35,702	35,700	35,693	35,693
Adjusted number of the shares average for the period diluted with stock options (1000 PCS)	35,609	35,702	35,700	35,693	35,693

*) Proposal of the Board of Directors for 2023.

Notes to the Consolidated Financial Statements

CALCULATION OF KEY RATIOS

Return on equity % (ROE) = $\frac{\text{Profit for the year x 100}}{\text{Total equity (average for the accounting period)}}$

Return on investment % (ROI) = $\frac{\text{Profit before tax + interest and other financial expenses x 100}}{\text{Balance sheet total - interest-free liabilities (average for the accounting period)}}$

Net gearing, % = $\frac{\text{Interest-bearing liabilities - cash and cash equivalents x 100}}{\text{Total equity}}$

Equity ratio, % = $\frac{\text{Total equity x 100}}{\text{Balance sheet total - advances received}}$

Earnings per share = $\frac{\text{Profit attributable to equity holders of the parent}}{\text{Share issue adjusted number of the shares average for the period}}$

Equity per share = $\frac{\text{Equity attributable to equity holders of the parent}}{\text{Share issue adjusted number of the shares at the end of the period}}$

Dividend per share = $\frac{\text{Dividend for the period (Board's proposal) per share}}{\text{Adjustment coefficient of post-fiscal share issues}}$

Dividend per earnings, % = $\frac{\text{Dividend per share x 100}}{\text{Earnings per share}}$

P/E ratio = $\frac{\text{Share issue adjusted share price at the end of the period}}{\text{Earnings per share}}$

Effective dividend yield, % = $\frac{\text{Dividend per share x 100}}{\text{Share issue adjusted share price at the end of the period}}$

33. SHAREHOLDINGS AND SHARES

Breakdown of Shares by Shareholding, December 31, 2023

Number of shares	Number of shareholders	Percentage of shareholders	Number of shares	Percentage of shares and votes
1 - 100	10,222	46.4	451,579	1.3
101 - 500	6,787	30.8	1,783,314	5.0
501 - 1000	2,132	9.7	1,671,292	4.7
1001 - 5000	2,153	9.8	4,833,000	13.5
5001 - 10000	365	1.7	2,659,155	7.4
10001 - 50000	303	1.4	5,934,090	16.6
50001 - 100000	33	0.2	2,192,226	6.1
100001 - 500000	25	0.1	5,620,020	15.7
500001 - 999999999999	10	0.0	10,557,588	29.6
Total	**22,030**	**100.0**	**35,702,264**	**100.0**
Nominee-registered	9		1,350,441	3.8

Breakdown of Shareholders by Shareholder Type, December 31, 2023

Shareholders by shareholder type	Number of shareholders	Percentage of shareholders	Number of shares	Percentage of shares and votes
Non-financial corporations	511	2.3	4,191,362	11.7
Financial sector and insurance corporations	22	0.1	1,969,316	5.5
General government	4	0.0	3,165,537	8.9
Non-profit institutions	28	0.1	104,936	0.3
Households	21,376	97.0	24,857,249	69.6
Foreign owners	80	0.4	63,423	0.2
Nominee-registered shares	9	0.0	1,350,441	3.8
Total	**22,030**	**100.0**	**35,702,264**	**100.0**

Notes to the Consolidated Financial Statements

Major Shareholders, December 31, 2023

	Number of shares	Percentage of shares and votes
Number of shares total	**35,702,264**	**100.0**
1. Veikkolainen Erkki, Chairman of the Board	1,822,112	5.1
2. Ponato Oy	1,501,300	4.2
3. Hulkko Juha	1,419,370	4.0
4. Varma Mutual Pension Insurance Company	1,365,934	3.8
5. Ilmarinen Mutual Pension Insurance Company	1,296,529	3.6
6. Special Investment Fund Aktia Mikro Markka	700,000	2.0
7. Skandinaviska Enskilda Banken AB	698,499	2.0
8. Hildén Kai	658,000	1.8
9. Citibank Europe Plc	592,844	1.7
10. Elo Mutual Pension Insurance Company	503,000	1.4
Total	**10,557,588**	**29.6**
Others (incl. nominee-registered shares)	25,144,676	70.4
The Board and CEO		
Veikkolainen Erkki, Chairman of the Board	1,822,112	5.1
Kemppainen Pekka, Member of the Board	8,326	0.0
Paloranta Veli-Pekka, Member of the Board	8,562	0.0
Tiuraniemi Riitta, Member of the Board	19,292	0.1
Toljamo Petri, Member of the Board	26,176	0.1
Westermarck Johan, CEO	71,854	0.2
	1,956,322	**5.5**

Income Statement, Parent

1000 EUR	Notes	2023	2022
NET SALES	1, 2	**1,316**	**790**
Other operating income	3	0	0
Personnel expenses	4	-1,878	-1,154
Depreciation and reduction in value	5	- 15	- 14
Other operating expenses	6	-1,150	- 872
OPERATING PROFIT		**-1,728**	**-1,250**
Financial income and expenses	7	4,809	1,590
PROFIT (LOSS) BEFORE APPROPRIATIONS AND TAXES		**3,081**	**340**
Appropriations	8	**-2,200**	**1,500**
PROFIT (LOSS) BEFORE APPROPRIATIONS AND TAXES		**881**	**1,840**
Taxes	9	**0**	**0**
NET PROFIT FOR THE FINANCIAL YEAR		**881**	**1,840**

Balance Sheet, Parent

1000 EUR	Notes	Dec. 31, 2023	Dec. 31, 2022
ASSETS			
Non-current assets			
Intangible assets	10	72	77
Tangible assets	11	71	71
Investments	12	39,750	39,750
Non-current assets total		39,893	39,898
Current assets			
Receivables			
Current receivables	13	109,883	100,152
Receivables total		109,883	100,152
Financing securities	14	1	5,696
Cash and bank deposits		5,836	8,845
Current assets total		115,720	114,693
TOTAL ASSETS		**155,613**	**154,591**
SHAREHOLDERS' EQUITY AND LIABILITIES			
Shareholders' equity	15		
Share capital		12,941	12,941
Invested non-restricted equity fund		25,953	25,953
Retained earnings		89,481	90,472
Net profit/loss for the year		881	1,840
Shareholders' equity total		129,256	131,206
Provisions			
Provisions, non-current			
Provisions, current			
Liabilities	16		
Non-current liabilities			20,000
Current liabilities		26,357	3,385
Liabilities total		26,357	23,385
SHAREHOLDERS' EQUITY AND LIABILITIES TOTAL		**155,613**	**154,591**

Cash Flow, Parent

1000 EUR	2023	2022
CASH FLOW FROM OPERATING ACTIVITIES		
Profit (loss) before taxes +/-	881	1,840
Adjustments		
Depreciation according to plan +	15	14
Effects of non-cash business activities	2,200	-1,500
Financial income and expenses +/-	-4,809	-1,590
Cash flow before change in net working capital	-1,713	-1,236
Change in net working capital		
Change in interest-free short-term receivables	-581	8
Change in interest-free short-term payables	58	169
Cash flow before financing activities	-2,235	-1,058
Interest paid -	-946	-881
Dividends received +	0	0
Interest received +	5,828	2,471
Net cash from operating activities	**2,647**	**531**
CASH FLOW FROM INVESTING ACTIVITIES		
Purchase of tangible and intangible assets -	-10	-4
Net cash used in investing activities	**-10**	**-4**
CASH FLOW FROM FINANCIAL ACTIVITIES		
Change in interest-free short-term financial receivables in Group	-10,650	-152
Change in interest-free short-term financial payables in Group	640	48
Received Group contributions	1,500	0
Dividend paid and capital repayment	-1,785	-1,428
Purchases of own shares	-1,046	-144
Net cash used in financial activities	**-11,341**	**-1,676**
NET CHANGE IN CASH AND CASH EQUIVALENTS	**-8,704**	**-1,149**
Cash and cash equivalents at beginning of the period	14,541	15,690
Cash and cash equivalents at end of the period	5,837	14,541
Change in cash and cash equivalents in the balance sheet	-8,704	-1,149

Cash and cash equivalents include liquid and low risk financing securities.

Accounting Principles for the Preparation of Financial Statements, Parent Company

The financial statements have been prepared in accordance with the Finnish Accounting Act.

Valuation Principles

Valuation of Non-current Assets
Non-current assets are capitalized in the balance sheet at the original acquisition cost deducted by accumulated depreciation. Depreciation according to the plan is calculated either using the straight-line method or the reducing balance method, taking into consideration of the useful life of assets. The depreciation periods are:

Intangible assets	3–10 years
Tangible assets	3–5 years

Valuation of Financial Securities
Financial securities are valued at fair value. The fair value of forward exchange are defined based on forward exchange prices on balance sheet date and option contracts are defined based on market prices on balance sheet date.

Pensions
The Company has organized pension coverage for its personnel through independent pension insurance companies. The pension insurance expenditures are included into personnel expenses.

Leasing Agreements
Leasing agreements and fixed-term rental agreements are reported as contingent liabilities off the balance sheet.

Income Tax
Taxes of the financial year have been reported in the income statement as income taxes. Deferred tax or liabilities or receivables has not been recorded on the financial statement.

Foreign Currency Items
The transactions in the income statement have been converted into euro using the exchange rate of the transaction date. Receivables and payables denominated in foreign currency have been converted into euro by using the exchange rate of the European Central Bank at the balance sheet date.

Net Sales
Sales of goods is recorded when goods have been handed over to the customer or the services have been rendered. Sales are shown net of indirect sales taxes and discounts.

Notes to the Financial Statements of the Parent Company

1000 EUR	2023	2022
1. NET SALES BY SEGMENTS		
Other functions	1,316	790
Total	**1,316**	**790**
2. NET SALES BY MARKET AREAS		
Europe	1,158	701
Americas	158	89
Asia		
Total	**1,316**	**790**
3. OTHER OPERATING INCOME		
Other operating income	0	0
Total	**0**	**0**
4. NUMBER OF PERSONNEL AND PERSONNEL EXPENSES		
Average number of personnel during the period		
Other functions	8	7
Total	**8**	**7**
Number of personnel at the end of the year	9	7
Personnel expenses *		
Management salaries	539	353
Board of Directors	175	176
Other salaries and wages	898	472
Total	**1,612**	**1,001**
Pension expenses	242	136
Other social expenses	24	17
Total	**1,878**	**1,154**

* The Board of Directors' salaries include the share-based compensation.

	2023	2022
5. DEPRECIATION AND REDUCTION IN VALUE		
Intangible rights	15	14
Other capitalized long-term expenditures	0	0
Machinery and equipment	0	0
Total	**15**	**14**

Notes to the Financial Statements of the Parent Company

1000 EUR	2023	2022
6. OTHER OPERATING CHARGES		
IT equipment and SW expenses	55	33
Premises expenses	27	17
Administrative services	585	440
Travel expenses	102	39
Voluntary staff expenses	31	22
Other business expenses	351	320
Total	**1,150**	**872**
Auditor's charges		
Auditing	25	23
Tax advice	0	1
Other services	1	1
Total	**26**	**25**
7. FINANCIAL INCOME AND EXPENSES		
Income from investments		
From Group companies		
From others	73	63
Total	**73**	**63**
Other interest and financial income		
From Group companies	5,471	2,284
From others	377	35
Total	**5,848**	**2,320**
Other interest and financial expenses		
To Group companies	4	3
To others	1,109	790
Total	**1,113**	**793**
Reduction in the value of the investment	0	0
Net financial income and expenses	**4,809**	**1,589**
Net financial income and expenses including exchange gains and losses	-6	-237
8. APPROPRIATIONS		
Received Group contributions	-2,200	1,500
9. INCOME TAX		
Other direct taxes	0	0
Total	0	0

1000 EUR	Dec. 31, 2023	Dec. 31, 2022
10. INTANGIBLE ASSETS		
Intangible rights		
Acquisition cost Jan. 1	345	341
Investments during the period	10	4
Disposals during the period		
Acquisition cost at the end of the period	**355**	**345**
Accumulated depreciation Jan. 1	-269	-254
Depreciation for the period	-15	-14
Book value at the end of the period	**72**	**77**
Other capitalized long-term expenditures		
Acquisition cost Jan. 1	6	6
Investments during the period		
Acquisition cost at the end of the period	**6**	**6**
Accumulated depreciation Jan. 1	-6	-6
Depreciation for the period		
Book value at the end of the period		
Intangible assets total		
Acquisition cost Jan. 1	352	348
Investments during the period	10	4
Acquisition cost at the end of the period	**361**	**352**
Accumulated depreciation Jan. 1	-275	-261
Depreciation for the period	-15	-14
Book value at the end of the period	**72**	**77**

Notes to the Financial Statements of the Parent Company

1000 EUR	Dec. 31, 2023	Dec. 31, 2022
11. TANGIBLE ASSETS		
Machinery and equipment		
Acquisition cost Jan. 1	6	6
Investments during the period		
Disposals during the period		
Acquisition cost at the end of the period	**6**	**6**
Accumulated depreciation Jan. 1	-6	-6
Depreciation for the period	0	0
Book value at the end of the period	**0**	**0**
Other tangible assets		
Acquisition cost Jan. 1	71	71
Acquisition cost Dec. 31	**71**	**71**
Book value at the end of the period	**71**	**71**
Tangible assets total		
Acquisition cost Jan. 1	77	77
Investments during the period		
Acquisition cost at the end of the period	**77**	**77**
Accumulated depreciation Jan. 1	-6	-6
Depreciation for the period	0	0
Book value at the end of the period	**71**	**71**
12. INVESTMENTS		
Investments in subsidiaries		
Acquisition cost Jan. 1	39,749	39,749
Book value at the end of the period	**39,749**	**39,749**
Investments in other shares		
Acquisition cost Jan. 1	1	1
Book value at the end of the period	**1**	**1**
Investments total		
Acquisition cost Jan. 1	39,750	39,750
Book value at the end of the period	**39,750**	**39,750**

1000 EUR	Dec. 31, 2023	Dec. 31, 2022
13. CURRENT RECEIVABLES		
Accounts receivable		
From Group companies	547	0
Total	**547**	**0**
Other receivables		
From Group companies	109,257	98,607
From others	21	52
Total	**109,278**	**98,659**
Prepaid expenses and accrued income		
From Group companies	0	1,500
From others	58	60
Total	**58**	**1,560**
Current receivables total	**109,883**	**100,219**
14. FINANCING SECURITIES		
Cash and cash equivalents include liquid and low-risk financing securities.		
Financial assets at fair value through profit or loss	1	5,696
15. SHAREHOLDERS' EQUITY		
Share capital at the beginning of the period	12,941	12,941
Share capital at the end of the period	**12,941**	**12,941**
Invested unrestricted equity fund at the beginning of the period	25,953	25,953
Share issue		
Invested unrestricted equity fund at the end of the period	**25,953**	**25,953**
Retained earnings at the beginning of the period	92,312	92,044
Dividend distribution	-1,785	-1,428
Purchases of own shares	-1,046	-144
Net profit for the period	881	1,840
Retained earnings at the end of the period	**90,362**	**92,312**
Distributable earnings at the end of the period	116,315	118,265
Shareholders' equity total	**129,256**	**131,206**

Notes to the Financial Statements of the Parent Company

1000 EUR	Dec. 31, 2023	Dec. 31, 2022
16. LIABILITIES		
Current liabilities		
Accounts payable		
To Group companies	36	0
To others	49	163
Total	**85**	**163**
Other short-term liabilities		
To Group companies	5,710	2,936
To others	20,138	32
Total	**25,848**	**2,968**
Accrued expenses and deferred income		
To others	424	321
Total	**424**	**321**
Current liabilities total	**26,357**	**3,452**

1000 EUR	Dec. 31, 2023	Dec. 31, 2022
17. SECURITIES AND CONTINGENT LIABILITIES		
On behalf of Group companies		
Guarantee limits	2,989	2,992
of which guarantees in use total		
Leasing liabilities		
Falling due in the next year	1,501	1,011
Falling due after one year	1,337	868
Other liabilities		
Credit Cards	1	6
Rental liabilities		
Falling due in the next year	11	9
Contractual liabilities		
Falling due in the next year	20	16
Falling due in 1–5 years		

1000 EUR	Dec. 31, 2023	Dec. 31, 2022
18. NOMINAL VALUE OF CURRENCY DERIVATES		
Foreign exchange forwards		
Market value	19	33
Nominal value	2,200	5,000

	Owned by Parent, %	Owned by Group, %	Book value 1000 EUR
19. SHARES AND HOLDINGS			
Subsidiaries			
Bittium Technologies Oy	100.00	100.00	39,749
Other holdings by Parent			
Partnera Oy			1

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

According to the parent company's balance sheet at December 31, 2023, the distributable assets of the parent company are EUR 116,314,733.29 of which the profit of the financial year is EUR 880,995.75.

The Board of Directors proposes to the Annual General Meeting to be held on April 10, 2024, that a dividend of EUR 0.03 per share be paid based on the balance sheet to be adopted for the financial year ended December 31, 2023.

The Board of Directors furthermore proposes that the Annual General Meeting would authorize the Board of Directors to decide, at its discretion, on the payment of an extraordinary dividend of EUR 0.03 per share, by October 31, 2024. The Board of Directors expects that this discretionary extraordinary dividend will be paid, unless there is a significant deterioration in the business environment during 2024. The company will publish any possible decisions on dividend payment by the Board of Directors separately, and simultaneously confirm the dividend record and payment dates.

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

In Oulu, February 8, 2024

Erkki Veikkolainen
Chairman of the Board

Pekka Kemppainen
Member of the Board

Veli-Pekka Paloranta
Member of the Board

Riitta Tiuraniemi
Member of the Board

Petri Toljamo
Member of the Board

Johan Westermarck
CEO

Auditor's Note

Auditor's Report has been issued today.
In Oulu February 9, 2024

Ernst & Young Oy
Authorized Public Accountant Firm

Jari Karppinen, Authorized Public Accountant

Auditor's Report

(Translation of the Finnish original)

To the Annual General Meeting of Bittium Oyj

Report on the Audit of Financial Statements

Opinion

We have audited the financial statements of Bittium Oyj (business identity code 1004129-5) for the year ended 31 December, 2023. The financial statements comprise the consolidated balance sheet, statement of comprehensive income, statement of changes in equity, statement of cash flows and notes, including a summary of significant accounting policies, as well as the parent company's balance sheet, income statement, statement of cash flows and notes.

In our opinion
- the consolidated financial statements give a true and fair view of the group's financial position as well as its financial performance and its cash flows in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU.
- the financial statements give a true and fair view of the parent company's financial performance and financial position in accordance with the laws and regulations governing the preparation of financial statements in Finland and comply with statutory requirements.

Our opinion is consistent with the additional report submitted to the Audit Committee.

Basis for Opinion

We conducted our audit in accordance with good auditing practice in Finland. Our responsibilities under good auditing practice are further described in the *Auditor's Responsibilities for the Audit of Financial Statements* section of our report.

We are independent of the parent company and of the group companies in accordance with the ethical requirements that are applicable in Finland and are relevant to our audit, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

In our best knowledge and understanding, the non-audit services that we have provided to the parent company and group companies are in compliance with laws and regulations applicable in Finland regarding these services, and we have not provided any prohibited non-audit services referred to in Article 5(1) of regulation (EU) 537/2014. The non-audit services that we have provided have been disclosed in note 5 to the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

We have fulfilled the responsibilities described in the *Auditor's responsibilities for the audit of the financial statements* section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying financial statements.

We have also addressed the risk of management override of internal controls. This includes consideration of whether there was evidence of management bias that represented a risk of material misstatement due to fraud.

KEY AUDIT MATTER	HOW OUR AUDIT ADDRESSED THE KEY AUDIT MATTER
Recognition of Revenue from long-term construction contracts *We refer to the Group's accounting policies and to the note 2* Fixed price contracts in long-term construction contracts are part of the Group's business. These projects constitute a significant portion of the consolidated net sales. In the financial statements 2023 the revenue recognized from these projects was 8.4 million euro, which is 11 percentage of the total net sales. The group applies the percentage of completion method for recognizing revenue from long-term construction contracts, which involves the use of significant management estimates. E.g. the following estimates include significant management judgement for each project: stage of completion, total contract costs and the project margin. During the performance phase, the financial outcome of a project is based on the estimates made by the management and will come more accurate when the project advances. In the Group net sales is a key performance indicator, which might generate an incentive to prematurely recognition of revenue. Revenue recognition was determined to be a key audit matter and a significant risk of material misstatement referred to in EU Regulation No 537/2014, point (c) of Article 10(2), because of the risk related to correct timing of revenue.	Our audit procedures in which risk of material misstatement on revenue recognition has been taken into account included, among other: • assessment of the accounting principles of the group on revenue recognition and comparing them with the applied accounting standards; • examination of the nature of revenue, stage of completion and financial contract terms behind the revenue recognized in the long-term projects; • tests of revenue recognition, which included testing of the calculations and the estimates used in the revenue recognition; • assessing the revenue recognized with substantive analytical procedures, and • assessment of the disclosure in respect of the revenue.

Responsibilities of the Board of Directors and the Managing Director for the Financial Statements

The Board of Directors and the Managing Director are responsible for the preparation of consolidated financial statements that give a true and fair view in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU, and of financial statements that give a true and fair view in accordance with the laws and regulations governing the preparation of financial statements in Finland and comply with statutory requirements. The Board of Directors and the Managing Director are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors and the Managing Director are responsible for assessing the parent company's and the group's ability to continue as going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting. The financial statements are prepared using the going concern basis of accounting unless there is an intention to liquidate the parent company or the group or cease operations, or there is no realistic alternative but to do so.

Auditor's Responsibilities for the Audit of Financial Statements

Our objectives are to obtain reasonable assurance on whether the financial statements as a whole are free from material misstatement, whether due to fraud or error and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with good auditing practice will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with good auditing practice, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the parent company's or the group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of the Board of Directors' and the Managing Director's use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may east significant doubt

on the parent company's or the group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events so that the financial statements give a true and fair view.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Other Reporting Requirements

Information on Our Audit Engagement

We were first appointed as auditors by the Annual General Meeting on April 12, 2002, and our appointment represents a total period of uninterrupted engagement of 22 years.

Other Information

The Board of Directors and the Managing Director are responsible for the other information. The other information comprises information included in the report of the Board of Directors and in the Annual Report but does not include the financial statements and our report thereon. We obtained the report of the Board of Directors prior to the date of the auditor's report, and the Annual Report is expected to be made available to us after the date of the auditor's report.

Our opinion on the financial statements does not cover the other information.

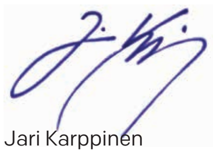
In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. With respect to report of the Board of Directors, our responsibility also includes considering whether the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations.

In our opinion, the information in the report of the Board of Directors is consistent with the information in the financial statements and the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations.

If, based on the work we have performed on the other information that we obtained prior to the date of this auditor's report, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Oulu, February 9, 2024

Ernst & Young Oy
Authorized Public Accountant Firm



Jari Karppinen
Authorized Public Accountant

Connectivity to be trusted.
www.bittium.com

Bittium / Ritaharjuntie 1, FI-90590 Oulu, Finland / t. +358 40 344 2000 / www.bittium.com