



Annual Report 2023

FREQUENTIS
FOR A SAFER WORLD

Key figures Frequentis Group

All figures in EUR million, except where otherwise stated.

Earnings	2023	2022	+/- in %	+/- in EUR million	2021	2020	2019 ¹
Revenues	427.5	386.0	+10.8%	+41.5	333.5	299.4	303.6
EBITDA	44.2	45.6	-3.2%	-1.5	46.5	41.9	30.2
EBITDA margin	10.3%	11.8%	-1.5 PP	-	13.9%	14.0%	9.9%
EBIT	26.6	25.0	+6.6%	+1.7	29.0	26.8	17.2
EBIT margin	6.2%	6.5%	-0.3 PP	-	8.7%	9.0%	5.7%
Profit/loss for the period	20.0	18.9	+5.8%	+1.1	20.8	-3.4	12.5
Earnings per share in EUR	1.39	1.41	-1.7%	-	1.50	-0.30	0.93
Dividend in EUR (for the financial year)	0.24 ⁴	0.22	+9.1%	-	0.20	0.15	0.15
Orders	2023	2022	+/- in %	+/- in EUR million	2021	2020	2019
Order intake	504.8	404.8	+24.7%	+100.0	333.2	314.6	333.7
Orders on hand (at year-end)	594.7	522.0	+13.9%	+72.6	467.9	427.6	391.5
Statement of financial position	2023	2022	+/- in %	+/- in EUR million	2021	2020	2019 ¹
Total assets	371.1	340.3	+9.1%	+30.8	315.7	277.6	272.1
Shareholders' equity	155.6	147.3	+5.7%	+8.3	129.9	111.4 ²	116.2
Equity ratio	41.9%	43.3%	-1.4 PP	-	41.1%	40.1% ²	42.7%
Net cash	84.3	91.0	-7.3%	-6.6	101.1	85.0	77.8
No. of employees (average, FTE ³)	2,217	2,081	+6.5%	-	1,937	1,907	1,849
Cash flow statement	2023	2022	+/- in %	+/- in EUR million	2021	2020	2019 ¹
Cash flow from operating activities	25.7	14.2	+80.4%	+11.4	48.8	54.8	17.7
Cash flow from investing activities	-18.8	-20.1	+6.5%	+1.3	-24.6	-7.0	-4.6
Cash flow from financing activities	-13.4	-16.5	+18.7%	+3.1	-12.6	-10.1	8.0
Cash and cash equivalents at end of period	74.2	81.4	-8.8%	-7.2	103.8	91.3	66.9

Note: Slight differences may result from rounding of individual items and percentages.

¹ Initial application of IFRS 16 (Leases) from 1 January 2019 (↗ Note 41 to the consolidated financial statements 2019)

² Comparative figures for 2020 restated.

³ Average number of employees expressed as full-time equivalents (FTE); comparative figures for 2021 restated.

⁴ Proposal to the Annual General Meeting 2024.

Table of contents

Preface	4
Report of the Supervisory Board	9
The Company	12
The Share	17
Consolidated Corporate Governance Report	21
Consolidated Non-Financial Report	33
Group Management Report	115
Consolidated Financial Statements	141
Glossary	233
Financial Calender	239
Publishing Details	239

Preface



Peter Skerlan,
Norbert Haslacher,
Monika Haselbacher,
Hermann Mattanovich

Ladies and gentlemen,

Frequentis made a big leap forward in 2023. Despite the polycrisis, order intake rose by a quarter and revenues grew by more than a tenth. On the other hand, we experienced inflation-driven cost increases, especially in purchases from suppliers and personnel expenses. We endeavoured to limit the cost increases insofar as possible, both on the customer side and through internal measures in order to maintain our profitability.

Highlights

We are satisfied with the progress made in 2023 and consider that it paves the way for further profitable growth.

- Order intake increased by 24.7% to EUR 504.8 million (2022: EUR 404.8 million)
- At year-end 2023, orders on hand were 13.9% higher at EUR 594.7 million (2022: EUR 522.0 million)
- Revenues rose by 10.8% to EUR 427.5 million (2022: EUR 386.0 million)
- EBITDA dropped to EUR 44.2 million (2022: EUR 45.6 million)
- EBIT increased to EUR 26.6 million (2022: EUR 25.0 million)
- The profit for the period increased to EUR 20.0 million (2022: EUR 18.9 million)
- The equity ratio slipped to 41.9% (2022: 43.3%)
- Net cash decreased to EUR 84.3 million (2022: EUR 91.0 million).

Strong hike in growth

Thanks to the continuous organic and inorganic expansion of our product portfolio, order intake rose by a quarter to EUR 504.8 million, a strong rise of EUR 100.0 million compared with 2022. That strengthens Frequentis' strong growth trajectory. At year-end 2023, orders on hand amounted to EUR 594.7 million, an increase of 13.9% compared with year-end 2022. Thanks to the good order situation, capacity utilisation at Frequentis was and remains good.

Revenues exceeded EUR 400 million for the first time, thanks to growth of 10.8% to EUR 427.5 million. That was above the inflation rate in the euro zone, which was 5.4% (as at December 2023, annual average, year-on-year change). The companies acquired in 2023 also contributed to this increase. Frequentis' organic growth was 10.2%.

We benefit from our diversification – in terms of both market segments and regional positioning. That is a stabilising effect in periods of multiple challenges and crises – inflation, supply chain bottlenecks, delayed deliveries, increasing geopolitical tensions, and weak growth rates in the major economies.

Inflation was well above-average, so it was necessary to adjust prices for both existing and new customer projects. The 5.5% increase in the cost of materials was below the revenue growth rate. By contrast, personnel expenses increased by 11.8%, which was faster than revenues, driven by the increase in the number of employees and annual pay rises under collective and other salary agreements. The rise in other operating expenses was principally attributable to higher travel and advertising expenses, for example for trade shows, the change in project provisions, and increased energy costs. Further cost rises are anticipated in 2024.

EBITDA declined slightly to EUR 44.2 million. Depreciation and amortisation were unchanged and there were no impairment losses. In all, EBIT rose to EUR 26.6 million. The EBIT margin for 2023 (relative to revenues) was 6.2%, which was at the lower end of the target range of 6-8%. An EBIT margin of around 6% is anticipated for 2024. In addition to the challenges already outlined, ramp-up costs for the major projects acquired in 2023 will put pressure on the margin situation in 2024. These projects in the USA, Canada (Air Traffic Management segment), and France (Public Safety & Transport segment) are long-term. Along with several other orders received in 2023, they will have a positive influence on revenues well beyond the next decade.

Our financial position remains solid. Equity increased to EUR 155.6 million and the equity ratio was 41.9% at year-end 2023. The net cash position decreased to EUR 84.3 million. At the Annual General Meeting, we will be proposing a 9% higher dividend of EUR 0.24 per share for 2023.

Acquisitions

We made two acquisitions in the technology sector in 2023. In April 2023, Frequentis acquired a 76.67% interest in FRAFOS GmbH, which is based in Berlin, Germany. FRAFOS delivers key security components for Frequentis' communication solutions for all safety-critical sectors. This acquisition strengthens our cybersecurity competence.

In July 2023, Frequentis acquired 100% of the Norwegian software company GuardREC ATC AS, which has since been renamed Frequentis Recording AS as part of the integration process. This acquisition increases our recording and replay competence, including data analysis, in all areas of business.

Frequentis has made nine acquisitions since its IPO in May 2019. Proactively searching for attractive M&A opportunities is part of Frequentis' strategy. When making acquisitions, we focus on the following parameters:

- Expansion of the product portfolio
- Profitable business model
- Access to new markets
- Cultural fit
- A good management team that will remain with the company
- Appropriate acquisition price

Business model

Frequentis has a stable and resilient business model that has proven effective in periods of multiple crises or polycrisis. Since we supply communication and information systems for the safety-critical sector, our customers are mainly authorities, who plan and award orders on a long-term basis. Our customers are the world's civil and military air navigation service providers and control centres for the police, emergency rescue services, fire services, railways, public transport systems, coastguards, and port authorities. The products supplied by Frequentis are part of the safety-critical infrastructure, in other words, the essential infrastructure of the relevant countries.

This infrastructure always has to be available and ready for operation – irrespective of the number of flights/flight movements or how many times the police, fire service, and emergency rescue services are deployed. There is still demand for our products and services as our order intake and well-stocked pipeline of tenders and requests show.

Long-term vision

Our long-term vision is to be the global number one in solutions for control centres in the safety-critical sector. As a systems integrator that integrates its own software and, in some cases, its own hardware into customers' existing software and hardware landscapes, we expect our long-term profitability in project business to be on the level of established IT systems integrators.

The transformation to a software-centric business is under way but, given our customer structure, it will take several years or even longer in some markets. Research and development is aligned to this transformation.

Innovations

We are proud to be an innovation leader in our markets, which enables us to play a part in shaping the industry. In new areas of business, our focus is on UTM / drone management (especially in the Air Traffic Management segment) and mission-critical communication via 5G/LTE (in the Public Safety & Transport segment). The supply of cloud-enabled software and the acquisitions we have made show that we are consistently implementing our strategy of steadily positioning Frequentis as a software company. In the Public Safety & Transport segment, in particular, there is rising demand for purely software- and private cloud-based solutions. We are playing an active part in this transformation of our industry.

Sustainability

Sustainability is a fundamental element of our corporate culture and covers the entire value chain. Frequentis regularly undergoes various voluntary CSR ratings by a variety of institutions with different perspectives (customers, investors). From the customer perspective, for example, Frequentis was awarded the EcoVadis silver medal in 2022 (the current rating based on the modified EcoVadis requirements profile is under way) and has also been awarded the status "Verified GSES Member". In addition, many customers perform their own ESG ratings, often during the tender phase. From the investor perspective, Frequentis was rated, for instance, by EthiFinance (formerly Gaia Research) and Sustainalytics. Frequentis is also included in the OekB ESG Data Hub and Deutsche Börse's ESG Visibility Hub.

A key focus for 2024 is driving forward ESG reporting and the transition to the extended sustainability reporting requirements of the CSRD (Corporate Sustainability Reporting Directive of the European Union), which are mandatory from the 2024 financial year. The basis for this is the outcome of a materiality analysis using the principle of double materiality. We carried out this analysis in October 2023. The CSRD will greatly expand and standardise the present non-financial reporting obligations on the environmental, social, human rights, and governance aspects.

Forecast for 2024

The uncertainties remain and have increased in some respects:

- the war in Ukraine is entering its third year,
- the war between Israel and Hamas is causing further tension,
- in Austria, in particular, inflation is still far from the average of less than 2% seen in the euro zone since the start of the millennium,
- the major economic areas such as the USA and the euro zone will probably achieve growth of just 2.1% and 0.9%, respectively, in 2024 (IMF forecast, January 2024).

The outbreak of even limited conflicts could rapidly cause distortion of the global IT hardware market. In the project business, Frequentis has always had to address extensive challenges and dynamic changes in external influences and adapts constantly to the relevant conditions. The wide range of uncertainties makes forecasting difficult at present.

It is not possible to make a reliable estimate of exactly how these factors and inflation will affect costs, e.g. travel expenses, higher salaries, delays in passing on inflation-driven price rises to customers, and potential supply chain bottlenecks and delivery delays.

Expenses for company-funded research & development amounted to EUR 25.2 million in 2023 and will be higher in 2024. Capital expenditure (capex) will be around EUR 12 million.

Depending on the aspects outlined above, Frequentis has the following targets for 2024 compared with 2023:

- Increase revenues
- Increase order intake
- EBIT margin of around 6%.

Continued trust

Our customers, suppliers, business partners, investors, and around 2,200 committed employees continue to place their trust in the stability of Frequentis' business model, as shown by the rise in both order intake and revenues.

We would like to extend our sincere thanks to everyone connected with Frequentis for their trust and excellent collaboration. Together we can build a safe future at global level.

Vienna, 11 March 2024

Best regards,

Norbert Haslacher
Chairman
of the Executive Board

Monika Haselbacher
Member
of the Executive Board

Hermann Mattanovich
Member
of the Executive Board

Peter Skerlan
Member
of the Executive Board



Report of the Supervisory Board

2023 was another year affected by numerous crises around the world that had global repercussions. In addition to the climate crisis, comparatively high inflation, especially in Europe and Austria, and the ongoing war in Ukraine, Hamas' attack on Israel in October 2023 led to the outbreak of a further armed conflict that could potentially have global implications.

In these turbulent times, the Frequentis business model has once again proven to be very stable and resilient, with undiminished demand for our communication and information systems for control centres with safety-critical tasks. That is shown by order intake, which rose 24.7% year-on-year to EUR 504.8 million on 31 December 2023, the highest level in the company's history.

Alongside the very gratifying rise in order intake, Group revenues increased by 10.8% compared with the previous year to EUR 427.5 million and Group EBIT was 6.6% higher at EUR 26.6 million. With an equity ratio of 41.9% and net cash of EUR 84.3 million at year-end 2023, Frequentis still has a very solid financial base for further development.

Changes on the Executive Board and (unchanged) composition of the Supervisory Board

Ms. Monika Haselbacher joined the Executive Board on 1 January 2023 as our new Chief Operations Officer (COO). She took over the previous COO agenda from Mr. Mattanovich, who has focused since then on his role as Chief Technology Officer (CTO). I am pleased to report that this addition has proven effective, and I am convinced that the broader allocation of Executive Board's tasks positions Frequentis optimally to continue its successful business operations and serve the needs of its customers with innovative products.

The members of the Supervisory Board were unchanged from the previous year.

Work of the Supervisory Board and its committees

In 2023, the Supervisory Board performed the tasks imposed on it by the law, the articles of association, and the rules of procedure with the utmost care. We regularly advised and supervised the Executive Board in the management of the company. The Executive Board kept the Supervisory Board informed at all times about the business situation and development of Frequentis AG. In addition, the chairmen of the committees and I maintained regular contact with the Executive Board to discuss opportunities and risks for the company.

The Supervisory Board of Frequentis AG held four meetings in 2023. At these meetings, the Supervisory Board received detailed reports from the Executive Board on the company's strategy, business performance, and situation, as well as the principal projects in progress, material events, possible acquisitions, and the related questions. In this context, the Supervisory Board discussed, questioned, and examined the information provided by the Executive Board. This examination, which took the form of an open discussion between the Executive Board and the Supervisory Board, did not result in any objections. The approval of the Supervisory Board was obtained on matters where this was required by the articles of association or rules of procedure.

The Audit Committee held three meetings in the reporting period and performed all the tasks entrusted to it. In particular, it examined the company's financial statements, the consolidated financial statements, and the consolidated corporate governance report, supervised the audit of the financial statements and consolidated financial statements and the independence of the auditor, prepared a proposal for the appointment of the auditor of the financial statements and consolidated financial statements, and oversaw the company's accounting, internal control and internal audit system, and its risk management system. In addition, the Audit Committee performed the preliminary examination of the non-financial report. The Supervisory Board was regularly informed of the outcome of the meetings of the Audit Committee.

The Committee for Executive Board Issues met twice in the reporting period, mainly to discuss aspects of Executive Board remuneration. Among other things, it addressed the statutory review of the compensation policy for the Executive Board and Supervisory Board, considered the company's remuneration report, evaluated the achievement of the targets agreed with the members of the Executive Board, and developed the Long-Term Incentive plan 2023 (LTIP 2023). The remuneration report and the LTIP 2023 were subsequently adopted at the company's Annual General Meeting on 1 June 2023. In addition, the Committee for Executive Board Issues took a general look at succession planning for the Executive Board.

The special committee established in connection with the insolvency of Commerzialbank Mattersburg in 2020 held one meeting in 2023 and advised the Executive Board on the ongoing judicial proceedings to assert possible claims by the company on the bank and third parties.

Except for one member, who was excused from attending one meeting of the Supervisory Board, all members took part in all Supervisory Board meetings in the reporting period. All committee members attended all committee meetings in the reporting period.

Financial statements of Frequentis AG and consolidated financial statements for 2023

The annual financial statements of Frequentis AG and the consolidated financial statements as at 31 December 2023 submitted by the Executive Board, as well as the management report for the company and the Group for the 2023 financial year were audited by the appointed auditors, BDO Assurance GmbH Wirtschaftsprüfungs- und Steuerberatungsgesellschaft ("BDO"). The audit did not give rise to any objections and the statutory requirements were complied with in full, so the auditors issued an unqualified audit opinion. BDO performed a limited assurance review of the data and disclosures on sustainability reporting in the consolidated non-financial report for 2023. This did not give rise to any objections.

The Supervisory Board's Audit Committee examined the annual financial statements, the consolidated financial statements, the auditors' reports, the Executive Board's proposal for the distribution of the profit, the consolidated corporate governance report, and the consolidated non-financial report in detail with the auditors at its meeting on 27 March 2024 and proposed that they should be approved by the Supervisory Board. The Supervisory Board examined the documents in accordance with Section 96 of the Austrian Companies Act (AktG) and agreed with the findings of the Audit Committee. The annual financial statements for Frequentis AG for 2023 were accepted by the Supervisory Board, so they are deemed to be approved pursuant to Section 96(4) of the Austrian Companies Act. The management report, the consolidated financial statements prepared in accordance with the International Financial Reporting Standards (IFRS), the Group management report, the consolidated corporate governance report, and the consolidated non-financial report were approved by the Supervisory Board. The Supervisory Board agreed to the Executive Board's proposal for the distribution of the profit. A proposal will therefore be put to the Annual General Meeting on 6 June 2024 that a dividend of EUR 0.24 per share should be paid for the 2023 financial year.

On behalf of the entire Supervisory Board, I would like to express my sincere thanks and appreciation to the entire Executive Board and all employees of the Frequentis Group for their commitment and successful work in the past financial year. We would also like to express our special thanks to our customers and to the shareholders of Frequentis AG for their trust in us in these challenging times.

Vienna, 27 March 2024

A handwritten signature in blue ink, appearing to be the name "Johannes Bardach".

Johannes Bardach
Chairman of the Supervisory Board of Frequentis AG

The Company

Over 75 years of innovation – for a safer world

Wherever Frequentis systems are used, people bear responsibility for the safety of other people and property. Frequentis has been developing and marketing communication and information systems for control centres in the safety-critical sector for more than 75 years. In 2023, the Frequentis Group generated revenues of EUR 427.5 million and EBIT of EUR 26.6 million. Its products and solutions are marketed through two segments:

The Air Traffic Management segment (69% of revenues) comprises the following business domains:

- Civil air traffic control
- Military air traffic control and air defence
- AIM (aeronautical information management)

The Public Safety & Transport segment (31% of revenues) comprises the following business domains:

- Police / fire brigades / emergency rescue services
- Railways and local public transport systems
- Coastguards and port authorities

As a recognised specialist, Frequentis develops future-oriented solutions for control centres in collaboration with key account customers and makes new technologies usable for safety-critical applications. Using a human-centric design process, integrated systems are created to provide safer and more stable working environments for end-users in control centres, such as air traffic controllers, operators, and dispatchers. For more information on Frequentis, please visit www.frequentis.com/en/about-us.

Frequentis control centres for people's lives

Frequentis develops and optimises systems for customers in safety-critical areas of the global mega-markets for transport and safety infrastructure – wherever efficient and flexible high-performance solutions are required. Increasing mobility, digitalisation, and rising safety and security requirements are driving long-term growth. Modern technologies are used to optimise control centres for traffic and public safety.

Frequentis solutions are already used operationally by air traffic controllers, dispatchers, and operators at 49,000 working positions in air traffic control, public safety, railways / public transport, and the maritime sector.

Overview of the Frequentis Group

Founded in 1947, Frequentis is the global market leader in voice communication systems for air traffic control with a market share of around 30%. It is also the global leader in aeronautical information management (AIM) and message handling systems for air traffic. Since May 2019, shares in Frequentis AG have been listed on the Vienna and Frankfurt stock exchanges under ISIN: ATFREQUENT09, WKN: A2PHG5.

The knowledge and experience of around 2,200 employees worldwide (full-time equivalents, including approximately 1,000 at the company's headquarters in Vienna), together with a network of companies and local representatives in more than 50 countries, enable Frequentis to serve more than 500 customers in some 150 countries. The parent company of the Frequentis Group is Frequentis AG, which is based in Vienna, Austria.

FREQUENTIS AG, Austria				
	Regional Sales & Operations	Products, Sales & Operations	Group Services	Special Purpose or Minority Shareholdings
Europe	Frequentis Deutschland, Germany	ATRICS, Germany, 51%	Frequentis Czech Republic	FLYK, Finland, 25%
	Frequentis France	CNS-Solutions & Support, Austria	Frequentis Recording, Norway	FRAFOS GmbH, Germany, 77%
	Frequentis Norway	ELARA Leitstellentechnik, Germany, 51%	Frequentis Romania	Frequentis DFS Aerosense, Austria, 70%
	Frequentis UK	Frequentis Comsoft, Germany	Frequentis Solutions & Services, Slovakia	Frequentis Invest4Tech, Austria
		Frequentis Orthogon, Germany	PDTS, Austria	GroupEAD Europe, Spain, 28%
		Regola, Italy, 51%		Mission Embedded, Austria, 20%
				Nemergent Solutions, Spain, 25%
				Secure Service Provision, Germany
				Skyzr GmbH, Austria
				Systems Interface, UK
Australia/Asia	Frequentis Australasia, Australia	C4i, Australia	AIRNAV Technology Services, Philippines, 65%	team Technology Management, Austria, 51%
	Frequentis Middle East, UAE			
	Frequentis Shanghai, China			
	Frequentis Singapore			
Americas	Frequentis Brazil	Frequentis California, USA		
	Frequentis Canada			
	Frequentis Defense, USA			
	Frequentis USA			

Simplified visualisation; all shareholdings 100% unless otherwise stated. Company names abbreviated. As at end March 2024.

Safety-critical DNA

Frequentis thrives on a corporate culture supported by a safety-critical DNA, which influences its daily work. Understanding customers' safety-critical environments means that Frequentis can provide optimum support so they can meet their business objectives. This deep knowledge of their tasks and responsibilities helps Frequentis support them in the safety-critical processes and workflows in their day-to-day work.

To supplement this extensive understanding of its customers' needs, Frequentis focuses on long-term customer relationships and support throughout the life cycle, thereby underscoring the sustainability of its solutions.

Cross-sector solutions for control centres

Control centre solutions are systems for command centres for safety-critical tasks as encountered daily by Frequentis on its customers' premises. Control centre solutions are used either to control traffic or to organise safety. The same tasks have to be carried out, although they are labelled differently in each application.

To put it simply, there are basically four components that always interact:

- A tactical situation report that shows the operator the current situation
- A planning and management tool that helps make the right decision quickly and safely
- A communication system to communicate with transport users, emergency services, or security forces
- Safety-critical networks to ensure seamless operational continuity



Voice and data communications, an area where Frequentis is the world leader, is an indispensable element of every control centre. The communication system is therefore often a good starting point for the development of fully integrated solutions for customers, using additional products and services from the Frequentis service portfolio. In addition, networks are becoming the centre of communication solutions. For example, traditional voice communication systems are being extended by networked voice and data communication services. The requirements for safety-critical operations entail high market entry barriers.

The following chart provides an overview of the product portfolios and services of the two segments and their business domains.



Frequentis sets standards

Frequentis' customers are public authorities, organisations, and companies that perform safety-critical tasks. Its control centre solutions comprise proprietary software solutions and hardware components that are configured for specific applications.

The company develops state-of-the-art IT components and integrates them into comprehensive communication and information systems that meet the highest requirements for safety-critical applications. In addition, Frequentis provides a range of supplementary services to support customers throughout the entire life cycle of their Frequentis systems. Participation in standardisation bodies such as ETSI and EUROCAE allows our solutions to be anchored in standards and regulations. That underscores the future-proofing of Frequentis solutions.

High innovative capability

Innovation is very important to Frequentis. The company is proud to be an innovation leader providing sustainable innovations and solutions to extend the market it addresses. The basis for this is interdisciplinary collaboration, which leverages the domain-specific know-how of the segments and the specialist expertise of the central support and governance functions. These activities are managed by the New Business Development department.

The present focus is on the ongoing development of the digital (remote) tower technology, drone management, and the use of the 5G/LTE mobile communication standard in safety-critical applications. In addition to digital (remote) towers, which have already been used for a number of years, the realisation of this strategy includes the national drone management systems in Norway, Estonia, and Austria and the investment in Nemergent, a Spanish software company operating in the field of mission-critical services.

Awards

Frequentis received a number of awards and accolades in various areas of activity in 2023:

- **ATM Awards**
At the annual ATM Awards ceremony in Geneva, Frequentis, Avinor, and the Norwegian air rescue service won the “Overall Excellence” award for the safe and effective integration of drones into traditional airspace.
Frequentis and Avinor were also the runners-up in the sustainability award for significantly reducing CO₂ emissions at Oslo airport through continuous climb and descent operations.
- **UTM Airspace Integration Award**
Frequentis and Austro Control won the UTM Airspace Integration Award in Madrid for the development of a drone traffic management system.
- **Austria's Best Managed Companies Award**
Deloitte and Raiffeisenlandesbank Lower Austria / Vienna present the Best Managed Companies award to Austrian companies in recognition of outstanding performance in the following core areas: strategy, productivity and innovation, governance, finance and commitment, cyber risk, and ESG.
- **Vienna Stock Exchange Award**
In 2023, Frequentis was awarded first place in the mid-cap category of the Vienna Stock Exchange Award for the second successive year.
- **Investor Relations Innovation Award**
Frequentis won the Best Innovation Award in Investor Relations – Small Cap and was nominated as a finalist in the category Best Investor Relations Programme – Small Cap. The Best Practice awards, which were presented by the London-based Investor Relations Society for the 23rd time, recognise the achievements of companies that are committed to first-class engagement with investors.

The share

Shareholder structure

Frequentis' core shareholder is Hannes Bardach. He holds around 68% of the shares (about 8% directly and about 60% indirectly through Frequentis Group Holding GmbH). B&C Holding Österreich GmbH holds more than 10% of the shares. The free float is approximately 22%, mainly investors from Germany, Austria, and other European countries. For further information, including a share price chart, see www.frequentis.com/en/ir > Share.

Analysts

BankM (Roger Becker, Daniel Großjohann), Raiffeisen Bank International (Teresa Schinwald), and ODDO BHF (Gautier Le Bihan, Nicolas Thorez) regularly write analyses and notes on Frequentis.

Share price performance

Shares in Frequentis started the year with a downward trend. During this phase, the shares dropped to a low for the year of EUR 26.40 (Vienna Stock Exchange) and EUR 26.50 (Frankfurt stock exchange). Between mid-February and the end of May 2023, the closing price was almost consistently above EUR 30.00. Based on closing prices, the highest prices for the year were registered in this period: EUR 31.80 on XETRA in Frankfurt in mid-February 2023 and EUR 32.40 on the Vienna Stock Exchange at the beginning of April.

A new downward trend started in early June, but the shares rallied from mid-July, leading to prices of over EUR 30.00 towards the end of August / beginning of September. From the end of October, there was a gradual drop in the share price. The year-end closing price was EUR 27.30 (Vienna Stock Exchange and XETRA Frankfurt). That was 4.2% (Vienna Stock Exchange) and 4.5% (XETRA Frankfurt) below the closing price at year-end 2022. The ATX rose 9.9% over the year 2023 and the DAX gained 20.3%

The most important exchanges for shares in Frequentis were the Vienna Stock Exchange and XETRA Frankfurt, which accounted for 59% and 23% of trading respectively, followed by Tradegate, which accounted for 15%. The remainder of trading was on the trading floor in Frankfurt and other German stock exchanges. The average trading volume on the above stock exchanges was around 3,600 shares per day in 2023 (2022: around 6,100 shares per day).

Dividend and dividend policy

A dividend of EUR 0.24 per share for the 2023 financial year will be proposed at the Annual General Meeting on 6 June 2024 (dividend for 2022: EUR 0.22 per share). If this is approved, the payout would be around EUR 3.2 million (2022: EUR 2.9 million), giving a dividend yield of 0.88% based on the closing price on the Vienna Stock Exchange at end-December 2023 (2022: 0.77% based on the closing price at end-December 2022).

The Frequentis dividend policy is to pay out around 20-30% of adjusted profit of the Frequentis Group after tax each year – bearing in mind the annual ceiling of around 40% of the net profit of Frequentis AG reported in the individual financial statements of Frequentis AG prepared in compliance with the Austrian Commercial Code (UGB).

Share repurchase 2023

On 17 August 2023, the Executive Board of Frequentis AG decided to undertake a share repurchase programme in accordance with Section 65 (1) subsections 4 and 8 of the Austrian Companies Act (AktG) on the basis of the authorisation of the Annual General Meeting of 2 June 2022. A total of 17,500 shares with a total value of EUR 509 thousand were repurchased. The share repurchase programme ended on 13 November 2023. Further details can be found at www.frequentis.com/en/ir > Share > Share Repurchase 2023.

Treasury shares

The company had 8,910 treasury shares as at 31 December 2022. Following the transfer of 7,925 shares to the CEO in May 2023 as settlement for the Long-Term Incentive Plan 2020 (LITP 2020) and the repurchase of 17,500 shares, the company held 18,485 treasury shares as at 31 December 2023. That equals 0.1392% of the share capital.

Capital market communication

As the interface to the capital market, Investor Relations focuses on providing extensive and transparent information for the financial community. The aim is to raise awareness of Frequentis and strengthen trust in the company and its shares. The Executive Board and the Investor Relations department engaged in extensive communications with private and institutional investors in 2023 to foster dialogue. In addition to financial reporting, this included conference calls and participation in several virtual and face-to-face capital market conferences and web conferences. An overview of all past and future events is available at www.frequentis.com/en/financialcalendar.

Awards

Two awards were presented in recognition of Frequentis' efforts:

- Vienna Stock Exchange Award
In 2023, Frequentis was awarded first place in the mid-cap category of the Vienna Stock Exchange Award for the second successive year.
- Investor Relations Innovation Award
Frequentis won the Best Innovation Award in Investor Relations – Small Cap and was nominated as a finalist in the category Best Investor Relations Programme – Small Cap. The Best Practice Awards, which were presented by the London-based Investor Relations Society for the 23rd time, recognise the achievements of companies that are committed to first-class engagement with investors.

Key share data

		XETRA Frankfurt	Vienna Stock Exchange
Closing price on 31 December 2023	in EUR	27.30	27.30
Lowest price (closing price) in 2023	in EUR	26.50	26.40
Highest price (closing price) in 2023	in EUR	31.80	32.40
No. of shares outstanding as at 31 December 2023	in millions	13.28	13.28
Market capitalisation as at 31 December 2023	in EUR million	362.5	362.5
Share price performance in 2023 (31 December 2023 vs. 31 December 2022)		-4.5%	-4.2%
Share price performance since the IPO in May 2019 (31 December 2023 vs. issue price of EUR 18.00)		+51.7%	+51.7%
Index performance in 2023 (31 December 2023 vs. 31 December 2022)	DAX +20.3%	ATX +9.9%	

Basic information on the share

ISIN	ATFREQUENT09
WKN	A2PHG5
Free float	around 22%
Stock exchanges	Vienna Stock Exchange, XETRA Frankfurt, Frankfurt Stock Exchange
Market makers / designated sponsor	ODDO-BHF (Vienna and Frankfurt), BankM (Frankfurt)
Ticker symbol	FQT
Reuters ticker symbol	FQT.VI (Vienna), FQT.DE (Frankfurt)
Bloomberg ticker symbol	FQT:AV (Vienna), FQT:GY (XETRA Frankfurt)
No. of shares outstanding as at 31 December 2023	13,280,000 shares
Share capital	EUR 13,280,000
Date of initial listing	14 May 2019
Issue price	EUR 18.00

Investor Relations contact

The Frequentis investor relations website at www.frequentis.com/en/ir provides extensive information for shareholders: press releases, presentations, videos, financial reports, a share chart, the financial calendar, and information on corporate governance.

Contact: Stefan Marin, +43 1 81150 1074, investor@frequentis.com

Consolidated Corporate Governance Report 2023

Commitment to the Austrian Code of Corporate Governance	22
Executive Board	24
Supervisory Board	26
Measures to promote women	29
Diversity concept	30
External evaluation in accordance with C rule no. 62	32

Commitment to the Austrian Code of Corporate Governance

Frequentis is committed to accountable management of the company geared to creating sustainable, long-term value. In keeping with this, Frequentis AG supports the Austrian Code of Corporate Governance, which aims to strengthen the confidence of national and international investors in the Austrian capital market by increasing transparency and establishing uniform principles of good corporate management.

The Austrian Code of Corporate Governance published by the Austrian Working Group for Corporate Governance is generally recognised. The applicable version is publicly available at www.corporate-governance.at and comprises three categories of rules:

- **L rules** (legal requirements), which are based on mandatory legal requirements;
- **C rules** (comply or explain), which have to be followed; to be in compliance with the Code, any deviation has to be explained and the reasons stated; and
- **R rules** (recommendations) since these are recommendations, non-compliance does not require either disclosure or reasons.

Corporate Governance Declaration

Frequentis AG complies with all mandatory L rules and – with the exception of the deviations set forth below – all C rules set out in the Austrian Code of Corporate Governance in the version dated January 2023:

Rule 2

- Under article 5.1.2 of the articles of association of Frequentis AG, the holder of registered share no. 1 with restricted transferability, Mr. Johannes Bardach, is authorised to appoint one third of the maximum number of shareholder representatives on the Supervisory Board (right to appoint Supervisory Board members under Section 88 of the Austrian Companies Act [AktG]). In this respect, the principle of “one share – one vote” is not fulfilled. The company benefits from the commitment, knowledge, and experience of the Supervisory Board members appointed by the majority shareholder, Mr. Johannes Bardach. In all other respects, share no. 1 has the same rights (especially voting and profit-sharing rights) as all other shares. An agreement on the election of a person nominated by B&C Holding Österreich GmbH (“BCHÖ”) as a member of the Supervisory Board of Frequentis AG has been concluded between Frequentis Group Holding GmbH and BCHÖ.

Rule 27

- Further, in the reporting period long-term variable remuneration components were only provided for the Chairman of the Executive Board, because he bears primary responsibility for the long-term corporate strategy.

Rule 39

- The Audit Committee and the Committee for Executive Board Issues do not meet the requirements of C rule no. 39 of the Austrian Code of Corporate Governance as only one of the two shareholder representatives on these committees can be regarded as independent. The two shareholder representatives who are not deemed to be independent are Mr. Johannes Bardach (Committee for Executive Board Issues) and Mr. Reinhold Daxecker (Audit Committee). They have extensive knowledge of the relevant fields and, above all, the Frequentis Group. This is of material importance for the work of these committees, so their appointment represents added value for the committees.

Rule 53

- The Supervisory Board does not fulfil C rule no. 53 as only three of the six shareholder representatives elected by the Annual General Meeting or delegated by the shareholders on the basis of the articles of association are considered to be independent. The shareholder representatives who are not deemed to be independent are Mr. Johannes Bardach (Chairman of the Supervisory Board), Mr. Reinhold Daxecker (member of the Supervisory Board) and Mrs. Sylvia Bardach (member of the Supervisory Board). However, each of these members has extensive expertise that is of material relevance to the work of the Supervisory Board and, above all, a very precise knowledge of the Frequentis Group, so their appointment represents added value for the Supervisory Board.

Executive Board

Members of the Executive Board

In 2023, the Executive Board of Frequentis AG comprised the following members:

Name (Year of birth)	Function	Date of initial appointment	End of current term of office	Supervisory Board or similar offices ¹
Norbert Haslacher ² (1970)	Chairman of the Executive Board (CEO)	1 April 2015 (member of the Executive Board) 16 April 2018 (Chairman)	15 April 2028	None
Monika Haselbacher ² (1969)	Member of the Executive Board (COO)	1 January 2023	31 December 2027	None
Hermann Mattanovich (1960)	Member of the Executive Board (CTO)	1 January 2009	31 December 2024	None
Peter Skerlan (1968)	Member of the Executive Board (CFO)	16 April 2021	15 April 2026	None

¹ Seats on supervisory boards or comparable offices at domestic and foreign companies that are not included in the consolidated financial statements

² In view of the similarity between the surnames of Mr. Haslacher and Ms. Haselbacher, attention is explicitly drawn to the fact that they are not related.

Norbert Haslacher has been a member of the Executive Board of Frequentis AG since April 2015, originally with responsibility for Sales & Marketing. He was appointed CEO in April 2018.

Responsibilities: Strategy, Global Sales, Strategic Business Units, Corporate Communications & Marketing, Investor Relations, New Business Development & Invest4Tech, New Market Solutions, Partnerships and M&A.

Norbert Haslacher studied business economics at St. Gallen Business School and has more than two decades' experience of technology solutions, services, and consulting, including as managing director responsible for Austria and Eastern Europe at the US IT company CSC and, before that, as a consultant at Coopers & Lybrand Consulting.

Monika Haselbacher has been a member of the Executive Board of Frequentis AG and Chief Operating Officer (COO) since 1 January 2023.

Responsibilities: Project Management & PMO, Customer Services, Health Safety Environment (HSE) Management, Group Governance, Processes & Efficiency, Quality Management, Safety Management, Group Management.

Monika Haselbacher studied communications engineering at Vienna University of Technology and has worked for Frequentis since 1998 in various management positions in different departments and Group companies. She was also responsible for the implementation of complex customer projects.

Peter Skerlan has been Chief Financial Officer (CFO) of Frequentis AG since 16 April 2021. Mr. Skerlan is also the administrative managing director of the following Frequentis Group company: Frequentis Invest4Tech GmbH.

Responsibilities: Finance, Human Resources, IT, Legal, Facility Management, Environment, Social & Governance (ESG), Internal Audit & Compliance.

Peter Skerlan studied corporate management at Vienna University of Applied Sciences and business administration and accounting at the University of London. He joined Frequentis in 1999 as a business area controller. From 2006, Peter Skerlan was Vice President Finance with overall responsibility for financial performance and processes in the Frequentis Group.

Hermann Mattanovich has been a member of the Executive Board of Frequentis AG since January 2009. In the reporting period, his function was Chief Technology Officer (CTO). In addition, Mr. Mattanovich is managing director of the following Frequentis Group companies: Frequentis Czech Republic s.r.o., PDTS GmbH, Mission Embedded GmbH.

Responsibilities: Technology Management, Production & Logistics, Procurement, Product Management, Security.

Hermann Mattanovich studied electrical engineering at Vienna University of Technology and started his career as a technical consultant for companies such as Philips, Elin, VOEST, and Frequentis. He also worked as a lecturer at Vienna University of Technology. In 1988, he co-founded PDTS, a software development company that was later taken over by Frequentis. In addition, between 1999 and 2004 he was responsible for the TETRA development portfolio at Frequentis.

Supervisory Board

Members and independence of the Supervisory Board

In 2023, the Supervisory Board of Frequentis AG comprised the following members:

Name (Year of birth)	Function	Date of initial appointment	End of current term of office	Supervisory Board or similar offices ¹
Johannes Bardach (1952)	Chairman of the Supervisory Board (shareholder representative)	16 April 2018	Indefinite [member delegated pursuant to article 5.1.2 of the articles of association]	None
Karl Michael Millauer (1958)	Deputy Chairman (shareholder representative)	17 July 2007 ²	Until the Annual General Meeting in 2025	None
Boris Nemsic (1957)	Member of the Supervisory Board (shareholder representative)	17 July 2007 ²	Until the Annual General Meeting in 2025	None
Reinhold Daxecker (1970)	Member of the Supervisory Board (shareholder representative)	16 April 2018	Indefinite [member delegated pursuant to article 5.1.2 of the articles of association]	None
Petra Preining (1973)	Member of the Supervisory Board (shareholder representative)	20 September 2019	Until the Annual General Meeting in 2024	None
Sylvia Bardach (1962)	Member of the Supervisory Board (shareholder representative)	20 May 2021	Until the Annual General Meeting in 2026	None
Gabriele Schedl (1968)	Member of the Supervisory Board (employee representative)	1 January 2015	Indefinite [delegated pursuant to Section 110 ArbVG]	None
Reinhard Steidl (1962)	Member of the Supervisory Board (employee representative)	20 September 2019	Indefinite [delegated pursuant to Section 110 ArbVG]	None
Stefan Hackenthal (1961)	Member of the Supervisory Board (employee representative)	1 September 2022	Indefinite [delegated pursuant to Section 110 ArbVG]	None

¹ Supervisory Board or similar offices at publicly listed Austrian or foreign companies

² Previously a member of the Supervisory Board of Frequentis GmbH (from 2002), which became Frequentis AG on 17 July 2007

The Supervisory Board's **criteria for independence** are based on the "Guidelines for Independence" set out in the Austrian Code of Corporate Governance, which specify – among other things – that a Supervisory Board member shall not have served as member of the Executive Board or as a management-level staff member at the company in the past five years. Mr. Bardach was Chairman of the Executive Board of Frequentis AG before being appointed to the Supervisory Board in April 2018. Mr. Daxecker held a management position at Frequentis AG before being appointed to the Supervisory Board in April 2018. Prior to her election to the Supervisory Board in May 2021, Mrs. Bardach was a member of the Executive Board of Frequentis AG. Mr. and Mrs. Bardach and Mr. Daxecker are therefore deemed not to be independent, so C rule no. 53 of the Austrian Code of Corporate Governance is not fulfilled (see [Corporate Governance Declaration](#) in this report). The other members of the Supervisory Board (shareholder representatives) are independent of the

company and the members of its governance bodies. Moreover, Mr. Millauer and Mr. Nemsic are independent members of the Supervisory Board; neither hold more than 10% of the company's shares or represent the interests of such shares.

Apart from the disclosures in the notes to the consolidated financial statements for 2023 [Note 36 Information on business relations with related parties](#), there were no business transactions in 2023 requiring approval pursuant to Section 95 (5) subsection 5 line 12 of the Austrian Companies Act or L rule no. 48 of the Austrian Code of Corporate Governance.

Working procedures of the Executive Board and the Supervisory Board and its committees

The **Executive Board** conducts the business of Frequentis AG in accordance with the law, the articles of association, and the rules of procedure issued by the Supervisory Board (the allocation of business responsibilities can be seen from the previous section of this report [Members of the Executive Board](#)). The rules of procedure govern, in particular, reporting to and collaboration with the Supervisory Board and contain an extensive list of business activities that require the consent of the Supervisory Board. The Executive Board holds regular meetings at which it discusses and decides on strategic and operational issues and on other matters of significance for the Frequentis Group or individual parts of the Frequentis Group which fall within the remit of the Executive Board. In addition, the members of the Executive Board constantly share information with each other and with the responsible managers and experts in the relevant field.

The Executive Board constantly maintains close contact with the Supervisory Board and, in particular, its Chairman, especially on strategic and other fundamental matters relating to the Frequentis Group's business policy. In addition, the Executive Board reports extensively at least once a quarter to the Supervisory Board on the business performance and situation of the Frequentis Group.

The **Supervisory Board** advises and oversees the management of the company by the Executive Board. It held four meetings in 2023. Except for one employee representative, who was excused from attending one meeting of the Supervisory Board, all members took part in all Supervisory Board meetings in the reporting period. The computed attendance rate was therefore around 97% (2022: around 98%). At its meetings, the Supervisory Board openly discussed with the Executive Board the strategic focus, business development, and situation of the Frequentis Group. It also examined in detail the key projects and individual measures and business activities requiring its consent.

In conformance with the statutory requirements and the corresponding rules of the Austrian Code of Corporate Governance, the Supervisory Board has set up the following **committees**:

Committee	Members
Audit Committee	Karl Michael Millauer (Chairman/financial expert) Reinhold Daxacker Gabriele Schedl
Committee for Executive Board Issues	Johannes Bardach (Chairman) Boris Nemsic
Special Committee on Commerzbank Mattersburg	Karl Michael Millauer (Chairman) Petra Preining Reinhard Steidl

The **Audit Committee** has been established in accordance with the provisions of Section 92 (4a) of the Austrian Companies Act. It is responsible, in particular, for the audit and for preparations for adoption of the annual financial statements for the company and the consolidated financial statements, the management report, the corporate governance report, and the proposal for the distribution of the profit. It also puts forward a proposal for election of the auditor for the resolution of the Annual General Meeting. In addition, the Audit Committee performs the preliminary examination of the non-financial report. The Audit Committee held three meetings in 2023. In addition to all committee members, the auditor also attended these meetings.

The **Committee for Executive Board Issues** deals, on the one hand, with matters relating to the relationship between the company and members of the Executive Board, especially the content and conclusion of employment contracts, and on the other hand, with all aspects of succession planning for the Executive Board and the Supervisory Board. Therefore, it combines the typical agendas of a remuneration committee and a nomination committee ("identical committee" as defined in C rule no. 43 of the Austrian Code of Corporate Governance). The Committee for Executive Board Issues held two meetings in 2023. All members attended both meetings.

The **Special Committee on Commerzbank Mattersburg** was set up by the Supervisory Board to oversee the investigation and appraisal of the internal processes and responsibilities relating to the Commerzbank Mattersburg case in 2020 and the accompanying revision of the relevant processes and regulations. At present, this special committee is focusing on overseeing the measures being taken to reclaim the company's deposits at Commerzbank Mattersburg and the related assertion of claims against Commerzbank Mattersburg and third parties. The committee held two meetings in 2023; all members took part in both meetings.

As already outlined, neither the Audit Committee nor the Committee for Executive Board Issues meets the requirements of C rule no. 39 of the Austrian Code of Corporate Governance, because in each case only one of the two shareholder representatives on the committee can be regarded as independent (see [Members and independence of the Supervisory Board](#) and [Corporate Governance Declaration](#) in this report). Mr. Bardach and Mr. Daxecker both have extensive knowledge of the relevant fields and, above all, the Frequentis Group. This is of material importance for the work of these committees, so their appointment as committee members represents added value for the committees.

Measures to promote women

Frequentis is committed to equal opportunities for all employees. As a global company, it employs people from a wide range of age groups with diverse competencies, different cultural and religious backgrounds, and different sexual orientations. Respecting this diversity is essential for successful collaboration on the company's numerous international projects and is therefore a crucial element in the success of the Frequentis Group. Accordingly, respect, diversity, and inclusion are central values that are taken into account when making appointments to all functions. All personnel decisions, from recruitment and training to remuneration and promotion, are based on suitability, performance, qualifications, integrity, and similar criteria. By contrast, gender, origin, religion, and sexual orientation are not selection criteria.

The percentage of women on the Supervisory Board is 33%. The percentage of women on the Executive Board is 25%. As at 31 December 2023, the percentage of women in the Frequentis Group was around 23%. However, in some regions and organisational units (e.g. in administration) the proportion of women is far higher.

Frequentis would like to increase the percentage of female employees, especially as mixed teams generally perform better and are an important enrichment for the company. However, the proportion of women in technical occupations and companies is generally still comparatively low. Frequentis uses a range of initiatives – cooperation with schools and universities, internal discussion meetings on women and careers, a special mentoring programme for women, transparent internal vacancy notices – in an effort to strengthen awareness and help female employees actively shape their careers. In particular, the aim is to increase the proportion of female managers.

In addition, Frequentis does its best to implement a balance between working and family life. A flexible working time model aligned to the legal requirements in different regions allows personal needs to be taken into account and encourages a good work-life balance. To help staff pursue their personal interests, the company also supports parental and educational leave. Moreover, Frequentis offers a wide range of educational and training opportunities covering both specialist topics and personal development.

Diversity concept

The functions of the Supervisory Board and Executive Board of Frequentis AG should be performed by people with the skills, knowledge, and experience required for the management, oversight, and sustained development of a publicly listed global company operating in a safety-critical environment.

The Supervisory Board of Frequentis AG is firmly convinced that a balanced and diverse mixture of Executive Board and Supervisory Board members plays a significant role in meeting this objective and enhances the effectiveness of the work of these two boards. In particular, diversity should ensure that different perspectives and a range of experience form the basis of business decisions taken by the Executive Board and assessed and overseen by the Supervisory Board.

Against this backdrop, when appointing **Executive Board members**, the primary and overriding criteria for assessing the suitability of potential Executive Board members are the proposed area of responsibility and the candidate's leadership qualities, previous performance, skills acquired, and knowledge of the company.

Appropriate consideration is also given to diversity when selecting suitable candidates for the Executive Board to ensure that the composition of the Executive Board achieves a complementary balance of diverse factors such as education, professional and personal experience (especially in an international setting), age, and gender. To this end, particular attention is paid to the following aspects:

- Each member of the Executive Board should have many years' experience of leadership, especially in an international context, and be familiar with the special nature of the project business and public sector contracts
- At least one member of the Executive Board should have a technical qualification or many years' experience in a technical profession
- At least one member of the Executive Board should have an administrative training or many years' experience of working in business administration
- The Executive Board as a whole should have many years' experience in the fields of software and hardware development, production, project management, international sales, finance, and human resources management
- In the composition of the Executive Board, attention should be paid to a suitable mixture of ages; consequently, no specific age limits are set for Executive Board members.

The above aspects and criteria for the selection of Executive Board members are not related to the gender of the candidates. Consequently, no specific target is set for the percentage of female Executive Board members. Rather, in the interests of the company, candidates are selected exclusively on the basis of their professional and personal qualifications, in accordance with the selection criteria outlined above.

When putting forward proposals for election to the **Supervisory Board**, with a view to diversity, the Supervisory Board is guided by the following criteria, taking into account the size of the company, the proportion of international business, and the ownership structure:

- The Supervisory Board should comprise shareholder representatives from business, science, technology, or research, who have gained experience in sectors or markets which are of significance for Frequentis' business activities (e.g. in project business and public sector contracts)
- The Supervisory Board should include shareholder representatives with experience of the management and/or oversight of international companies
- The Supervisory Board as a whole should have appropriate knowledge of the areas of finance, financial statements, accounting, law, compliance, and risk management as well as a basic knowledge of capital market law
- Attention should be paid to ensuring a suitable mixture of ages on the Supervisory Board; consequently, no specific age limit is set for Supervisory Board members
- Insofar as there is no statutory requirement, no specific target is set for the percentage of female Supervisory Board members. Rather, in the interests of the company, the proposals submitted to the General Meeting for the election of Supervisory Board members are based exclusively on the professional and personal qualifications of the candidates.

External evaluation in accordance with C rule no. 62

C rule no. 62 of the Austrian Code of Corporate Governance specifies that the company shall have compliance with the C rules of the Code evaluated by an external institution at least every three years. The last evaluation of this type was performed for the 2021 financial year and resulted in a positive report, which can be viewed at [> Investor Relations > Corporate Governance > Corporate Governance Reports.](http://www.frequentis.com/ir)

Vienna, 11 March 2024

Consolidated Non-Financial Report 2023

Foreword by the Executive Board	34
About this report	36
Company profile	39
Business model	42
ESG at Frequentis	43
Preparations for CSRD reporting	49
Impact of the geopolitical situation	54
Social and employee matters	55
Environmental matters	66
Human rights, compliance & anti-corruption	73
Safety, security & data protection	80
Risk-impact analysis	88
ESG outlook	91
KPIs for non-financial reporting	92
GRI content index	100
Sustainable Development Goals (SDGs)	103
EU Taxonomy	104
Report on the independent audit of the consolidated non-financial report in accordance with section 267a of the Austrian Commercial Code (UGB)	112
Declaration by all legal representatives	114

Foreword by the Executive Board

Safe. Secure. Sustainable. Putting our responsibility into practice.

GRI 2-22

Corporate social responsibility and sustainability are values that the Frequentis Group has been committed to in all its activities for many years. Sustainability is therefore a fundamental element in our holistic corporate culture and covers the entire value chain¹. We see sustainability as an opportunity for our future development.

In 2023, ESG (environment – social – governance) was integrated into Frequentis' overall strategy under the motto "Safe. Secure. Sustainable". By making ESG a key element of our corporate strategy, we want to emphasise the importance of sustainability and corporate social responsibility for the development of our group of companies, strengthen the related awareness throughout the Frequentis Group, and ensure comprehensive understanding and support for the implementation of measures. Our ESG strategy takes a very broad approach. ESG is reflected in our corporate purpose ("for a safer world"), the Frequentis culture, and the values and objectives of the Frequentis Group.

ESG strategy

- We want our descendants to inherit a viable environment
- Sustainability is embedded in our global strategy
- We want to create group-wide awareness of ESG and an understanding of the associated activities
- As a publicly listed company, we comply with mandatory reporting requirements
- Dialogue with our stakeholders is important to us
- We also help our customers meet their sustainability obligations
- Starting at headquarters, all ESG activities will be rolled out Group-wide and adapted to local conditions

This basic approach accompanied us throughout 2023, a year of notable successes, yet, at the same time, increasing geopolitical tension and crises. That made the achievements of the Frequentis team even more impressive – and they were rewarded by the market, as shown by the figures for 2023.

In addition, in 2023, we focused on extending the ESG organisation, especially with a view to the upcoming requirements of the CSRD (the European Union's Corporate Sustainability Reporting Directive). The aim of the CSRD is to improve the quality and comparability of sustainability reporting. To achieve that, the established reporting requirements on environmental, social, human rights, and governance aspects have been greatly extended and standardised.

¹ The value chain is defined as the entire spectrum of activities, resources, and relationships associated with the company's business model and the external environment in which it operates. In this context, Frequentis concentrates on monitoring its direct upstream and downstream relationships.

Although reporting in compliance with the CSRD only becomes mandatory from the 2024 financial year, we have already embarked on extensive preparatory work. An ESG Steering Group, headed by the CFO as the representative of the Executive Board, is driving forward this work by defining and coordinating further ESG measures. All activities are discussed with the Executive Board and Supervisory Board and are supported by the Supervisory Board, as the company's highest governance body.

A central milestone in the preparations for reporting in accordance with the CSRD was a materiality assessment based on the ESRS (European Sustainability Reporting Standards), which was undertaken in October 2023. The principle of double materiality on which this materiality assessment was based allows two perspectives on materiality in the context of sustainability reporting (impact materiality and financial materiality). In addition to the topics covered by the ESRS, safety and security are material company-specific topics for sustainability reporting at Frequentis ([↗ Materiality assessment in conformance with the ESRS](#)).

The results of this new materiality assessment, along with the previous materiality analyses, pave the way for the future: we strive to improve all aspects of our social and ecological performance throughout the Group, fulfil our compliance obligations, and actively work towards sustainable development.

For a safer world: Safe. Secure. Sustainable.



Norbert Haslacher
Chairman
of the Executive Board



Monika Haselbacher
Member
of the Executive Board



Hermann Mattanovich
Member
of the Executive Board



Peter Skerlan
Member
of the Executive Board

GRI 2-3
GRI 2-4
GRI 2-8

About this report

In keeping with its mission “for a safer world”, the Frequentis Group is committed to sustainability in everything it does. Appropriate initiatives are implemented locally in conformance with local law. The reporting period covered by this non-financial report is 2023 (publication date: 9 April 2024). The non-financial report on 2022 was published on 12 April 2023.

This non-financial report covers Frequentis AG, registered address Innovationstraße 1, 1100 Vienna, Austria, and its subsidiaries (subsequently referred to as Frequentis, the Frequentis Group, or the Group). As in the previous year, in the non-financial report the number of employees presented is given as a headcount because all employee-related indicators refer to the number of individuals employed. This supplements the presentation in the Group management report, where the employee data are based on full-time equivalents (FTEs). No disclosures were made on GRI 2-8 in the non-financial report for 2022. The data for 2022 are included in this report, together with the data for 2023, in the section “KPIs for non-financial reporting / Social and employee matters” ([↗ KPIs for non-financial reporting](#)). Further, the KPI table now contains data on water consumption (GRI 303-5) and more detailed disclosures on the weight of waste generated by Frequentis AG (GRI 306-3, GRI 306-4). No other new or supplementary disclosures have been added for 2023.

The basis for the content of this annual non-financial report and the level of detail is the Austrian Sustainability and Diversity Improvement Act (NaDiVeG), which was published in 2017 in the Austrian Federal Law Gazette (Bundesgesetzblatt) and transposes the European Union's Non-Financial Information (NFI) Directive (2014/95/EU) into Austrian law. This consolidated report was prepared in all material respects in conformance with the legal requirements of the Austrian Sustainability and Diversity Improvement Act [Sections 243b and 267a Austrian Commercial Code [UGB]] and meets the requirements set out in Section 243b UGB for the individual financial statements of Frequentis AG and Section 267a UGB for the consolidated financial statements. The materiality assessment, risks, and the concepts developed also apply for both Frequentis AG and the Frequentis Group.

This is the fifth non-financial report of the Frequentis Group. It was prepared on the basis of the materiality assessment performed in November 2021. To meet the extended requirements of the CSRD (Corporate Sustainability Reporting Directive), a new materiality assessment in accordance with the ESRS (European Sustainability Reporting Standards), based on the principle of double materiality, was performed in October 2023. The results of this new materiality assessment will form the basis for Frequentis' sustainability report from the 2024 financial year. The topics examined in the non-financial report 2023 will be taken into account in the transition to this new reporting basis ([↗ Materiality assessment in conformance with the ESRS](#)).

The non-financial report 2023, like the non-financial report 2022, was prepared on the basis of the GRI (Global Reporting Initiative) Standards 2021. These were used as a guide for the key performance indicators and management approaches. The goal is to continuously enhance the quality of the report and enable all stakeholders to obtain an objective and transparent overview of the company and the actions taken in the past year.

Data compiled and evaluated with reference to the GRI Standards and the related explanations are indicated by stating the applicable GRI Standards in the margin and are listed in the overview in the appendix to this report ([↗ GRI content index](#)). From the 2024 financial year, when the CSRD takes effect, the reporting will no longer be based on the GRI Standards. Instead, it will be based on the new ESRS (European Sustainability Reporting Standards). As set out in a joint statement by the European Financial Reporting Advisory Group (EFRAG) and the GRI in September 2023, a high level of interoperability is to be achieved between both standards so the use of the KPIs can be extended in the sustainability report ([↗ Preparations for CSRD reporting](#)).

In addition to representative initiatives and relevant disclosures, this report includes topics that have had a significant influence on the company's business activities, together with their social and ecological impact. For the sustainable orientation of the company, Frequentis also observes the United Nations Sustainable Development Goals ([↗ Sustainable Development Goals \(SDGs\)](#)).

Basis for the materiality assessment 2021

As in the non-financial reports on 2021 and 2022, the materiality assessment performed in November 2021 forms the starting point for the non-financial report 2023. The structure of the report is therefore based on the four sections of the materiality assessment, which contain a total of 21 sustainability topics:

GRI 3-2

- Social and employee matters
- Environmental matters
- Human rights, compliance, anti-corruption
- Safety, security & data protection

The stakeholder survey covered a total of 2,609 people:

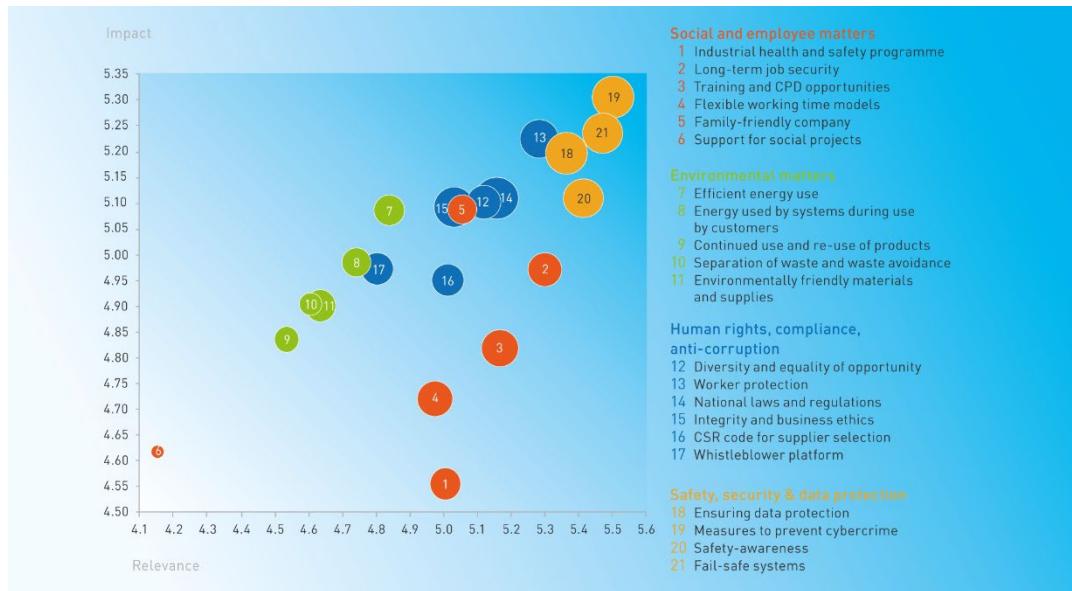
GRI 3-1

- Employees and prospective employees
- Customers
- Shareholders / capital market representatives
- Suppliers
- Top management

These stakeholders were asked to give their assessment of the relevance of the various aspects (shown on the x axis in the following chart). The y axis shows their assessment of the impact of the various activities on society, the economy, and/or the environment. The size of the bubbles shows the top management's assessment of the relevance of each activity for the business, taking into consideration both quantitative and qualitative aspects.

GRI 3-2

The overview of the 21 statements used in the questionnaire shows that the topics from the areas of safety, security & data protection, and human rights, compliance, anti-corruption are considered to be particularly relevant. In the other two areas, the aspects "family-friendly company" and "efficient energy use" received high ratings.



Assurance review

GRI 2-5

The content of the non-financial report was the subject of a limited assurance review by the external audit and tax consultancy BDO Assurance GmbH. The basis for this review was the Austrian Sustainability and Diversity Improvement Act (NaDiVeG) in accordance with Section 267a of the Austrian Commercial Code (UGB). This report was reviewed by Frequentis' Supervisory Board in accordance with Section 96 (1) of the Austrian Companies Act (AktG) ([Independent audit of the consolidated non-financial report](#)).

GRI 2-2

The consolidated group on which this report is based is the same as for the financial reporting ([Annual Report / Consolidated financial statements / Consolidated group](#)). Besides Frequentis AG, which is the parent company, the consolidated group comprises 6 (2022: 6) domestic subsidiaries and 31 (2022: 28) foreign subsidiaries controlled by Frequentis AG. The financial statements of subsidiaries are included in the consolidated financial statements from the date on which control commences until the date when control ends. 6 (2022: 7) foreign and 1 domestic (2022: 2) companies are included in the consolidated financial statements by applying the equity method. The reporting date for all companies included in the financial statements is 31 December.

If any information applies only to Frequentis AG or to a selected group of consolidated companies, this is specifically stated. The risk assessment meets the requirements of the Austrian Sustainability and Diversity Improvement Act (NaDiVeG).

To avoid redundancy, where appropriate, the report refers to the notes to the consolidated financial statements for 2023 ("consolidated financial statements"), the Group management report ("management report"), the consolidated corporate governance report for 2023, the compensation report 2023, or the profile of the company. References within this report are indicated by an arrow [↗](#) followed by the title of the section *in italics*.

Contact

GRI 2-3

If you have any questions about this report, please contact Brigitte Gschiegl, ESG Group Coordinator; ESG-Team@frequentis.com.

Company profile

Frequentis AG, which is based in Vienna, Austria, is a global provider of communication and information systems for control centres that perform safety-critical tasks. It develops and markets its “control centre solutions” in the Air Traffic Management segment (civil and military air traffic control, air defence, AIM [aeronautical information management]) and the Public Safety & Transport segment (police, fire service, emergency rescue services, railways and local public transport systems, coastguards, port authorities).

GRI 2-1
GRI 2-6

The primary objective of a control centre is to protect people and property from danger. Optimised solutions for this are especially important to customers operating in safety-critical sectors. More than 90% of customers are state-run or other public authorities. Customer requirements often include requests for even more efficient and sustainable solutions and the need to adapt quickly to constantly changing conditions. That increases the demand for integrated solutions. A human-centred design process enables the provision of a secure, efficient, and stable working environment for controllers, operators, and dispatchers.

As a global group of companies, Frequentis has an international network of companies and local representatives in more than 50 countries. In addition to its headquarters in Vienna, Austria, Frequentis’ locations include Australia, Brazil, Canada, the Czech Republic, France, Germany, Italy, Norway, Romania, Singapore, Slovakia, Switzerland, the UK, and the USA.

For further information, see [Annual report / Consolidated financial statements / Consolidated group](#).

The chart below shows the significant Group companies around the world, together with their main activities.

FREQUENTIS AG, Austria				
	Regional Sales & Operations	Products, Sales & Operations	Group Services	Special Purpose or Minority Shareholdings
Europe	Frequentis Deutschland, Germany	ATRiCS, Germany, 51%	Frequentis Czech Republic	FLYK, Finland, 25%
	Frequentis France	CNS-Solutions & Support, Austria	Frequentis Recording, Norway	FRAFOS GmbH, Germany, 77%
	Frequentis Norway	ELARA Leitstellentechnik, Germany, 51%	Frequentis Romania	Frequentis DFS Aerosense, Austria, 70%
	Frequentis UK	Frequentis Comsoft, Germany	Frequentis Solutions & Services, Slovakia	Frequentis Invest4Tech, Austria
		Frequentis Orthogon, Germany	PDTS, Austria	GroupEAD Europe, Spain, 28%
		Regola, Italy, 51%		Mission Embedded, Austria, 20%
				Nemergent Solutions, Spain, 25%
Australia/Asia	Frequentis Australasia, Australia	C4i, Australia	AIRNAV Technology Services, Philippines, 65%	Secure Service Provision, Germany
	Frequentis Middle East, UAE			Skyzr GmbH, Austria
	Frequentis Shanghai, China			Systems Interface, UK
	Frequentis Singapore			team Technology Management, Austria, 51%
Americas	Frequentis Brazil	Frequentis California, USA		
	Frequentis Canada			
	Frequentis Defense, USA			
	Frequentis USA			

Simplified visualisation; all shareholdings 100% unless otherwise stated. Company names abbreviated. As at end March 2024.

Frequentis has made nine acquisitions since its IPO in May 2019. Frequentis’ strategy includes searching proactively for attractive M&A opportunities to extend its product portfolio or gain access to new markets.

Frequentis' products and solutions are used at more than 49,000 working positions in around 150 countries. Founded in 1947, Frequentis estimates that it is the world market leader in voice communication systems for air traffic control with a market share of 30%. Frequentis is also the global leader in aeronautical information management and aeronautical message handling systems.

In April 2023, Frequentis acquired a 76.67% interest in FRAFOS GmbH, which is based in Berlin, Germany. FRAFOS delivers key security components for Frequentis' communication solutions for all safety-critical sectors. Solutions from FRAFOS are approved for safety-critical installations of government organisations and by Germany's Federal Office for Information Security (BSI). FRAFOS is an expert in VoIP (voice over internet protocol) firewalls, which support Frequentis in solutions for safety-critical operations by expanding protection against denial-of-service (DOS) attacks and attempted fraud.

In July 2023, Frequentis acquired 100% of the Norwegian software company GuardREC ATC AS, which has since been renamed Frequentis Recording AS as part of the integration process. This acquisition increases recording competence in all business areas. Its portfolio covers all aspects of surveillance as well as audio, video, and data recording, including data analysis. Frequentis' recording solution DIVOS is being merged with the solution that has been acquired to provide a new global product offer.

GRI 2-6

In 2023, revenues increased by 10.8% (EUR 41.5 million) to EUR 427.5 million (2022: EUR 386.0 million). Taken together, the two acquisitions – the German company FRAFOS and the Norwegian company Frequentis Recording – contributed around EUR 2 million to revenues in 2023. Organic growth was therefore 10.2%. Revenues in the Air Traffic Management segment grew by 13.8% to EUR 293.3 million. In the Public Safety & Transport segment, revenues increased by 4.8% to EUR 133.8 million. The revenue split between the Air Traffic Management and Public Safety & Transport segments was 69% : 31% in 2023 (2022: 67% : 33%). Looking at the regional revenue split, in 2023 Europe accounted for 66% (2022: 65%), the Americas for 16% (2022: 16%), Asia for 11% (2022: 12%), Australia/Pacific for 6% (2022: 5%), and Africa for 1% (2022: 2%). Less than 1% (2022: <1%) of revenues were not allocated to a region.

GRI 2-7

Since increasing use is being made of opportunities to work part-time, the Group management report states the number of employees as full-time equivalents (FTEs). This development reflects the trend on the labour market, where the offer of part-time employment is increasing. The number of employees increased by 6.5% to an average of 2,217 FTEs in 2023 (2022: 2,081 FTEs). Around 1,100 FTEs, which was around half of the total, were employed in Austria. In the non-financial report for 2023, the number of employees is supplemented by data on the headcount, because all employee-related indicators refer to the number of individuals employed. The headcount was 2,341 in 2023, compared with 2,193 in 2022.

GRI 2-1

Since May 2019 shares in Frequentis AG have been listed on the prime market at the Vienna Stock Exchange and the General Standard on the Frankfurt Stock Exchange, with the ticker symbol FQT (ISIN: ATFRQUENT09). The core shareholder is Johannes Bardach. He holds around 68% of the shares (about 8% directly and about 60% indirectly through Frequentis Group Holding GmbH). B&C Holding Österreich GmbH holds more than 10% of the shares. The free float is approximately 22%, mainly investors from Germany, Austria, and other European countries. For further information, see [↗ Annual report / The company](#), [↗ Annual report / The share](#).

Details of suppliers can be found in the section [↗ Selection of suppliers](#).

Segment overview

Air Traffic Management

GRI 2-6

The Air Traffic Management (ATM) segment comprises the ATM Civil business domain (which includes AIM / Aeronautical Information Management) and the ATM Defence business domain. This segment focuses on civil and military air traffic control organisations and therefore generally on one to two customers per country. It is estimated that the market entry barriers are relatively high.

The business domains' products are similar and are based on the same product platform. In the Defence business domain, there is also demand for additional encryption solutions. The safety and quality management requirements are the same: the international regulations for standardisation of air traffic issued by the International Civil Aviation Organization (ICAO) apply. Moreover, the infrastructure to be installed for customers (radar, radio transmission, networks) is similar.

Frequentis' ATM portfolio for the defence sector comprises communication and information systems for air defence and military air traffic control, systems for networked operational management and tactical networks, management and information systems, including systems for integrated use by different authorities, and high-security, interoperable communication systems for mission-critical applications.

Public Safety & Transport

The Public Safety and Transport segment comprises the Public Safety, Public Transport, and Maritime business domains. Its customers are public authorities or related organisations with monitoring and control functions.

The Public Safety business domain's customers are the police, fire, and rescue services. Police organisations also require additional encryption solutions. Alongside conventional rail operators, the Public Transport business domain's customers include local public transport providers. The Maritime business domain focuses on coastguards and port authorities.

The business domains' products are similar and are based on the same product platform. Moreover, the infrastructure to be installed for customers (phones, radio transmission, networks) is similar. Despite several international standardisation efforts, different national and regional requirements and regulations still apply.

Business model

Wherever Frequentis' systems are used, people bear responsibility for the safety of other people and property. The Frequentis Group is an international provider of communication and information systems for safety-critical control centres. Custom-tailored control centre solutions are developed and marketed by the Air Traffic Management segment (for civil and military air traffic control, AIM [aeronautical information management], and air defence) and the Public Safety & Transport segment (police, fire service, emergency rescue services, railways, coastguards, and port authorities). As a recognised specialist for the supply of safety-critical infrastructure, Frequentis develops future-oriented solutions for control centres in collaboration with key customers and makes new technologies usable for safety-critical applications.

The robustness of Frequentis' business model is supported by the fact that the products it supplies are part of the countries' safety-critical infrastructure. This infrastructure has to be available and ready for operation at all times – irrespective of the number of flights / flight movements or how often the police, fire service, and emergency rescue services are deployed.

Moreover, the central focus is on long-term customer relationships. Customers – public authorities, organisations, and companies with safety-critical tasks – often use the solutions provided for several decades. That requires a deep understanding of the customer's requirements, maximum reliability, and long-term trust. The extensive installed base also drives the steady and sustained growth of the Frequentis Group.

GRI 2-22

The Frequentis Group's sustainable growth strategy, accompanied by active risk management, is embedded in its corporate strategy. Furthermore, sustainability aspects are taken into account in the development of the corporate culture. Aspects addressed include increasing internationalisation and, in this context, global sustainability endeavours. A group-wide Culture Ambassador Network was established in 2023 to support the global rollout.



ESG at Frequentis

ESG organisation

To enhance the response to the broadly based environmental, social, and governance aspects and improve their presentation to stakeholders, at the start of 2022 Frequentis pooled its expertise in these three areas in a Group-wide ESG organisation. As a representative of the Executive Board, CFO Peter Skerlan bears executive-level responsibility for ESG topics. This was defined by the Supervisory Board at its meeting on 30 March 2022 in the rules of procedure for the Executive Board of Frequentis AG.

GRI 2-9
GRI 2-11
GRI 2-12
GRI 2-13
GRI 2-24



This interdisciplinary ESG team is coordinated by an ESG Steering Group, which involves and works closely with the Executive Board. Alongside the CFO, the members of the ESG Steering Group are the staff responsible for environmental, social, governance, and compliance aspects and the ESG Group Coordinator. The ESG team maintains regular contact with Frequentis' stakeholders ([↗ Materiality assessment in conformance with the ESRS / Stakeholder groups](#)).

GRI 2-14

Specific projects are analysed, prioritised, and driven forward at a monthly jour fixe. Current sustainability measures are examined and modified jointly, and new sustainability projects are initiated as necessary. At the annual ESG management review led by the CFO, the past year's ESG activities and indicators are discussed and action to achieve targets and further improvements are defined.

The CFO and the members of the ESG Steering Group regularly attend specialist congresses and events to network with experts and enhance their knowledge. Reading relevant literature is also very important. The knowledge gained in this way is shared widely within Frequentis. This ensures that the company always has up-to-date knowledge of the fast-changing fields of sustainability and transparent ESG reporting.

GRI 2-17

ESG was also the subject of a joint workshop where the Supervisory Board and Executive Board addressed the new regulatory framework introduced by the CSRD (Corporate Sustainability Reporting Directive) and discussed possible implications for the Supervisory Board and Executive Board.

The Executive Board and Supervisory Board, as the highest governance bodies, support all ESG measures. The Supervisory Board regularly considers ESG topics and ESG is a recurrent item on the agenda for Supervisory Board meetings.

GRI 2-18

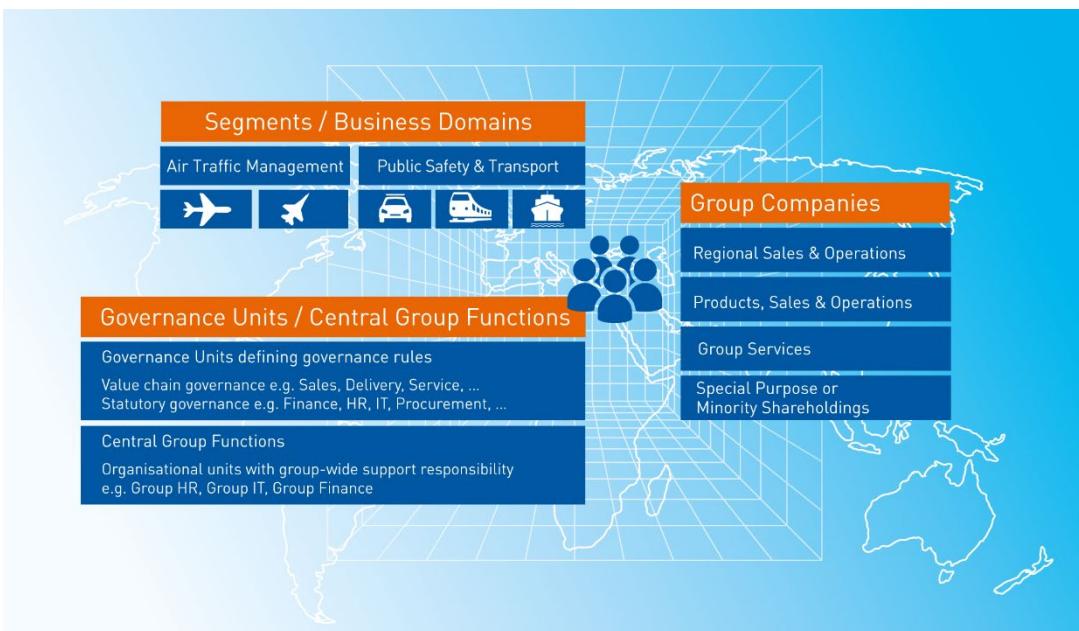
Specific ESG targets have been agreed with the Executive Board members for 2024. These also affect the variable component of their remuneration. Examples are aspects of the circular economy, energy savings, and employee satisfaction. As an additional focus, cybersecurity was selected from the company-specific issues highlighted in the materiality assessment ([↗ Remuneration report](#)).

The non-financial report is examined and approved by the Executive Board and the Supervisory Board.

Governance organisation

GRI 2-9 GRI 2-24

Frequentis' business model is based on a strong governance organisation, which is reflected in a three-dimensional matrix and ensures optimised interaction between the central units, the business domains, and the international subsidiaries.



Frequentis' two segments and the business domains grouped in these segments focus on successful business operations as their contribution to the Group's overall performance. The main responsibility is allocated to local value-generating functions such as Domain Sales, Key Accounts, Product Management, and Project Management. Innovation is very important to Frequentis. At all stages in the Frequentis innovation process, close and interdisciplinary collaboration with the business domains is ensured.

As an integral part of the value chain, the subsidiaries and equity investments make a significant contribution to the overall success of the Frequentis Group. There are currently 37 companies worldwide controlled by Frequentis AG. These have different areas of responsibility and competencies within the value chain ([↗ Company profile](#)). Governance and process orchestration takes place within the framework of the management of the Frequentis Group to ensure harmonised rollout of governance requirements based on accountability.

The Central Group Functions, most of which have governance responsibility, are divided into value-generating functions such as Sales, Production, and the provision of services, and central functions with a statutory governance remit, such as Human Resources, IT, Finance & Controlling, and Compliance.

The role of these central functions is to ensure smooth global collaboration. They focus on supporting the business, minimising risk, optimising workflows, and maintaining a general overview of the company.

Efficient regulation and management of processes and requirements are becoming more important, particularly in view of the increasingly rapid changes in the environment in which companies and organisations operate. The purpose of the three-dimensional governance organisation is to ensure successful, long-term collaboration at Frequentis.

The Global Corporate Policy, which applies to all companies that are majority-owned by Frequentis AG, contains all regulations and mechanisms for documenting and communicating necessary changes in individual governance units and how they interact. The policy and the governance rules it contains are based, among other things, on the defined ESG objectives and support their realisation. They are evaluated in the annual management review and therefore continuously improved and updated.

Management system

Frequentis' integrated management system forms the basis for sustainable optimisation of services and results in compliance with the requirements of internationally recognised standards:

GRI 2-23
GRI 403-1

- Quality management (ISO 9001:2015)
- Environmental management (ISO 14001:2015)
- Information security (ISO 27001:2013)
- Occupational health and safety (ISO 45001:2018)

On the one hand, the defined processes guarantee the quality of Frequentis' products and services. On the other hand, they support efficient collaboration and the use of synergies in the Frequentis Group.

Internal audits are used to check that the processes are applied and complied with. Certified sites are regularly audited by accredited certification organisations.

The table shows the initial certification dates (taking into consideration any predecessor legal entities):

	ISO 9001	ISO 14001	ISO 27001	ISO 45001	AEO	Cyber Essentials
Frequentis AG, Austria	1993	2005	2011	2005	2008	2016
ATRiCS Advanced Traffic Solutions GmbH, Germany	2010					
C4i Pty Ltd., Australia	1993			2020		
CNS-Solutions & Support GmbH, Austria	2016		2016			
Frequentis (Shanghai) Co. Ltd., China	2014					
Frequentis Australasia Pty Ltd., Australia	2012	2018	2011	2019		
Frequentis California Inc., USA	2000					
Frequentis Canada Limited	2008	2009		2009		
Frequentis Comsoft GmbH, Germany	1993		2018			
Frequentis Czech Republic s.r.o.	2011					
Frequentis Defense Inc.	2023					
Frequentis Deutschland GmbH, Germany	1998		2011			
Frequentis do Brasil Assessoria, Serviços e Comércio de Sistemas de Informação e Comunicação Ltda., Brazil	2019					
Frequentis Orthogen GmbH, Germany	2005					
Frequentis Romania S.R.L.	2010					
Frequentis Solutions & Services s. r. o., Slovakia	1997		2018			
Frequentis UK Ltd.	2015	2023	2011	2023		2016
Frequentis USA Inc.	2003		2011			
PDTS GmbH, Austria	2000					
Regola S.r.l., Italy	2014		2016			
Secure Service Provision GmbH (SSP), Germany	2021					
Systems Interface Ltd., UK	2018					
TEAM Technology Management GmbH, Germany	2020					
team Technology Management GmbH, Austria	2004					

In 2023, the accredited external certification organisations performed an extensive re-certification audit of Frequentis' headquarters for ISO 9001, ISO 14001, ISO 27001, and ISO 45001. Conformance without any deviations was confirmed.

Frequentis UK was successfully validated as conforming with ISO 14001 and ISO 45001 and Frequentis Defense Inc. obtained independent certification under ISO 9001.

Extending the ISO certificates to further Group companies is constantly evaluated, as is obtaining further relevant certifications to extend the integrated management system.

In addition, all companies in the Frequentis Group are required to comply with the corporate governance rules to ensure that operating processes can be applied throughout the organisation.

Sector initiatives and membership of organisations

Frequentis AG and its employees play an active role in many international associations, institutions, and advocacy organisations. Various platforms are used, depending on the business domain and governance issues. The purpose is to promote professional knowledge-sharing, structure content through committees, and play an active part in shaping national and international standards. They also heighten visibility of the Frequentis Group's wide-ranging competencies and present them externally, which in turn makes a positive contribution to stakeholder dialogue.

GRI 2-28

Examples are membership of national and international sector networks such as CANSO (Civil Air Navigation Services Organisation), EASA (European Union Aviation Safety Agency), CIRM (Comité International Radio-Maritime), the Austrian rail industry association Verband der Bahnindustrie Österreich, and TCCA (The TETRA + Critical Communication Association). In addition, Frequentis is actively involved in standardisation bodies such as EENA (European Emergency Number Association). Frequentis' international network is complemented by cooperations and memberships in the field of research and partnerships with various technical universities.

In the ESG context and from the perspective of the operating business, special mention should be made of Frequentis' membership of ISSS (International System Safety Society), safety-specific CANSO and EASA working groups, and networking with international communities in the field of security ([↗ Security](#)).

Frequentis has been a member of respACT, Austria's leading corporate sustainability platform, since 2022. As one of more than 400 members of this network, Frequentis aims to make a contribution to sustainable development both in Austria and internationally. Furthermore, Frequentis has been listed in the Austrian CSR Guide for many years. This also highlights the Group's ESG profile.

ESG ratings and awards

Frequentis regularly takes part in various voluntary CSR ratings conducted by a variety of institutions from different perspectives (customers, investors). This also involves extensive interchange about the Group's sustainability activities.

From the customer perspective, for example, Frequentis was awarded the EcoVadis silver medal in 2022 (the current rating based on the modified EcoVadis requirements profile is under way) and was also awarded the status "Verified GSES Member". In addition, many customers perform their own ESG ratings, often during the tender phase.

From the investor perspective, Frequentis was rated, for instance, by EthiFinance (formerly Gaia Research) and Sustainalytics. Frequentis is also included in the OekB ESG Data Hub and Deutsche Börse's ESG Visibility Hub.

Various awards and accolades testify to Frequentis' sustainability endeavours. Here is an overview from 2023:

- Vienna Stock Exchange Award, mid-cap category, for, among other things, corporate management, corporate governance, and sustainability
- "Austria's Best Managed Companies" (presented by Deloitte Austria and Raiffeisenlandesbank Lower Austria/Vienna)
- equalitA seal: award for in-house advancement of women, presented by the Austrian Ministry for Economy and Labour
- Signature of the "Diversity Charter" (initiative of the Austrian Economic Chambers / WKO), a commitment to all dimensions of diversity
- "Top Company" award from kununu (employer rating platform)
- Runner up in the ATM Award in the sustainability category together with its customer Avinor for significantly reducing CO₂ emissions at Oslo airport through continuous climb and descent operations

Preparations for CSRD reporting

To comply with the EU's new Corporate Sustainability Reporting Directive (CSRD), which was adopted in December 2022, Frequentis is required to provide extended sustainability reporting from the 2024 financial year. The objective of this enhanced reporting, which includes more stringent requirements for the disclosure of sustainability-related information, is to strengthen the trust of investors, employees, customers, partners, and other stakeholders in companies' sustainability performance. It also aims to accelerate the transition to a more sustainable economy by encouraging companies to identify their sustainability risks and opportunities and adopt corresponding measures.

Frequentis started to address the requirements of the CSRD in 2023 in order to prepare in good time for the new reporting requirements. At present, the following changes are planned for 2024:

- The non-financial report will become the sustainability report, which will be integrated into the management report in both the individual financial statements of Frequentis AG and the Group management report.
- Reporting in accordance with the GRI Standards 2021 will be transitioned to the mandatory ESRS (European Sustainability Reporting Standards). In parallel with this, reporting of key performance indicators (KPIs) will be extended and rolled out to include the Frequentis Group.
- A materiality assessment based on the ESRS using the principle of double materiality has already been performed and dialogue with stakeholders has been stepped up.
- Greater attention will be paid to forward-looking disclosures, including specific ESG targets for the Executive Board and strengthening ESG-awareness throughout the Group.

The focus of the preparatory work in 2023 was on the materiality assessment in conformance with the ESRS, which is a central element in the implementation of the new regulations and will form the basis for the new sustainability report.

Materiality assessment in conformance with the ESRS

Frequentis performed materiality analyses in 2019 and 2021 as the starting point for its non-financial reports.

GRI 3-2

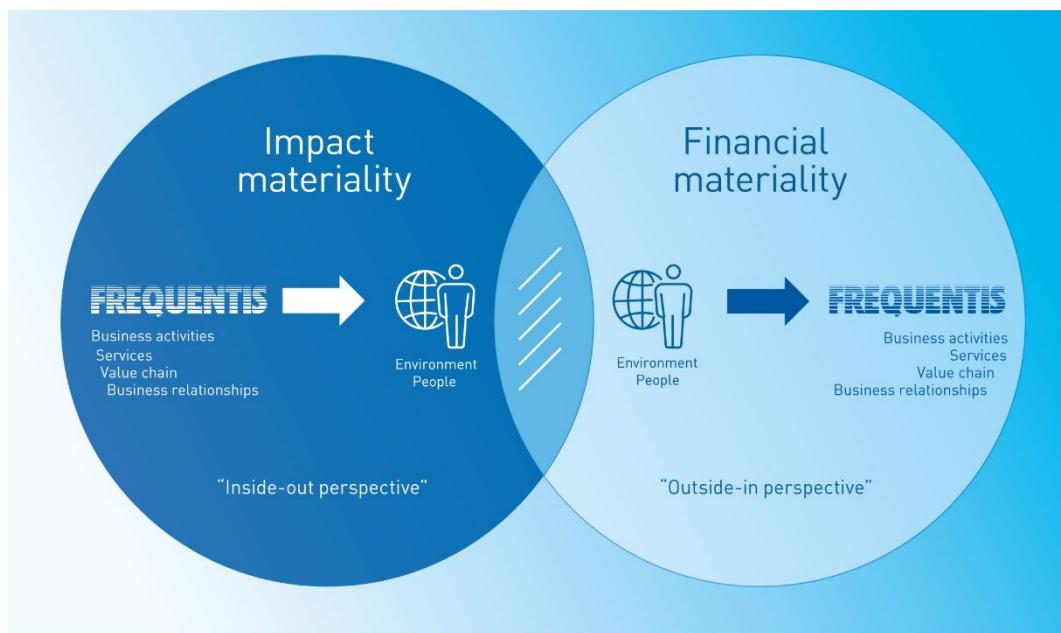
Following a recommendation from the ESG Steering Group, in summer 2023, the Executive Board decided that a new materiality assessment should be undertaken on the basis of the new European Sustainability Reporting Standards (ESRS).

Frequentis sees the materiality assessment as the starting point for systematic and structured integration of sustainability topics into the company. Its purpose is to involve key stakeholder groups, assess risks, and define the future areas of focus with regard to environmental, social, and governance aspects. It is also necessary to comply with the legal provisions of the CSRD.

Double materiality

The principal change relates to “double materiality”. An ESG topic is material and reportable if it meets at least one of two perspectives:

- Inside-out perspective (= impact materiality)
An ESG topic relating to the company has a significant impact on people and the environment. This perspective identifies aspects that are relevant for the stakeholder groups affected and could have an impact on the image, reputation, and long-term sustainability of the company.
- Outside-in perspective (= financial materiality):
This perspective assesses the impact of sustainability aspects on the company’s financial and business performance. In other words, it identifies aspects that are of financial significance and could have an impact on the company’s earnings, costs, assets, or liabilities.



Materiality assessment process

The ESG Steering Group has been examining the extended requirements of CSRD reporting since the start of 2023. As a central element, a project team drew up a concept for conducting a materiality assessment in conformance with the ESRS (principle of double materiality). Based on the previous materiality analyses, the standardised ESRS list of environmental, social, and governance policy areas was supplemented by a company-specific “Safety & Security” section.

For the inside-out perspective (impact materiality), it was proposed that the views of relevant stakeholders should be obtained through an anonymous online questionnaire. The stakeholder groups were modified and greatly extended compared with the previous materiality analyses. In all, about 3,250 people were addressed ([Stakeholder groups](#)). This process was accompanied by two workshops that brought together experts, firstly for a more detailed discussion of impact materiality, and secondly to assess the financial materiality (outside-in perspective).

The concept was presented to the Executive Board and Supervisory Board in summer 2023 and they approved its realisation.

Overview of the materiality assessment



Phases 1 to 3 were performed in 2023. Work on phases 4 and 5 is continuing in 2024. Based on the evaluations by Frequentis experts and the risk management team, the materiality of the individual topics will be compared, and all relevant aspects will be presented in a materiality matrix.

The results will then be presented to the Executive Board and the Supervisory Board. Together, they will discuss the material topics and define the principal areas of action. Details will be published in the Frequentis sustainability report 2024, which will be based on these areas of action.

Stakeholder groups

For the materiality assessment in October 2023, a broader stakeholder base was used than in previous materiality analyses. Representatives of banks, NGOs and advocacy groups, and project partners were added as new stakeholder groups. As a result, 3,250 people were sent an email containing a link to the anonymised online Microsoft Forms questionnaire. The survey was sent to people in the following stakeholder groups:

- Employees
- Supervisory Board
- Managers
- Executive Board members and Managing Directors of Frequentis companies
- Shareholders / capital market representatives
- Banks
- Suppliers and sub-contractors
- Customers
- NGOs and advocacy groups
- Project partners (sales, execution)

These stakeholders were asked to assess the relevance of the topics listed in the ESRS topic list (37 ESRS sub-topics). Since safety and security are company-specific topics of relevance for sustainability reporting at Frequentis, a company-specific safety & security section with four additional sub-topics was included in addition to the standard ESRS environmental, social, and governance (ESG) matters.

GRI 3-2

The survey was online for three weeks in October 2023. The average response rate was 17% (a total of 547 responses), with the highest response rates coming from representatives of banks and the Supervisory Board. The lowest response rates were from shareholders/capital market representatives and sales and project partners. The assessments of the various stakeholder groups are still being analysed in detail and will be incorporated into dialogue and communication with the various groups.

Continuous dialogue with stakeholders

GRI 2-29
GRI 3-1

Active engagement with internal and external stakeholders and target-group specific reporting remains important to Frequentis. Regular dialogue with stakeholders plays a key role in this. One area of focus is the stakeholders addressed in the materiality assessment.

GRI 3-3

Stakeholders	Communication and collaboration formats	Topics addressed
(Prospective) employees (including managers)	Intranet, career fairs, communication via social media, CFO Talk, CEO Dialogues, Board Chat, IDEAS, various communities and events, internal training sessions, Q&A formats, team workshops, employee newsletter, meetings of the workers' council	Frequentis as an employer, work-life balance, collaboration, leadership issues, occupational safety, support for women, corporate culture, health-related measures, environmental management, energy-saving measures
Shareholders, capital market representatives	Financial reporting (internet), regular mailshots, Annual General Meeting, roadshows, capital market events, surveys, one-on-one meetings with investors	Sustainability strategy, sustainability-related measures, ESG strategy and targets, governance, ratings
Banks	Specialist conferences, financial reporting, one-on-one meetings with representatives of banks	Sustainability strategy, governance, ratings, (trade) compliance, responsibility within the supply chain
Sub-contractors and suppliers	Supplier visits and audits, various events and trade shows, regular mailshots	ESG strategy, governance, responsibility within the supply chain, social and employee matters, environmental management
Customers	Customer projects and presentations, customer satisfaction survey, company presentation, customer events, trade shows	Responsibility within the supply chain, sustainability of products, sustainability-related measures (energy supply, social and employee matters, governance), safety awareness, security, cybercrime, (trade) compliance
Sales and project partners	Partner portal, regular newsletter, training	Innovation, sustainability of products, governance, (trade) compliance, safety-awareness, cybercrime, ESG strategy

Advocacy groups, associations, NGOs	Frequentis website, social media, conferences, research projects, cooperations, active involvement in associations and committees	ESG strategy, innovation, sustainability of products, safety awareness, security, fail-safety of systems, cybercrime, support for women in the company, energy-saving measures, careful use of resources
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For communication purposes, digital platforms are used extensively – videoconferencing, virtual training sessions, social media. In addition to this, personal contact is very important, for example, through local meetings and at a wide range of international trade shows.

Furthermore, Frequentis offers all internal and external stakeholders a whistleblower service, which is available via the Frequentis website www.frequentis.com/whistleblowing. This service allows simple and anonymous reporting of concerns about possible non-compliant behaviour.

GRI 2-26
GRI 2-16

Further CSRD preparations

To supplement the materiality assessment based on the principle of double materiality, which will form the basis for the new sustainability report, further CSRD preparations have been initiated.

Introduction of the CSRD also involves mandatory reporting in accordance with the European Sustainability Reporting Standards (ESRS). These binding standards have been drawn up by the European Financial Reporting Advisory Group (EFRAG) to improve comparability between companies.

So far, Frequentis' non-financial reports have been based on the applicable GRI standards. Transitioning the key performance indicators and datapoints to meet the requirements of the ESRS started in 2023 and the work will continue in 2024. At present, Frequentis assumes broad interoperability between GRI and ESRS, as announced in a joint statement by EFRAG and GRI in September 2023.

In parallel with the switch to ESRS, reporting of the KPIs will be rolled out stepwise to include the entire Frequentis Group. Some KPIs are currently only presented for Frequentis AG as a stand-alone company. Therefore, evaluations were performed at Frequentis subsidiaries in 2023 to identify the datapoints that are already available and where work is necessary to implement the requirements.

As well as extending KPI reporting, the CSRD has a strong focus on forward-looking disclosures. Specific ESG targets have been agreed with the Executive Board members for 2024. These also affect the variable component of their remuneration. Examples are aspects of the circular economy, energy savings, and employee satisfaction. As an additional focus, cybersecurity was selected from the company-specific issues highlighted in the materiality assessment. In addition, Group-wide ESG awareness is to be strengthened and a comprehensive understanding of the actions to be taken is to be established.

Impact of the geopolitical situation

This section provides an overview of the impact of global events on the company in 2023 in the context of non-financial reporting. The economic effects are set out in the Group management report ([Business performance](#)). The comments below indicate how these global factors impacted or are impacting Frequentis' internal and external stakeholders.

In addition to the war in Ukraine, which started in February 2022 and is now entering its third year, Hamas' attack on Israel in October 2023 led to the outbreak of a new war with potentially global consequences. Moreover, there are longer-term crises such as the climate crisis and distortion and price volatility on the energy market. It is possible to talk about a polycrisis, where individual crises have a compound effect. At the same time, Europe, in particular, is stepping up investment in military infrastructure and public safety.

These crises affect Frequentis' internal and external stakeholders in many different ways. There were no relevant effects on Frequentis' revenues because it did not generate any revenues with Ukraine, the Russian Federation, Belarus, or the Palestinian territories in 2023. Revenues from Israel were below EUR 1.0 million in 2023. However, the wars had an indirect effect through higher prices, especially for electricity, gas, and fuel.

Consequently, prices of other everyday products increased. Overall, inflation therefore rose sharply almost everywhere in the world and was well above the average for previous years in both 2022 and 2023. This resulted in the need to adjust prices for existing and new customer projects.

The inflation-related salary adjustments based on individual and collective salary agreements are reflected in the Frequentis Group's personnel expenses in both 2022 and 2023. Further cost rises are anticipated in 2024. This applies above all for Austria, where about half of Frequentis' workforce is employed. According to Eurostat, inflation was 7.7% (as at December 2023, annual average, year-on-year change). That was once again several percentage points above the average for the euro zone, which was 5.4%.

Recurrent supply chain bottlenecks caused by various factors (e.g. attacks on trade routes) have some impact on Frequentis, for instance through some sharp price rises and delays in the delivery of purchased materials. The increase in inventories was mainly due to increased stocking of components to ensure an adequate safety net to meet long-standing delivery and maintenance obligations despite the withdrawal of products by producers and supply bottlenecks.

Another aspect that could influence Frequentis' business is that more than a quarter of the world's population will have the opportunity to vote in elections in 2024. That could result in new governments, which could either initiate new investment plans or cut existing plans.

Social and employee matters

Employees are the most important factor for the achievement of Frequentis' corporate objectives and its international growth. Their commitment and dedication, and the innovative capability of multi-cultural teams are the foundations on which Frequentis has built 40 years of profitable growth and give the company key competitive advantages on the international market.

GRI 2-7

About 75% of Frequentis' employees are highly qualified engineers and specialists. Their broad and deep specialist knowledge and their extensive practical focus on customer and market needs are widely appreciated. As a high-tech company, Frequentis employs both young, highly trained university graduates and staff with practical experience. It offers them all an attractive working environment characterised by continuity and sustainability. The long-term stability of teams is crucial for customer confidence. Therefore, stability and continuity are key corporate values. Consequently, Frequentis endeavours to provide lasting job security.

Talent acquisition and employer branding

In 2023, recruitment of new employees once again concentrated on technical staff. In addition to system engineers, there was particularly high demand for software engineers, project managers, and IT and sales staff.

The company gives high priority to a thorough and exhaustive recruiting process. Finding the people with the right skillset means addressing the right target groups (through recruitment campaigns, including the conventional screening process, approaching prospective employees directly). It also involves supporting candidates right through the recruitment process, up to and including pay negotiations and drafting the employment contract. Alongside professional qualifications, Frequentis looks for an understanding of its business and its specific safety-critical culture.

Certain functions where there are frequent recruiting requirements, especially in technical areas where filling vacancies is difficult, have been defined as key functions in order to draw particular attention to them. In these functions a specific salary progression is defined in the employment contract, especially for university graduates. This underscores the importance of these functions and gives young employees, in particular, a perspective, which enhances employee retention.

In 2023, the recruiting team in Vienna received 2,359 job applications. Following a thorough evaluation process, they resulted in 105 new hires. In addition, the "Bringing a friend counts" incentive scheme has proven effective. In 2023, nearly 9% of total job applications were due to recommendations by employees and in 20 cases they resulted in the hiring of new employees.

GRI 2-30

In autumn 2023, we started to draw up a strategy for a strong employer brand in order to introduce Group-wide employer branding guidelines. The aim is to extend and strengthen employer branding in keeping with Frequentis' mission, strategy, and culture. The employer brand created in this way will give Frequentis a positive and unique identity as an employer and help attract and retain skilled staff, differentiate Frequentis from its competitors, and foster a pleasant and productive working environment.

The Frequentis Group's headcount increased from an average of 2,193 in 2022 to 2,341 in 2023. Almost 45% of employees work in Vienna. The increase in the headcount was therefore 6.7%. Expressed as full-time equivalents (FTEs), the average number of employees in the Frequentis Group rose by 6.5% to an average of 2,217.

Remuneration

To ensure uniform, transparent, and fair remuneration, the salaries of all employees are reviewed annually by the responsible managers and, in some cases, the relevant committees and governance bodies by comparing them with the statutory requirements and external benchmarks. This includes evaluating whether they meet the minimum requirements and market conditions. Salaries are reassessed in the regular pay rise process. All employees at Frequentis AG fall within the scope of the Austrian collective bargaining agreement for employees in the metalworking sector.

GRI 405-2

Every two years, a mandatory income report is prepared in accordance with Section 11a of the Austrian Equal Treatment Act (GLBG). This report contains information on the number of men and women in each salary grade and the number of years in the salary grade, along with corresponding average salaries of men and women in the calendar year. This anonymised report is submitted to the workers' council of Frequentis AG, which communicates the findings to the company's employees at the annual works meeting. In addition to the income report, an analysis is performed at function level. This is used in the annual salary adjustment process.

For employees of Frequentis AG, remuneration information sessions were organised for the first time in 2023, to provide a transparent presentation of Frequentis' pay policy and answer employees' questions.

Occupational health and safety

The long-term nature of Frequentis' business relationships and the extensive periods for which its systems are used by customers require special action to secure the know-how and stability of project teams. Alongside a range of employee retention measures, there is an extensive occupational health and safety programme, including measures to prevent accidents at work and preventive health measures to enhance the long-term well-being and job satisfaction of Frequentis staff.

GRI 403-1
GRI 403-2
GRI 403-3

To create an attractive working environment for present and future employees, work has to be shaped to ensure that it does not entail excessive physical or mental strain. The occupational health and safety team at Frequentis AG comprises a medical officer, a psychologist, an external female safety specialist, an internal male safety specialist, and an eight-member team of safety officers from various areas of the company. The team ensures that hazards and inappropriate workloads are viewed from different angles and takes proactive steps to avoid them.

To ensure a safe working environment, risks, hazards, and problems are viewed from a wide range of perspectives. Alongside measures to prevent work-related accidents, occupational illness, and excessive stress, methods and possibilities are made available in case the preventive measures fail or accidents happen.

A wide-ranging first responder organisation has therefore been put in place. As well as ample first-aid equipment, this includes a significant number of first-aiders and paramedics. In addition, there are defibrillators for use by anyone and special rinsing equipment for accidents involving chemicals. Special training on their use is provided.

To prevent work-related accidents and injuries involving tools and machinery, every new machine and piece of equipment is analysed in advance by the safety specialist and any necessary measures are implemented. Special attention is paid to the correct use of any necessary personal protective equipment (PPE). To increase acceptance and thus the use of PPE, wherever possible, employees are consulted when purchasing new PPE.

All dangerous chemicals used at Frequentis AG are managed with the aid of a tool provided by the Austrian accident insurer AUVA. In accordance with the STOP principle (risk avoidance and hazard prevention at source, as defined in Austrian worker protection legislation), as a first step particularly hazardous materials and all new materials are analysed for scope for substitution. Technical and organisational measures are then implemented to ensure safe use and storage of chemicals. Any remaining danger is mitigated by the use of PPE by staff.

Regular inspections are carried out by the safety specialists and the occupational medical officer to continuously enhance the effectiveness of the safety measures already defined, identify risks that had not previously been detected, evaluate the implementation and efficiency of the measures already in place, and obtain feedback from employees. The safety specialists and safety officers are firmly integrated into the everyday working environment, so employees can contact them confidentially at any time.

The training and continuing professional development (CPD) programme contains a wide range of free health and safety offerings. These include the mandatory safety training, for example, on working at heights and the regular refresher courses required under Section 14 of the Austrian Occupational Safety Act (ASchG). In addition, a wide choice of other topics, including occupational psychology, is available on a voluntary basis. In 2023, the focal areas were once again resilience (mental toughness), stress management, and burnout prevention. Regular refresher courses are held for first responders.

GRI 403-5

As a responsible employer, Frequentis gives high priority to actively fostering the health of its employees. As well as annual vaccination programmes (e.g. influenza and FSME vaccines) as part of occupational healthcare at the Vienna location, Frequentis organises special prevention projects such as heart check days, lung function tests, eye tests, and vein checks.

GRI 403-6

To alleviate mental stress, which may result from deadlines, targets, or interpersonal differences, established preventive occupational healthcare includes psychological support. In this way, the company can evaluate and largely prevent mental stress and also give employees access to a neutral assessment of situations they find stressful.

Frequentis AG also offers its staff a wide range of preventive healthcare measures to promote their health through the Frequentis vitality programme. A key aspect of this programme is healthy nutrition for employees and guests at the Vienna location. Food is freshly prepared every day and great emphasis is placed on high-quality ingredients and on using regional and seasonal products. The operator of the staff restaurant, SV Österreich, is committed to sustainability in the staff restaurant. As well as offering a wide range of vegetarian and vegan dishes, this includes cutting back on single-use plastic and using more environmentally friendly packaging.

Since most employees have jobs requiring them to sit in front of monitors for long periods, poor posture and musculoskeletal injuries are a special focus of preventive healthcare at Frequentis AG. A varied vitality programme is offered to prevent such problems and enhance employees' health. This includes exercise sessions, training sessions for runners, and participation in runs, as well as massages and an exercise room that is available for individual use.

Where possible, subsidiaries of the Frequentis Group also offer preventive healthcare programmes, check-ups, and activities to support physical and mental health. These include regular running groups, sometimes accompanied by special trainers, participation in regional runs and other sports events, subsidised or free gym membership, and joint exercise sessions for office staff in the workplace.

GRI 403-2

Despite extensive precautions, accidents cannot be prevented entirely. Frequentis AG considers it very important to analyse every accident carefully to prevent similar accidents occurring in the future. Although the accident rate is traditionally low, every accident and near miss is examined carefully to identify the exact causes. When an accident is reported, the background and causes have to be determined as quickly as possible by one of the safety specialists. Where appropriate, the occupational medical officer can be included in the analysis. On this basis of the findings, where possible, action to improve the situation is defined and implemented.

GRI 403-3

Operating procedures are drafted for all chemicals and machinery/equipment classified as dangerous. These are available to all members of staff. Where applicable, they include notes restricting their use by risk groups such as pregnant and nursing mothers and young people. If a member of staff is pregnant or young people are employed, e.g. through a work-experience placement or holiday job, the line manager is responsible for checking the information in order to protect the employee concerned. Employees who work with chemicals or operate machinery/equipment receive relevant instruction from their line manager or qualified colleagues in line with the operating procedure.

Flexible working hours and the working environment

Even before the COVID-19 pandemic, Frequentis had successfully established flexible working time models to accommodate personal needs and enable employees to achieve a work-life balance. After adaptation to comply with regional legislation, these are applied throughout the Group. The Frequentis working time model is part of the corporate culture and is based on the principles of performance, respect for individual personality, and mutual trust. A modern IT landscape (Microsoft Teams and other web-based platforms) provides extensive support for mobile working and working from home.

The provisions of the law adopted in Austria in 2021 on working from home and the results of an in-house survey have been combined in a Frequentis-specific regulation on working from home. Depending on the function profile and work performed, employees can sign an agreement allowing them to work from home for a maximum of three days a week. To supplement this, guidelines on hybrid working have been drawn up and distributed to the teams. To support this, the technical infrastructure in the meeting rooms has been upgraded and special rules of conduct have been issued to ensure the efficiency of virtual and hybrid meetings.

A framework for working from home is to be set at Frequentis companies worldwide in the future, based on local legal requirements.

To make it easier for staff to pursue their personal interests, in addition to statutory dispensations, Frequentis offers staff throughout the Group temporary part-time working conditions, sabbaticals, and educational leave.

Business travel is an essential element in Frequentis' business. To improve the travel conditions for employees, especially system engineers, a key function group that performs responsible tasks on customers' premises, a working group made up of representatives of Delivery / Technology, the workers' council, HR, and the Travel department was set up in 2023 to identify weak points and propose ways of making business travel more attractive, including taking sustainability into consideration. The first initiatives will be implemented in 2024.

Enabling staff to combine work and family life is important to Frequentis. As a family-friendly company, Frequentis AG has offered the Frequency Kinderwochen summer activity weeks for employees' children since 2012. To date, well over 1,000 employees' children have taken part in the varied programmes offered by this initiative in Vienna. The Frequency Kinderwochen help to foster a passion for technology, awaken interest in natural science, and instil an interest in experiments at a young age.

In 2023, 150 "Frequentis kids" aged between 4 and 12 years took part in the Frequency activity weeks, which took mobility and traffic as their theme. At the parent-child afternoon, the kids were able to conduct experiments with their parents. In addition, a special obstacle course gave the parents and children an opportunity to experience the mobility challenges faced by blind people and wheelchair-users in their daily lives.

The Frequency programme is continuing in 2024.

These staff-retention measures are having a positive effect: on average every employee stays with the Frequentis Group for around 8 years.

Broadly based staff development

Training and continuing professional development are very important at Frequentis and staff commitment is a key factor in the company's success. In order to remain successful on the market, it is important to be able to adapt quickly to new challenges and to constantly update knowledge of laws, requirements, technical specifications, and global issues such as sustainability and the environment.

GRI 404-2

Frequentis has a lifelong learning concept, which starts when staff join the company. It is important to offer employees an individually agreed training plan. This is discussed at the annual appraisal interview.

The Frequentis Onboarding Programme and the trainee programmes within the Frequentis Group ensure that new employees are rapidly integrated into the company and given the knowledge required for their job, for example, project management, systems engineering, and software development, and can build up a personal network. In their first months at Frequentis, new staff are supported by tutors to ensure quick and successful onboarding. The onboarding programme at Frequentis' headquarters in Vienna starts with an in-person welcome workshop. These workshops take place once a month. To support international networking, eight virtual Welcome Calls were organised in 2023.

GRI 404-3

Mandatory training sessions are part of the onboarding process. Subsidiaries also offer onboarding programmes for new employees. These are based on corporate standards, with a "local touch".

Appraisal interviews, which are held at least once a year, are the main tool used for employee advancement, development, and leadership. The aim is to reflect on work and the results achieved in the past year, establish the status quo, and make plans for the coming year. That includes a two-way discussion of expectations, mutual feedback on performance and personal development, and defining binding targets. The appraisal interview is therefore a snapshot, which gives employees guidance for their personal development. Digital documentation facilitates tracking of the agreed targets and development measures.

In 2023, at least one documented appraisal interview was held with 63% of staff in the Frequentis Group. This included agreeing and defining targets for the coming year. At Frequentis AG, the percentage was 87%. The difference is due to the fact that employees at the companies acquired in the past three years have not yet been included in the Group-wide appraisal system.

In addition to the Frequentis career model, which places management, expert, and project management careers on an equal footing, specific attention is paid to cross-departmental and intra-Group development of talented employees and those with potential. The annual staff review (STAR), which covers around 86% of employees in the Frequentis Group, provides an overview of the distribution of performance and potential at company, function, and team level. Further, identifying key staff and key functions allows long-term succession planning. Data on succession planning for management and key staff also formed the basis for the ongoing development of Group-wide talent management in 2023.

An adaptable international leadership development programme supports succession planning. Group-wide building and sharing of knowledge is aided, for example, by extensive skills management, virtual platforms, and distance learning.

Thanks to the comprehensive training offering, Frequentis employees participated in around 6,759 training sessions in 2023. The increase compared with 2022 (participation in 6,230 training sessions) was attributable to the extended training offering, especially in technical subjects. Most training sessions are conducted by internal instructors. This is an important element in passing on knowledge and safeguarding Frequentis-specific know-how. This valuable knowledge transfer is used to leverage synergies and as a competency multiplier across a wide range of fields. Frequentis has more than 100 internal instructors, who are an important part of the corporate culture and a vital basis for it to remain a learning organisation in the future.

The extensive digitalisation of “HR Learning & Development”, with virtual training sessions, distance learning, and blended learning concepts, remains positive. The internal CPD programme includes training in the market, sales, technology, project management, management and leadership skills, personal development, and business administration, as well as language courses. Sustainability aspects such as capital market compliance and security training are also included.

O'Reilly Online Learning, also known as O'Reilly Safari, is an online learning platform, which offers a broad spectrum of content, including e-books, video courses, interactive tutorials, and case studies. The platform has a strong focus on technology and software development and offers advanced content on programming languages, frameworks, cloud computing, machine learning, and other relevant topics. Intensive use is made of this platform at Frequentis. At present, more than 17 companies have joined the Group-wide O'Reilly programme, which gives their employees access to more than 60,000 modules.

GRI 404-2

A cybersecurity training programme was added to the technical training courses in 2023. In response to the development of the cyber threat landscape, the aim of this training programme is to give employees the knowledge and skills needed to protect the company and ensure the highest standards of safety and reliability. The programme covers a wide range of topics, including threat analysis, safe coding practices, network security, incident response, and compliance with sector regulations. It therefore improves Frequentis' cyber resilience and competence.

In 2023, management training focused on special coaching offerings for managers at Frequentis AG. They can select the most suitable partner for their needs from a pool of coaches. Around 30 people used this offer in 2023.

The new “Leadership Nuggets” format for managers to exchange compact information on specific topics proved successful in 2022. Four “Leadership Nuggets” sessions were held in 2023. The topics addressed were change communication, psychological safety, and decision-making in turbulent times. In view of the very positive feedback, this format is continuing with new topics in 2024.

There is rising demand for informal learning. Working Out Loud (WOL) was introduced as a new Learning & Development initiative in 2023. WOL is a method of collaboration and self-learning based on sharing knowledge and experience. The basic idea is that people report on their work and make it visible to others to help them and benefit from other people's knowledge. WOL is designed to foster personal development, networking, and collaboration.

The Frequentis Community Framework, which supports the establishment and operation of “communities of practice” has proven effective. Through these communities, Frequentis encourages a culture of collaboration and sharing specialist knowledge. They are an important element in collecting, creating, and sharing knowledge. There are now more than 20 Group-wide communities, mainly dedicated to technical topics such as data science, security, and artificial intelligence.

Sales Excellence Programme

GRI 404-2

Frequentis offers all sales employees extensive training opportunities through a Sales Excellence Programme. This is targeted at staff from the strategic business domains, regions, and international subsidiaries who work in the areas of sales & operations. The aim of the Sales Excellence Programme is to ensure that all sales staff in the Frequentis Group have a uniform knowledge base, and to provide individuals with opportunities to deepen their knowledge.

This extensive training programme was developed on the basis of an internal analysis of the strengths and development areas of the Frequentis sales organisation and is constantly reviewed. The basic package is a series of mandatory training sessions covering areas such as data protection, security, and “compliance for sales” (see [↗ Safety, security & data protection](#) and [↗ Compliance](#)). This is supplemented by advanced sales training modules on topics such as trust-based selling, consultative selling, and lateral leadership.

Most training sessions are digital, so they can be offered to all Frequentis subsidiaries, regardless of their geographical location. Moreover, some of the training sessions are recorded and made available for participants on the internal streaming portal so they can refer to them later.

Diversity & equality of opportunity

GRI 405-1

Customers greatly appreciate the internationality of Frequentis’ teams. The culture on which this is based is a key competitive factor on the international market. That is why every effort is made to ensure that it is a sustainable, Group-wide element in the fast-growing Frequentis Group.

An optimum work-life balance should be possible for all employees, irrespective of their age, gender, culture, religion, or background. Frequentis established the conditions for this many years ago. This is reflected in the international composition of its teams – the Frequentis Group employs staff from 56 nations – and in long-term employment relationships, which support the aim of retaining knowledge in the Frequentis Group.

Since the Frequentis Group encourages long-term employment, the average age of the workforce is naturally increasing. This trend is also reflected in the figures for retirement and phased retirement of older members of staff. In the past five years, there has been a considerable rise in the number of employees retiring and this will continue in the coming years. Frequentis aims for a mixture of experienced specialists and graduates to maintain a good balance in the age pyramid and safeguard the transfer of know-how. Professional succession planning also allows timely planning and development of replacements for staff who are retiring.

GRI 406-1

The Frequentis Group does not tolerate any form of discrimination, especially not on the grounds of gender, age, sexual orientation, race, ethnic background, or religion. Compliance with the legal framework is a matter of course. Frequentis is an equal opportunity employer. All personnel decisions, from recruitment and training to remuneration and promotion, are based on suitability, performance, qualifications, integrity, and similar criteria.

Two allegations of discrimination were formally investigated in 2023. In the first case, the allegation was not substantiated. In the second case, prompt disciplinary action was taken. In addition, awareness-raising action was taken with the team concerned and external coaching was offered.

A video message recorded by the Executive Board increased Group-wide awareness of this issue. A supplementary training module on equal treatment and anti-discrimination was developed for the Group companies in Austria and Germany.

The percentage of women at Frequentis is comparatively low, as it generally is in technical fields. However, a higher percentage of female employees would be desirable from Frequentis' perspective, especially in technical jobs. Diverse teams are generally more effective and enrich the company. The objective of the "Women & Careers" initiative is to support and encourage women at Frequentis to play an active part in shaping their career. In particular, the aim is to increase the proportion of female managers, for example through transparent internal vacancy notices. The Frequentis "Women's Community" is a platform for networking and interaction that provides important impetus to support female employees.

This can be illustrated by three initiatives from 2023:

- Launch of the mentoring programme at the Vienna location
Development of a common understanding and establishment of a professional mentoring network with more than 30 committed mentors
- Salary information for employees
Transparent presentation of remuneration components, criteria for salary progression
- Pilot initiative "active publication of management vacancies"
A qualified assessment process for filling management posts from within the company; identifying female employees with potential

The proportion of female employees was stable in the Frequentis Group and at Frequentis AG. In 2023, the proportions were 23.4% in the Frequentis Group and 25.4% at Frequentis AG (compared with 23% in the Frequentis Group and 25% at Frequentis AG in 2022). Frequentis Romania remains a "positive outlier" in respect of the proportion of women: due to the higher number of women with technical qualifications in Romania, the percentage of female employees at this development company is 33% (37% in 2022).

At Frequentis AG, women accounted for 27.4% of the 2,359 job applications received in 2023 (compared with 33.7% in 2022). This was partly due to the type of vacancies advertised, and partly to the fact that about 20% of the applicants did not disclose their gender.

Frequentis is also involved in a range of cooperation projects with schools and universities to interest women in technical professions. For example, it is a project partner in Girls! TECH UP, an initiative organised by the Austrian electrical engineering association OVE to interest girls in the world of technology and technical professions at an early stage by offering them female role models. Frequentis also partners with "sheconomy", a platform that showcases impressive women, and FIT (women in technology) in Vienna. As a member of the "Agenda Bahnindustrie Frauen" initiative, Frequentis provides a platform to identify and support mobility experts and women working in the railway industry.

Human Resources International

The Group HR Consultancy & Employee Mobility competence centre is responsible for implementing an effective Group-wide HR organisation by fostering a shared, Group-wide HR mentality, supporting the companies in the Frequentis Group around the world, and enabling international collaboration in HR work through Group-wide knowledge sharing and knowledge transfer. The competence centre is also responsible for initiating and supporting international assignments.

A core team involving local HR managers holds regular meetings to define joint goals and ensure implementation of a Group-wide HR strategy. In addition, the first World HR Team Summit was held at headquarters in Vienna in September 2023. More than 30 HR professionals from nine companies in the Frequentis Group on three continents attended.

Social responsibility

In keeping with its mission “for a safer world”, Frequentis sees making a contribution to disaster relief as a social responsibility and an expression of solidarity with those affected.

Supporting children has a special place at Frequentis because in many cases too little attention is paid to their situation as they are the weakest members of society. The company therefore made substantial donations to UNICEF in the immediate aftermath of the catastrophic earthquakes in Turkey and Syria, and in Morocco and Libya.

Moreover, collections were made at the initiative of employees at the Vienna location in cooperation with the Caritas charity: 65 parcels were donated for deprived families with babies and EUR 5,000 in cash was donated by employees. The cash donations were doubled by the company.

Sponsoring education

GRI 2-28

For many years, the Frequentis organisation in Austria and some of its subsidiaries, for example, in Germany, Romania, Slovakia, and Australia, have provided selective educational sponsorship for technical schools and universities. Special technically oriented training facilities require considerable financial resources and basic state funding generally only covers part of the cost. Exchange with industry is also vital to ensure top-quality, practice-oriented training that is state-of-the-art. Close collaboration between business and education is therefore essential.

Therefore, Frequentis AG offers work-experience placements for students and co-supervises dissertations and theses for bachelor's and master's degrees. For example, in 2023, the Vienna location supervised 23 holiday internships and five work experience placements. Other activities include sponsorship, workshops, and field trips for technical higher education institutions in Vienna and Lower Austria.

For many years, Frequentis has also been committed to helping various universities in Austria improve the quality of training. Since 2011, a special course on “Next Generation Air Traffic Management Systems – Air Traffic Control as an Example of Safety-Critical Systems” has been offered at Vienna University of Technology in cooperation with the Institute for Computer Technology. Here, Frequentis experts pass on their knowledge and give students an insight into the world of Frequentis.

“Adventure in Computer Science”, another cooperation with Vienna University of Technology launched in 2019, targets a younger age group: this permanent exhibition is designed to encourage school children’s enthusiasm for computer science.

Start-up activities

GRI 2-28

Frequentis has actively supported start-up activities since the 1990s. In recent years, the Frequentis Start-up Centre has evolved from a physical location in Vienna to an international virtual network that encourages close exchange of skills and ideas. Experience shows that a network of innovative partners, collaboration, and mutual support are very important for start-ups.

Frequentis’ current focus is on cooperation in the area of drones. Innovations in drone technology also have positive environmental effects, for example, by increasing the efficiency of inspection flights and monitoring. Special mention should be made of skyzr GmbH, the first Business Development spin-off, which is working with Frequentis in the field of UTM (uncrewed traffic management). At the same time, it is pursuing its own product developments for drone pilots and their clients.

Future aspects include examining artificial intelligence or blockchain technology for possible use in safety-critical applications.

Environmental matters

GRI 3-3

Environmental aspects and careful use of resources are important to Frequentis at all stages in the value chain. Sustainability and environmental awareness are taken into consideration in production workflows, where careful use of primary energy resources and raw materials, reducing harmful emissions, and the use of environmentally compatible production processes are documented and checked as part of the management review in the regular HSE (Health & Safety and Environment) report.

An important Group-wide contribution to sustainability and the conservation of resources is that Frequentis products and solutions are used by customers for many years, often decades. Frequentis supports this long life cycle by providing extensive service and maintenance programmes and through life cycle management. Customer Service offers various service levels and service teams are available worldwide around the clock.

In addition, Frequentis solutions help optimise traffic flows and therefore reduce pollution by reducing CO₂ emissions ([Green products](#)).

As a result of the pandemic, there was a massive drop in business trips from 2020, resulting in an extensive reduction in CO₂ emissions. A continuation of this trend was observed in the following years and has been included in Frequentis' environmental concepts since the end of the pandemic. Greater attention is now paid to optimising business trips and incorporating virtual meetings into project work. This is reflected in the CO₂ emissions caused by air travel, which were only half the 2019 level in 2023.

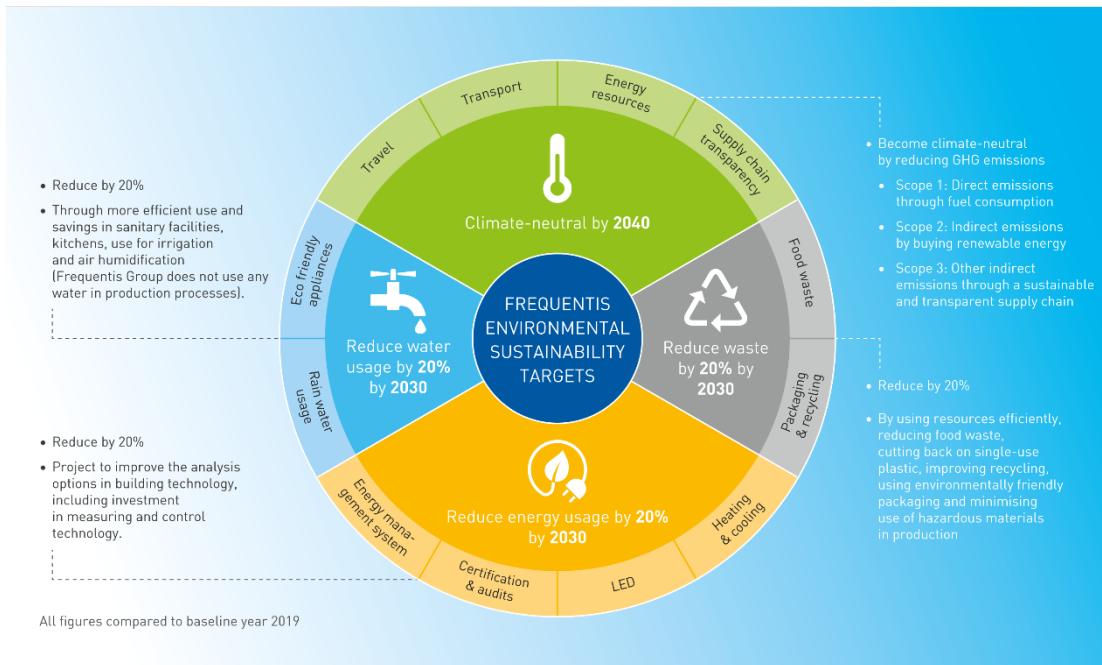
Without corresponding energy efficiency concepts and their implementation, Frequentis would not be able to make a significant contribution to international climate protection guidelines (e.g. United Nations, EU). Inefficient use of energy resources would also mean higher costs for the company.

Equally, high energy consumption by Frequentis systems would affect the energy efficiency of the customers who use them.

The Frequentis Group uses various concepts to reduce environmental impact in the production and use of its systems. When selecting products for production processes, Frequentis looks for environmentally friendly materials and supplies. Relevant chemicals are evaluated by HSE. Moreover, in development processes it strives to optimise the energy consumption of its systems and software to help customers optimise the energy consumption of their installations.

Long-term environmental targets

To bring together all steps taken under the auspices of the established environmental management system, long-term environmental targets have been defined, taking the European climate protection endeavours a guide. All activities to date constitute important steps towards achieving these environmental targets. Further measures and graduated plans have been defined to bring Frequentis closer to these targets. Progress is tracked and documented in annual management reviews.



Environmental impact of on-site activities

The Frequentis Group concentrates on installing and operating its solutions on existing infrastructure. That minimises the environmental impact of Frequentis' activities on local ecosystems. Consequently, these activities do not have any adverse impact on biodiversity, which is mainly jeopardised by intensive land-use by people, in other words, the conversion of natural habitats and ecosystems into agroecosystems.

GRI 304-1
GRI 304-2

Moreover, the risk of the irreversible loss of valuable natural areas can be minimised by using specific local knowledge and focusing on correct spatial development in collaboration with sub-contractors, with whom Frequentis' customers have often had a very good relationship for many years. That avoids conflicts between the implementation of Frequentis' solutions and the natural environment.

Frequentis' local activities focus on the installation of systems, maintenance work, and training. Consequently, they do not include the storage or handling of chemicals and there is no impact on groundwater levels or change in land-use. Therefore, the Frequentis Group's project work does not have any detrimental effect on nearby aquatic or terrestrial habitats.

With regard to activities on customers' sites, Frequentis focuses on reducing the carbon emissions resulting from business travel by endeavouring to make sure that all employees are accommodated as close as possible to the place of their assignment.

GRI 413-1

Furthermore, Frequentis works with its customers and project partners to enhance local environmental protection, broaden knowledge, disseminate best practices, and support initiatives and achievements geared to improving the environment. With this in mind, Frequentis constantly strives to learn about and contribute to local nature conservation projects and initiatives to enhance environmental sustainability.

Re-use/refurbishment of products

**GRI 301-2
GRI 301-3**

Frequentis pays attention to the re-use and refurbishment of products. For many years, the central element in this has been the selective repurchase of hardware originally delivered by Frequentis to customers. Repurchased parts are subject to a visual quality control check and stored in conditions with ESD (electrostatic discharge) protection until they can be reused. For customers, this avoids the special disposal process that would otherwise be required when an old system is taken out of service.

Some of these system components can be refurbished by Frequentis for re-use in as-new assemblies and therefore remain in use for many years. Normally, only a few components have to be replaced in the refurbishment process, which reduces the energy that would otherwise be required in Frequentis' production facilities to manufacture new system components.

Efficient use of energy

Frequentis gives priority to efficient use of energy. In recent years, Frequentis AG has used a variety of measures such as free cooling, heat pumps, and solar installations to manage power consumption carefully, despite the increase in revenues.

Following modernisation of measuring and control technology at Frequentis AG in 2022, heating, cooling, and ventilation systems have been optimised. This includes prioritising the use of heat pumps and making optimum use of exhaust heat. In addition, there was a considerable improvement in the capture and presentation of consumption data. Furthermore, a more detailed breakdown of individual electricity consumers will be integrated into the reporting system in the future to allow more accurate planning of effective measures to reduce consumption.

Lighting of the premises in Vienna is currently being converted to LED. When completed, this will reduce the energy required for lighting by about 65%.

**GRI 302-1
GRI 302-3
GRI 302-4**

Frequentis places great value on the use of electricity from renewable resources. For some years now, Frequentis AG has therefore sourced all electricity from hydroelectric power, wind energy, and eco-energy sources. This makes a contribution to reducing pollution by climate-damaging gases (e.g. carbon dioxide) and radioactive waste. It is also a clear signal for sustainability and efficient use of resources.

Consumption of gas for heating at Frequentis AG's location in Vienna was more than halved in 2023 compared with the previous year. This was attributable partly to the optimisation of the measuring and control system and the associated improvement in the use of exhaust heat, and partly to higher average ambient temperatures in the past two years.

Total energy consumption by the installations used to assemble systems for delivery to customers increased again in 2023. This was because considerably more systems were sold than in 2022. Moreover, average power consumption during operation of the systems has risen as electronic components are more densely packed.

GRI 302-2

Efficient use of resources and waste separation

In the context of efficient use of resources, Frequentis makes a sustained effort to reduce the resources used within the company and to minimise the use of hazardous materials in production. An annual HSE audit evaluates the action taken and recommends new initiatives to ensure correct sorting of waste and help avoid waste.

GRI 306-1
GRI 306-2

Environmental protection plays an important role throughout the value chain at Frequentis, from the selection of materials to processing and recyclability. Considerable attention is paid to reducing the use of hazardous materials in production. At the same time, Frequentis AG takes environmental relevance into consideration by using environmentally compatible production processes such as lead-free soldering and reducing power consumption in the production and operation of its systems. Attention is also paid to resource-saving packaging in the shipment of equipment, for example, by using reusable transport boxes. Since 2023, bubble packaging has been produced from recyclable materials at the Vienna location and used to package installations. Wherever possible, packaging of purchased materials is re-used.

GRI 306-4

Systematic sorting of different types of waste is compulsory. There are many waste collection points at the company's head office in Vienna. Each office has separate containers for recyclable paper (data protection regulations are observed in the disposal of paper) and other refuse. There are also collection points for waste paper in the large copy centres. For all other types of waste, there are waste sorting points in every kitchenette. Used electrical appliances are collected centrally by Logistics (Material & Transport department). In keeping with the motto "Donate instead of throwing away", IT hardware (laptops, PCs, printers, and headsets) that is no longer required by Frequentis AG is donated to the not-for-profit organisation "PCs für alle" (*PCs for everyone*). At subsidiaries, waste is sorted in accordance with local regulations.

This mindful approach minimises Frequentis' waste-related impact. As a result, hazardous waste accounts for less than 5% of total waste. There was a slight adjustment to the waste data because waste generated by the caterer SV Österreich is presented separately for the first time for 2023. The waste generated by Frequentis' activities at the Vienna location is disposed of by an external waste disposal company. The change in the waste disposal company and the related revision of the disposal concept at headquarters resulted in a further optimisation of waste sorting at the Vienna location in 2023.

The "Frequente" employee magazine, which is published three times a year, has been switched to an entirely PDF publication which can be downloaded from the intranet. A concept for a fully digital version is being developed.

Frequentis also uses resources carefully in its marketing activities. For example, when building booths for international trade shows, attention is paid to reusable elements. Virtualisation and digitalisation have brought a massive reduction in the volume of printed promotional materials. Moreover, setting up virtual demonstration rooms means that customer presentations and training can be carried out without business travel. In 2023, work started on guidelines for "green" meetings and events in the Frequentis Group. Greater attention is paid to the principle of sustainability by using sustainable event locations, reducing the use of single-use materials, and using shorter, more sustainable transport options.

Careful use of food resources is also a focus of the catering firm at Frequentis' head office in Vienna: SV Österreich has taken a conscious approach to the environment and resources for many years. In particular, it endeavours to reduce its environmental impact along the entire value chain, from considering the origin of products in the procurement phase to their preparation and disposal. Free, environmentally friendly reusable packaging for take-away food was introduced in 2021.

Specific steps are also taken to reduce food waste. These include careful planning of supply and the related purchases, fresh preparation, regular preparation of the dishes on the lunch menu, and careful replenishment of the salad buffet. Lunch menus now also include more vegan options. All this requires knowledge and conviction, so the company also places value on raising the awareness of its employees. To do this and to draw attention to the action that can be taken to avoid food waste, the staff restaurant has introduced initiatives such as an annual "United Against Waste" week.

GRI 303-1
GRI 303-2

Thanks to state-of-the-art production technology, Frequentis does not withdraw any groundwater or surface water for production purposes or inclusion in products. The water used at Frequentis' facilities is supplied from standard municipal sources and used for sanitary purposes. Wastewater is discharged into the municipal sewer system and meets Austria's high wastewater quality standards. This is monitored by unannounced sampling by the authorities. The possibility of using rainwater for sanitary installations has already been analysed and had to be rejected as there are no separate pipes for this in the building.

GRI 2-27

Frequentis is not aware of any cases of failure to comply with environmental laws and regulations in the reporting period. The company can confirm that it did not incur any fines or non-monetary sanctions in 2023.

Greenhouse gas impacts

Frequentis is continuously extending its accounting and reporting of greenhouse gases (GHG) using standardised, internationally recognised principles and approaches, taking into consideration the concept of scopes as defined, for example, in the GHG Protocol Corporate Accounting and Reporting Standard.

GRI 305-1
GRI 305-5

Taking Frequentis AG as an example, fuel consumption by the heating system and by the fleet of company cars have been identified as direct Scope 1 GHG emissions sources that are owned or controlled by the company.

Frequentis' current goal of addressing climate action by drawing up a company-wide GHG inventory and rolling out environmental performance indicators to its subsidiaries is best achieved by using the method based on standard emissions factor data from international sources rather than country- and combustion-specific data. Nevertheless, the company is endeavouring to adapt the methodology where this makes sense by using country-specific emission factors, while continuing to take into account the IPCC guidelines. For these calculations, Frequentis used the data for the 100-year global warming potential (GWP-100), which takes into account the radiative efficiency of the various substances and their atmospheric lifetimes compared with those of the reference gas CO₂, as derived from the IPCC report "Climate Change 2013: The Physical Science Basis". The GHG emissions calculations cover the gases carbon dioxide, methane, and nitrous oxide and are converted into CO₂ equivalents by applying the corresponding GWP-100 as the conversion factor.

In its efforts to reduce carbon emissions, the Frequentis Group welcomes the rising interest shown by staff in switching to electric or hybrid vehicles when ordering new company cars. This is supported, for example, by subsidies for electric cars and the installation of charging stations in the company's car park. These source their power from in-house photovoltaic installations. In Germany, Frequentis introduced a fleet policy giving preference to electric and hybrid vehicles in 2020. In 2023, electric and hybrid vehicles made up about 42% of the fleet of company cars at Frequentis AG and about 42% at Frequentis Comsoft.

Frequentis AG has switched sourcing of energy to 100% renewable resources such as hydroelectric power, wind energy, and other ecological sources. In this way, it has taken a major step forward in the decarbonisation of the company's headquarters in Vienna, where nearly 50% of the Group's employees work. This location includes a production facility. Frequentis calculates Scope 2 emissions using the market-based approach. According to the energy supplier, no CO₂ emissions occur in the generation of electricity from renewable resources.

GRI 305-2
GRI 305-5

Frequentis AG is constantly extending the coverage of its GHG inventory. Therefore, it reports the following other indirect GHG emissions (Scope 3) for Frequentis AG for 2023: waste generated in operations and business travel. These categories are defined in the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard and comprise indirect GHG emissions that are not contained in energy indirect (Scope 2) GHG emissions occurring outside the organisation. The GHG inventory is continuously being updated to include other indirect sources of emissions to expand the coverage of the GHG inventory.

GRI 305-3
GRI 305-5

Business trips are very important at Frequentis because of the international nature of its business activities. For Frequentis AG and selected subsidiaries, business travel is organised centrally by Frequentis Travel Management. Group-wide, all business trips are organised in compliance with a defined travel policy, which applies to everyone travelling on behalf of Frequentis.

Business trips may only be undertaken for business reasons and if the tasks cannot be done in another form (email, phone, online meetings, or video conferencing). Decisions on business travel are taken on the basis of cost-efficiency and sustainability, taking into account the lessons learnt during the COVID-19 pandemic.

In 2023, Frequentis AG gave 627 kg of used vegetable oil from the staff restaurant to Münzer Bioindustrie GmbH, which was able to use it in the production of sustainable biodiesel. According to a certificate issued by this company, 1,921 kg CO₂ equivalents were avoided in this way.

Green products

GRI 305-5

In addition to other products, Frequentis develops and delivers solutions for the safe management of traffic: railways, air traffic, and shipping. The company aims to structure its solutions to ensure that traffic can be managed both safely and efficiently. These green solutions bring a lasting reduction in the CO₂ emissions of the traffic managed.

For example, Frequentis supplies air traffic management products for safe and efficient traffic management in all flight phases. As a result, airlines save kerosene on the ground, during take-off and landing, and in flight, thus reducing their total carbon emissions.

In addition, Frequentis plays a key role in research projects that aim to reduce environmental impact, for example, as part of the Strategic Research and Innovation Agenda and the European Green Deal. For some 20 years, Frequentis has been an important partner in the SESAR programme, a pan-European initiative to standardise, harmonise, and synchronise European air traffic management services.

Long-standing partner for the EU's SESAR programme

SESAR, the Single European Sky ATM Research programme, which started in 2005, is a key element in the creation of a uniform airspace as part of the European Commission's Single European Sky Initiative. The aim is to do away with the present fragmented national flight management systems and processes, pool the expertise of the aviation sector, and establish a uniform flight management network in Europe.

GRI 305-5

One important focus of this project is improving the environmental compatibility of aviation. The European Green Deal adopted by the European Commission in December 2019 aims to create the world's first climate-neutral air traffic bloc by 2050. This ambitious goal requires a fundamental transformation of the entire aviation sector. The SESAR partner organisations and companies want to build on their progress in the environmental area to help make European airspace the most efficient and environmentally friendly in the world. This could be achieved, for example, by optimising flight routes, implementing formation flights, and creating automated processes.

Biodiversity

GRI 304-4

Within its sphere of influence, Frequentis places importance on preventing the destruction of ecosystems and the resulting loss of biodiversity.

The site adjacent to its location in Vienna, which is assigned to its care, is a habitat and migration route for many species of animals, including foxes and snakes. It is also one of the few areas in the city that provides a retreat for field hamsters, which are classified as an endangered species. This site is mowed only once a year and litter is regularly removed. There is no further intervention in its ecosystem, allowing largely undisturbed use by animals and plants. Frequentis sees this as a small contribution to maintaining and fostering biodiversity.

Human rights, compliance & anti-corruption

Combating corruption and the violation of human rights is important for the Frequentis Group. Frequentis operates internationally and is therefore active in countries that have a high ranking on the Transparency International's Corruption Perception Index (CPI).

GRI 2-23
GRI 3-3
GRI 205-2

The employees of the Frequentis Group are required to act lawfully in all business dealings and to show clearly through their conduct that they reject all forms of bribery and corruption.

Corruption and violation of human rights can have serious implications for the company and its employees. The principal risks are the loss of orders and exclusion from future tender processes, fines, reputational damage, and criminal prosecution of the company and the employees involved. Moreover, a loss of reputation could make the Frequentis Group less attractive to new employees or customers and suppliers might no longer regard it as a reliable business partner.

The principles of integrity and business ethics at Frequentis are set out in the Code of Conduct and internal anti-corruption policies and form the basis for internal and external collaboration. The corporate policy on Anti-Corruption, Invitations, and Gifts is an operational instruction designed to avoid all forms of corruption and provides guidance on ensuring legally compliant conduct when dealing with the Frequentis Group's business partners.

The Code of Conduct defines principles and guidelines for responsible conduct and integrity. It is a key element in Frequentis' corporate culture and shapes the Frequentis Group. The Code of Conduct was drawn up by the Executive Board of Frequentis AG and applies to all employees of the Frequentis Group. Alongside Frequentis AG, it therefore applies at all companies in which Frequentis AG has a direct or indirect stake of at least 50% or in which it exercises control in a different manner.

An obligatory e-learning module "Business ethics and the Code of Conduct", which was introduced in 2022, ensures that all employees throughout the Group are aware of the principles and values set out in the Frequentis Code of Conduct.

It is also in the interest of the Frequentis Group to ensure that all significant business partners (suppliers, consultants, contractors, ...) who provide services for the Frequentis Group or operate on its behalf are familiar with the Code of Conduct. These business partners are expected to respect the principles set out in the Code of Conduct and to observe them in their business relationship with the Frequentis Group.

In 2023, there were no cases of corruption resulting in disciplinary action, court cases, or dismissals. Moreover, no contracts with suppliers had to be terminated as a result of violations of human rights. Furthermore, in the reporting period the Frequentis Group was not required to pay any fines in connection with corruption, anti-competitive practices, or failure to comply with social or economic legislation and/or regulations.

GRI 2-27
GRI 205-3
GRI 206-1

Preventive measures will continue to be implemented to make sure that employees can recognise corruption and violations of human rights and the company can take any necessary action.

Compliance

GRI 2-26
GRI 205-2

The Executive Board of Frequentis AG has appointed a Compliance Officer to support it in ensuring Group-wide observance of compliance requirements. The Compliance Officer's main role is to raise awareness and to take steps to ensure exemplary conduct in compliance with the law and guidelines. Employees of Frequentis AG and its subsidiaries, agents, and sub-suppliers are required to respect country-specific laws and regulations.

As a provider of communication and information systems for safety-critical applications, Frequentis AG has an enormous responsibility to its customers, society, and its shareholders. Their trust is indispensable for Frequentis' business activities. The reputation and business success of a company can be put at considerable risk by breaches of compliance.

The compliance management system is based on the following principles:

- **Prevention:** defining corporate policies, training, creating compliance awareness, providing advice on complex compliance issues
- **Early detection:** possibility of reporting compliance incidents; performing compliance audits and special audits in response to specific circumstances
- **Response:** taking any necessary measures and imposing sanctions

Making staff aware of the key principles is a declared aim of the Frequentis Group. Compliance is obligatory, not optional.

Once again, substantial use was made of virtual classroom training sessions in 2023. This also gives international employees easier access to compliance training, which should continuously increase the training rate.

Other focal areas of future compliance activities will be preventing and identifying compliance violations that harm the company's interests, avoiding liability risks and reputational damage, training, and advising and protecting the senior management, managers, and staff.

Training

Three virtual training modules were used in 2023: the Compliance for Sales training course is a compulsory part of the Sales Excellence Programme for all sales staff. By year-end 2023, 66% of sales staff had completed these modules ([↗ Sales Excellence Programme](#)).

Advice

The Compliance Officer is also the first line of contact for staff on compliance issues. 12 enquiries were dealt with in 2023. These were submitted by email to a special email account, compliance@frequentis.com, or asked personally or over the phone.

Compliance audits

Since 2019, receipts and travel expense claims have been monitored for compliance with the limits set out in the Group policy on Anti-Corruption, Invitations, and Gifts. The focus is on receipts relating to gifts, invitations, and hospitality. An internal process has been implemented to ensure that the book-keeping department submits all receipts relating to gifts and invitations that exceed the defined limit set in the policy to the Compliance Officer for further checking and clarification.

GRI 205-1

Whistleblowing

An open and honest corporate culture, and transparent and respectful communication have always been important to Frequentis. To supplement the existing ways of drawing attention to irregularities and risks or suggesting improvements and to meet the requirements of an EU Directive, a whistleblower system was introduced in December 2021.

GRI 2-16

This system is available to employees via a link in the intranet and to customers and other external partners via a link on Frequentis' website. It can also be reached directly by entering the URL [<https://frequentis.integrityline.com/frontpage>] in the selected browser.

All stakeholders are therefore offered the possibility of anonymously reporting any suspicions of criminal offences or attempted offences, indications of unequal treatment or other forms of illegal discrimination, breaches of the Group policy on Anti-Corruption, Invitations, and Gifts, and breaches of EU law. All reports received are treated as strictly confidential and anyone who submits a report in good faith will be protected from any sort of reprisals. The whistleblower officer analyses the reports received using a clearly defined process and initiates the subsequent steps. Should further clarification be necessary, the whistleblower can be contacted via the system's anonymous mailbox.

GRI 2-25

The whistleblower system was first implemented at Frequentis AG. The next step is to roll it out to those subsidiaries that are required by the EU Directive to implement a whistleblower system.

Two reports were received via this system in 2023. These were processed using the defined whistleblower process.

Global Channel Management

Frequentis AG has a network of more than 50 agents around the world. At the beginning of 2022, they were integrated into a Group-wide Channel Management unit. Its role is not simply to support sales agents; it is also responsible for ensuring that they are integrated into Group-wide processes, standards, and policies and that they observe all compliance regulations.

In 2023, an extensive partner programme was established to drive forward regular engagement, training, and development of channel partners and establish Group-wide processes, standards, and guidelines for the management of channel partners. This included five regional partner events, which were organised both digitally and locally.

As another measure to improve partner management, Frequentis developed a partner portal, which was officially presented in October 2023. This portal serves as a central platform for improved collaboration with the global partner network.

It allows efficient onboarding of new partners and the provision of training documents and a range of marketing materials. Moreover, more than 15 professional training modules on the Frequentis product portfolio, which were offered by Enablement in 2023, are also accessible 24/7 via the portal. A special partner newsletter was introduced in 2023 to ensure transparent and better communication. This is sent to all partners quarterly. Further measures are planned in the areas of training & enablement, engagement, and communication in 2024.

The Group-wide Sales Partner Policy published in 2022 ensures a uniform process for the use, selection, and management of channel partners in the Frequentis Group, together with the associated compliance audits.

Trade compliance

In view of the global political situation, there is a continued focus on international trade restrictions and economic sanctions on people, organisations, and economic sectors in third countries. These can be expected to increase further in the future.

In 2023, a thorough analysis of established trade compliance workflows and business activities was performed from this perspective, paving the way for a harmonised Group-wide export control system. Frequentis plans to implement the new processes in 2024.

Capital market compliance

To implement capital market-relevant laws and regulations, the Frequentis Group has a capital market compliance policy. This covers, in particular, the handling and publication of capital market-relevant information, the prohibition of trading in shares and other financial instruments of Frequentis AG, and the obligation to report transactions by members of the management ("Directors' Dealings"). In addition, the position of Capital Market Compliance Officer has been established. The Capital Market Compliance Officer is responsible for implementing the capital market compliance policy and reports directly to the Executive Board of Frequentis AG. This is designed to ensure that the Frequentis Group acts with integrity on the capital market and to enhance employees' understanding of what is meant by capital market compliance.

Failure to comply with laws and regulations relating to the capital market can have legal and financial consequences for Frequentis AG and/or its employees. Furthermore, serious violations can cause reputational damage including long-term damage to the confidence of investors and other stakeholders, making it more difficult for the company to execute any further capital measures on the capital market.

The measures set out in the capital market compliance policy are designed to ensure compliance with the laws and regulations relating to the capital market. The Capital Market Compliance Officer is responsible for implementing the policy in the Frequentis Group and monitoring the measures it describes. To enhance understanding of this policy, employees also receive training.

The mandatory online training on capital market issues introduced in 2020 was continued in 2023. The main focus is on raising awareness of potential insider knowledge. The training module has to be repeated every two years and includes a test at the end.

In 2023, 87% of employees in the Frequentis Group had a valid training certificate.

Selection of suppliers

The criteria used by Frequentis to select suppliers include ethics, compliance with labour standards, and environmental protection, as set out in the Corporate Social Responsibility (CSR) code for suppliers and sub-contractors.

Since it operates in the safety-critical area, Frequentis places its trust in reliable suppliers and ongoing, long-term business relationships. A stable basis, regular interaction, and transparency are vital for project execution. Objective evaluation criteria are used for this. These are defined before analysing offers and are applied irrespective of the stakeholders involved. The aggregate results deliver a decision on the winner of a tender or a more complex request for proposals.

The CSR code for suppliers and sub-contractors highlights Frequentis AG's commitment to protecting the environment, respecting human rights and labour standards, and fighting corruption. Frequentis' suppliers give an undertaking that they will act in accordance with these principles. The focus is first and foremost on respecting labour standards. Frequentis explicitly rejects forced and compulsory labour, child labour, moonlighting, and discrimination of employees. Observing working hours, ensuing a safe working environment, and paying the collectively agreed and statutory minimum wage are other key elements of the CSR code.

As a result of the large number of business relationships, there is a significant risk that suppliers could fail to respect human rights, labour standards, and social welfare legislation. That could result in inhumane living and working conditions and non-compliant business relationships with third parties. Moreover, in this context there are delivery risks, reputational risks, and a risk of losing customers.

Supply chain management staff and managers receive training in the principles of transparency along the supply chain, including strict avoidance of slavery, human trafficking, any form of forced or compulsory labour, child labour, and all types of discrimination.

"Modern slavery" is included in the Code of Conduct and the Corporate Social Responsibility (CSR) code for suppliers and sub-contractors, and in the contractual documents for sub-contractors, suppliers, coaches, and employment agencies.

By acknowledging the CSR Code, suppliers undertake to do everything necessary to apply and implement the principles of the CSR Code, in compliance with the contractual provisions and the applicable national laws, and in conformance with the United Nations Universal Declaration of Human Rights and the fundamental conventions of the International Labour Organisation (ILO). Suppliers are also responsible for compliance by their own suppliers and sub-contractors.

GRI 308-1
GRI 414-1

The Frequentis CSR code is an integral part of the General Terms and Conditions of Purchase and the master agreement with suppliers.

The obligation to accept the CSR code has been included in the supplier self-assessment. By signing this document at the start of the business relationship, suppliers give an undertaking that they and their sub-contractors will apply the CSR code.

Supplier audits

Frequentis AG regularly audits its suppliers. The audits are conducted at the end of a year for the following year. There are various reasons for a supplier audit:

- To get to know a potential new supplier
- The supplier accounts for significant order volume or has increased risk potential
- Difficulties in the relationship with the supplier over the past year (e.g. delivery, quality, communication problems, etc.)

Audits are always performed on-site because this is essential to secure the quality of the audit.

The audit plan can be modified in the light of events during the year, planned audits may be dropped or postponed, and new audits may be added to the plan. This flexibility is necessary to respond to current requirements.

Procurement governance principles are in place at subsidiaries with sales responsibility and supplier audits are conducted on an ad-hoc basis.

Supplier assessments

In addition to the supplier audits, Frequentis AG assesses its established suppliers once a year. They are assessed in the first quarter of the year using the following criteria, which have recently been revised:

- Quality: e.g. product quality, product complexity, quality assurance system
- Price: e.g. development of prices and comparison with the previous year and market prices
- Support quality: e.g. commercial, personal, and technical support
- Delivery performance: the main criteria here are adherence to delivery dates and volumes; attention is also paid to environment-friendly and sustainable packaging
- Sustainability of the supplier: this involves evaluating, on the one hand, the business environment (stability, performance, flexibility, environmental management, etc.) and, on the other, social aspects (CSR code, social competence, etc.).

These assessment criteria have different weightings and are included in the overall assessment, which is generated with the aid of the ERP system (SAP).

GRI 308-1
GRI 414-1

Assessments are performed for the suppliers that account for the highest order volume (top 10%) and those that play a key role in the supply of specific groups of products. The assessment for 2023 will be performed in Q1 2024 as planned. The 2022 assessment, which was performed in 2023, covered 90 suppliers accounting for a procurement volume of EUR 46.5 million at Frequentis AG. The top three suppliers received performance awards and certificates. A range of measures is agreed with suppliers whose performance needs to be improved and implementation is monitored.

As well as quality, price, reliability, and service, responsible procurement emphasises the importance of respecting human rights, humane working conditions, and environment-related issues. Sustainability was once again a special focus of the 2022 assessment. There was a separate evaluation and award for the suppliers with the highest scores in the sustainability category, and this approach will be continued in the future.

At Frequentis AG and its subsidiaries, whose business activities comprise production and integration, other key criteria are short supply lines and improving local value-added. Therefore, local sourcing is the goal for the majority of products. For Frequentis AG that means within Europe. Apart from intragroup procurement, 94.5% of Frequentis AG's procurement is from suppliers in Europe. Taking into account the subsidiaries that provide independent production and integration services, Europe accounts for around 92.9% of procurement.

GRI 2-6
GRI 204-1
GRI 308-1
GRI 414-1

In 2023, seven on-site supplier audits were performed in Austria, Germany, Belgium, and Hungary (comparative figure for 2022: nine audits).

The aim is to continue the application and Group-wide rollout of the Frequentis Governance Policy, which includes precise supplier evaluations, in order to achieve a continuous improvement in supplier management. Supplier audits are also used to evaluate potential for improvement.

In addition to the criteria listed above, it is important to the procurement function to avoid long procurement distances in order to reduce the Frequentis Group's carbon footprint and sharpen sustainability awareness throughout the Group.

GRI 305-5

Public policy

Frequentis AG strives to obtain the trust of its stakeholders by implementing high standards of corporate governance, transparency, and reliability. As a company whose business activities primarily include public sector contracts, support for political parties, including donations to such parties, is strictly prohibited. Therefore, Frequentis did not make any donations to political parties in 2023.

GRI 415-1

Frequentis has been registered with the European Transparency Register (<https://ec.europa.eu/transparencyregister/public/consultation/displaylobbyist.do?id=878884412932-63>) since 2014 to disclose its activities in the area of research funding in Europe.

Safety, security & data protection

GRI 3-3

Handling safety-critical systems is a central feature of Frequentis' corporate culture. It is based on many years' experience of safety-critical systems. That responsibility is reflected in Frequentis' mission "for a safer world". It expresses a deeply rooted technical and emotional understanding of customers' needs, along with a highly developed ability to understand current challenges and working processes, and strong identification with the task in hand. Other key attributes are openness, flexibility, and transparency – both in internal collaboration and in customer relationships.

Digital security is becoming more and more of a challenge for companies. Increasingly sophisticated cyberattacks on critical infrastructure require special knowledge and specific measures to harden technical systems to such attacks. This has a dual impact on Frequentis: firstly, because it needs to protect its own working environment and IT structure and secondly, because Frequentis Group companies need to provide the best possible support and assistance to help customers handle this new threat.

In line with its mission "for a safer world", Frequentis addresses both safety and security. Safety means avoiding unacceptable operating risks, while security refers to the ability to defend against external attacks. In terms of the sustainability of the Frequentis Group's activities, safety and security are therefore closely interlinked: there is no safety without security.

Measures to prevent cybercrime have high priority at Frequentis. Special attention is paid to endpoint protection technologies for Frequentis' own IT systems to identify and ward off phishing attacks, including in the remote operation of devices. This was accompanied by an internal awareness campaign.

Safety and security are both fundamental to the Frequentis Group's safety-critical business operations. Failures and shortcomings in these areas would result in an immediate loss of confidence by the customers and business partners and have a lasting negative impact on the Frequentis business.

Safety awareness as an element in the Frequentis culture

Wherever Frequentis' systems are used, people are responsible for the safety of other people and of property. This aspect of Frequentis' culture is important for internal collaboration and for external interaction with customers, business partners, and other stakeholders. It is also a key determinant of behaviour and attitude when dealing with risks.

To sharpen the awareness of employees and, especially, new colleagues for this important aspect of culture, an awareness-raising video on safety-critical behaviour has been published. In this video, the Executive Board explains the specific features and importance of safety-critical behaviour and how this can be implemented optimally in day-to-day working practices, for example, through proactive risk management, high safety and security standards, and professional project management.



This introduction to safety-critical behaviour has been designated as a mandatory training unit that has to be refreshed every two years. By the end of 2023, the completion rate of valid training modules was 87%.

Safety

System safety is achieved by analysing the undesirable effect of operating a system on the system itself, the environment, the user, or a third party. With reference to Frequentis, this means that the safe operation of Frequentis systems has to be guaranteed at all times. Frequentis has been a global leader in safety for many years. Since 1995 it has had its own competence centre for system safety management. This provides safety expertise for customer projects. Numerous awards, published papers, and international accolades testify to Frequentis' enormous expertise in this field.

Safety management system

Safety is an integral part of Frequentis' business processes and therefore a key competitive advantage.

To perform the required system safety tasks in regulated areas of operation, Frequentis has an extensive safety management system, which is an important element in the management's commitment to safety.

Everyone in the company has to understand the importance of safety and constantly strive to optimise safety in cooperation with customers, suppliers, and authorities. That allows early identification and evaluation of risks so that appropriate risk mitigation measures can be taken.

The basic elements of the safety management system are consistent application of international safety standards for the relevant business unit, an obligatory safety assessment for all product developments, a Group-wide hazard management system for preventive risk minimisation, and the in-house Safety Academy for staff training. All this takes place in the context of the different regulatory requirements in target countries and the specifications of customers operating in different business areas.

Safety certificate

In response to rising international requirements, since 2005 the Safety Academy has offered special safety training leading to the award of a certificate. So far, more than 170 employees have gained this safety certificate, including 23 staff from Frequentis subsidiaries. In this way, extensive safety know-how is disseminated within the Frequentis Group and corresponding Group-wide safety expertise is generated.

The training programme leading to the safety certificate is used to train safety peers in a wide range of organisational units. Safety competence is a key corporate characteristic in safety-critical activities; it further strengthens Group-wide safety competence. In addition, the results of analyses are used for continuous improvement of products and internal workflows.

To ensure role-specific safety training and be able to offer specific training for relevant functions at subsidiaries, the Safety Academy offers a wide range of other safety training modules.

Security

The Frequentis Group supplies its solutions to operators of “critical infrastructure” and “essential services”. These are organisations that are vital for the functioning of society. Safety is contingent upon effective defence against attacks (= security). Frequentis takes a holistic view.

The steadily rising threat situation with different patterns of attack requires continuous monitoring to allow constant implementation of foresighted preventive measures. Worldwide, laws are being drafted and implemented to counter the increased cyber threat. These contain more stringent regulations to safeguard cybersecurity. Consequently, demand from Frequentis’ customers for proven, auditable security architectures and processes is set to rise further. In addition, as a result of (geo-)political changes, cyber terrorism and cyber warfare are gaining in significance alongside cyber crime. This is associated with targeted attacks conducted with a high level of resources and know-how. This trend is taking place in the context of the system safety standards that are established on the market, which conflict with the common measures to ensure cybersecurity such as rapid elimination of software vulnerabilities.

To address these challenges, Frequentis has an extensive security organisation covering all business processes. The objective is, on the one hand, to protect the company, and on the other, to help customers ensure system security in their operations and provide the necessary evidence for regulatory authorities.

The more intensive collaboration between the system supplier, system integrator and system operator required for this opens up wide-ranging opportunities for Frequentis to deepen customer relationships and strengthen its competitiveness. In the context of these challenges, Frequentis positions itself as a global expert for the integration of system safety and cybersecurity requirements.

The following units work together in the Frequentis Security Organisation:

- Group-wide Security Governance, which includes IT Security, System Security, Service Security, Physical Security, Personnel Security, and Managed Supplier Security.
- The Information Security Management System (ISMS) operated by Frequentis Group IT.
- Implementation of security in business processes by security engineers in product, project, and service teams, and the security agents in the Frequentis business domains, who coordinate specific cross-departmental security activities.
- The strategically oriented Security Steering Board and the Security Committee, which is open to all employees, drive forward the security strategy and innovation on a top-down and bottom-up basis in cross-functional teams.

In 2023, special attention was paid to implementing security in business processes. A joint effort by the Vice Presidents of the business domains and Security Governance defined an extensive security improvement programme with more than ten sub-projects. These focus on preparing for anticipated changes in the market and the challenges faced by Frequentis' customers and are continuing in 2024. The first result is the role of Project Security Manager within the Projects & Process framework at Frequentis.

Frequentis has a very active Security Community. This is an open platform for interested employees to discuss and reflect on current security-related topics. The community also invites experts to give talks on specific topics.

It is therefore a platform for joint creation of innovations, standards, and guidelines and for sharing examples of best practices. Twelve Group-wide security events were held in 2023, all in hybrid format.

In 2023, the various security teams focused on the following activities:

System Security

The System Security team bears Group-wide governance responsibility for the security of Frequentis products and solutions delivered to customers.

The focus in 2023 was on setting up a security training programme for technical functions in the company, based on the established CompTIA Sec+ standards (global security certification).

The security training programme designed in 2022 was successfully tested in two pilot training sessions with 30 participants in 2023. The feedback from the participants was analysed in detail to refine the curriculum of this training programme. The security training and certification programme will be continued in 2024 to train further personnel. This is an investment to raise the security competence of employees and contributes to the ongoing improvement of the security of Frequentis products.

Service Security

The software-based solutions supplied by Frequentis require broadly based support knowledge, ranging from extensive operational support to support for specific tasks and responsibilities. Within the Customer Service function, the role of Service Security is to provide support on security-related issues. This includes managed services (technical operation) and technical assistance as a service.

The Service Security Policy rolled out in 2022 contains governance guidelines for the entire Frequentis Group to ensure that Frequentis can provide services throughout the life cycle of its products and integrated solutions. These guidelines support the provision of services (managed services and platform-as-a-service) for both customers and the company itself to ensure the secure operation of installations, most of which are classified as safety-critical, over a period of many years.

IT Security

Companies around the world have been a focus for hackers and cybercrime for many years. Identity theft and data theft are major areas of cybercrime. As a company operating in the safety-critical area, Frequentis takes special precautions to avoid cybercrime in the form of attacks on its in-house IT infrastructure. In light of the current global troublespots, Frequentis constantly monitored the situation from an IT security perspective and implemented additional precautions as required. Protection of the Frequentis network, including subsidiaries and external access, is therefore always state-of-the-art.

Employees are an important factor in this. To ensure the greatest possible awareness of this issue throughout Frequentis, all employees in the Group have been required to complete an Information Security Awareness Training module since 2015. This compulsory training module has to be repeated every two years.

To further sharpen employees' awareness, there are also regular Group-wide phishing campaigns. The frequency was increased in 2023 and campaigns are now carried out monthly. Everyone who uses the Frequentis networks receives simulated phishing emails. The response is automatically evaluated, feedback is published in the intranet and the staff newsletter and reinforced by personal discussions.

Phishing campaigns are used to train employees to report phishing mails via functions that are integrated into the mail system. These are analysed by the IT Information Security team and further training is undertaken where necessary. This is supplemented by lectures by experts spread across the year and by other opportunities for sharing information within the community. These activities are constantly supported by a range of communication measures under the motto "You are the key to security".

In 2023, internal IT services were not affected by outages caused by successful cyberattacks.

Personnel security

Personnel-related security measures include protecting staff from possible threats. Examples are a buddy principle for business travel to crisis-hit regions and preventive measures, including insurance, to cover employees who become ill or are required to quarantine while on business trips.

Moreover, new employees are subject to an extensive background check. Together with the corresponding training, this is designed to raise the awareness of Frequentis employees of the special nature of the safety-critical sector in which the company works.

Physical security

Physical security provides a safe framework for various other security aspects.

Based on the Physical Security Policy introduced in 2021, physical security standards have been tightened stepwise throughout the Group, for example, by renewing and extending access control systems, improved visitor management, and additional surveillance by the Security Incident Response Team (SIRT).

Security Incident Response Team (SIRT)

The Frequentis Security Incident Response Team (SIRT) is composed of cybersecurity experts from within the Frequentis Group, who are prepared to coordinate the response to IT security incidents and recommend suitable counter-measures. The team actively contributes to reducing the time required to deal with IT security incidents in the Frequentis Group through efficient coordination and therefore reduces the risk of lost earnings, damage, and productivity losses. It also monitors security reports on critical vulnerabilities in software components and forwards information on the necessary action to internal stakeholders. A key aspect is networking and maintaining a trusting relationship with customers' security teams through national and international security communities. This gives the team an edge in obtaining important information in the area of cybersecurity.

A particular focus in 2023 was on training technical capabilities for forensic investigation of systems compromised by attacks in order to apply appropriate knowledge and software to detect the technical evidence required to clarify the situation. In addition, a Threat Intelligence Policy was issued. This outlines the requirements for collecting, processing, and analysing data on threats. Such data allow a better understanding of the patterns used by attackers and their motives and objectives, as a basis for faster and sounder security decisions to proactively mitigate the risks posed by attackers. National and international networking with security teams in the public sector and Frequentis' market segments has been stepped up further.

IT security incidents in 2023 were coordinated successfully, so no serious damage occurred.

Networking with international safety and security communities

GRI 3-3

Many of Frequentis' customers operate "critical infrastructure", which is particularly important for society, the environment and essential supply services. As a supplier of safety-critical systems, the Frequentis Group is aware of its special responsibility. Therefore, it gives high priority to active participation in national and international safety and security communities, platforms, and bodies. These assess future risks, develop strategies, and share experience. In critical circumstances, it is therefore possible to rely on exchange with trusted experts, for example, in the event of a major infrastructure attack.

In 2023, Frequentis actively contributed to the following communities:

- Austrian CERT (Computer Emergency Response Team) network
- FIRST (global Forum of Incident Response and Security Teams)
- EUROCAE (European Organisation for Civil Aviation Equipment) Working Group 72
- Cyber Security Platform Austria
- CANSO (Civil Air Navigation Services Organisation): Cyber Safety Working Group
- CANSO: Next Generation Safety Management System Workgroup
- CANSO: Human Performance Working Group
- EASA (European Union Aviation Safety Agency): Rule Making Task Analyse
- ISSS (International System Safety Society)
- ISC(2) International Information System Security Certification Consortium

Data protection

The European Union's General Data Protection Regulation (EU GDPR) requires every company to apply the European data protection principles in its corporate activities and to require staff to respect data privacy and the confidentiality of business and operating secrets.

As a technology supplier and service provider, responsible handling of data, especially personal data, is vital for Frequentis. Ensuring the security of these data, especially personal data, has top priority both when implementing and servicing customer systems and with regard to the internal systems. Data protection and data security go hand in hand. Frequentis treats data confidentially as a matter of course and data are always collected and processed in compliance with the applicable legal provisions. Wherever possible, the company uses established management systems to structure information security (ISO 27001) and quality management (ISO 9001).

Since 2018, Frequentis has had its own Data Protection Officer. Frequentis constantly applies the requirements of the GDPR and the local laws adopted to implement it. Activities to implement the GDPR in the Frequentis Group include, for example, revising Group policies and processes on handling personal data, continuously upgrading process documentation, preparing and revising document and contract templates, and regularly reviewing and updating the technical and organisational measures for which the company is responsible.

The data protection officers appointed by headquarters and the subsidiaries work to ensure legally compliant handling of personal data throughout the Frequentis Group at all times. Their tasks include driving forward company-specific data protection measures and regular consultation with the management and the specialist departments involved.

Every two years, employees must complete mandatory e-learning modules on personal data protection. The content focuses on protecting the personal data of employees, customers, and suppliers. These compulsory training modules have a firm place in Frequentis' training programme. The concepts for security awareness and the security organisation are subject to ongoing development and are revised to reflect the latest conditions. Worldwide, 87% of employees at majority-owned companies in the Frequentis Group have fulfilled the data protection training obligation. The next training round starts in the second quarter of 2024. The process to meet the obligation to report breaches of data protection was recently reviewed and revised.

Predefined workflows and templates are used to meet the requirements to enable data subjects to exercise their rights and to deal with any possible breaches of data protection. In 2023, there were several requests for data erasure or information on data processing, all of which were processed without delay. No complaints relating to Frequentis AG or its subsidiaries in respect of data protection law were submitted to a data protection authority.

These precautions enable Frequentis to ensure a high level of data protection. Thanks to its cautious approach, there were no substantiated complaints about breaches of customer privacy or the loss of customer data in 2023. Together with the current initiatives to heighten data security and safety, data security in the Frequentis Group is continuously being strengthened.

GRI 418-1

Risk-impact analysis

Social and employee matters

Material topics	Occupational health and safety	Long-term job security	Training and CPD	Flexible and family-friendly working time models	Support for social projects	Diversity
Risks	<ul style="list-style-type: none"> • Physical and mental health impairments • Shortage of skilled workers due to lack of training or inadequate training • Intercultural misunderstandings 					
Impact on non-financial matters	<ul style="list-style-type: none"> • Unfair remuneration • Work-related accidents • Physical and mental illness • Lack of training and advancement opportunities • Constraints on innovation and progress • Mental health and family-related stress • Social tensions • Discrimination 					
Impact on Frequentis' business activities	<ul style="list-style-type: none"> • Loss of reputation with customers and new employees • Higher order losses • Loss of specialist expertise • Reduction in competitiveness and quality • Increased project and human resources costs • Increased sickness-related absences • Lack of teamwork • Skills shortage • Loss of employees • Failure to utilise the potential of diversity and innovation 					
Concepts, due diligence processes, action	p. 56ff	p. 55ff	p. 57, p. 59ff.	p. 58f	p. 64f	p. 62f

Environmental matters

Material topics	Energy consumption and energy efficiency	Waste management	Re-use/refurbishment of products	Environmentally friendly inputs and processing aids
Risks	<ul style="list-style-type: none"> Physical and economic risks resulting from climate change, e.g. extreme weather events Failure to comply with regulations on the circular economy 			
Impact on non-financial matters	<ul style="list-style-type: none"> High energy consumption in production and during use by customers Environmental impact of emissions Negative impact on climate change 	<ul style="list-style-type: none"> Increased volume of waste 	<ul style="list-style-type: none"> Accelerated depletion of resources Increased volume of electronic waste 	<ul style="list-style-type: none"> Damage to the ecosystem Increased volume of waste Pollution caused by non-recyclable materials
Impact on Frequentis' business activities	<ul style="list-style-type: none"> Increased costs (e.g. electricity, waste disposal costs, cost of materials, adaptations) Threat of lost orders due to failure to comply with international regulations (e.g. United Nations, EU Regulations) Criminal proceedings due to environmental damage, breaches of compliance, etc. Disruption of supply and supply bottlenecks due to weather events Reputational damage 			
Concepts, due diligence processes, action	p. 66, p. 68f.	p. 69f	p. 68f	p. 66, p. 69f

Respect for human rights

Material topics	Observance of human rights	Diversity and equality of opportunity	Protection of employees
Risks	<ul style="list-style-type: none"> Failure to respect human rights, workers' and social provisions, and basic rights such as child labour, forced labour, right to freedom 		
Impact on non-financial matters	<ul style="list-style-type: none"> Breaches of human rights, workers' and social provisions, and basic rights Social tensions Physical and mental illness Unfair remuneration Discrimination 		
Impact on Frequentis' business activities	<ul style="list-style-type: none"> Criminal consequences Loss of reputation with customers and new employees Higher order losses Reduction in competitiveness and quality 		
Concepts, due diligence processes, action	p. 73ff	p. 62f	p. 56f

Fight against bribery and corruption

Material topics	Compliance with national laws and regulations	Integrity and business ethics	Compliance with the CSR Code at all stages in the supply chain
Risks	<ul style="list-style-type: none"> Bribery and corruption Unfair competition Supply chain risks 		
Impact on non-financial matters	<ul style="list-style-type: none"> Damage to the economy and fair competition Negative impacts on government tax receipts Undermining the rule of law Wasting state resources due to increased legal costs 		
Impact on Frequentis' business activities	<ul style="list-style-type: none"> Loss of orders and exclusion from future tenders Criminal consequences Reputational damage Negative impact on the share price and financial opportunities 		
Concepts, due diligence processes, action	p. 73ff	p. 62f., p. 73ff.	p. 73ff., p. 77ff.

Safety, security & data protection

Material topics	Ensuring data protection	Measures to prevent cybercrime	Safety awareness	Fail-safe systems
Risks	<ul style="list-style-type: none"> Breach of data protection Cybercrime Security threats Outage of safety-critical systems 			
Impact on non-financial matters	<ul style="list-style-type: none"> Data losses Increase in cyber attacks and cybercrime Misuse of data Risk to safety-critical infrastructure Risk to human life 			
Impact on Frequentis' business activities	<ul style="list-style-type: none"> Loss of orders and exclusion from future tenders Criminal consequences Reputational damage Reduction in competitiveness and quality 			
Concepts, due diligence processes, action	p. 80, p. 86f	p. 80, p. 84f	p. 80ff	p. 80ff

ESG outlook

Sustainability is a fundamental element in Frequentis' holistic corporate culture and covers the entire value chain.

GRI-2-22

A key focus for 2024 is driving forward ESG reporting and the transition to the extended sustainability reporting requirements of the CSRD (Corporate Sustainability Reporting Directive of the European Union), which are mandatory from the 2024 financial year.

The CSRD will greatly expand and standardise the present reporting obligations on environmental, social, human rights, and governance aspects. A significant contribution to this is the definition of the principle known as double materiality. Information that is necessary to understand the impact of sustainability aspects on business development, business performance, and the company's situation will have to be reported. Additional information that is necessary to understand the impact of the company's activities on the environment and society will also be required. Moreover, mandatory reporting standards – the European Sustainability Reporting Standards (ESRS) – will standardise the content of reports.

From the 2024 reporting period, the Frequentis sustainability report will be based on the outcome of the materiality assessment performed in October 2023. The topics covered by the non-financial report 2023 will be taken into account in the transition to this new reporting basis.

The various topics will be further developed in 2024 on the basis of the concepts already in place. One focal area within Frequentis in 2024 will be the further improvement of the circular economy. The commitment to sustainable business practices is underscored by specific ESG targets for the Executive Board, which also influence their variable remuneration. All activities will be carried out in accordance with Frequentis' Corporate Governance Policy.

The Frequentis Group is committed to continuously improving its social and ecological performance in all aspects, fulfilling its compliance obligations, and actively working towards sustainable development. Guidance is provided by the ESG strategy, which embeds sustainability into the Frequentis Corporate Strategy. This aims to strengthen Group-wide ESG awareness and establish a broadly based understanding of the actions to be taken.

For a safer world: Safe. Secure. Sustainable.

KPIs for non-financial reporting

In the past, KPIs were compiled primarily for headquarters as part of the certification process for ISO 9001, 14001, and 18001 (45001). As a result, the following list currently only contains the KPIs for Frequentis AG on a stand-alone basis. The KPIs are now being extended stepwise to include the subsidiaries. Where this has already been done, the data for the Group are also reported.

Social and employee matters

All figures in this chapter refer to the average headcount.

	2023	2022	2021	
Average headcount – Frequentis Group	2,341	2,193	2,157	GRI 2-7
thereof male	77%	77%	78.3%	
Executive Board / Managing Directors	34	30	29	
1st management level	40	39	26	
Other managers	185	156	149	
thereof female	23%	23%	21.7%	
Executive Board / Managing Directors	1	0	0	
1st management level	6	6	4	
Other managers	35	27	25	
Average headcount – Frequentis AG	1,017	996	999	
thereof male	75%	75%	78.3%	
Executive Board	3	3	until 1 April 2021: 2 from 1 April 2021: 3	
1st management level	21	29	26	
Other managers	99	100	88	
thereof female	25%	25%	21.7%	
Executive Board	1	0	until 1 April 2021: 1 from 1 April 2021: 0	
1st management level	6	5	4	
Other managers	16	14	14	
New hires – Frequentis Group	462	276	448	GRI 401-1
thereof male	334	184	359	
thereof female	128	92	89	
New hires – Frequentis AG	103	87	92	
thereof male	63	52	69	
thereof female	40	35	23	
Exits – Frequentis Group	207	220	212	
thereof male	149	166	162	
thereof female	58	54	50	
Exits – Frequentis AG	60	70	64	
thereof male	40	52	52	
thereof female	20	18	12	

	2023	2022	2021
Employee turnover – Frequentis Group			
New hires	19.7%	13.3%	20.7%
Exits	8.4%	10.6%	9.8%
thereof employees	6.6%	7.8%	n.a.
thereof employer	1.1%	1.7%	n.a.
thereof natural fluctuation	1.1%	1.0%	n.a.
Employee turnover – Frequentis AG			
New hires	10.1%	9.2%	9.2%
Exits	5.9%	7.4%	6.4%
thereof employees	4.5%	5.8%	n.a.
thereof employer	0.5%	1.0%	n.a.
thereof natural fluctuation	0.9%	0.6%	n.a.
Employees – Frequentis Group			
Part-time	369	344	315
thereof male	181	164	197
thereof female	188	180	118
Parental leave	47	53	51
thereof male	20	22	23
thereof female	27	31	28
Special dispensation	60	66	62
thereof male	37	38	25
thereof female	23	28	37
Training leave	4	3	4
thereof male	1	1	4
thereof female	3	2	0
Part-time training leave	7	5	7
thereof male	6	5	6
thereof female	1	0	1
Phased retirement	13	10	n.a.
thereof male	9	7	n.a.
thereof female	4	3	n.a.
Employees – Frequentis AG			
Part-time	174	168	146
thereof male	80	79	65
thereof female	94	89	81
Parental leave	43	49	44
thereof male	19	21	20
thereof female	24	28	24
Special dispensation	45	43	42
thereof male	30	28	21
thereof female	15	15	21
Training leave	4	3	4
thereof male	1	1	4
thereof female	3	2	0
Part-time training leave	7	5	7
thereof male	6	5	6
thereof female	1	0	1
Phased retirement	13	10	n.a.
thereof male	9	7	n.a.
thereof female	4	3	n.a.

GRI 401-1

GRI 401-3

	2023	2022	2021	
Workers who are not employees – Frequentis Group	175			
Workers who are not employees – Frequentis AG	100			
Average length of employment – Frequentis Group	7.9	n.a.	n.a.	
Average length of employment – Frequentis AG	10.6	10.2	10.2	
Average age – Frequentis Group				GRI 405-1
Total	43	42	43	
Executive Board	56	56	55	
1st management level and other managers	49	48	45	
New hires	38	36	39	
Average age – Frequentis AG				
Total	44	43	42	
Executive Board	56	56	55	
1st management level	53	52	52	
Other managers	49	48	47	
New hires	34	35	35	
No. of nationalities – Frequentis Group	56	56	55	
No. of nationalities – Frequentis AG	34	35	38	
No. of appraisal interviews held – Frequentis Group	63%	64%	67%	
No. of appraisal interviews held – Frequentis AG	87%	87%	88%	
No. of courses offered Group-wide¹	566	491	469	
thereof distance learning	395	422	427	
No. of classroom training sessions – Frequentis AG	237	220	35	
thereof with internal instructors	79.3%	61.4%	88.6%	
No. of Group-wide¹ virtual classroom training sessions	397	424	454	
thereof with internal instructors	87.4%	81.8%	92.3%	

¹ Employees from all subsidiaries can book/participate in Group-wide training sessions and courses so it is not possible to draw a distinction between Frequentis AG and the Frequentis Group.

Environmental matters

	2023	2022	2021	
Energy – Frequentis AG				GRI 302-1
Total energy consumption in kWh	6,786,733	6,467,390	6,994,086	
Consumption of natural gas in kWh	187,058	396,271	1,079,770	
Consumption of electricity by buildings in kWh	6,599,675	6,071,119	5,914,296	
Self-generated electricity in kWh	125,962	131,662	115,300	
Purchase of electricity from renewable sources	100%	100%	100%	
Total energy consumption of systems approved for delivery to customers' locations in W	150,435	89,908	96,563	GRI-302-2
Energy consumption of vehicles (combustion engines, incl. hybrids) in kWh	516,294	1,156,681	n.a.	
Consumption of diesel in kWh	505,452	880,438	n.a.	
Consumption of petrol in kWh	10,842	276,243	n.a.	
Total energy consumption by buildings as a percentage of total operating performance	2.4%	2.5%	2.1%	GRI 302-3
Total energy consumption by buildings per employee in kWh	6,677	6,496	6,925	
Natural gas consumption per employee in kWh	184	398	1,069	
Electricity consumption by buildings per employee in kWh	6,493	6,098	5,856	
Natural gas consumption per m ² heatable surface area in kWh	8.2	17.4	47.5	
Self-generated energy per employee in kWh	124	132	114	
Average consumption by customer systems in W	348	281	386	
Energy consumption of vehicles (combustion engines, incl. hybrids) per employee in kWh	508	1162	n.a.	
Diesel consumption per employee in kWh	497	884	n.a.	
Petrol consumption per employee in kWh	11	277	n.a.	
Emissions – Frequentis AG				
Direct GHG emissions (Scope 1) from consumption of natural gas and fuel for company cars in tonnes CO ₂ (eq)	180	378	218	GRI 305-1
Energy indirect GHG emissions (Scope 2) in tonnes CO ₂ (eq)	0	0	0	GRI 305-2
Other indirect GHG emissions (Scope 3) in tonnes CO ₂ (eq)	1,833	1,375	718	GRI 305-3
Waste generated by operations	15	11	12	
Business trips¹	1,817	1,363	706	
Hire cars	38	36	43	
Flights	1,779	1,328	663	
No. of flight legs on business trips ¹	12,933	10,995	4,084	

¹ Frequentis AG and subsidiaries served centrally by Frequentis Travel Management

	2023	2022	2021	
Waste – Frequentis AG				
Weight of waste generated in tonnes	77.18	64	45	GRI 306-3
Non-hazardous waste	75.14	63	43	GRI 306-4
Domestic waste and similar commercial waste	26.20	18.78	19.76	
Paper and cardboard packaging (mixed packaging materials)	15.26	14.27	8.71	
Mixed plastic packaging	6.13	4.28	3.96	
Waste paper, paper, and cardboard, not coated	7.83	4.01	3.61	
Waste wood for material recovery	5.56	3.68	2.34	
Mixed metal packaging	1.55	2.00	1.66	
Iron and steel waste	0.07	0.42	0.77	
Waste electrical and electronic equipment - small appliances	1.67	0.38	0.73	
Electrical and electronic devices and device parts without environmentally relevant amounts of hazardous waste or substances	2.36	3.82	0.63	
Waste electrical and electronic equipment - large appliances	0.00	0.00	0.42	
Glass	0.44	0.24	0.18	
Bulky waste	6.24	1.57	0.12	
Sorted non-hazardous laboratory waste and residual chemicals	0.00	0.00	0.03	
Waste wood for thermal recovery	0.92	0.14	0.00	
Organic waste for composting	0.11	0.00	0.00	
Kitchen and food waste ¹	0.04 ¹	9.08	n.a.	
Gypsum	0.96	n.a.	n.a.	
Polyurethane	0.12	n.a.	n.a.	
Resin residues	0.02	n.a.	n.a.	
Hazardous waste	1.70	1.50	1.70	
Electrical and electronic appliances and components, including environmentally relevant amounts of hazardous waste or materials	0.00	0.49	1.46	
Screen devices	0.42	0.08	0.20	
Waste electrical and electronic equipment – large equipment with hazardous properties	0.00	0.00	0.01	
Synthetic coolants and lubricants	0.00	0.00	0.01	
Paints	0.00	0.00	0.01	
Unsorted or hazardous laboratory waste and residual chemicals	0.78	0.08	0.01	
Pressurised containers (sprays) with residues	0.05	0.02	0.00	
Iron containers, with residual content	0.00	0.63	n.a.	
Batteries	0.15	0.15	0.00	
Lithium-ion batteries	0.04	0.05	n.a.	
Fluorescent light bulbs	0.13	n.a.	n.a.	
Solvent mixtures	0.01	n.a.	n.a.	
n-propanol	0.02	n.a.	n.a.	
Residual printing inks, toner	0.06	n.a.	n.a.	
Lead accumulators	0.03	n.a.	n.a.	
Adhesive waste	0.01	n.a.	n.a.	

¹ Food waste split between Frequentis AG and SV Österreich from 2023

	2023	2022	2021
Waste – SV Österreich			
Weight of waste generated in tonnes	20.22	n.a.	n.a.
Kitchen and food waste	10.93	n.a.	n.a.
Commercial waste	3.66	n.a.	n.a.
Plastics	0.90	n.a.	n.a.
Metal packaging	1.14	n.a.	n.a.
White glass	0.77	n.a.	n.a.
Mixed metal packaging	0.09	n.a.	n.a.
Waste paper	2.28	n.a.	n.a.
Paper and cardboard packaging	0.45	n.a.	n.a.
 Water – Frequentis AG			
Water consumption in m ³	8,478	6,502	7,077
 Environmentally friendly vehicles – Frequentis AG			
Electric cars	29	17	9
Hybrid cars	15	10	8
 PCs and workstations equipped with MS Teams functionality – Frequentis Group			
PCs and workstations equipped with MS Teams functionality - Frequentis AG	100%	100%	100%
Average no. of MS Teams meetings per month ¹	22,247	21,729	24,413

GRI-303-5

¹ MS Teams is implemented for the entire Group so it is not possible to draw a distinction between Frequentis AG and the Frequentis Group. The figures for 2021 include Skype for Business meetings.

Human rights, compliance & anti-corruption

	2023	2022	2021	
Cases of corruption resulting in disciplinary action	0	0	0	GRI 205-3
Termination of contracts with suppliers due to violation of human rights	0	0	0	
Fines in connection with corruption or competition law	0	0	0	
No. of compliance enquiries from employees – Frequentis Group	12	14	36	
No. of compliance enquiries from employees – Frequentis AG	9	12	27	
Reports via the whistleblower platform (introduced in December 2021)	2	0	0	
Compliance training in face-to-face/virtual classroom sessions	4	3	4	GRI 205-2
Checking invoices for compliance with the requirements of the Group policy on anti-corruption, invitations, and gifts; cases referred – Frequentis AG	17 ¹	60	37	GRI 205-1
E-learning module “Business Ethics and Code of Conduct” for all employees				
Frequentis Group (in % of total workforce)	91%	84%	n.a.	
Frequentis AG (in % of total workforce)	94%	82%	n.a.	
Online training in capital market compliance for all employees				GRI 205-2
Frequentis Group (in % of total workforce)	87%	85%	95%	
Frequentis AG (in % of total workforce)	92%	84%	95%	
Supplier audits performed by Frequentis AG	7	9	5	
New suppliers that were screened using environmental criteria	96%	n.a.	n.a.	GRI 308-1
New suppliers that were screened using social criteria	96%	n.a.	n.a.	GRI 414-1
Geographical structure of suppliers and service providers by order volume ²				GRI 204-1
Europe	92.9%	92.6%	90.0%	
North America	3.0%	4.8%	6.9%	
Asia	1.1%	0.6%	1.2%	
Australia	2.7%	1.6%	1.0%	
South America	0.1%	0.2%	0.5%	
Middle East	0.3%	0.2%	0.3%	
Africa	0.0%	0.0%	0.1%	
Geographical structure of suppliers and service providers by order volume – Frequentis AG*				
Europe	94.5%	93.5%	89.9%	
North America	2.0%	4.6%	7.0%	
Asia	2.6%	1.0%	1.7%	
Australia	0.0%	0.2%	0.0%	
South America	0.3%	0.3%	0.8%	
Middle East	0.6%	0.3%	0.5%	
Africa	0.0%	0.0%	0.2%	

¹ Decreased because the threshold for hospitality and event invoices under the anti-corruption policy has been raised from EUR 50 to EUR 80 per person.

² Product and project-related procurement by Frequentis AG, Frequentis Deutschland GmbH, Frequentis Comsoft GmbH, Frequentis USA Inc., Frequentis Australasia Pty Ltd.

Safety, security & data protection

	2023	2022	2021
Total number of safety certificates issued – Frequentis Group	173	164	157
thereof newly issued "Basic" certificates	9	7	7
Additional "Upgrade" certificates	30	29	15
Total number of safety certificates issued – Frequentis AG	150	144	140
thereof newly issued "Basic" certificates	6	4	7
Additional "Upgrade" certificates	30	29	15
 Training in safety-critical behaviour – Frequentis Group	87%	85%	91%
Training in safety-critical behaviour – Frequentis AG	92%	84%	89%
 Occupational safety training – Frequentis AG	551	666	454
Work-related accidents – Frequentis AG	1	1	3
of which serious accidents	0	0	0
Near misses – Frequentis AG	6	2	3
Improvements derived from these accidents	6	1	3
 Completed system security training sessions¹ – Frequentis Group			
System Security Overview for Engineers	n.a.	2	53
System Security Advanced for Engineers	n.a.	0	32
Security Training Programme (CompTIA Sec+) ²	30	n.a.	n.a.
 Completed system security training sessions¹ – Frequentis AG			
System Security Overview for Engineers	n.a.	2	30
System Security Advanced for Engineers	n.a.	0	15
Security Training Program (CompTIA Sec+) ²	20	n.a.	n.a.
 Successful completion of "Information Security Awareness Training" – Frequentis Group	85%	88%	86%
 Successful completion of "Information Security Awareness Training" – Frequentis AG	88%	86%	84%
 Successful completion of "Personal Data Protection" training – Frequentis Group	87%	86%	92%
 Successful completion of "Personal Data Protection" training – Frequentis AG	91%	86%	93%
 No. of Group-wide Security Community events	12	12	11
 Average no. of participants	56	51	25
 Proven IT service outages due to cyberattacks	0	0	0

GRI 403-9

¹ In 2022, there was only one training session with two participants because the focus was on designing a new security training and certification programme.

² Redesigned and extended concept that replaced the System Security Overview for Engineers and System Security Advanced for Engineers training modules in 2023.

GRI content index

The following list refers to the GRI Standards 2021, which were used as a guide in selecting the key performance indicators.

Name of standard	No.	Topic-specific disclosure	Page no.
GRI 2: General Disclosures 2021	2-1	Organisational details	39, 40
	2-2	Entities included in the organisation's sustainability reporting	38
	2-3	Reporting period, frequency, and contact point	36, 38
	2-4	Restatements of information	36
	2-5	External assurance	38
	2-6	Activities, value chain, and other business relationships	39, 40, 41, 79
	2-7	Employees	40, 55f, 92f
	2-8	Workers who are not employees	36, 94
	2-9	Governance structure and composition	43, 44f ↗ Corporate governance report
	2-10	Nomination and selection of the highest governance body	↗ Corporate governance report
	2-11	Chair of the highest governance body	43 ↗ Corporate governance report
	2-12	Role of the highest governance body in overseeing the management of impacts	43
	2-13	Delegation of responsibility for managing impacts	43
	2-14	Role of the highest governance body in sustainability reporting	43
	2-15	Conflicts of interest	↗ Consolidated financial statements, Note 36, ↗ Corporate governance report
	2-16	Communication of critical concerns	53, 75
	2-17	Collective knowledge of the highest governance body	43
	2-18	Evaluation of the performance of the highest governance body	44
	2-19	Remuneration policies	↗ Remuneration report
	2-20	Process to determine remuneration	↗ Remuneration report
	2-21	Annual total compensation ratio	↗ Remuneration report
	2-22	Statement on sustainable development strategy	34, 42
	2-23	Policy commitments	45f, 73ff

Name of standard	No.	Topic-specific disclosure	Page no.
GRI 3 Material Topics 2021	2-24	Embedding policy commitments	43, 44
	2-25	Processes to remediate negative impacts	75
	2-26	Mechanisms for seeking advice and raising concerns	53, 74f
	2-27	Compliance with laws and regulations	70, 73f
	2-28	Membership of associations	47, 64, 65
	2-29	Approach to stakeholder engagement	52
	2-30	Collective bargaining agreements	55
GRI 204: Procurement Practices 2016	3-1	Process to determine material topics	37, 52
	3-2	List of material topics	37, 49, 51
	3-3	Management of material topics	52f, 66f, 73, 80ff, 86
GRI 205 Anti-Corruption 2016	204-1	Proportion of spending on local suppliers	79, 98
GRI 206: Anti-Competitive Behaviour 2016	205-1	Operations assessed for risks related to corruption	75, 98
	205-2	Communication and training about anti-corruption policies and procedures	73, 74, 98
	205-3	Confirmed incidents of corruption and actions taken	73, 98
GRI 301: Materials 2016	206-1	Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	73
GRI 302: Energy 2016	301-2	Recycled input materials used	68
	301-3	Reclaimed products and their packaging materials	68
GRI 303: Water and Effluents 2018	302-1	Energy consumption within the organisation	68, 95
	302-2	Energy consumption outside of the organisation	69, 95
	302-3	Energy intensity	68, 95
	302-4	Reduction of energy consumption	68
GRI 304: Biodiversity 2016	303-1	Interactions with water as a shared resource	70
	303-2	Management of water discharge-related impacts	70
	303-5	Water consumption	97
GRI 304: Biodiversity 2016	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	67
	304-2	Significant impacts of activities, products, and services on biodiversity	67
	304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	72

Name of standard	No.	Topic-specific disclosure	Page no.
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	70, 95
	305-2	Energy indirect (Scope 2) GHG emissions	71, 95
	305-3	Other indirect (Scope 3) GHG emissions	71, 95
	305-5	Reduction of GHG emissions	70, 71, 72, 79
GRI 306: Waste 2020	306-1	Waste generation and significant waste-related impacts	69
	306-2	Management of significant waste-related impacts	69
	306-3	Waste generated	96f
	306-4	Waste diverted from disposal	69, 96f
GRI 308: Supplier Environmental Assessment 2016	308-1	New suppliers that were screened using environmental criteria	77, 78, 79, 98
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	92, 93
	401-3	Parental leave	93
GRI 403: Occupational Health and Safety 2018	403-1	Occupational health and safety management system	45f, 56, 93
	403-2	Hazard identification, risk assessment, and incident investigation	56, 58
	403-3	Occupational health services	56, 58
	403-5	Worker training on occupational health and safety	57f
	403-6	Promotion of worker health	57f
	403-9	Work-related injuries	99
GRI 404: Training and Education 2016	404-2	Programs for upgrading employee skills and transition assistance programs	59, 61, 62
	404-3	Percentage of employees receiving regular performance and career development reviews	60, 94
GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	62, 94
	405-2	Ratio of basic salary and remuneration of women to men	56
GRI 406: Non-discrimination 2016	406-1	Incidents of discrimination and corrective actions taken	62
GRI 413: Local Communities 2016	413-1	Operations with local community engagement, impact assessments, and development programs	68
GRI 414: Supplier Social Assessment 2016	414-1	New suppliers that were screened using social criteria	77, 78, 79, 98
GRI 415: Public Policy 2016	415-1	Political contributions	79
GRI 418: Customer Privacy 2016	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	87

Sustainable Development Goals (SDGs)

In addition to the GRI Standards, Frequentis uses the United Nations Sustainable Development Goals for the sustainable alignment of the company. These are supplemented by the SDG Action Plan 2019+ of the Austrian Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology (BMK).

The SDGs are characterised by their universal validity and the equal weighting given to the three dimensions – economic, social, and ecological criteria – as well as respect for human rights, the rule of law, good governance, peace, and security.

Frequentis' wide-ranging corporate social responsibility (CSR) activities contribute to all 17 SDGs. Examples are activities relating to the supply chain and to occupational health and safety.

The long-term environmental targets, which are based on Agenda 2030 adopted by the United Nations General Assembly, and continuous evaluation of possible improvements in facility management, project work, and circularity also contribute to the SDGs. In this way, it is possible to make a contribution to the 12 SDGs of relevance for the environment.

In 2024, an internal focus programme was dedicated to further improvements in circular economy. This is addressed by the SDGs, especially in SDG 12 "Responsible consumption and production", which includes the target of substantially reducing waste generation by 2030 through prevention, reduction, recycling, and reuse. Other important aspects of the circular economy are contained in SDGs 6, 8, 9, 11, and 13.

In addition to the SDGs, the improvement programme takes further relevant legislation into consideration, especially

- Delegated Regulation (EU) 2023/2486 of the Commission
- The Austrian Circular Economy Strategy of the Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology
- The European Commission's "Circular Economy" action plan

Frequentis regularly undergoes various voluntary CSR ratings by a variety of institutions with different perspectives (customers, investors). Together with the applicable ISO certifications and the related independent audits, proposed improvements are derived, leading to continuous expansion of the sustainability activities.



EU Taxonomy

Since the 2021 financial year, Frequentis has been required to make disclosures in accordance with Article 8 of the EU Taxonomy Regulation (EU) 2020/852. The EU Taxonomy, which came into force on 12 July 2020, aims to establish a common understanding of the environmental sustainability of economic activities and investments. Further, it sets out detailed technical criteria on which economic activities are deemed to be environmentally sustainable in order to orient capital flows towards a sustainable transformation within the meaning of the European Green Deal.

As a non-financial company that falls within the scope of the EU's NFI Directive, which has been transposed into Austrian law through the Sustainability and Diversity Improvement Act (NaDiVeG) (replaced by CSRD in the future), since 2022 Frequentis has been required by Article 8 of the EU Taxonomy Regulation to disclose the proportion of turnover, capital expenditure (CapEx), and operating expenditure (OpEx) derived from products or services associated with economic activities that qualify as environmentally sustainable.

An economic activity is deemed to be environmentally sustainable if it makes a substantial contribution to at least one of the six environmental objectives defined in the EU Taxonomy and, at the same time, does no significant harm to any of the other environmental objectives. At the same time, the economic activity must meet the minimum safeguards set out in Article 18 of the EU Taxonomy Regulation.

Whether an economic activity makes a substantial contribution to one of the environmental objectives is determined by mandatory technical screening criteria defined by the EU Commission. All of the defined criteria have to be met. The technical screening criteria for the first two environmental objectives – “climate change mitigation (CCM)” and “climate change adaptation (CCA)” – were published in 2021. In 2023, these were supplemented by Delegated Regulation (EU) 2023/2385. Furthermore, Delegated Regulation (EU) 2023/2486 added the technical screening criteria for the four other environmental objectives. These relate to the objectives “water and marine resources (WTR)”, “circular economy (CE)”, “pollution prevention and control (PPC)”, and “biodiversity and ecosystems (BIO)”.

Frequentis is required to report the proportion of turnover, CapEx, and OpEx of taxonomy-eligible and taxonomy-aligned economic activities. For the new economic activities published in 2023, only taxonomy eligibility has to be reported in the first year of application. Economic activities that are within the scope of the EU Taxonomy are classified as taxonomy-eligible. Economic activities that meet the technical screening criteria and minimum safeguards are classified as taxonomy-aligned and are therefore environmentally sustainable within the meaning of the EU Taxonomy Regulation.

Identification of taxonomy-eligible economic activities

As the first step in fulfilling the requirements of the EU Taxonomy, Frequentis analysed the list of environmentally sustainable economic activities to identify those that are applicable within the Frequentis Group. Frequentis' core business, the production of communication and information systems for control centres, is not yet included in the list of environmentally sustainable economic activities pursuant to the EU Taxonomy because the EU Taxonomy initially focuses on greenhouse gas-intensive sectors and activities.

Therefore, the majority of its turnover, CapEx, and OpEx is not presently disclosed as taxonomy-eligible. The results of the analysis of the taxonomy-eligibility of the economic activities showed that one economic activity is applicable to Frequentis:

	Code
8.1 Data processing, hosting and related activities	CCM 8.1

The EAD (European AIS (Aeronautical Information Services) Database) business corresponds to economic activity 8.1 Data processing, hosting and related activities (CCM). Within this business unit, Frequentis, on behalf of EUROCONTROL, is responsible for the technical operation of the EAD system, the European database for aeronautical information, which enables users to retrieve data in real-time. The data centres are operated on a redundant basis by Frequentis and by an external service provider. Both the internal and the external data centres are included in the evaluation of taxonomy alignment. The turnover, CapEx, and OpEx relating to economic activity 8.1 only relate to the environmental objective "climate change mitigation (CCM)" and not to "climate change adaptation (CCA)" as they are not climate change adaptation solutions.

Repairs and spare parts for customer systems as well as boards and printed circuit boards contained in these systems are part of the customer projects and cannot be reported separately. Therefore, this business area forms part of Frequentis' core business.

Consequently, for 2023, the disclosures pursuant to Article 8 of the EU Taxonomy Regulation can only be made for economic activity 8.1 Data processing, hosting and related activities (CCM).

Examination of taxonomy alignment

In the next step, the economic activity identified as being taxonomy-eligible was screened for taxonomy alignment. For economic activity 8.1 Data processing, hosting and related activities (CCM), business and technical experts conducted a detailed examination of compliance with the technical screening criteria set out in Annex 1 of Delegated Regulation (EU) 2021/2139 in conjunction with (EU) 2023/2485 and documented the findings transparently. To comply with the technical screening criteria, the data centres must be compliant with the European Code of Conduct on Data Centre Energy Efficiency and be audited by an independent third party. In addition, the global warming potential (GWP) of the refrigerants used in the data centre cooling system may not exceed 675. The findings show that, as at the reporting date, not all technical screening criteria were fulfilled. Therefore, as at 31 December 2023, the economic activity was not aligned with the EU Taxonomy Regulation. Measures to satisfy the remaining criteria will be taken into account in future investments and upgrades. A CapEx plan within the meaning of Annex I of Delegated Regulation (EU) 2021/2178 has not been drawn up.

Conformance with the minimum safeguards was analysed in detail. This was closely based on the proposals set out in the report of the "EU Platform on Sustainable Finance" (October 2022). The established internal policies, procedures, processes (especially the Frequentis Code of Conduct, the Corporate Social Responsibility (CSR) Code for Suppliers, supplier audits) were examined for compliance with Article 18 of the EU Taxonomy Regulation. The focal areas were human rights, compliance and anti-corruption, taxes, and fair competition. As well as internal respect for these focal areas, importance is placed on suppliers complying with the CSR Code.

KPIs

The data required for the key performance indicators (turnover, CapEx, OpEx) were compiled in the IT systems in close collaboration with the individual departments. The identified taxonomy-eligible activity 8.1 only contributes to the environmental objective “climate change mitigation (CCM)” so double-counting is precluded.

Turnover (turnover KPI)

The total turnover of the Frequentis Group used as the denominator corresponds to the revenues recognised in accordance with IFRS 15. The figure is presented in the consolidated financial statements as at 31 December 2023 [↗ Annual Report / Consolidated financial statements / Consolidated income statement](#) and in the [↗ Notes to the consolidated income statement / 4. Revenues](#). The total turnover presented for Frequentis AG comprises the revenues recognised in accordance with the Austrian Commercial Code (UGB) and is presented in the financial statements of Frequentis AG as at 31 December 2023, which are only available in German ([↗ Jahresfinanzbericht / Frequentis AG – Einzelabschluss / Gewinn- und Verlustrechnung](#) and [↗ Anhang](#)).

The taxonomy-eligible proportion of turnover contains all revenues from the technical operation of data centres for the EAD business. The taxonomy-aligned turnover used as the numerator is derived from the proportion of turnover that complies with the technical screening criteria and the minimum social safeguards. No taxonomy-aligned turnover could be disclosed for 2023.

	Code	Turnover	Proportion of turnover, 2023	Substantial contribution criteria				DNSH criteria (“Does Not Significantly Harm”)				Category enabling activity	Category transitional activity									
				Climate change mitigation	Water	Pollution	Circular economy	Biodiversity	Climate change mitigation	Water	Pollution	Circular economy	Biodiversity									
		EUR thousand	%	Y; N; N/EL ¹				Y/N ¹				Y/N	%	E T								
A. Taxonomy-eligible activities																						
A.1. Environmentally sustainable activities (Taxonomy-aligned)																						
...		-	-	-	-	-	-	-	-	-	-	-	-	-								
Turnover of environmentally sustainable activities (taxonomy-aligned) (A.1)		0	0%	-	-	-	-	-	-	-	-	-	-	0%								
of which Enabling																						
of which Transitional																						
A.2. Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																						
Data processing, hosting and related activities	CCM 8.1	12,851	3%	EL	EL	N/EL	N/EL	N/EL	EL	EL	N/EL	N/EL	N/EL	3%								
Turnover of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		12,851	3%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%								
A. Turnover of Taxonomy-eligible activities (A.1 + A.2)		12,851	3%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%								
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																						
Turnover of Taxonomy-non-eligible activities		414,636	97%																			
Total		427,487	100%																			

¹ N = no; Y = yes; EL = eligible (taxonomy-eligible); N/EL = not eligible (taxonomy-non-eligible)

Economic activities of Frequentis AG	Code	Turnover	Proportion of turnover, 2023	Substantial contribution criteria					DNSH criteria ("Does Not Significantly Harm")					Category enabling activity	Category transitional activity												
				Climate change mitigation	Climate change adaptation	Water	Pollution	Circular economy	Biodiversity	Climate change mitigation	Climate change adaptation	Water	Pollution	Circular economy	Biodiversity	Minimum safeguards	Proportion of Taxonomy aligned (A.1) or eligible (A.2) turnover, 2022										
		EUR thousand	%	Y; N; N/EL ¹					Y/N ¹					Y/N	%	E	T										
A. Taxonomy-eligible activities																											
A.1. Environmentally sustainable activities (taxonomy-aligned)																											
...			- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -										
Turnover of environmentally sustainable activities (Taxonomy-aligned) [A.1]			0 0%	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	0%											
of which Enabling																											
of which Transitional																											
A.2. Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																											
Data processing, hosting and related activities			CCM 8.1	12,712	5%	EL	EL	N/EL	N/EL	N/EL	N/EL	N/EL	N/EL	N/EL	N/EL	4%											
Turnover of taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) [A.2]				12,712	5%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%											
A. Turnover of Taxonomy-eligible activities (A.1 + A.2)				12,712	5%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%											
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																											
Turnover of Taxonomy-non-eligible activities				258,942	95%																						
Total				271,654	100%																						

¹ N = no; Y = yes; EL = eligible (taxonomy-eligible); N/EL = not eligible (taxonomy-non-eligible)

Capital expenditure (CapEx KPI)

The total capital expenditure of the Frequentis Group used in the denominator contains additions to property, plant and equipment before depreciation, amortisation and remeasurement and additions of right-of-use assets as defined in IFRS 16 Leases in 2023 as disclosed in the consolidated financial statements [Annual Report / Consolidated financial statements / Notes to the consolidated statements / 15. Property, plant and equipment](#) and [Notes to the consolidated statements / 16. Intangible assets](#). The capital expenditure of Frequentis AG presented comprises additions to tangible and intangible assets before depreciation, amortisation and remeasurements in 2023 and is taken from the fixed asset schedule in the attachment to the notes to the annual financial statements of Frequentis as at 31 December 2023, which are only available in German ([Jahresfinanzbericht / Frequentis AG – Einzelabschluss nach UGB](#)).

As for turnover, the taxonomy-eligible proportion of CapEx comprises all additions to property, plant and equipment, and right-of-use assets pursuant to IFRS 16 Leases relating to the technical operation of data centres (EAD business).

No taxonomy-aligned CapEx could be included in the numerator in 2023 because the technical screening criteria were not met.

	Code	2023 CapEx EUR thousand	Proportion of CapEx, 2023 %	Substantial contribution criteria					DNSH criteria ("Does Not Significantly Harm")					Minimum safeguards Y/N	Proportion of Taxonomy aligned (A.1) or eligible (A.2) CapEx, 2022 %	Category enabling activity E	Category transitional activity T	
				Climate change mitigation	Climate change adaptation	Water	Pollution	Circular economy	Biodiversity	Climate change mitigation	Climate change adaptation	Water	Pollution	Circular economy	Biodiversity			
Economic activities of the Frequentis Group																		
A. Taxonomy-eligible activities																		
A.1. Environmentally sustainable activities (Taxonomy-aligned)																		
...		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CapEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)		0	0%	-	-	-	-	-	-	-	-	-	-	-	-	0%		
of which Enabling																		
of which Transitional																		
A.2. Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																		
Data processing, hosting and related activities	CCM 8.1	115	1%	EL	EL	N/EL	N/EL	N/EL	N/EL	EL	EL	N/EL	N/EL	N/EL	N/EL	0%		
CapEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		115	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
A. CapEx of Taxonomy-eligible activities (A.1 + A.2)		115	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																		
CapEx of Taxonomy-non-eligible activities		18,268	99%															
Total		18,383	100%															

¹ N = no; Y = yes; EL = eligible (taxonomy-eligible); N/EL = not eligible (taxonomy-non-eligible)

Economic activities of Frequentis AG	Code	CapEx	Proportion of CapEx, 2023	2023				Substantial contribution criteria				DNSH criteria ("Does Not Significantly Harm")				Category enabling activity	Category transitional activity								
				Climate change mitigation	Climate change adaptation	Water	Pollution	Circular economy	Biodiversity	Climate change mitigation	Climate change adaptation	Water	Pollution	Circular economy	Biodiversity										
		EUR thousand	%	Y; N; N/EL ¹				Y/N ¹				Y/N	%	E	T										
A. Taxonomy-eligible activities																									
A.1. Environmentally sustainable activities (Taxonomy-aligned)																									
...		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
CapEx of environmentally sustainable activities (Taxonomy-aligned) [A.1]		0	0%	-	-	-	-	-	-	-	-	-	-	-	-	0%									
of which Enabling																									
of which Transitional																									
A.2. Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																									
Data processing, hosting and related activities	CCM 8.1	68	2%	EL	EL	N/EL	N/EL	N/EL	N/EL	EL	EL	N/EL	N/EL	N/EL	N/EL	0%									
CapEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) [A.2]		68	2%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%									
A. CapEx of Taxonomy-eligible activities (A.1 + A.2)		68	2%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%									
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																									
CapEx of Taxonomy-non-eligible activities		4,399	98%																						
Total		4,467	100%																						

¹ N = no; Y = yes; EL = eligible (taxonomy-eligible); N/EL = not eligible (taxonomy-non-eligible)

Operating expenditure (OpEx KPI)

The total operating expenditure of the Frequentis Group used as the denominator comprises direct, non-capitalised costs that relate to research and development ([Annual Report / Consolidated financial statements / Notes to the consolidated income statement / 16. Intangible assets](#)), building renovation measures, short-term lease, maintenance and repair of assets of property, plant and equipment ([Annual Report / Consolidated financial statements / Notes to the consolidated income statement / 9. Other operating expenses](#)), incurred in the 2023 financial year. The operating expenditure of Frequentis AG is taken from the income statement and the notes to the financial statements as at 31 December 2023, which are only available in German ([Jahresfinanzbericht / Frequentis AG – Einzelabschluss nach UGB](#)). It comprises direct, non-capitalised costs relating to research and development, building renovation measures, short-term lease, maintenance and repair of assets of property, plant and equipment, and in addition lease expenses of Frequentis AG incurred in the 2023 financial year.

Taxonomy-eligible OpEx mainly comprises research and development costs, short-term leases, and the maintenance and repair of property, plant, and equipment incurred in connection with economic activities of the business unit EAD.

No taxonomy-aligned OpEx could be included in the numerator in 2023 because the technical screening criteria were not met.

	Code	2023		Substantial contribution criteria				DNSH criteria ("Does Not Significantly Harm")				Category enabling activity	Category transitional activity				
		OpEx	Proportion of OpEx, 2023	Climate change mitigation	Climate change adaptation	Water	Pollution	Circular economy	Biodiversity	Climate change mitigation	Climate change adaptation	Water	Pollution	Circular economy	Biodiversity	Minimum safeguards	Proportion of Taxonomy aligned (A.1) or eligible (A.2) OpEx 2022
		EUR thousand	%	Y; N; N/EL ¹				Y/N ¹				Y/N	%	E	T		
A. Taxonomy-eligible activities																	
A.1. Environmentally sustainable activities (Taxonomy-aligned)																	
...		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OpEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)		0	0%	-	-	-	-	-	-	-	-	-	-	-	-	0%	
of which Enabling																	
of which Transitional																	
A.2. Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																	
Data processing, hosting and related activities	CCM 8.1	32	0%	EL	EL	N/EL	N/EL	N/EL	N/EL							%	
OpEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		32	0%	0%	0%	0%	0%	0%	0%							0%	
A. OpEx of Taxonomy-eligible activities (A.1 + A.2)		32	0%	0%	0%	0%	0%	0%	0%							0%	
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																	
OpEx of Taxonomy-non-eligible activities		29,712	100%														
Total		29,744	100%														

¹ N = no; Y = yes; EL = eligible (taxonomy-eligible); N/EL = not eligible (taxonomy-non-eligible)

Economic activities of Frequentis AG	Code	OpEx	Proportion of OpEx, 2023	Substantial contribution criteria				DNSH criteria ("Does Not Significantly Harm")				Minimum safeguards	Proportion of Taxonomy aligned (A.1) or eligible (A.2) OpEx, 2022	Category enabling activity	Category transitional activity								
				Climate change mitigation	Climate change adaptation	Water	Pollution	Circular economy	Biodiversity	Climate change mitigation	Climate change adaptation												
		EUR thousand	%	Y; N; N/EL ¹				Y/N ¹				Y/N	%	E	T								
A. Taxonomy-eligible activities																							
A.1. Environmentally sustainable activities (Taxonomy-aligned)																							
...		-	-	-	-	-	-	-	-	-	-	-	-	-	-								
OpEx of environmentally sustainable activities (Taxonomy-aligned) [A.1]		0	0%	-	-	-	-	-	-	-	-	-	-	0%									
of which Enabling																							
of which Transitional																							
A.2. Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																							
Data processing, hosting and related activities	CCM 8.1	32	0%	EL	EL	N/EL	N/EL	N/EL	N/EL					%									
OpEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) [A.2]		32	0%	0%	0%	0%	0%	0%	0%					0%									
A. OpEx of Taxonomy-eligible activities [A.1 + A.2]		32	0%	0%	0%	0%	0%	0%	0%					0%									
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																							
OpEx of Taxonomy-non-eligible activities		23,683	100%																				
Total		23,715	100%																				

¹ N = no; Y = yes; EL = eligible (taxonomy-eligible); N/EL = not eligible (taxonomy-non-eligible)

Report on the independent audit of the consolidated non-financial report in accordance with section 267a of the Austrian Commercial Code (UGB)

The German text of the signed report, which refers to the German version of the consolidated non-financial report for the financial year 2023, is the only legally binding version. The English translation has no legal effect. In particular, it cannot be used for the interpretation of the German text.

We have performed a limited assurance engagement on the consolidated non-financial report (hereafter "non-financial report" in accordance with the Austrian Sustainability and Diversity Improvement Act ("NaDiVeG") and section 267a UGB of FREQUENTIS AG (hereafter "Company"), Vienna, for the financial year 2023.

Summary judgement

On the basis of our audit procedures and the evidence we have obtained, nothing has come to our attention that would cause us to believe that the non-financial report of the Company has in any material respect not been established in compliance with the NaDiVeG (section 267a UGB).

Responsibility of the statutory representatives

It is the statutory representatives of the Company who are responsible for the proper compilation of the non-financial report in accordance with the NaDiVeG (section 267a UGB).

On the one hand, the statutory representatives are responsible for selecting and applying appropriate non-financial reporting methods (particularly the selection of material topics) and for making assumptions and estimates for certain non-financial disclosures, that are reasonable in the respective circumstances. On the other hand, the responsibilities include the conceptualization, implementation and maintenance of systems, processes and internal controls that enable the preparation of non-financial reporting that is free from material misstatement, whether due to fraud or error.

Auditor's responsibility

We have been engaged with providing a judgement, based on our audit procedures and on the evidence we have obtained, as to whether anything has come to our attention that would cause us to believe that the non-financial report does not conform in any material respect to the NaDiVeG (section 267a UGB).

Mr. Gerhard Posautz, Certified Auditor, is responsible for the proper performance of the assignment.

We have performed our audit in accordance with the professional principles in force in Austria relating to general-assurance engagements (KFS/PG 13) and the International Standard on Assurance Engagements (ISAE 3000 (Revised)) applicable to such matters.

In this respect, we have to comply with our professional obligations, including the provisions on independence, and are bound to plan and carry out our assignment with regard to the principle of materiality in such a manner as allows us to deliver our judgement with limited assurance.

In a limited-assurance engagement, the audit procedures undertaken are less extensive than in a reasonable-assurance engagement, and therefore a lesser degree of assurance is obtained.

The choice of audit procedures is at the due discretion of the auditor and included in particular the following activities:

- Interviews with employees responsible for the materiality assessment at the group level, in order to gain an understanding of the procedure for identifying material sustainability topics and corresponding reporting boundaries of the company;
- Risk assessment, including media analysis of relevant information on the sustainability performance of the Company in the reporting period;
- Inquiries of personnel who are responsible for providing and consolidating as well as for carrying out internal control procedures relating to the data;
- Evaluation of the design and implementation of the systems and processes for the collection, processing and monitoring of the sustainability performance information and metrics included in the scope of the audit, including the consolidation of the data;
- Inspection of selected internal and external documents in order to determine whether qualitative and quantitative information is supported by sufficient evidence and presented in an accurate and balanced manner;
- Analytical assessment of the data and trends related to the quantitative disclosures;
- Evaluation of whether the requirements pursuant to section 267a UGB have been adequately addressed;

Our assignment did not include:

- The audit of future-oriented disclosures and data from external studies;
- The audit of references to the standards of the Global Reporting Initiative ("GRI Standards 2021");
- The audit of the information in accordance with Article 8 of the EU Taxonomy Regulation ((EU) 2020/852) in conjunction with the applicable Delegated Acts of the European Commission.

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

The subject-matter of the engagement does not consist of performing either an audit or an audit-related review of the financial statements. Neither are the detection and investigation of fraudulent acts, such as misappropriation or other acts of defalcation or administrative offences, nor an assessment of the effectiveness and efficiency of the Management a part of that subject-matter.

Restrictions on applicability

As our report is prepared exclusively at the client's request and in the client's interest, there exists no basis for other third parties to place any reliance on its content. It therefore provides no grounds for claims by other third parties arising from it. We agree to the publication of our report together with the non-financial report.

Conditions of the engagement

We make this report on the basis of the engagement concluded with you, which is itself based on the AAB appended to this report. The AAB are also valid against third parties.

Vienna, 12 March 2024



BDO Assurance GmbH
Wirtschaftsprüfungs- und Steuerberatungsgesellschaft

Gerhard Posautz
Certified Auditor

Gerhard Fremgen
Certified Auditor

Declaration by all legal representatives

We confirm to the best of our knowledge that the consolidated non-financial report contains the disclosures pursuant to Section 243b and Section 267a of the Austrian Commercial Code (UGB) and Regulation (EU) 2020/852 ("EU Taxonomy") that are necessary for an understanding of the business performance, results of operations, situation of Frequentis AG and its subsidiaries, and the impact of their activities and which relate, at a minimum, to environmental, social, and employee aspects, respect for human rights, and combating bribery and corruption. The disclosures include a description of Frequentis' business model and the concepts used with regard to the above aspects, including the due diligence processes applied, the material risks, the probable negative impacts on these aspects, the results of the concepts, and the key performance indicators.

Vienna, 11 March 2024



Norbert Haslacher
Chairman
of the Executive Board



Monika Haselbacher
Member
of the Executive Board



Hermann Mattanovich
Member
of the Executive Board



Peter Skerlan
Member
of the Executive Board

Group Management Report as at 31 December 2023

Economic environment	116
Business performance	117
Segment performance	124
Research & development	126
Non-financial information	126
Consolidated corporate governance report	126
Opportunity and risk management	127
Internal control system (ICS) for the accounting process	134
Information pursuant to Section 243a (1) UGB	135
Outlook	138

Economic environment

Compared to other sectors of the economy, the areas in which the Frequentis Group operates (information and communication systems for civil and military air traffic control, emergency services, rail, and water transport) have relatively low cyclical exposure. Frequentis' business performance would be adversely affected by a significant global decline in one of these five areas. Frequentis cannot completely avoid general economic developments. However, it supplies safety-critical infrastructure, which cannot be dispensed with and has to be upheld and maintained even in periods of crisis.

The International Monetary Fund (IMF) published its World Economic Outlook Update in January 2024¹. Global growth was 3.1% in 2023 and is projected to be at 3.1% in 2024 as well, with the 2024 forecast 0.2 percentage point higher than that in the October 2023 World Economic Outlook. The forecast is, however, below the historical (2000–2019) average of 3.8%, with elevated central bank policy rates to fight inflation, a withdrawal of fiscal support amid high debt weighing on economic activity, and low underlying productivity growth.

With disinflation and steady growth, the likelihood of a hard landing has receded, and risks to global growth are broadly balanced. On the upside, faster disinflation could lead to further easing of financial conditions. Looser fiscal policy than necessary and than assumed in the projections could imply temporarily higher growth, but at the risk of a more costly adjustment later on. Stronger structural reform momentum could bolster productivity with positive cross-border spillovers. On the downside, new commodity price spikes from geopolitical shocks – including continued attacks in the Red Sea – and supply disruptions or more persistent underlying inflation could prolong tight monetary conditions. Deepening property sector woes in China or, elsewhere, a disruptive turn to tax hikes and spending cuts could also cause growth disappointments.

For the USA, the IMF is projecting growth of 2.1% in 2024. It estimates that the economy in the euro zone will grow by 0.9% in 2024. For the major economies in the euro zone, it predicts different growth rates in 2024, led by Spain (1.5%), ahead of France (1.0%), Italy (0.7%), and Germany (0.5%). The forecast for the UK is 0.6% growth in 2024.

For the emerging and developing economies in Asia, the projection is 5.2% growth in 2024. The IMF assumes growth of 1.9% for Latin America and 2.9% for the Middle East and Central Asia in 2024.

¹ <https://www.imf.org/en/Publications/WEO/Issues/2024/01/30/world-economic-outlook-update-january-2024>

Business performance

In 2023, the Frequentis Group increased revenue by 10.8%, based on the high level of orders on hand at year-end 2022 and good order intake. Thanks to Frequentis' stable business model as a provider of communication and information systems for control centres in the safety-critical sector, demand remains high, as shown by the 24.7% increase in order intake.

Significant events in 2023

Acquisition to strengthen expertise in cybersecurity

In April 2023, Frequentis acquired a 76.67% interest in FRAFOS GmbH, which is based in Berlin, Germany. FRAFOS delivers key security components for Frequentis' communication solutions for all safety-critical sectors. Solutions from FRAFOS are approved for safety-critical installations of government organisations and by Germany's Federal Office for Security and Information Technology (BSI).

FRAFOS is an expert in VoIP (Voice over Internet Protocol) firewalls, which support Frequentis in solutions for safety-critical operations by expanding protection against denial-of-service (DOS) attacks and attempted fraud.

Acquisition on the recorder market

In July 2023, Frequentis acquired 100% of the Norwegian software company GuardREC ATC AS, which has since been renamed Frequentis Recording AS as part of the integration process. This acquisition increases recording competence in all business areas. Its portfolio covers all aspects of surveillance as well as audio, video, and data recording, including data analysis. Frequentis' recording solution DIVOS is being merged with the solution that has been acquired to provide a new global product offer.

Impact of the geopolitical situation

In addition to the war in Ukraine, which started in February 2022 and is now entering its third year, Hamas' attack on Israel in October 2023 led to the outbreak of a new war with potentially global consequences. Moreover, there are longer-term crises such as the climate crisis and distortion and price volatility on the energy market. It is possible to talk about a polycrisis, where individual crises have a compound effect. At the same time, Europe, in particular, is stepping up investment in military infrastructure and public safety.

These crises affect Frequentis' internal and external stakeholders in many different ways. There were no relevant effects on Frequentis' revenues because it did not generate any revenues with Ukraine, Russian Federation, Belarus, or the Palestinian territories in 2023. Revenues from Israel were below EUR 1.0 million in 2023. However, the wars had an indirect effect through higher prices, especially for electricity, gas, and fuel.

Consequently, prices of other everyday products increased. Overall, inflation therefore rose sharply almost everywhere in the world and was well above the average for previous years in both 2022 and 2023. This resulted in the need to adjust prices for existing and new customer projects.

The inflation-related salary adjustments based on individual and collective salary agreements are reflected in the Frequentis Group's personnel expenses in both 2022 and 2023. Further cost rises are anticipated in 2024. This applies above all for Austria, where about half of Frequentis' workforce is employed. According to Eurostat, inflation was 7.7% (as at December 2023, annual average, year-on-year change). That was once again several percentage points above the average for the euro zone, which was 5.4%.

Recurrent supply chain bottlenecks caused by various factors (e.g. attacks on trade routes) have some impact on Frequentis, for instance through some sharp price rises and delays in the delivery of purchased materials. The increase in inventories was mainly due to increased stocking of components to ensure an adequate safety net to meet long-standing delivery and maintenance obligations despite the withdrawal of products by producers and supply bottlenecks.

Another aspect that could influence Frequentis' business is that more than a quarter of the world's population will have the opportunity to vote in elections in 2024. That could result in new governments, which could either initiate new investment plans or cut existing plans.

Order intake

Order intake in the Frequentis Group was EUR 504.8 million in 2023, an increase of 24.7% (EUR 100.0 million) compared with 2022, when order intake was EUR 404.8 million.

The distribution of order intake between the two segments in 2023 was as follows: Air Traffic Management 68% (EUR 345.4 million) compared with 68% in 2022 (EUR 275.4 million), Public Safety & Transport 32% (EUR 159.3 million), compared with 32% in 2022 (EUR 129.4 million).

Highlights of order intake in the Air Traffic Management segment

In the field of voice communication systems, Frequentis has been selected to upgrade the mission control voice conferencing technology at NASA's Johnson Air Space Center (JSC). NASA's current voice conferencing system at JSC is to be replaced by the next-generation Voice over IP (VoIP) conferencing system.

Another highlight in order intake for voice communication systems came from Norway. The country's air navigation service provider Avinor has ordered the X10 VCS geographically redundant voice communication system. Frequentis will also be supplying this system to NAV CANADA for one of the world's largest air traffic control deployments, a county-wide voice communication and gateway project at 100 facilities with over 1,000 operator working positions.

The Norwegian air navigation service provider Avinor has also awarded Frequentis a contract to deliver the Advanced Network Management System (Advanced-NMS). Total operational awareness and real-time performance monitoring will enhance the security of Avinor's operations. This flexible and scalable solution evolves with customers' requirements.

In the USA, Frequentis has been selected by Verizon for the FAA's Enterprise Network Services (FENS) contract. The FAA (Federal Aviation Administration) is the US air traffic control organisation. One billion passengers use US airspace every year. In keeping with the FAA's mission to continue to provide the safest and most efficient airspace system in the world, the FENS programme will update the FAA's telecommunications network across the United States.

Further orders for voice communication systems were received from countries including Egypt, Bulgaria, the UK, and Mexico.

In the area of drones, the Lithuanian air navigation service provider has selected Frequentis to provide its proven UTM (uncrewed traffic management) solution to allow safe, efficient, and compliant integration of drones into Lithuanian airspace in response to growing use of drones in the country.

Demand for remote digital towers for both civil and military use remains high. For example, Frequentis is supporting the US Department of Defense in trials on transportable digital tower technology at several air force bases in the USA as part of a multi-site evaluation of digital tower technology.

In Australia, C4i, as a supplier to Lockheed Martin, will be providing its VOICE C2 solution for the Air650 project to ensure secure communications across air, land, sea, and space. The objective of this project for the Royal Australian Airforce (RAAF) is to enhance the security, rapid response, and interoperability of the country's defence systems.

Highlights of order intake in the Public Safety & Transport segment

In the Public Safety & Transport segment, the Public Safety business domain is increasing its market leadership with the emergency services in Germany. Police and local authorities in Lower Saxony, represented by the Central Police Directorate, have commissioned Frequentis to supply its multimedia communication solution 3020 LifeX. The implementation of this system across eight control centres, one alternate control centre, and one test system will take place in three phases. This project will establish a state-wide standard for the control centre communication system within an IP-based system environment in Lower Saxony.

In Bavaria, Germany, Frequentis has secured an order through the general contractor Sopra Steria to supply the ASGARD voice and data communication system for a total of 26 integrated control centres, three emergency control centres, the fire service dispatch centre in Munich, and a training and test environment at the fire fighter college in Geretsried. This state-wide project is being implemented by Sopra Steria in collaboration with Frequentis.

A centralised country-wide communication solution for medical emergency and non-emergency centres for up to 500 active operators is being delivered to Norway. This multimedia control room solution supports video and social media communication. Additionally, it includes mobile access for nurses treating patients in hospitals. This software-based solution will reduce operating and management costs.

Outside of Europe, Frequentis has been selected by Airservices Australia, the nation's air navigation service provider, to deliver a solution for its Aviation Rescue Fire Fighting Service. The solution will be made up of two components: the multimedia collaboration and communication platform 3020 LifeX, extended by the messenger, incident, and resource management module, OnSite.

In the Public Transport business domain, France's state-owned rail company SNCF Réseau has selected Frequentis to develop and supply a customised communication system for the entire French rail network as part of its strategic development plan to transform its network by 2030. Deployment of the new system to 3,600 dispatcher working positions and around 40,000 mobile apps will create a uniform operational communication platform. The FERCOM railway communication project paves the way for the transition to the Future Railway Mobile Communication System (FRMCS). The aim is to drive performance through digital innovation. In addition to its office in Toulouse, France, which has strong air traffic management competence, Frequentis will be establishing a new location in Paris dedicated to the public transport market.

In the area of innovation, a high-profile drone-based project has been realised in collaboration with the Austrian Federal Railways (ÖBB). Drones operating without direct visual contact with the pilots are used to inspect railway lines, providing a fast and safe overview of the condition of the line and minimising line closures. The drones operate from hangar-based drone garages distributed along the rail network. They send real-time images to the control centre, where the necessary decisions are taken.

The Maritime business domain received orders from the German and Belgian Maritime Rescue and Coordination Centres (MRCC). MRCCs are control centres for maritime emergencies, e.g. vessels in distress, accidents, oil spills and private individuals in difficulty. The German Maritime Search and Rescue Service and the Belgian Maritime Service Agency and Coast Guard have each ordered a flexible modern incident management system as part of the Frequentis MarTRX solution.

The UK has become a new MarTRX customer, enabling the Maritime and Coastguard Agency (MCA) to simplify workflows in the dispatch of navigation information (NAVTEX). In future, the Frequentis DSC (digital selective calling) solution will improve the handling of emergency calls from British ships operating worldwide. This project will connect 130 radio stations along the British coast to the MarTRX control centre.

Orders on hand

Orders on hand amounted to EUR 594.7 million as at 31 December 2023 (including the latest acquisitions), an increase of 13.9% (EUR 72.6 million) compared with end-December 2022 (EUR 522.0 million). The Air Traffic Management segment accounted for around 63% of total orders on hand (December 2022: 63%) and the Public Safety & Transport segment for 37% (December 2022: 37%).

Revenues and operating performance

In 2023, revenues increased by 10.8% (EUR 41.5 million) to EUR 427.5 million (2022: EUR 386.0 million). Taken together, the two acquisitions – the German company FRAFOS and the Norwegian company Frequentis Recording – contributed around EUR 2 million to revenues in 2023. Organic growth was therefore 10.2%.

Revenues in the Air Traffic Management segment grew by 13.8% to EUR 293.3 million. In the Public Safety & Transport segment, revenues increased by 4.8% to EUR 133.8 million. The revenue split between the Air Traffic Management and Public Safety & Transport segments was 69% : 31% in 2023 (2022: 67% : 33%).

Looking at the regional revenue split, in 2023 Europe accounted for 66% (2022: 65%), the Americas for 16% (2022: 16%), Asia for 11% (2022: 12%), Australia/Pacific for 6% (2022: 5%), and Africa for 1% (2022: 2%). Less than 1% (2022: <1%) of revenues were not allocated to a region.

The change in inventories of finished goods and work in progress was EUR -0.5 million in 2023 (2022: EUR <0.1 million). Own work capitalised rose to EUR 4.1 million (2022: EUR 2.6 million), mainly due to voice communication systems produced for leasing.

The other operating income decreased to EUR 8.1 million (2022: EUR 10.5 million). The biggest single items here are grants and subsidies for research and development costs and income from research subsidies.

The operating performance increased by 10.0% to EUR 439.2 million in 2023 (2022: EUR 399.1 million).

Earnings

The cost of materials and purchased services increased by 5.5% to EUR 104.7 million (2022: EUR 99.2 million), which was less than the rise in revenues. Personnel expenses rose 11.8% to EUR 227.9 million (2022: EUR 203.9 million), which was above the rise in revenues. This was attributable to the increase in the headcount, pay rises, which reflected the high inflation rate, and the acquisitions made in 2023.

The other operating expenses increased by 24.1% to EUR 62.4 million (2022: EUR 50.3 million), driven principally by higher travel and advertising expenses, for example for trade shows, the change in project provisions, and increased energy costs. Since the COVID-19 pandemic has subsided, allowing unrestricted travel, and air fares have risen, travel expenses increased by EUR 2.0 million year-on-year to EUR 12.7 million, which was 3.0% of revenues in 2023. In absolute terms, travel expenses were therefore higher than in 2019, before the pandemic, but relative to revenues they were lower than in 2019 (2019: EUR 11.9 million, which was 3.9% of revenues). Frequentis strives to keep travel expenses at around 3-4% of revenues.

EBITDA (earnings before interest, taxes, depreciation, and amortisation) declined to EUR 44.2 million in 2023 (2022: EUR 45.6 million). The EBITDA margin (relative to revenues) was 10.3% in 2023, compared with 11.8% in 2022.

Depreciation and amortisation were almost unchanged at EUR 17.5 million (2022: EUR 17.5 million). No impairment losses were recognised in 2023. In 2022, impairment losses of EUR 3.1 million were recognised due to the impairment of product rights at ATRiCS Advanced Traffic Solutions GmbH and Frequentis Comsoft GmbH.

As a result of all the changes outlined above, EBIT increased to EUR 26.6 million in 2023 (2022: EUR 25.0 million). The EBIT margin (relative to revenues) was 6.2%, compared with 6.5% in 2022.

As a result of the increase in interest rates, financial income rose by EUR 0.7 million to EUR 0.9 million in 2023 (2022: EUR 0.2 million). At the same time, the cost of financing (which also includes interest on leases) increased by EUR 0.7 million to EUR 1.4 million (2022: EUR 0.7 million).

Profit before tax was EUR 26.4 million in 2023 (2022: EUR 24.7 million). Income tax expense was EUR 6.4 million (2022: EUR 5.9 million), giving a tax rate of 24.4% (2022: 23.7%).

The profit for the period increased to EUR 20.0 million in 2023 (2022: EUR 18.9 million). Basic earnings per share were EUR 1.39 in 2023 (2022: EUR 1.41) and diluted earnings per share were EUR 1.38 (2022: EUR 1.41).

Employees

The number of employees increased by 6.5% to an average of 2,217 FTEs in 2023 (2022: 2,081 FTEs). Around 1,100 FTEs, which was around half of the total, were employed in Austria.

Asset and capital structure

Total assets increased by 9.1% to EUR 371.1 million as at end-December 2023 (end-December 2022: EUR 340.3 million). This was partly attributable to an increase in contract assets. The equity ratio was 41.9% (end-December 2022: 43.3%). Equity increased by EUR 8.3 million to EUR 155.6 million (end-December 2022: EUR 147.3 million).

The net cash position (cash and cash equivalents and time deposits less liabilities to banks and other financial liabilities) was EUR 84.3 million as at end-December 2023, which was below the net cash position of EUR 91.0 million recorded at the end of December 2022.

Non-current assets amounted to EUR 94.0 million at the end of December 2023 (end-December 2022: EUR 80.4 million). The three largest items here were property, plant and equipment, which totalled EUR 55.9 million (end-December 2022: EUR 53.3 million), intangible assets, which amounted to EUR 17.5 million (end-December 2022: EUR 14.5 million), and goodwill, which was EUR 11.4 million (end-December 2022: EUR 5.8 million).

Current assets totalled EUR 277.1 million at the end of December 2023 (end-December 2022: EUR 259.8 million). The most important item here is cash and cash equivalents, including time deposits, which amounted to EUR 84.7 million (end-December 2022: EUR 91.4 million), followed by trade accounts receivable totalling EUR 81.0 million (end-December 2022: EUR 77.0 million), contract assets, which amounted to EUR 61.3 million (end-December 2022: EUR 50.5 million), and inventories, which totalled EUR 26.6 million (end-December 2022: EUR 21.7 million). The increase in inventories was mainly due to increased stocking of components to ensure an adequate safety net to meet long-standing delivery and maintenance obligations despite the withdrawal of products by producers and supply bottlenecks.

As at end-December 2023, more than two-thirds of total cash and cash equivalents and time deposits were deposited with eleven system-relevant major banks in Austria and Germany. Less than one-third was deposited with approximately 25 other banks in Europe, Australia, Asia, and the Americas.

On the liabilities side, the main item was equity of EUR 155.6 million as at end-December 2023 (end-December 2022: EUR 147.3 million). The second largest item comprised current liabilities, which amounted to EUR 142.4 million as at end-December 2023 (end-December 2022: EUR 131.0 million). Contract liabilities accounted for EUR 72.1 million of this amount (end-December 2022: EUR 68.0 million).

Non-current liabilities (third-largest item on the liabilities side) totalled EUR 73.0 million (end-December 2022: EUR 61.9 million). The biggest item here comprised non-current lease liabilities, which totalled EUR 29.2 million (end-December 2022: EUR 30.8 million).

Cash flow

The cash flow from operations increased to EUR 46.8 million in 2023 (2022: EUR 43.6 million).

The cash flow from operating activities increased to EUR 25.7 million in 2023 (2022: EUR 14.2 million), driven principally by the positive development of the cash flow from operations and the change in other liabilities and contract liabilities. By contrast, it was held back by higher income tax payments in many countries.

The cash outflow for investing activities was EUR 18.1 million in 2023, compared with an outflow of EUR 20.1 million in 2022. This includes the cash outflows for the acquisition of the German company FRAFOS and the Norwegian company Frequentis Recording. Capital expenditures (cash outflows for the purchase of intangible assets, property, plant and equipment) were EUR 11.7 million, which was higher than in 2022 (EUR 10.1 million). The cash outflows in 2022 and 2023 were influenced by own work capitalised, mainly in connection with voice communication systems produced in these two years.

The cash flow from financing activities improved to EUR -13.4 million in 2023 (2022: EUR -16.5 million), principally as a result of borrowing and other financing. This was offset to some extent by repayment of loans and other financing.

The total cash flow in 2023 was EUR -6.6 million (2022: EUR 22.4 million). Cash and cash equivalents, excluding time deposits, amounted to EUR 74.2 million as at end-December 2023 (end-December 2022: EUR 81.4 million).

Business relations with related parties

For details see [↗ Consolidated financial statements as at 31 December 2023, note 36](#).

Segment performance

Air Traffic Management / ATM

The Air Traffic Management (ATM) segment comprises the ATM Civil business domain (which includes AIM / Aeronautical Information Management) and the ATM Defence business domain. This segment focuses on civil and military air traffic control organisations and therefore generally on one to two customers per country. It is estimated that the market entry barriers are relatively high.

The business domains' products are similar and are based on the same product platform. In the Defence business domain, there is also demand for additional encryption solutions. The safety and quality management requirements are the same: the international regulations for standardisation of air traffic issued by the International Civil Aviation Organization (ICAO) apply. Moreover, the infrastructure to be installed for customers (radar, radio transmission, networks) is similar.

Frequentis' ATM portfolio for the defence sector comprises communication and information systems for air defence and military air traffic control, systems for networked operational management and tactical networks, management and information systems, including systems for integrated use by different authorities, and encrypted, interoperable communication systems for mission-critical applications.

Revenues in the Air Traffic Management segment increased by 13.8% to EUR 293.3 million in 2023 (2022: EUR 257.8 million). EBIT was EUR 10.1 million (2022: EUR 10.2 million).

Highlights from the operating business

This segment recorded key milestones and acceptance of voice communication systems for the British, French, and Korean air traffic control organisations. The latest release of the X10 voice communication system came into service at Montreal Airport in Canada. Using its agile state-of-the-art service-oriented architecture, the X10 adds future operational benefits through seamless integration with other systems.

In the area of drone management, Estonia's air navigation service provider has taken the first steps – together with Frequentis – towards automated, digital implementation of drones in air traffic. Frequentis' work in the field of drone management is also honoured by the market: at the 2023 Airspace World trade show in Geneva, Frequentis, the Norwegian air navigation service provider Avinor, and the Norwegian air ambulance service won the Overall Excellence Air Traffic Management Award for demonstrating the safe operation of drones and the air ambulance service.

In Austria, flying drones has been even simpler and safer since the end of October 2023. Together with Frequentis, Austro Control has developed a traffic management system for the safe integration of drones into Austrian airspace.

Frequentis is leading an artificial intelligence research initiative to enhance the safety and efficiency of remote digital towers. The Austrian research initiative Take Off provides funding for this collaboration between Frequentis, the Austrian Institute of Technology, and Graz University.

Public Safety & Transport / PST

The Public Safety and Transport segment comprises the Public Safety, Public Transport, and Maritime business domains. Its customers are public authorities or related organisations with monitoring and control functions.

The Public Safety business domain's customers are the police, fire, and rescue services. Police organisations also require additional encryption solutions. Alongside conventional rail operators, the Public Transport business domain's customers include local public transport providers. The Maritime business domain focuses on coastguards and port authorities.

The business domains' products are similar and are based on the same product platform. Moreover, the infrastructure to be installed for customers (phones, radio transmission, networks) is similar. Despite several international standardisation efforts, different national and regional requirements and regulations still apply.

Revenues in the Public Safety & Transport segment increased by 4.8% to EUR 133.8 million in 2023 (2022: EUR 127.7 million). EBIT rose to EUR 16.7 million (2022: EUR 14.9 million).

Highlights from the operating business

A highlight in the Public Safety business domain was the full completion of the rollout of the 3020 LifeX multimedia communication solution in Bavaria, Germany. Now the entire police force in Bavaria uses 3020 LifeX platforms.

3020 LifeX was successfully taken into service in the Saarland region of Germany when the police control centre was switched to this platform. It should be noted that Frequentis Germany executed this project in just six months from placement of the order by ZRF, a joint association of the fire and emergency rescue services in this region.

Within the framework of the Ambulance Radio Programme, the first systems were replaced at some of the eleven control centres operated by the (regional) Ambulance Trusts in England, Scotland, and Wales.

Frequentis expert Charlotte Rösener was appointed President of the Public Safety Communication Europe (PSCE) Forum in 2023. She became chair of the Industry Committee and one of four board members in 2021. The PSCE Forum is a non-profit organisation in the field of communication technologies for public authorities and emergency services (police, fire, and rescue services).

The Public Transport domain completed key milestones for customers in Europe and Australia. These will increase safety further in the future and pave the way to better address specific issues such as security requirements. One focus of the RailDays event organised for customers in Vienna in the reporting period was joint work on the systems roadmap for railways.

The Maritime domain brought systems into operation in Australia and Egypt and important progress and customer acceptances were registered in projects for the Netherlands and Norway.

Research & development

The greatest challenges for customers operating safety-critical services are currently rising cost pressure and continual changes in the operating environment, most recently caused, in part, by the effects of the pandemic. Users need more flexible systems and software solutions to ensure they continue to meet the demanding safety requirements and can adapt operating resources and operational locations easily to meet current needs. Therefore, flexible means of communication and integrated control room solutions are required. The migration of data and voice communication to joint IP networks creates the technical preconditions for greater flexibility, which is needed, for example, for remote tasks. At the same time, cybersecurity is becoming more and more important as a result of increased networking.

As a recognised innovation leader in the markets it addresses, Frequentis responds to this by providing IP-based systems. In the next phase, the networks will become the centre of communications solutions. Traditional voice communication systems are being extended by networked voice and data communication systems. Close interaction with customers, with most of whom Frequentis has worked in partnership for many years or even decades, allows early identification and a timely response to technological developments.

Innovations are an important element in Frequentis' corporate strategy. All related activities are managed by New Business Development. The present focus is on the ongoing development of the digital (remote) tower technology, drone management, and the use of 5G/LTE for safety-critical applications. Another focal area is the development and commercialisation of new business models such as software as a service (SaaS) and cloud solutions.

Future aspects include examining artificial intelligence or blockchain technology for possible use in safety-critical applications. Frequentis' involvement in a range of national and EU-funded projects is also focused on such issues in the safety-critical environment. Wherever possible, Frequentis' innovations are patent-protected.

Expenses for in-house research and development work (i.e. work not ordered by customers) amounted to EUR 25.2 million in 2023 (2022: EUR 26.8 million). That was around 6% of revenues in 2023 (2022: around 7% of revenues).

Non-financial information

Frequentis AG publishes a separate consolidated non-financial report, which meets the statutory requirements of Sections 243b and 267a of the Austrian Commercial Code (UGB).

Consolidated corporate governance report

The consolidated corporate governance report is available at www.frequentis.com/ir > Corporate Governance.

Opportunity and risk management

Frequentis has implemented an active risk management system throughout the Group. The fundamental aim is to identify opportunities and risks as soon as possible and take suitable measures to maintain profitability and secure the continued existence of the Group. Variable capacity utilisation scenarios are a central risk factor, which the company addresses through extensive scenario management. Together with the risk awareness of the staff, this allows timely recognition and Group-wide counteraction, even in business situations that develop in an unforeseen manner.

The Frequentis Group therefore regularly undertakes an extensive internal evaluation of all relevant risks and opportunities. These are compiled in a Group-wide risk report, which is discussed by an extended management circle. As well as exploiting opportunities, Frequentis enters into risks with a view to enhancing the value of the company. To ensure early identification and proactive management of risks, the Frequentis Group has a soundly based Risk Management Policy, a Group-wide risk management system, an extensive internal control system (ICS), and an Internal Audit department. Breaches of compliance can constitute a considerable risk for any company.

The Risk Management Policy is based on the internationally recognised ISO 31000 standard and forms the backbone of the efforts to systematically identify, evaluate, and manage risks. Through this established process, Frequentis ensures a holistic view of the opportunities and risks. The measures taken to exploit opportunities and mitigate risks are discussed in detail by an extended management circle at regular intervals. Specific action points are identified and corresponding decisions are taken to ensure that Frequentis can respond agilely to challenges and, at the same time, make full use of the opportunities that arise. As well as safeguarding the Frequentis Group's earnings capability, this proactive approach strengthens its position in a changing business world. The Director of Group Security & Risk Management is responsible for this process.

To simplify the internal and external communication channels for reporting any issues, Frequentis introduced a whistleblower system at Group level at the end of 2021. This is available both via the company's website at www.frequentis.com/en/whistleblowing and via the intranet. This meets the requirements of EU Directive 2019/1937 on the protection of persons who report breaches of Union law.

Project management as an operational mainstay

Risk management is essential in projects, which form Frequentis' core business and are the mainstay of its operations. As part of effective and professional project management, an in-depth risk analysis examines the entire project life cycle. Risks are identified, tracked, mitigated, and eliminated to ensure clear management of risks and results.

The entire project portfolio is managed by a project management board that meets periodically. This board reviews projects and allocates them to the relevant business types. It also drives forward the continuous improvement of project methods and project management processes.

In addition, projects are evaluated several times a year by an extended management circle. All key projects are presented, risk assessments and deviations are discussed, and the action to be taken is agreed. Performance of the projects, invoicing, and receipt of payments are monitored continuously. These project evaluations are supplemented by periodic status meetings in the individual units, which monitor operating performance and marginal income with a view to the Group's profit.

Evaluation of risk management

As part of the audit of the financial statements, in March 2024, BDO Assurance GmbH Wirtschaftsprüfungs- und Steuerberatungsgesellschaft confirmed the functioning and appropriateness of Frequentis' risk management system in accordance with C rule no. 83 of the Austrian Code of Corporate Governance.

Overview of risks

If any of the risks outlined in this section materialise, this could have an adverse effect on the business, financial condition, and result of operations of the Frequentis Group.



To obtain a full overview of the risks within the Frequentis Group, they are classified by impact. The division into project, finance, legal & compliance, operational & HR (human resources), security, strategy, and ESG (environmental, social, governance) risks creates a precise structure that allows a full overview of the wide-ranging opportunities and risks of Frequentis' business activities. The categories are outlined below to provide an extensive insight into the risk management strategies and activities.

Project-related risks

Unpredictabilities, which are characteristic of the tender project business, and seasonal and annual fluctuations in the order situation.

An important part of the Frequentis Group's business is acquiring orders (often through lengthy tender processes) to provide products and services. Competition is intense, and the tender procedure is typically protracted and extensive and necessitates considerable personnel and financial resources. Projects by public and semi-public organisations depend on regulatory decisions, budget considerations, and internal approval and release procedures. If Frequentis does not succeed in winning the tender process, all funds and resources allocated to such projects are frustrated. Delays in the tender process and during project execution may have detrimental impacts on the Group's order intake and operating performance. The larger a project is, the more significant the impact. The order intake, operational performance, and earnings of the Frequentis Group are typically subject to considerable seasonal fluctuations. Usually, the Group generates most of its order intake, earnings, and operating performance in the fourth quarter of any given financial year and its financial results in the first half of the financial year are usually negative. Moreover, in most cases, payment depends on the achievement of milestones and the successful finalisation of such projects.

Fluctuations in earnings due to the impact of major projects.

Frequentis' revenues in any period may fluctuate significantly due to the specific payment dates for major projects. Such contracts cause a significant revenue contribution in one year, compared to other years, in which no such major contracts were obtained.

Cost overruns

Changes in costs and production in projects based on fixed-price contracts might influence the financial result of the relevant project. Expenses necessary to complete projects (in particular, if a project involves significant R&D or engineering work) could be underestimated. This may render certain projects unprofitable or even loss-making.

Further risks in this area:

Uncertain, delayed, or deferred orders.

Finance-related risks

Legitimate/illegitimate utilisation or unavailability of bank guarantees.

Frequentis regularly provides bank guarantees (bid bonds, down payment bonds, performance bonds, warranty bonds) to customers as surety for their contractual claims. Legitimate or illegitimate utilisation of these bank guarantees could result in liquidity problems. Similarly, tender invitations for goods and services to be delivered to customers in countries where Frequentis' domestic relationship banks do not have regular business connections could make it difficult to identify appropriate banks for the issuance of letters of credit in time or at all. If no corresponding bank could be found, Frequentis would not be able to take part in the tender process. Frequentis AG has provided numerous comfort letters on behalf of its subsidiaries. This means that Frequentis AG assumes the risk of contract performance by these subsidiaries.

Non-performance of payment obligations by customers.

Non-performance of payment obligations by a customer, particularly in major projects, may be caused by a customer getting into financial difficulty or becoming insolvent, delays in the performance of a project, tension in the collaboration with the customer, or other reasons. Payment delays by public or semi-public entities could also be caused by a delay in budget negotiations or by political uncertainties.

Further risks in this area:

- Inadequate cash flows from operating activities to finance liquidity and net working capital requirements.
- Rising cost pressure triggered, in particular, by competitors in low-wage countries.
- Fluctuation of raw material and energy prices and labour costs.
- Fluctuations in exchange rates and rising interest rates.
- High inflation rates or inflation rates above the long-term average.

Legal & compliance risks**Legal risks relating to public tender contracts.**

An important aspect of Frequentis' business is the delivery of products and rendering of services that are subject to public tender procedures and therefore exposed to several specific risks. It should be borne in mind that:

- Competition in tender processes is normally very intensive;
- Such processes require considerable human and financial resources over a long period;
- Public tenders may have very disadvantageous contractual terms, which often cannot be negotiated individually;
- Public and semi-public organisations (which dominate Frequentis' customer base) may give preferential treatment to suppliers from certain other countries rather than Frequentis due to protectionism or political influence;
- An order awarded to Frequentis could be challenged by unsuccessful competitors.

Statutory provisions that define a proportion of domestic content.

Some countries, e.g. the USA (Buy American Act) and Australia (Australian Industry Capability Program), prescribe minimum domestic content directly or indirectly by statute. In such situations, Frequentis must purchase local content from local suppliers, or must make acquisitions or direct investments in the relevant market, regardless of the price level and the capacity situation within the Frequentis Group and any resulting underemployed capacity.

Faulty performance under Frequentis' contracts (including when it is acting as a sub-contractor).

This could include complete non-fulfilment, incomplete fulfilment or bad fulfilment, in terms of quality, time or budget.

Faulty performance by subcontractors.

When Frequentis acts as the main contractor and/or system integrator, which occurs more and more often, it also assumes responsibility for third-party suppliers, which entails additional risks. If a subcontractor provides certain components, which the main contractor has to integrate into an overall solution, the main contractor faces both technological and financial integration risks. In certain circumstances, it may not be possible to complete the subcontract on terms that are essentially equal to those set out in the main contract with the customer. If a subcontractor does not meet its contractual performance obligations, the Frequentis Group might face claims for damages or penalties or be compelled to re-assign the outstanding performance to a third party or to provide the remaining performance itself.

Further risks in this area:

- Damage to customers' assets during on-site work.
- Business activities could be adversely affected by changes in the legal and political framework or the application or interpretation of laws, especially as regards regulatory, commercial, financial, and tax law.
- Failure to successfully protect technology and proprietary know-how or to defend intellectual property.
- Access to bank deposits or other financial assets as a result of legal regulations or the illiquidity of banks.
- Non-negotiable contract terms in public tender processes and, in particular, unlimited liability clauses in public-sector contracts.
- Embargoes and other trade restrictions.
- Compliance-related risks.

Operational & human resources risks

Loss of established customers.

Installed base business is the provision of services, updates, upgrades, or enhancements related to products and systems delivered to, and operated by, existing customers of the Frequentis Group. The Frequentis Group believes that it has a competitive advantage in such follow-up projects in relation to competitors who are not familiar with the Frequentis products already operated by such customers. Since customers often rely on the Group's products and services for a long period of time, installed base business sales offer a relatively stable source of income for the Group. A loss of existing customers therefore has a far-reaching effect.

Long-term commitments.

For certain of its projects, Frequentis is obliged to replace system parts or to deliver spare parts for up to 15 years or longer and needs to keep the corresponding products and know-how available. Such commitments could lead to unforeseen increases in storage costs, which tie up the Frequentis Group's funds, or could cause complications if suppliers fail to deliver such components in the required quantity and quality or discontinue the supply of such components. In this situation it could be expensive or even impossible for Frequentis to obtain such components from other suppliers or to produce them itself.

Outbreak of a global pandemic.

The outbreak of pandemics like COVID-19 could have a negative impact on economic development in the markets in which Frequentis operates and adversely affect the company's business performance. Among other things, restrictions on freedom to travel, immigration bans, quarantine requirements, reductions in flight schedules and the associated reduction in the number of flights, and restrictions on the production of goods and services could have a detrimental effect on the development of the markets served by Frequentis.

The points listed could result, for example, in delays in the acceptance of projects on site or in local acceptance by customers or make such acceptance impossible for an indefinite period. There could also be logistics and supply problems, resulting in supply chain bottlenecks. Customers' investment budgets could be cut back, and customers could be less willing to take decisions as a result of the uncertainty.

If Frequentis fails to meet quantitative requirements, its know-how might not be sufficient to win new customers or retain existing customers.

Customers' tenders often have quantitative requirements for their projects, e.g. references from previous customers and projects, a minimum annual turnover and/or revenue, or quantitative requirements relating to the Group's employees, e.g. a minimum number of system experts located in the customer's country.

Further risks in this area:

- Malfunctioning of products and product shortcomings.
- Loss of key personnel and failure to attract qualified employees.
- Loss of suppliers or interruptions or bottlenecks in the supply of the Group's services, software, component parts, or raw materials.
- Failure to deal successfully with the challenges of (organic) growth, and excess capacities or capacity shortages in Frequentis' organisational units.

Security-related risks

Cyberattacks

Given that Frequentis' business is heavily dependent on IT security, cyberattacks could pose a substantial risk to its business, in particular because the technical solutions offered by Frequentis perform safety-critical tasks. If a customer's infrastructure is affected by a cyberattack, and if the vulnerability of the infrastructure is caused by or attributed to a product of the Frequentis Group, this could cause claims for damages, loss of customers, and negatively affect the perception of the reliability of the products of the Frequentis Group.

Changes in technological standards.

The development of products could fail or take more time than permitted by technological progress; development costs for products with insufficient demand could lead to stranded investments; the implementation of change programmes could fail or increase the time and cost involved.

Strategy-related risks

Dependence on political and economic conditions.

Frequentis' ability to secure contracts and their content, amount, and size depends, among other things, on the volume of air, ship, and rail traffic, the relative importance attributed to safety awareness by the public, and the funds available for the procurement of control centre solutions, systems, and products as well as for maintenance, enhancements, and upgrading of existing solutions, systems, and products.

Exercise of political influence and protectionism.

Public and semi-public organisations dominate Frequentis' customer structure. Such customers may, for various reasons, prefer suppliers from certain countries over Frequentis.

Progressive customer concentration.

A trend towards amalgamations within the public sector and privatisations of public organisations in some of the Frequentis Group's business areas can lead to delays in investment and procurement decisions or a smaller number of customers, each of which has greater market and bargaining power. If there are few or only one potential customer per country, the Frequentis Group's dependency on such customers increases.

Defending market positions against competition.

Frequentis is active in highly competitive markets where a few large international companies compete against a number of smaller businesses. Some of Frequentis' competitors have higher market capitalisation and greater financial power, so they are in a better position to adapt to changes in the market, finance new technologies, and bypass financial bottlenecks.

Growth through acquisitions.

Acquisitions are associated with a general entrepreneurial risk. Frequentis might not be able to identify and purchase suitable acquisition targets and it might not have sufficient funds for a potential acquisition. Successful integration of the acquired business might be difficult or impossible, the anticipated goals and synergies might be unachievable, and the Frequentis Group could face new risks not evaluated in advance.

ESG-related risks

The opportunities and risks relating to ESG (environmental, social and governance) aspects are presented in the *risk impact analysis* section in the separate [consolidated non-financial report](#).

Internal control system (ICS) for the accounting process

Corporate Accounting comprises those activities that are necessary to prepare annual financial statements and consolidated financial statements in compliance with the law and IFRS.

Structure of accounting

The accounting function in the Frequentis Group comprises the accounting departments at local companies and the Corporate Accounting department in Vienna. Book-keeping for some subsidiaries is carried out directly at the Group's headquarters in Vienna. The local companies draw up financial statements in accordance with local law and then prepare financial statements in accordance with the IFRS. Both sets of financial statements are submitted to Corporate Accounting in Vienna.

Book-keeping for most companies, especially the large companies, is performed using a uniform SAP system. For some local companies, which use other ERP systems, Corporate Accounting in Vienna uploads the accounts to the SAP system. Consolidation is performed by Corporate Accounting.

Consolidation

The IFRS financial statements are drawn up in accordance with the IFRS accounting and valuation policies. The staff responsible for local accounting apply the IFRS. The IFRS of relevance for the consolidated financial statements are outlined in the corporate accounting manual, which is made available to the subsidiaries. If necessary, supplementary information on Group-wide reporting requirements is distributed to the subsidiaries before each annual closing process. Local financial reporting data are checked manually by Corporate Accounting (mainly plausibility checks) and also undergo automatic, tool-based checking routines. During this process, Accounting works closely with other departments, especially Controlling (e.g. in respect of target/actual comparisons and segment reporting).

The overall consolidation process includes checking the consistency of the data transmitted and plausibilisation of the financial statements as a whole.

To ensure correct and timely completion of the annual report by the publication date, deadlines are set for both the half-year and the annual financial statements. The entire accounting function is notified of these in good time. In addition to the annual report at the end of each financial year, a half-year interim report is published in accordance with IAS 34.

Controls

The entire accounting function reports to the CFO. Quarterly reports to the Executive Board and the Supervisory Board contain information on order intake, the development of revenue, the income statement, and opportunities and risks. This ensures ongoing oversight of the internal control system. Existing and potential risks are constantly monitored by several bodies. This is based on uniform risk guidelines. The management of the local companies is responsible for implementing these guidelines and ensuring they are observed.

In the Frequentis Group, the Internal Audit department is a staff department reporting to the CFO. The annual audit schedule is determined by the Supervisory Board's Audit Committee on the basis of a proposal by the Internal Audit department. Focal areas are examining the effectiveness of the internal control system, compliance with the applicable Group-wide guidelines at individual companies, and special audits triggered by specific events. Depending on the circumstances, audits are conducted locally or at headquarters. The results of audits are presented once a year to the Audit Committee and twice a year to the Executive Board.

Information pursuant to Section 243a (1) UGB

1. The share capital of Frequentis AG was EUR 13,280,000.00 as at 31 December 2023 and was divided into 13,279,999 no-par-value bearer shares, all of which are equal in all respects, and one registered share with restricted transferability ("share no. 1"). The holder of share no. 1, Johannes Bardach, is authorised by article 5.1.2 of the articles of association to appoint one third of the members of the Supervisory Board (i.e. one third of the maximum number of shareholder representatives set out in article 5.1.1 of the articles of association).

As at 31 December 2023, the company held 18,485 treasury shares, which was 0.1392% of the share capital (31 December 2022: 8,910 treasury shares, which was 0.0671% of the share capital). Under Section 65 (5) of the Austrian Companies Act (AktG), treasury shares do not confer any rights, especially voting rights, on the company.

2. Apart from the following exceptions, there are no restrictions on voting rights or the transfer of shares other than the general provisions of company law: Under article 3.3 of the articles of association, registered share no. 1 can only be transferred with company's consent (restricted transferability). In terms of voting rights, share no. 1 has the same rights as the bearer shares. An agreement on the election of a person nominated by B&C Holding Österreich GmbH as a member of the Supervisory Board of Frequentis AG has been concluded between Frequentis Group Holding GmbH and B&C Holding Österreich GmbH.

3. As at 31 December 2023, Frequentis Group Holding GmbH had a direct stake of over 50.0% in Frequentis AG and was thus the direct majority shareholder of Frequentis AG. B&C Holding Österreich GmbH held a stake of over 10.0% in Frequentis AG as at 31 December 2023.

4. As at 31 December 2023, share no. 1 was held by Johannes Bardach. This share has the rights set out in subsection 1 above.

5. Employees who hold shares may exercise their voting rights at the General Meeting.

6. The Executive Board comprises one, two, three, or four people. The members of the Executive Board are appointed by the Supervisory Board for a maximum of five years. Reappointment is permitted.

The articles of association contain the following ruling on the appointment and dismissal of members of the Supervisory Board: The Supervisory Board comprises at least three and at most six members elected by the General Meeting or delegated by the shareholders (shareholder representatives) and a corresponding number of employee representatives delegated in accordance with Section 110 of the Austrian Labour Constitution Act (Arbeitsverfassungsgesetz).

The shareholder of registered share no. 1 is authorised to appoint one third of the members of the Supervisory Board (i.e. one third of the maximum number of shareholder representatives set out in article 5.1.1 of the articles of association).

The Supervisory Board members elected by the General Meeting shall, unless they are elected for a shorter term of office, be elected for the period until the end of the General Meeting that resolves on ratification of their actions for the fourth financial year after their election. The financial year in which they are elected is not included in this calculation. Re-election of a Supervisory Board member is permitted.

The appointment of an elected Supervisory Board member can be revoked by the General Meeting before the end of the term of office. The resolution requires a simple majority of the valid votes cast. Abstentions do not count as votes cast.

The members of the Supervisory Board delegated by shareholders are members of the Supervisory Board for an unlimited period. The parties who delegated them may revoke their appointment at any time and replace them by others. Otherwise, the appointment of delegated members of the Supervisory Board may only be terminated in accordance with Section 88 (4), last sentence, of the Austrian Companies Act (AktG). A member whose appointment is terminated in this way may be replaced by the parties who delegated them.

Any member of the Supervisory Board can resign their seat subject to four weeks' notice, even without good cause, by submitting a written letter of resignation to the chairperson of the Supervisory Board. The chairperson's resignation shall be submitted to his deputy. Re-election of members who leave the Supervisory Board is permitted.

If elected members resign from the Supervisory Board before the end of their term of office, replacements need not be elected until the next Annual General Meeting. However, a replacement must be elected without delay by an Extraordinary General Meeting if the number of shareholder representatives drops below three. Replacements are elected for the remaining term of office of the member who resigned.

The articles of association contain the following ruling on amendments to the articles of association: The Supervisory Board is authorised to make amendments to the articles of association that only affect the wording. Furthermore, the Supervisory Board is authorised to make amendments to the articles of association that result exclusively from the issuance of new shares out of the authorised and/or conditional capital set out in section 3 of these articles of association or from other capital measures.

7. By resolution of the General Meeting of 1 June 2023, the Executive Board is authorised, subject to the approval of the Supervisory Board, to increase the company's share capital up to 31 May 2028 by up to EUR 6,640,000 (six million six hundred and forty thousand) by issuing up to 6,640,000 (six million six hundred and forty thousand) new no-par-value bearer shares in return for cash or contributions in kind, in one or more tranches, or through a direct subscription offer following acceptance by one or more banks in accordance with Section 153 (6) of the Austrian Companies Act (AktG). The Executive Board is authorised, subject to the approval of the Supervisory Board, to fully or partially exclude shareholders' subscription rights and, subject to the approval of the Supervisory Board, to define further details of the issue conditions (especially the issue price, type of contribution in kind, rights of the shares, exclusion of subscription rights, etc.) (authorised capital). The Supervisory Board is authorised to adopt amendments to the articles of association resulting from the issuance of shares out of the authorised capital.

The Executive Board is authorised by the resolution adopted by the Annual General Meeting of 2 June 2022, pursuant to Section 65 (1) No. 4 and No. 8, to purchase, via the stock exchange or off-market, bearer shares in the company in an amount of up to 10% of the company's share capital during a period of 30 months from the date of the resolution by the General Meeting, whereby the minimum consideration per share may not be more than 20% below and the maximum consideration per share may not be more than 10% above the average closing price on the stock exchange over the preceding ten trading days. Trading in own shares is excluded from the purpose of purchase. The authorisation may be exercised in full or in part or in several tranches and for one or more purposes by the company, by a subsidiary (Section 189a No. 7 of the Austrian Commercial Code, UGB) or by a third party for the account of the company or of a subsidiary (Section 189a No. 7 UGB). If the shares are purchased off-market, the purchase may also be effected under exclusion of the shareholders' general right of sale, even for certain shareholders or one individual shareholder.

Furthermore, the Executive Board is authorised to reduce the share capital by cancelling shares in the company without a further resolution of the General Meeting. The Supervisory Board is authorised to adopt amendments to the articles of association resulting from the cancellation of shares.

The resolution adopted at the General Meeting on 20 September 2019 authorises the Executive Board, pursuant to Section 65 (1b) AktG, for a period of five years from the date of the resolution, therefore up to and including 19 September 2024, with the consent of the Supervisory Board but without a further resolution by the General Meeting, to sell or use treasury shares, also in a manner other than by sale on the stock exchange or by means of a public offer, in particular to sell or use treasury shares

- a) to grant treasury shares to employees, senior managers, and/or members of the Executive Board or the managing boards of its affiliates, including for purposes of share transfer programmes, in particular stock options, long-term incentive plans, and other stock ownership plans,
 - b) to deliver treasury shares under convertible bonds issued by Frequentis AG,
 - c) as consideration for the acquisition of entities, business operations, parts of business operations or shares in one or several domestic or foreign companies, and
 - d) for any other legally permissible purpose,
- and to exclude the subscription rights of shareholders. This authorisation may be exercised in full or in part or in several tranches and for several purposes.

8. Some financing agreements and customer contracts contain customary agreements on a change of control in the event of a takeover within the meaning of Section 243a (1) No. 8 UGB.

9. There are no compensation agreements within the meaning of Section 243a (1) No. 9 UGB.

Outlook

The goal of increasing revenues and order intake was achieved in 2023. Revenues rose 10.8% to EUR 427.5 million and therefore exceeded the EUR 400 million threshold for the first time. Order intake increased by 24.7% to EUR 504.8 million and therefore exceeded the EUR 500 million threshold for the first time. EBIT was EUR 26.6 million and the EBIT margin was 6.2%

This highlights the robustness of Frequentis' business model. The products supplied by Frequentis are part of the safety-critical infrastructure, in other words, the essential infrastructure of the relevant countries. This infrastructure always has to be available and ready for operation – irrespective of the number of flights/flight movements or how many times the police, fire service, and emergency rescue services are deployed.

Acquisitions

- Acquisition to strengthen expertise in cybersecurity: In April 2023, Frequentis acquired a 76.67% interest in FRAFOS GmbH, which is based in Berlin, Germany. FRAFOS delivers key security components for Frequentis' communication solutions for all safety-critical sectors.
- Acquisition on the recorder market: In July 2023, Frequentis acquired 100% of the Norwegian software company GuardREC ATC AS, which has since been renamed Frequentis Recording AS as part of the integration process. This acquisition increases recording competence in all business areas.

Frequentis' strategy includes searching proactively for attractive M&A opportunities to extend its product portfolio or gain access to new markets.

Long-term vision

Frequentis' long-term vision is to be the global number one in solutions for control centres in the safety-critical sector. As a systems integrator that integrates its own software and, in some cases, its own hardware into customers' existing software and hardware landscapes, Frequentis sees its long-term profitability in project business at the level of established IT systems integrators.

The transformation to a software-centric business is under way but, given the customer structure, it will take several years or even longer in some markets. Research and development is aligned to this transformation. For example, a very high proportion of customers in the Public Safety & Transport segment have very low demand for hardware; Frequentis' offering for this customer group comprises project management, training, software, project services, and maintenance contracts.

Forecast for 2024

The uncertainties remain and have increased in some respects:

- the war in Ukraine is entering its third year,
- the war between Israel and Hamas is causing further tension,
- in Austria, in particular, inflation is still far from the average of less than 2% seen in the euro zone since the start of the millennium,
- the major economic areas such as the USA and the euro zone will probably achieve growth of just 2.1% and 0.9%, respectively, in 2024 (IMF forecast January 2024).

The outbreak of even limited conflicts can rapidly cause distortion of the global IT hardware market. In the project business, Frequentis has always had to address extensive challenges and dynamic changes in external influences and adapts constantly to the relevant conditions. The wide range of uncertainties makes forecasting difficult at present.

It is not possible to make a reliable estimate of exactly how these factors and inflation will affect costs, e.g. travel expenses, higher salaries, delays in passing on inflation-driven price rises to customers, and potential supply chain bottlenecks and delivery delays.

Expenses for company-funded research & development amounted to EUR 25.2 million in 2023 and will be higher in 2024. Capital expenditure (capex) will be around EUR 12 million.

Depending on the aspects outlined above, Frequentis has the following targets for 2024 compared with 2023:

- Increase revenues
- Increase order intake
- EBIT margin of around 6%.

Vienna, 11 March 2024

Consolidated Financial Statements as at 31 December 2023

Consolidated income statement	142
Consolidated statement of comprehensive income	143
Consolidated statement of financial position	144
Consolidated cash flow statement	146
Consolidated statement of changes in shareholders' equity	148
Notes to the consolidated financial statements	149
Notes to the consolidated income statement	171
Notes to the consolidated statement of financial position	180
Other information	208

Consolidated income statement

	Note	2023 EUR thousand	2022 EUR thousand
Revenues	[3] [4]	427,487	385,970
Change in inventories of finished goods and work in progress	[3]	-454	22
Own work capitalised	[3] [5]	4,082	2,574
Other operating income	[3] [6]	8,055	10,514
Profit from business combinations	[1]	3	0
Total income (operating performance)		439,173	399,080
Cost of materials and purchased services	[7]	-104,714	-99,250
Personnel expenses	[8]	-227,854	-203,872
Other operating expenses	[9]	-62,431	-50,326
Earnings before interest, taxes, depreciation, amortisation, and impairment losses (EBITDA)		44,174	45,632
Depreciation of property, plant and equipment and amortisation of intangible assets	[10]	-17,527	-17,535
Impairment losses	[3] [17]	0	-3,106
Earnings before interest and taxes (EBIT)	[3]	26,647	24,991
Financial income	[11]	946	209
Financial expenses	[12]	-1,442	-738
Earnings from investments accounted for at equity	[18]	268	275
Profit/loss before tax		26,419	24,737
Income taxes	[13]	-6,439	-5,859
Profit/loss for the period		19,980	18,878
Profit/loss attributable to:			
Equity holders of the company		18,416	18,723
Non-controlling interests	[28]	1,564	155
		19,980	18,878
Basic earnings per share	[15]	1.39	1.41
Diluted earnings per share	[15]	1.38	1.41

Consolidated statement of comprehensive income

	Note	2023 EUR thousand	2022 EUR thousand
Profit/loss for the period		19,980	18,878
Items that may be reclassified to the income statement in subsequent periods			
Foreign currency translation	[26]	-484	284
Measurement of cash flow hedges	[26] [34]	164	297
Income taxes	[26]	-39	-76
Items that may not be reclassified to the income statement			
Remeasurement of post-employment benefits	[26] [29]	-1,359	4,024
Income taxes	[26]	322	-1,176
Other comprehensive income, net of tax		-1,396	3,353
Total comprehensive income		18,584	22,232
Total comprehensive income attributable to:			
Equity holders of the company		17,057	21,963
Non-controlling interests		1,527	269
		18,584	22,232

Consolidated statement of financial position

ASSETS	Note	31 Dec. 2023 EUR thousand	31 Dec. 2022 EUR thousand
Non-current assets			
Property, plant and equipment	(15)	55,888	53,298
Intangible assets	(16)	17,514	14,501
Goodwill	(17)	11,351	5,834
Investments accounted for at equity	(18)	2,903	2,097
Advance payments for non-current assets		0	35
Other non-current financial assets	(23)	696	885
Deferred tax assets	(13)	5,617	3,785
		93,969	80,435
Current assets			
Inventories	(19)	26,628	21,726
Trade accounts receivable	(20)	81,029	76,990
Contract assets	(21)	61,272	50,475
Contract costs	(22)	2,394	4,024
Other current financial assets	(23)	3,257	2,759
Other current non-financial assets	(23)	15,202	11,360
Income tax receivables		2,641	1,126
Time deposits		10,500	10,000
Cash and cash equivalents	(24)	74,180	81,380
		277,103	259,840
Total assets		371,072	340,275

LIABILITIES AND EQUITY	Note	31 Dec. 2023 EUR thousand	31 Dec. 2022 EUR thousand
Shareholders' equity			
Share capital	[25]	13,280	13,280
Capital reserves	[26]	21,138	21,138
Retained earnings	[26] [27]	119,702	110,494
Treasury shares		-544	-221
Adjustments for foreign currency translation		-109	364
Equity attributable to equity holders of the parent company		153,467	145,055
Non-controlling interests	[28]	2,157	2,224
Total shareholders' equity		155,624	147,279
Non-current liabilities			
Liabilities to banks and other financial liabilities		148	218
Provisions	[29]	19,665	17,263
Lease liabilities	[35]	29,187	30,763
Other non-current financial liabilities	[31]	13,972	4,239
Deferred tax liabilities	[13]	10,078	9,441
		73,050	61,924
Current liabilities			
Liabilities to banks and other financial liabilities		215	199
Contract liabilities	[30]	72,124	68,035
Trade accounts payable		18,937	16,258
Provisions	[32]	15,823	14,914
Lease liabilities	[35]	8,068	8,422
Other current financial liabilities	[31]	6,591	6,087
Other current non-financial liabilities	[31]	15,444	10,261
Current tax liabilities		5,196	6,896
		142,398	131,072
Total shareholders' equity and liabilities		371,072	340,275

Consolidated cash flow statement

	Note	2023 EUR thousand	2022 EUR thousand
Profit/loss before tax		26,419	24,737
Net interest income/expense		496	529
Foreign currency translation		211	126
Profit/loss from the disposal of non-current assets		-3	12
Depreciation of property, plant and equipment and amortisation of intangible assets	(15) (16)	17,527	20,641
Earnings from investments accounted for at equity	(18)	-268	-275
Change in provisions	(29) (32)	1,878	-2,151
Profit from business combinations		-3	0
Income/expense relating to changes in variable purchase price payments	(31)	203	-402
Other non-cash income/expenses		359	389
Net cash flow from operations		46,819	43,606
Change in inventories	(19)	-4,870	-4,448
Change in trade accounts receivable	(20)	-3,282	-1,578
Change in contract assets	(21)	-10,797	-12,122
Change in contract costs	(22)	1,630	-312
Change in other receivables	(23)	-3,242	-6,298
Change in trade accounts payable		2,516	2,868
Change in contract liabilities	(30)	2,370	-1,910
Change in other liabilities	(31)	6,757	239
Change in net working capital		-8,918	-23,561
Interest paid		-1,452	-705
Interest received		779	169
Dividends received		212	114
Income taxes paid	(13)	-11,785	-5,400
Net cash flow from operating activities		25,655	14,223

	Note	2023 EUR thousand	2022 EUR thousand
Cash inflows from the sale of intangible assets		0	1
Cash inflows from the sale of property, plant and equipment		65	20
Cash inflows from time deposits		31,500	2,199
Cash outflows for the purchase of intangible assets		-1,241	-946
Cash outflows for the purchase of property, plant and equipment		-10,504	-9,160
Cash outflows for time deposits		-32,000	-10,000
Cash outflows for investments accounted for at equity		-835	-160
Cash outflows for the acquisition of subsidiaries, less acquired cash and cash equivalents		-5,823	-2,097
Net cash flow from investing activities		-18,838	-20,143
Dividends paid to owners	(25)	-2,921	-2,654
Dividends paid to non-controlling interests	(28)	-1,204	-953
Cash outflows for the acquisition of non-controlling interests		-787	0
Purchase of treasury shares	(25)	-520	0
Cash inflows from loans and other financing		30,568	398
Cash outflows for repayment of loans and other financing		-30,124	-4,599
Cash outflows for payments of principal on lease liabilities	(35)	-8,417	-8,686
Net cash flow from financing activities		-13,405	-16,494
Change in cash and cash equivalents:			
Net cash flow from operating activities		25,655	14,223
Net cash flow from investing activities		-18,838	-20,143
Net cash flow from financing activities		-13,405	-16,494
Net change in cash and cash equivalents		-6,588	-22,413
Cash and cash equivalents at start of period		81,380	103,798
Cash-flow related change in cash and cash equivalents		-6,588	-22,413
Foreign currency translation		-612	-5
Cash and cash equivalents at end of period		74,180	81,380

For further information on the consolidated cash flow statement, see Note 33.

Consolidated statement of changes in shareholders' equity

	Share capital	Capital reserves	IAS 19 reserve	Option reserve	Cash flow hedge reserve	Retained earnings	Treasury shares	Foreign currency translation	Equity attributable to equity holders of the parent company	Non-controlling interests	Total shareholders' equity
in EUR thousand	(25)	(26)	(29)	(27)	(34)	(26)	(25)		(28)		
Note	(25)	(26)	(29)	(27)	(34)	(26)	(25)		(28)		
As at 1 January 2023	13,280	21,138	-3,523	739	-125	113,403	-221	364	145,055	2,224	147,279
Profit/loss for the period						18,416			18,416	1,564	19,980
Other comprehensive income				-1,012		125		-472	-1,359	-37	-1,396
Total comprehensive income				-1,012		125	18,416	-472	17,057	1,527	18,584
Dividends						-2,921			-2,921	-1,204	-4,125
Change in treasury shares						-166	-323		-489		-489
Acquisition of non-controlling interests						-296			-296	632	336
Changes in connection with put options						-4,992			-4,992	-1,022	-6,014
Other changes				59		-5			54		54
As at 31 December 2023	13,280	21,138	-4,536	798	0	123,440	-544	-109	153,467	2,157	155,624

	Share capital	Capital reserves	IAS 19 reserve	Option reserve	Cash flow hedge reserve	Retained earnings	Treasury shares	Foreign currency translation	Equity attributable to equity holders of the parent company	Non-controlling interests	Total shareholders' equity
in EUR thousand	(25)	(26)	(29)	(27)	(34)	(26)	(25)		(28)		
Note	(25)	(26)	(29)	(27)	(34)	(26)	(25)		(28)		
As at 1 January 2022	13,280	21,138	-6,284	602	-346	98,302	-384	106	126,414	3,436	129,850
Profit/loss for the period						18,723			18,723	155	18,878
Other comprehensive income				2,761		221		257	3,239	114	3,353
Total comprehensive income				2,761		221	18,723	257	21,962	269	22,231
Dividends						-2,654			-2,654	-953	-3,607
Change in treasury shares						-44	163		119		119
Acquisition of non-controlling interests										2,653	2,653
Changes in connection with put options						-832			-832	-3,181	-4,013
Other changes				137		-92			45		45
As at 31 December 2022	13,280	21,138	-3,523	739	-125	113,403	-221	364	145,055	2,224	147,279

Notes to the consolidated financial statements

1. General information

Reporting

The consolidated financial statements of Frequentis AG for the 2023 financial year have been prepared in accordance with the provisions of the International Financial Reporting Standards (IFRS) as adopted by the European Union. Similarly, all interpretations of the IFRS Interpretations Committee that were mandatory for 2023 have been applied.

The present consolidated financial statements, including the Group Management Report, comply with Section 245a of the Austrian Commercial Code (UGB) on consolidated financial statements in accordance with the International Financial Reporting Standards.

Information on the company

These consolidated financial statements include Frequentis AG, registered address Innovationstrasse 1, 1100 Vienna, Austria, and its subsidiaries (subsequently referred to as Frequentis, the Frequentis Group, or the Group).

Its parent company, Frequentis Group Holding GmbH (which holds around 60% of the shares in Frequentis AG), files all required financial statements at its registered office (Dommayergasse 8/15, 1130 Vienna, Austria) and at Vienna Commercial Court under the number FN 477997 m.

Frequentis AG was founded in 1947 and has been registered in the commercial register at Vienna Commercial Court under the number FN 72115 b since 30 August 1948.

According to Section 2 of the articles of association, the purpose of the company is the development, production, distribution, and maintenance of control systems, information processing and transmission systems, and communication systems, especially for air traffic control, road, rail and water transport, and public safety organisations.

The reporting date is 31 December 2023.

The financial year is 1 January to 31 December 2023.

In the reporting period, the Executive Board comprised:

- Norbert Haslacher, Chairman
- Monika Haselbacher
- Hermann Mattanovich
- Peter Skerlan

In the reporting period, the Supervisory Board comprised:

- Johannes Bardach, Chairman
- Dr. Karl Michael Millauer, Deputy Chairman
- Sylvia Bardach, member
- Reinhold Daxecker, member
- Dr. Boris Nemsic, member
- Petra Preining, member
- Stefan Hackethal, member pursuant to Section 110 ArbVG
- Gabriele Schedl, member pursuant to Section 110 ArbVG
- Reinhard Steidl, member pursuant to Section 110 ArbVG

The consolidated financial statements were approved by the Executive Board on the date of signature, subject to approval by the Supervisory Board at its meeting on 27 March 2024.

Consolidated group

Besides Frequentis AG, which is the parent company of the consolidated group, the consolidated financial statements of Frequentis AG include 6 (2022: 6) domestic subsidiaries and 31 (2022: 28) foreign subsidiaries controlled by Frequentis AG.

The Group controls an entity if it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The financial statements of subsidiaries are included in the consolidated financial statements from the date on which control commences until the date when control ends.

6 (2022: 7) foreign and 1 (2022: 2) domestic companies are included in the consolidated financial statements by applying the equity method. The reporting date for all companies included in the financial statements is 31 December.

- a) Fully consolidated Austrian subsidiaries
 - Frequentis Invest4Tech GmbH, Vienna (100%)
 - CNS-Solutions & Support GmbH, Vienna (100%)
 - Frequentis DFS Aerosense GmbH, Vienna (70%)
 - PDTS GmbH, Vienna (100%)
 - skyzr GmbH, Vienna (100%)
 - team Technology Management GmbH, Vienna (51%)
- b) Fully consolidated subsidiaries in Europe
 - ATRiCS Advanced Traffic Solutions GmbH, Freiburg, Germany (51%)
 - ELARA Leitstellentechnik GmbH, Aachen, Germany (51%)
 - FRAFOS GmbH, Berlin, Germany (76.67%)
 - FRAFOS CZ s.r.o., Prague, Czech Republic (76.67%)
 - Frequentis Comsoft GmbH, Karlsruhe, Germany (100%)
 - Frequentis Czech Republic s.r.o., Prague, Czech Republic (100%)
 - Frequentis Deutschland GmbH, Langen, Germany (100%)
 - Frequentis France SARL, Toulouse, France (100%)
 - Frequentis Norway AS, Oslo, Norway (100%)
 - Frequentis Orthogen GmbH, Bremen, Germany (100%)
 - Frequentis Recording AS, Borre, Norway (100%)
 - Frequentis Romania S.R.L., Cluj-Napoca, Romania (100%)
 - Frequentis Solutions & Services s.r.o., Bratislava, Slovakia (100%)
 - Frequentis UK Ltd., Twickenham, UK (100%)

- Regola S.r.l., Turin, Italy (51%)
 - Secure Service Provision GmbH, Leipzig, Germany (100%)
 - Systems Interface Ltd., Bordon, UK (51%)
 - TEAM Technology Management GmbH, Gräfelfing, Germany (51%; effective shareholding 26%)
- c) Fully consolidated subsidiaries in the Americas
- Frequentis California Inc., Columbia, USA (100%)
 - Frequentis Canada Ltd., Ottawa, Canada (100%)
 - Frequentis Defense Inc., Columbia, USA (100%)
 - Frequentis do Brasil Assessoria, Serviços e Comércio de Sistemas de Informação e Comunicação Ltda., São Paulo, Brazil (100%)
 - Frequentis USA Inc., Columbia, USA (100%)
 - Frequentis USA Holdings, Inc., Columbia, USA (100%)
- d) Fully consolidated subsidiaries in Asia
- AIRNAV Technology Services Inc., Iloilo, Philippines (65%)
 - Frequentis Middle East Limited, Abu Dhabi, United Arab Emirates (100%)
 - Frequentis (Shanghai) Co. Ltd., Shanghai, China (100%)
 - Frequentis Singapore Pte. Ltd., Singapore (100%)
- e) Fully consolidated subsidiaries in Australia/Pacific
- C4i Pty Ltd, Melbourne, Australia (100%)
 - Frequentis Australia Holding Pty Ltd, Hendra, Australia (100%)
 - Frequentis Australasia Pty Ltd., Hendra, Australia (100%)
- f) Companies accounted for using the equity method
- AMANTEA Ltd., Zabbar, Malta (50%, effective shareholding 25.5%)
 - Flyk Oy, Valkeakoski, Finland (25%) (formerly Aviamaps Oy)
 - GroupEAD Europe S.L., Madrid, Spain (28%)
 - Lift S.r.l., Cagliari, Italy (24%, effective shareholding 12.24%)
 - Mission Embedded GmbH, Vienna, Austria (20%)
 - Nowtech S.r.l., Sassari, Italy (20%, effective shareholding 10.2%)
 - Nemergent Solutions S.L., Bilbao, Spain (24.83%)

All information on the consolidated group relates to the circumstances as at 31 December 2023.

Changes to the consolidated group

AIRNAV Technology Services Inc.

The increase in the interest in **AIRNAV Technology Services Inc.** (registered office: Iloilo, Philippines) from 40% to 65% to extend the system engineering services in Asia was successfully completed on 20 February 2023.

The purchase agreement for the increase in the interest was signed in December 2021 but the transaction was only closed on 20 February 2023 as a result of delays in official registration procedures.

The contractually agreed purchase price of EUR 35 thousand was paid on 21 January 2022 and recognised in the annual financial statements for 2022 in the line item advance payments for non-current assets.

The preliminary fair value of the assets acquired and liabilities assumed is as follows:

	Fair value as at 20 Feb. 2023	Fair value as at 20 Feb. 2023
	100%	25%
	EUR thousand	EUR thousand
Property, plant and equipment	66	17
Trade accounts receivable	85	21
Other assets	2	0
Cash and cash equivalents	171	43
Trade accounts payable	-96	-24
Other liabilities	-61	-15
Other current provisions	-8	-2
Current tax liabilities	-6	-2
Net assets	153	38
Consideration paid	35	
Profit from the business combination	3	

The fair value of the net assets acquired exceeded the consideration paid due to the delay in closing the transaction. The profit from the business combination was recognised immediately in profit/loss.

Transaction costs incurred for the business combination were expensed as incurred. The receivables assumed did not contain any receivables that are expected to be uncollectable, so the carrying amount corresponded to the fair value.

Since the acquisition, AIRNAV has contributed EBIT of EUR 42 thousand to the consolidated figures of the Frequentis Group. This transaction did not increase consolidated revenues because AIRNAV works exclusively for the Frequentis Group.

FRAFOS

On 3 April 2023, Frequentis acquired – through its wholly owned subsidiary Frequentis Invest4Tech GmbH – 76.67% of shares in **FRAFOS GmbH** (registered office: Berlin Germany) and its wholly owned subsidiary FRAFOS CZ s.r.o (registered office: Prague, Czech Republic). FRAFOS solutions are approved for mission-critical installations in government organisations and the company will provide an important security component for cyber security for Frequentis communications in all safety-critical areas.

FRAFOS is a leading provider of IT security solutions for VoIP communications in Germany, offering various software products, including cloud-native solutions developed for virtualised environments, and public-service-approved solutions for mission-critical installations. The FRAFOS Session Border Control (SBC) solution separates communication systems and networks from open, untrusted internet access, blocks DoS (denial of service) attacks and fraud attempts, hides the internal network structure from outsiders, and blacklists suspicious sources. FRAFOS has been allocated to the Public Safety & Transport (PST) segment.

The purchase agreement was signed on 20 February 2023 and transfer of control took place on 3 April 2023.

The contractually agreed purchase price comprised the following components:

	Fair value as at 3 Apr. 2023	Fair value as at 3 Apr. 2023
	100%	76.67%
	EUR thousand	EUR thousand
Basic purchase price	3,000	2,300
Purchase price adjustment	601	461
Earn-out	981	752
Total consideration	4,582	3,513

The purchase price adjustment was contingent upon settlement by 20 April 2023 of the customer receivables specified in the purchase agreement. Of the maximum adjustment of EUR 466 thousand, EUR 461 thousand was paid.

The earn-out liability is based on the achievement of the annual EBIT targets for the years 2023 to 2026.

In accordance with the purchase agreement, EUR 2,300 thousand was paid on the closing date and EUR 461 thousand was paid on 15 June 2023 when payment of the customer invoices had been verified.

In addition, the purchase agreement includes an option for non-controlling shareholders in FRAFOS to transfer their interests to Frequentis Invest4Tech. If this option is exercised, Frequentis Invest4Tech has an irrevocable obligation to acquire the interests in this business. The put option can be exercised at the earliest after the resolution on the annual financial statements for 2026. It is based on the enterprise value, calculated as a multiples-based valuation, less net financial debt, and is recognised in other non-current financial liabilities (see Note 31. Other liabilities).

The preliminary fair value of the assets acquired and liabilities assumed is as follows:

	Fair value as at 3 Apr. 2023	Fair value as at 3 Apr. 2023
	100%	76.67%
	EUR thousand	EUR thousand
Intangible assets	2,799	2,146
Property, plant and equipment	23	18
Trade accounts receivable	207	159
Other assets	829	635
Cash and cash equivalents	1,363	1,045
Deferred tax liabilities	-844	-647
Contract liabilities	-1,645	-1,261
Trade accounts payable	-22	-17
Other liabilities	-102	-79
Other current provisions	-1	-0
Net assets	2,607	1,999
Consideration paid	4,582	3,513
Goodwill	1,975	1,514

The goodwill from this acquisition was recognised using the full goodwill method and relates primarily to the anticipated synergies from use of the new technologies.

Transaction costs incurred for the business combination were expensed as incurred. The receivables assumed did not contain any receivables that are expected to be uncollectable, so the carrying amount corresponded to the fair value.

Since the acquisition, FRAFOS has contributed revenues of EUR 1,945 thousand and EBIT of EUR 559 thousand to the consolidated figures of the Frequentis Group. Had the acquisition been made at the beginning of the 2023 financial year, FRAFOS would have contributed revenues of EUR 2,580 thousand and EBIT of EUR 771 thousand to the consolidated figures of the Frequentis Group.

Frequentis Recording AS

Frequentis AG acquired the Norwegian software company GuardREC ATC on 4 July 2023 and renamed it **Frequentis Recording AS**. The acquisition was effected by purchasing of 100% of the shares in GuardREC AT from the EMBRON Group, Norway. Frequentis Recording AS specialises in the development of recorder solutions for the air traffic control market. It offers full surveillance, audio, video, and data recording solutions with data analysis functions.

The acquisition allows the planned fusion of the DIVOS and Frequentis Recording technologies to produce a new recording solution. Frequentis Recording's aim of providing secure and user-friendly data recording and replay solutions is consistent with Frequentis' mission "for a safer world".

The solution will comprise all interfaces for audio and video recording that are customary in the sector as well as surveillance and data recording functions. Special features such as vector-based measurements during replay and support for scenario mode will provide effective support for incident investigations.

The integrated solution from Frequentis and Frequentis Recording AS will include manual and automatic speech-to-text features as well as a modern software architecture to allow seamless integration of new data science and big data applications.

The purchase agreement was signed on 16 June 2023 and transfer of control took place on 4 July 2023.

The contractually agreed purchase price comprised the following components:

	Fair value as at 4 July 2023
	100%
	EUR thousand
Basic purchase price	4,500
Working capital/net debt adjustments	55
Earn-out	1,048
Total consideration	5,603

The earn-out liability is based on the number of recording solutions sold within a period of five years following closing of the transaction.

In accordance with the purchase agreement, a purchase price of EUR 4,577 thousand was paid on the closing date and EUR 22 thousand was refunded on 10 October 2023 following final determination of the purchase price.

The fair value of the assets acquired and liabilities assumed was as follows:

	Fair value as at 4 July 2023
	EUR thousand
Intangible assets	2,214
Property, plant and equipment	89
Inventories	32
Trade accounts receivable	420
Other assets	33
Cash and cash equivalents	208
Deferred tax liabilities	-434
Liabilities to banks and other financial liabilities	-67
Contract liabilities	-73
Trade accounts payable	-10
Other current provisions	-66
Other liabilities	-62
Current tax liabilities	-77
Net assets	2,207
Attributable to the Frequentis Group	2,207
Goodwill	3,396
Consideration paid	5,603

The goodwill from this acquisition mainly relates to the expected synergies from the integration of technologies, strengthening recording competence, and extending the features offered by Frequentis.

Transaction costs incurred for the business combination were expensed as incurred. The receivables assumed did not contain any receivables that are expected to be uncollectable, so the carrying amount corresponded to the fair value.

Since the acquisition, Frequentis Recording has contributed revenues of EUR 26 thousand and EBIT of EUR -201 thousand to the consolidated figures of the Frequentis Group. Had the acquisition been made at the beginning of the 2023 financial year, Frequentis Recording would have contributed revenues of EUR 1,024 thousand and EBIT of EUR 54 thousand to the consolidated figures of the Frequentis Group.

Other changes to the consolidated group

As at 1 January 2023, Frequentis Canada ATM Ltd. was merged into Frequentis Canada Ltd. On 21 February 2023, BlueCall Systems GmbH was renamed Frequentis Invest4Tech GmbH. Neither of these changes had an impact on the consolidated financial statements.

On 3 July 2023, 20% of the shares in Secure Service Provision GmbH, Germany, were purchased for EUR 787 thousand, increasing Frequentis' stake from 80% to 100%.

Since Frequentis no longer delegates a managing director for AIRlabs Austria GmbH (18% interest) and has thus relinquished its significant influence, this company is no longer accounted for using the equity method; it is now presented as an equity instrument.

2. Accounting policies

The consolidated financial statements are prepared by applying the historical cost convention. Excluded from this principle are derivative financial instruments, equity instruments, and contingent purchase price liabilities, which are measured at fair value, and employee benefit obligations, which are measured using the projected unit credit (PUC) method.

The financial statements of all consolidated companies are prepared using uniform Group-wide accounting policies. There are no significant differences in the accounting policies used for the investments accounted for at equity compared to those applied by the Frequentis Group.

In the event of business combinations, the assets, liabilities, and contingent liabilities of the subsidiaries acquired are measured at fair value at the date of acquisition as specified by IFRS 3. If the fair value of the consideration transferred and the amount of all non-controlling interests in the acquired business exceed the fair value of the acquired identifiable assets and liabilities, the difference is recognised as goodwill. Any excess of the net assets acquired over the fair value of the consideration transferred is recognised in profit or loss, after a reassessment of their measurement.

The consolidated financial statements of Frequentis AG are prepared in euros (EUR). All amounts are reported in thousands of euros (EUR thousand), except where otherwise stated. Rounding may result in minor discrepancies in totals as a result of the use of automatic data processing.

The annual financial statements of subsidiaries whose functional currency is not the euro are translated into the reporting currency (EUR) using the modified closing rate method. Equity items are translated at the historical rates; the other items in the statement of financial position are translated using the mean exchange rate as at the reporting date. Income statement items are translated using average annual exchange rates. The foreign currency translation differences arising from different exchange rates are recognised in other comprehensive income (OCI) and are presented in "foreign currency translation", a separate line item within shareholders' equity, until the subsidiary is sold.

The following exchange rates are used for translation of the main currencies (exchange rates for EUR 1):

Currency		Closing rate 31 Dec. 2023	Closing rate 31 Dec. 2022	Average rate 31 Dec. 2023	Average rate 31 Dec. 2022
AED	Emirati dirham	4.06	3.92	3.98	3.86
AUD	Australian dollar	1.63	1.57	1.63	1.52
BRL	Brazilian real	5.36	5.64	5.39	5.41
CAD	Canadian dollar	1.46	1.44	1.46	1.37
CNY	Chinese renminbi yuan	7.85	7.36	7.68	7.07
CZK	Czech koruna	24.72	24.12	23.97	24.54
GBP	British pound	0.87	0.89	0.87	0.85
NOK	Norwegian krone	11.24	10.51	11.47	10.11
PHP	Philippine peso	61.28		60.19	
RON	Romanian leu	4.98	4.95	4.95	4.93
SGD	Singapore dollar	1.46	1.43	1.45	1.45
USD	US dollar	1.11	1.07	1.08	1.05

Revenues, income, expenses, receivables, and liabilities resulting from intercompany transactions, and intercompany profits or losses are eliminated in consolidation, taking into account deferred taxes.

New and amended standards and interpretations

When preparing the consolidated financial statements, the following amendments to existing IAS/IFRS standards and interpretations, as well as the new standards and interpretations were applied, insofar as they had been endorsed by the European Union by 31 December 2023 and were effective at that date:

- Insurance Contracts (IFRS 17)
- Disclosure of Accounting Policies (IAS 1)
- Changes in Accounting Estimates and Errors (IAS 8)
- Deferred Tax related to Assets and Liabilities arising from a Single Transaction (IAS 12)
- IAS 12 Income Taxes – International Tax Reform – Pillar 2 Model Rules

Where applicable, the above standards and amendments were applied in these consolidated financial statements. The effects of these changes on the financial statements were insignificant.

In addition, some of the following new and amended standards had been endorsed by the EU but were not mandatory for the 2023 financial year. The Frequentis Group did not adopt these standards early on a voluntary basis, even if they had already been endorsed by the EU.

	Newly amended IFRSs	Endorsement by the EU	Effective date	Significant effects
IFRS 16	Lease Liability in a Sale and Leaseback	20 Nov. 2023	2024	None
IAS 1	Classification of Liabilities as Current or Non-Current	19 Dec. 2023	2024	None
IAS 7 / IFRS 7	Supplier Finance Arrangements	Open	2024	None
IAS 21	Effects of Changes in Foreign Exchange Rates	Open	2025	None

Intangible assets, property, plant and equipment

Intangible assets and property, plant and equipment are measured at acquisition or manufacturing cost less accumulated amortisation, depreciation, and impairment losses. The acquisition cost of intangible assets, property, plant, and equipment comprises the purchase price including import duties and non-refundable taxes, and all directly allocable costs incurred to bring the asset to the intended location and condition necessary for it to be capable of operating. The manufacturing cost of self-constructed property, plant and equipment comprises material and production costs and production overheads.

Borrowing costs that are directly attributable to the acquisition or manufacturing cost of a qualifying asset are capitalised as part of the cost of acquisition or production of the asset. Other borrowing costs are recognised as expenses.

The following useful lives are used for amortisation of intangible assets and depreciation of property, plant and equipment. They are unchanged from the previous year.

Buildings on leased land	5 - 40 years
Technical plant and machinery	3 - 10 years
Other plant, factory and office equipment	2 - 20 years
Software and licences	3 - 10 years

Maintenance and repairs are expensed as incurred; replacement costs and investments to increase the value of an asset are capitalised. When an item of property, plant and equipment is derecognised, the acquisition cost and accumulated depreciation are recorded as a disposal and the difference between the disposal proceeds and the carrying amount is recognised in other operating income or expense.

Goodwill

Goodwill, which results exclusively from business combinations, is not amortised. Instead, it is tested for impairment at least annually.

Impairment losses

Goodwill acquired in business combinations and intangible assets with an indefinite useful life are tested for impairment at least annually. The impairment test is performed irrespective of whether there is an indication of impairment. For the impairment test, the goodwill is allocated to those cash-generating units that are expected to benefit from the synergies of the business combination.

In accordance with the provisions of IAS 36 "Impairment of Assets", an impairment loss is recognised on goodwill if the carrying amount of the associated cash-generating unit exceeds the higher of the fair value less costs of disposal and the value in use.

Goodwill, intangible assets, and property, plant and equipment are tested for impairment if there are indications of a possible impairment, irrespective whether the asset is still in use or is to be sold. An impairment loss must be recognised for assets if the carrying amount exceeds the higher of the fair value less costs of disposal and the value in use. The value in use is derived from the estimated future net cash flows that would be generated by continuing use of the asset over its useful life or that would probably be generated by a potential sale. If the recoverable amount of individual assets cannot be estimated, it is determined for the cash-generating unit to which the asset is allocated. If there is significant uncertainty regarding the estimated future cash flows, several risk-weighted cash flow scenarios are used to determine the value in use.

If an impairment test identifies the need to recognise an impairment loss, the corresponding expense is recognised in the line item impairment loss on goodwill, property, plant and equipment, or intangible assets.

If there are indications that circumstances that resulted in an impairment loss on property, plant and equipment or intangible assets (other than goodwill) in the past no longer exist, it is assessed whether the impairment loss should be reversed.

Investments accounted for at equity (associated companies)

Associated companies are companies where the Group exercises significant influence over financial and operating policy decisions but does not control or jointly control the investee. Associated companies are included in the consolidated financial statements using the equity method and are initially recognised at acquisition cost. In subsequent periods, the carrying amount of the investment increases or decreases in accordance with the Frequentis Group's share of the profit or loss of the associated company.

An impairment test is performed if there are indications that an investment in a company accounted for using the equity method may be impaired. The proportionate goodwill is not tested separately. The impairment test is performed on the entire carrying amount of the investment. Consequently, the impairment losses are not allocated separately to the goodwill contained in the carrying amount of the investment and may therefore be completely reversed in subsequent periods.

Leases

Frequentis as lessee

At the inception of a contract, the Frequentis Group assesses whether the contract is, or contains, a lease. A contract is, or contains, a lease if it conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

At the commencement date or upon modification of a contract that contains a lease component, the Frequentis Group allocates the contractually agreed consideration based on the relative stand-alone prices of the components. Non-lease components of a contract such as electricity, servicing, etc. are excluded from the calculation of the right-of-use asset. On the commencement date, the Frequentis Group recognises an asset for the right of use granted and a lease liability. The right-of-use asset is initially measured at cost, which corresponds to the initial measurement of the lease liability, adjusted for any initial direct costs and costs of dismantling the underlying asset, less any lease incentives received.

In accordance with IFRS 16, the lease term is essentially the non-cancellable period of the lease. In addition, options to extend or terminate the lease are taken into account if it is reasonably certain that they will be exercised.

The lease liability is initially measured on the commencement date at the present value of the lease payments that are not paid at that date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the incremental borrowing rate of the Frequentis Group. The Frequentis Group generally uses the incremental borrowing rate.

To determine the incremental borrowing rate, the Frequentis Group uses interest rates from various external financial sources and adapts these to reflect the lease term.

The lease payments included in the measurement of the lease liability comprise:

- fixed payments, including in-substance fixed payments,
- variable lease payments that depend on an index or (interest) rate,
- amounts expected to be payable by the lessee under residual value guarantees,
- the exercise price of a purchase option or the lease payments relating to an extension option, if the lessee is reasonably certain to exercise that option,
- and penalties for terminating the lease, unless it is reasonably certain that the Frequentis Group will not exercise such termination options.

The right-of-use assets are recognised in the line item within property, plant and equipment where the underlying assets would have been recognised if they had been purchased.

The right-of-use assets are depreciated by applying the straight-line method over the useful life of the leased asset or the term of the lease if this is shorter, including any extension options.

Depreciation is based on the following useful lives:

Right-of-use assets for land and buildings	2 - 8 years
Right-of-use assets for other plant, factory and office equipment	2 - 6 years

There has not been any change in the useful lives compared with the previous year.

The carrying amount of the lease liability is subsequently measured using the effective interest method. The lease liability is remeasured if there is a change in future lease payments resulting from a change in the index or the (interest) rate used, if there is a change in the amounts expected to be payable under a residual value guarantee, and if there is a change in the assessment of a purchase, extension or termination option.

In the event of such remeasurement of the lease liability, a corresponding adjustment is made to the carrying amount of the right-of-use asset or the adjustment is recognised in profit or loss if the term or scope of the lease has been reduced (taking into consideration the reduction in the lease liability) or the carrying amount is reduced to zero. The Frequentis Group has decided not to recognise right-of-use assets and lease liabilities for leases where the underlying leased assets are of low value and for short-term leases. In addition, the option to exclude intangible assets from the scope of IFRS 16 is applied. The Frequentis Group recognises the lease payments relating to such leases as expense on a straight-line basis over the term of the lease.

Lease payments are divided into the payments of principal and interest. The payments of principal relating to the lease liabilities are recognised in the cash flow from financing activities, while the interest payments are recognised in the cash flow from operating activities

Frequentis as lessor

As lessor, the Frequentis Group only has insignificant subleases and leases for voice communication systems.

Leases where the Group is the lessor are classified as finance or operating leases in accordance with the standard. A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to ownership of an underlying asset to the lessee. All other leases are classified as operating leases. The Frequentis Group only has operating leases.

Assets leased under operating leases are recognised in property, plant and equipment and depreciated over their estimated useful life. Income from operating leases is recognised on a straight-line basis over the term of the lease. If a contract contains both lease and non-lease components, the Group uses the corresponding provisions of IFRS 15 to allocate the consideration to the individual components.

Financial instruments

A financial asset or financial liability is initially measured at fair value plus transaction costs. This does not include financial assets classified at fair value through profit or loss. They are initially measured at fair value excluding transaction costs. Trade accounts receivable that do not contain significant financing components are initially measured at the transaction price. Non-derivative financial assets are initially recognised at the settlement date, while derivative financial assets are initially recognised at the trade date. Gains and losses from the disposal of financial instruments are determined by comparing the carrying amount with the proceeds of the sale.

The following categories are used for initial classification and measurement of financial assets:

- At amortised cost
- At fair value through other comprehensive income (FVOCI)
- At fair value through profit or loss (FVTPL)

The classification is performed separately based on the type of instrument: derivative financial instruments, equity instruments, and debt instruments.

Subsequent measurement of all financial assets depends on the category to which they are assigned.

Financial assets are not reclassified after initial recognition unless the Group alters the business model used to manage its financial assets. In this case, all financial assets affected are reclassified on the first day of the reporting period subsequent to the change in business model.

If a financial asset is a debt instrument, it is measured at amortised cost if both of the following conditions are satisfied and it is not designated at FVTPL:

- it is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows, and
- the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

In the Frequentis Group, all trade accounts receivable, loans, and other receivables with fixed or determinable payments are allocated to this category. These assets are measured at amortised cost using the effective interest method. The amortised cost is reduced by impairment losses. Interest income, exchange rate gains and losses, derecognition effects, and impairment losses are recognised in profit or loss.

A debt instrument is carried at FVOCI if both of the following conditions are met and it is not carried at FVTPL:

- it is held within a business model whose objective is achieved both by holding financial assets in order to collect contractual cash flows and by selling financial assets, and
- the contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

In the Frequentis Group, no instruments were allocated to this category in either 2023 or 2022.

At the date of initial recognition of an equity instrument that is not held for trading, the Group can elect irrevocably to present subsequent changes in the fair value of the investment in other comprehensive income. This option can be exercised for each investment on a case-by-case basis.

All financial assets that are not measured at amortised cost or at FVOCI are measured at FVTPL. This comprises all derivative financial assets that are not designated as a cash flow hedge in a hedging relationship.

Financial liabilities are classified and measured at amortised cost or at fair value through profit or loss (FVTPL). A financial liability is classified at FVTPL if it is held for trading or is a derivative.

Financial assets and liabilities at FVTPL are measured at fair value and any net gain or loss, including interest expense, is recognised in profit or loss.

Other financial liabilities are subsequently measured at amortised cost using the effective interest method. Interest expense, exchange rate gains and losses, and derecognition gains and losses are also recognised in profit or loss.

The Group holds derivatives in the form of forward exchange contracts to hedge currency risks.

Derivatives are measured at fair value, both at initial recognition and subsequently. Any changes in their fair value are recognised in profit or loss.

Receivables are measured at cost. Foreign currency receivables are measured using the mean exchange rate on the reporting date.

Provided that an asset is not credit-impaired at initial recognition, it is initially measured using the 12-month expected credit losses concept. This assessment is maintained for subsequent reporting dates. If the credit risk of a financial asset has increased significantly on the reporting date compared with its credit risk at initial recognition, the lifetime expected credit losses method is applied. The lifetime expected credit losses concept must always be applied to trade accounts receivable and to contract assets without a significant financing component.

When determining whether the credit risk of a financial asset has increased significantly since its initial recognition and estimating expected credit losses, the Group uses appropriate and supportable evidence that is relevant and available with economically reasonable effort. This comprises both quantitative and qualitative information and analyses based on the Frequentis Group's historical experience, prospective information, and a solid creditworthiness assessment.

Inventories

Raw materials and supplies are measured at acquisition or manufacturing cost or at net realisable value if this is lower. For raw materials and supplies, the replacement cost was determined to be the best available measure for their net realisable value.

Work in progress and finished goods are measured at the manufacturing cost or lower net realisable value. The net realisable value is the price that could be obtained in the ordinary course of business less the estimated costs of completion and the estimated cost necessary to make a sale. The manufacturing cost is calculated using all direct costs incurred, and fixed and variable production overheads. Borrowing costs are not recognised because the criteria set out in IAS 23 are not met. The consumption of goods is determined using the moving average cost method.

IFRS 15 Revenue from Contracts with Customers

The Frequentis Group accounts for customer contracts using the five-step model in accordance with IFRS 15. The first step in the model is identifying the contract with a customer. This is followed by identifying the distinct performance obligations. In this step, distinct goods and services and bundles of goods and services are identified. The third step is determining the transaction price. The transaction price is the amount of consideration the supplying company expects to be entitled to in exchange for transferring the goods or services. The transaction price is then allocated to the identified performance obligations. The final step is recognising revenue when the performance obligation is satisfied. Revenue is recognised either at a point in time or over time.

For the vast majority of the Frequentis Group's contracts with customers, revenue is recognised over time. Revenue is recognised on the basis of the progress towards satisfaction of the performance obligation using the cost-to-cost method. Under this method, revenues are recognised on the basis of the production costs actually incurred in relation to the expected total cost. The impact of changes in the estimated total cost is recognised in profit or loss in the period in which it occurs.

For certain services (e.g. consulting and repairs) with a short lead time or performance period, orders for spare parts or small parts, and the sale of standard products without customer-specific adaptation or extensive processing required to put the product into operation at the customer's premises, revenue is recognised at a point in time. Revenue is recognised when control is transferred to the customer or the performance obligation is completely satisfied.

The contract assets do not contain significant financing components.

Certain costs such as the cost incurred in obtaining a contract and the cost of fulfilling a contract to deliver goods and services to customers are recognised as contract costs (mainly sales commission) and amortised in line with the transfer of control over the goods and services to the customer.

The contract liabilities comprise all obligations from contracts with customers (goods or services) for which the Frequentis Group has already received (or will receive) consideration. This mainly relates to advance payments from customers and services still to be performed for projects already invoiced.

Employee benefit obligations

The obligations for severance payments, pensions, and anniversary bonuses were measured on the basis of an actuarial valuation using the projected unit credit method in accordance with IAS 19 "Employee Benefits".

When determining the severance payment obligation, the retirement age was deemed to be the earliest possible date for (early) retirement under the 2018 pension reform.

The pension provisions were established on the basis of an actuarial valuation. Since the pension insurance policy has been pledged to the Executive Board, it meets the definition of plan assets and the pension provisions are offset against the amount accumulated in the pension insurance scheme in accordance with IAS 19.

The effects of remeasurement of post-employment benefits (severance payment and pension obligations) are recognised in other comprehensive income. Any past service cost is recognised immediately in profit or loss. The interest cost is recognised together with the service cost in personnel expenses.

Share-based payment

As part of a long-term incentive plan, Frequentis AG has granted share-based payment to one member of the Executive Board. This is accounted for in accordance with IFRS 2 "Share-based Payment". The plan is exclusively equity-settled. Frequentis AG therefore measures these instruments at fair value on the grant date, taking into account the performance conditions on which the instruments are granted. The expense is allocated over the specified service period.

Provisions

Provisions are recognised if there is a present (legal or substantive) obligation arising from a past event, an outflow of economic resources to meet this obligation is probable, and the level of the obligation can be estimated reliably. The provision is measured at the expected settlement amount. Provisions are reviewed at every reporting date and adjusted on the basis of the new assessment. If the interest rate effect is material, non-current provisions are recognised at the present value of the expected outflow to settle the obligation.

Research and development costs

Research projects are original and planned investigation undertaken with the prospect of gaining new scientific or technical knowledge. In the Frequentis Group, research projects generally have a time horizon of 3 to 10 years and their technical and commercial outcome is uncertain. All research expenditures are expensed as incurred (IAS 38.54).

Development projects comprise expenditures that serve to apply theoretical knowledge for technical and commercial use. If the criteria for recognition as an intangible asset pursuant to IAS 38.21 are met, the directly allocable development costs are recognised as an intangible asset; otherwise, the development costs are expensed as incurred. In the reporting period, as well as in the previous year, the technical feasibility of hardware and software development projects either could not be assessed or the research and development phases could not be clearly distinguished. Moreover, confirmation of technological feasibility and commercial usability is generally only obtained shortly before projects are ready for the commercial market. Therefore, with the exception of one development in 2023, the criteria for recognition as an intangible asset were not met in either 2023 or 2022.

Grants and subsidies

Subsidies granted to compensate for expenses that meet the recognition criteria are recognised immediately in profit or loss in the period in which the expenses are incurred. Grants related to assets, in other words, government grants where the primary condition is that an entity purchases, constructs, or otherwise acquires long-term assets, are deducted from the related assets when determining their carrying amount (net presentation).

Income taxes

Tax expense comprises current and deferred taxes. Current and deferred taxes are recognised in profit or loss, except if they relate to a business combination or to items recognised directly in equity or in other comprehensive income.

Current taxes are the expected tax liability or tax receivable on the taxable profit for the financial year, based on the tax rates that have been enacted on the reporting date, and all adjustments to the tax liability for previous years.

The applicable income tax rates for foreign Group companies were between 16% and 32% in the reporting period (2022: between 16% and 32%).

As at December 31, 2023, the OECD BEPS Pillar 2 rules were incorporated into Austrian law. The legislation is effective for financial years beginning after December 31, 2023. Since Frequentis' consolidated annual revenues are below the EUR 750 million threshold, application of the provisions is not mandatory at present.

In accordance with IAS 12, deferred taxes are recognised in the IFRS financial statements for temporary differences between the carrying amounts of assets and liabilities and their tax base.

Deferred taxes are not recognised for:

- taxable temporary differences on initial recognition of goodwill,
- temporary differences on initial recognition of assets or liabilities for a business transaction that is not a business combination and that does not affect either the profit before tax or the taxable profit,
- temporary differences relating to investments in subsidiaries, associated companies, and joint operations, provided that the Frequentis Group is able to control the timing of reversal of temporary differences and it is probable that they will not be reversed in the foreseeable future.

Deferred tax assets and liabilities are netted if there is a corresponding legally enforceable claim to offset them and the deferred tax assets and liabilities refer to income taxes that are levied by the same tax authority for the same taxable entity.

In order to assess whether deferred tax assets are impaired, the Executive Board estimates the probability that these items can be utilised in the future. The ability to utilise deferred tax assets is based on the assumption that taxable profit will be available in the future periods in which the temporary differences will be tax-deductible. The Executive Board includes the planned reversal of deferred tax liabilities and the estimated taxable future profit in its assessment.

Significant estimates and use of judgement

Preparation of the consolidated financial statements in accordance with the generally accepted accounting and valuation principles of the IFRS involves estimates and assumptions that may influence the amount and presentation of the reported assets and liabilities, the disclosure of contingent assets and liabilities as at the reporting date, and the reported income and expenses during the reporting period. The actual amounts may ultimately differ from the estimates and assumptions. Estimates and assumptions are reviewed continuously and revised prospectively.

When preparing the consolidated financial statements, the Frequentis Group made the following judgements:

- a) When assessing the term of leases, especially real estate leases, the Frequentis Group takes into account any extension or termination options where it is reasonably certain that they will be exercised.

The consolidated financial statements include the following items whose measurement depends to a large extent on assumptions and estimates:

- a) Useful life of non-current assets: Property, plant and equipment and purchased intangible assets are recognised at the acquisition or manufacturing cost and depreciated/amortised over their useful life using the straight-line method. Factors such as wear and tear, obsolescence, technical standards, and contract duration are taken into account when determining the useful life.
- b) Estimated impairment of goodwill: The Frequentis Group tests goodwill for impairment annually. The recoverable amount of cash-generating units is determined by calculating their value in use. This is based on corresponding planning calculations, which are naturally based on estimates and assumptions. See Note 17 for information on the assumptions used and the sensitivity analyses performed in impairment testing of goodwill.
- c) Revenue is recognised over time based on the progress towards satisfaction of the performance obligation using the input-based method (cost-to-cost method). Accounting for contracts realised over time is based on estimated contract costs, the achievable contract revenue, and the risks associated with the contract. These estimates are regularly reviewed and revised. Although the estimates are made using all information available at the reporting date, changes may occur. These changes may affect both the revenue recognised and the carrying amounts of contract assets.

Evaluating whether two or more contracts with a customer have to be combined or whether a contract with a customer has to be split into a series of performance obligations involves estimates that may affect the recognition of revenue or profit. Variable consideration is estimated at the most likely amount to which an entitlement exists. These estimates are based, in particular, on expectations and on the historical, present, and forecast information available at the reporting date.

- d) The recognition of provisions for onerous contracts is subject to estimates of the expected contract costs and contract results. These estimates are based on historical experience and current information as at the reporting date.
- e) Post-employment benefit obligations are measured using various parameters such as the discount rate and salary increases. Changes in these parameters may result in a change in the obligation recognised. The sensitivity of post-employment benefit obligations is outlined in Note 29. Non-current provisions.
- f) The recognition of deferred tax assets requires that sufficient taxable income will be generated in the future against which the tax credits and loss carryforwards can be utilised. The assessment as to whether deferred taxes can be recognised is subject to estimates of various factors. Tax matters are subject to uncertainties regarding their assessment by the tax authorities, therefore it cannot be precluded that in individual cases they may reach a different conclusion than the Frequentis Group.

- g) In connection with the acquisition of the shares in ATRiCS Advanced Traffic Solutions GmbH, FRAFOS GmbH, and Frequentis Recording AS, in addition to the basic purchase price, an earn-out payment was agreed. This is dependent on the achievement of certain targets in the future. To measure the earn-out liabilities as at 31 December 2023, assumptions were made on the development of these items. For further information, see Note 31. Other liabilities. If the actual development differs significantly from the assumptions made, this may impact earnings because the liability is subsequently measured at fair value through profit or loss.
- h) The liabilities for the put options relating to non-controlling interests correspond to the enterprise value less net financial debt of ELARA Leitstellentechnik GmbH, FRAFOS GmbH, and Regola S.r.l. The enterprise value is determined using a multiples-based valuation. To measure the liabilities, assumptions were made about the development of these items. For further information, see Note 31. Other liabilities. Significant changes in the underlying assumptions do not impact earnings because the changes are recognised in equity.
- i) Impairment loss on the deposits at Commerzialbank Mattersburg im Burgenland AG: Since 31 December 2020, all claims against Commerzialbank Mattersburg have been fully impaired because, based on the information on the insolvency proceedings, it can be assumed that the recovery quota of the insolvency estate will not be economically relevant. Due to the complex nature of the lawsuits filed by Frequentis in 2020, they are not currently at a stage that justifies the recognition of a claim in the financial statements. Depending on the further course of these proceedings, positive effects on earnings may arise if Frequentis is awarded a quota of the insolvency estate or if its claims for compensation in pending proceedings are successful and the amounts can be collected.
- j) Climate change and the associated warming will result in a number of changes. The global increase in temperatures and extreme weather events such as storms, exceptionally heavy rainfall, including floods, as well as droughts and heatwaves are adversely affecting many people's livelihoods. Coastal areas are exposed to an additional risk from rising sea levels. Many cities in south and south-east Asia and Australia are located directly on the coast. Frequentis has some companies in these regions.

Frequentis could be indirectly affected by climate change – on the procurement market as a result of supply chain delays and disruption and on the sales side by problems due to increasing social and civil conflicts. As a supplier of communication and information systems for control centres in the safety-critical sector, Frequentis' business model is not currently affected by the impact of climate change but the mid-term effects cannot yet be estimated. Climate change did not have any significant effect on the consolidated financial statements for 2023.

The possible impact on impairment testing and the useful life of non-current assets was examined, and none was identified.

- k) The war in Ukraine indirectly resulted in higher prices, especially for electricity, gas, and fuels. Consequently, prices of other everyday products increased, so inflation increased sharply almost everywhere in the world and was well above the average for recent years. This resulted in the need to adjust prices for existing and new customer projects. The annual inflation-adjusted pay rises for employees under collective agreements and other salary agreements are and will gradually have a direct influence on the Frequentis Group's personnel expenses in 2023 and 2024. The expected future impact of the cost increases was taken into consideration in the measurement of projects and non-current personnel provisions and recognised in contract assets, contract liabilities, and non-current provisions.

Notes to the consolidated income statement

3. Segment report

Operating segments

- Air Traffic Management
- Public Safety & Transport

The Air Traffic Management (ATM) segment comprises the ATM Civil business domain (which includes AIM / Aeronautical Information Management) and the ATM Defence business domain. This segment focuses on civil and military air traffic control organisations and therefore generally on one to two customers per country. It is estimated that the market entry barriers are relatively high.

The business domains' products are similar and are based on the same product platform. In the Defence business domain, there is also demand for additional encryption solutions. The safety and quality management requirements are the same: the international regulations for standardisation of air traffic issued by the International Civil Aviation Organization (ICAO) apply. Moreover, the infrastructure to be installed for customers (radar, radio transmission, networks) is similar.

Frequentis' ATM portfolio for the defence sector comprises communication and information systems for air defence and military air traffic control, systems for networked operational management and tactical networks, management and information systems, including systems for integrated use by different authorities, and encrypted, interoperable communication systems for mission-critical applications.

The Public Safety and Transport segment comprises the Public Safety, Public Transport, and Maritime business domains. Its customers are public authorities or related organisations with monitoring and control functions.

The Public Safety business domain's customers are the police, fire, and rescue services. Police organisations also require additional encryption solutions. Alongside conventional rail operators, the Public Transport business domain's customers include local public transport providers. The Maritime business domain focuses on coastguards and port authorities.

The business domains' products are similar and are based on the same product platform. Moreover, the infrastructure to be installed for customers (phones, radio transmission, networks) is similar. Despite several international standardisation efforts, different national and regional requirements and regulations still apply.

Data on the operating segments

The chief operating decision maker of the Frequentis Group is the Executive Board. The accounting policies applied by the individual segments are the same as those for the Frequentis Group. Earnings before interest and taxes (EBIT) are used for internal reporting and correspond to the segment result as defined in IFRS 8.23. There are no inter-segment revenues. The amounts in the column headed reconciliation/consolidation mainly comprise transactions that cannot be allocated clearly to one segment and were undertaken for both segments.

	Air Traffic Management 2023 EUR thousand	Public Safety & Transport 2023 EUR thousand	Reconciliation/ consolidation 2023 EUR thousand	Total 2023 EUR thousand
Revenues	293,328	133,754	405	427,487
Change in inventories of finished goods and work in progress	-140	-100	-214	-454
Own work capitalised	3,576	380	126	4,082
Other operating income	6,009	1,441	605	8,055
Profit from business combinations	0	0	3	3
Total income (operating performance)	302,773	135,475	925	439,173
EBIT	10,061	16,656	-71	26,647
Impairment losses				0

	Air Traffic Management 2022 EUR thousand	Public Safety & Transport 2022 EUR thousand	Reconciliation/ consolidation 2022 EUR thousand	Total 2022 EUR thousand
Revenues	257,772	127,675	523	385,970
Change in inventories of finished goods and work in progress	-318	84	256	22
Own work capitalised	2,268	0	306	2,574
Other operating income	8,470	1,355	689	10,514
Total income (operating performance)	268,192	129,114	1,774	399,080
EBIT	10,214	14,919	-142	24,991
Impairment losses	-3,106	0	0	-3,106

Segment assets and segment liabilities are not disclosed here because internal reporting does not include a breakdown of assets between the two segments.

Details of Group-wide data

Neither in 2023, nor in 2022, did the Frequentis Group generate more than 10% of its total revenues with any single customer.

In terms of revenue categories, 36% (2022: 41%) of the Group's revenues were generated principally with new products for established customers and existing products sold to new customers, 61% (2022: 56%) comprised IBB (installed base business, i.e. follow-on business for installed systems and solutions), and 3% (2022: 3%) came from other sources (mainly consulting). Approximately half of the installed base business comprised maintenance contracts.

The regional breakdown of orders received by end-users was as follows:

	2023	2022
Europe	62.2%	63.3%
Americas	17.9%	11.6%
Asia	9.6%	18.0%
Australia/Pacific	8.2%	6.3%
Africa	2.1%	0.7%

Orders on hand as at 31 December 2023 totalled EUR 594,658 thousand (2022: EUR 522,033 thousand). The ATM segment accounted for EUR 377,290 thousand (2022: EUR 329,709 thousand) of this amount and the PST segment for EUR 217,368 thousand (2022: EUR 192,323 thousand).

Regional breakdown of non-current assets

	2023 EUR thousand	2022 EUR thousand
Austria	35,081	37,253
Europe (excluding Austria)	34,454	23,730
Australia/Pacific	7,346	7,916
Americas	10,486	6,391
Asia	311	440
	87,678	75,730

Non-current assets comprise property, plant and equipment, intangible assets, goodwill, investments accounted for at equity, and equity instruments.

4. Revenues

The following comments apply for both segments, because both generate almost all of their revenue with customer-specific production orders and maintenance contracts. Only a few of the products sold are not customised.

Revenues are recognised when the contractually agreed milestones have been achieved. Amounts where the work or services have been performed but which have not yet been invoiced are recognised as contract assets. In principle, invoices are due within thirty days.

Revenues from customer-specific construction contracts and multi-component contracts meet the criteria for recognition of revenue over time based on the progress towards satisfaction of the performance obligation because there is no alternative use for the asset produced and the Frequentis Group has a right to receive payment for the work performed (costs plus an appropriate margin).

Revenues are recognised using the input-based method (cost-to-cost method). Contract assets are only recognised if they exceed the associated advance payments from customers. In the reporting period, contract assets increased by EUR 10,797 thousand (2022: EUR 12,122 thousand). The increase in contract assets is the net result of a large number of newly commenced and invoiced projects.

In the case of maintenance contracts, the customer generally receives the benefits as the performance obligation is satisfied. Revenue is recognised over time. Exceptions from this rule are certain services (e.g. consulting and repairs) with a short lead time or performance period, and orders for spare parts or small parts where the revenue is recognised at a point in time. The revenues from these orders amounted to EUR 27,148 thousand in the reporting period (2022: EUR 18,377 thousand).

In accordance with IFRIC 22, the Frequentis Group measures advance payments made and received in foreign currencies at the exchange rate at the transaction date, rather than the exchange rate at the reporting date.

All revenues presented below are revenues from contracts with customers pursuant to IFRS 15.

The revenue split by category in the reporting period was as follows:

	2023 EUR thousand	2022 EUR thousand
New products and/or new customer business	153,913	157,693
IBB (installed base business)	259,779	217,628
Other revenues	13,795	10,649
	427,487	385,970

The regional breakdown of revenues by end-users was as follows:

	2023 EUR thousand	2022 EUR thousand
Europe	279,638	252,747
Americas	68,167	60,691
Asia	46,232	45,034
Australia/Pacific	25,219	19,418
Africa	5,391	6,393
Small orders (not allocated)	2,840	1,687
	427,487	385,970

The line item "small orders" relates to revenues from customer contracts that were not allocated to the other categories in the above table.

The transaction price of unsatisfied or only partially satisfied performance obligations was EUR 594.7 million (31 December 2022: EUR 522.0 million) and corresponds to the orders on hand in the Frequentis Group at the reporting date. It is expected that revenue of approximately EUR 312.2 million will be recognised in 2024 and revenue of EUR 282.5 million will be recognised in 2025 and subsequent years. The expected timing of revenue recognition is based on the expected progress towards satisfaction of the performance obligation.

5. Own work capitalised

The expenses capitalised in 2023 comprise EUR 3,369 thousand (2022: EUR 2,261 thousand) for self-produced assets in connection with operating leases (see Note 35. Leases), EUR 380 thousand (2022: EUR 0 thousand) for capitalised development work, and EUR 333 thousand (2022: EUR 313 thousand) for, among other things, self-produced internal demonstration and test systems.

6. Other operating income

	2023 EUR thousand	2022 EUR thousand
Grants and subsidies for research and development costs	2,391	4,238
Income from research incentives	2,578	2,618
Exchange rate differences	755	1,339
Change in the earn-out payment liability	0	402
Changes in the fair value of forward exchange contracts	610	216
Gain from the sale of intangible assets, property, plant and equipment	24	19
Miscellaneous other operating income	1,697	1,682
	8,055	10,514

Grants and subsidies, including research incentives, are recognised in income when the conditions for their granting are fulfilled and the grants have either already been paid or it is reasonably sure that they will be paid.

The miscellaneous other operating income relates mainly to revenue from the reversal of loss allowances and provisions.

7. Cost of materials and purchased services

	2023 EUR thousand	2022 EUR thousand
Cost of materials	45,172	41,338
Cost of purchased services	59,542	57,912
	104,714	99,250

The cost of materials rose by roughly the same percentage as revenues.

8. Personnel expenses

	2023 EUR thousand	2022 EUR thousand
Salaries	181,632	162,237
Expenses for severance payments	2,436	2,215
Expenses for pensions	2,815	2,471
Social security contributions	34,508	31,547
Other voluntary social welfare expenses	6,463	5,402
	227,854	203,872

The number of employees at the end of the financial year was 2,318 (2022: 2,116), measured as full-time equivalents (FTE). The average number of employees was 2,217 FTEs (2022: 2,081 FTEs).

The increase in personnel expenses is mainly due to individual and collectively agreed salary rises, the increase in the accrual for holidays not yet taken, and the increase in the number of employees.

9. Other operating expenses

	2023 EUR thousand	2022 EUR thousand
Travel expenses	12,736	10,687
Other consulting expenses	5,172	5,775
External personnel	4,928	4,514
Advertising	4,356	3,849
Licenses (terms of up to 1 year)	4,242	2,907
Energy	3,353	2,014
Legal and consulting expenses	3,133	2,526
Insurance expenses	2,989	2,527
Exchange rate differences	2,969	2,694
Maintenance	2,494	2,290
Transport	2,148	1,891
Operating expenses (buildings)	1,945	1,472
Staff recruitment	1,714	1,072
Vehicles	1,349	1,159
Telephone and communications expenses	1,266	1,264
Cleaning	1,179	1,015
Change in provisions for projects	1,132	-2,392
Other taxes and levies	912	736
Bank charges and bank guarantee fees	747	903
Short-term leases and leases for low-value assets	676	677
Impairment of receivables and contract assets	464	313
Membership fees	410	371
Translation costs	174	202
Losses from the disposal of intangible assets, property, plant and equipment	21	30
Changes in the fair value of forward exchange contracts	11	94
Miscellaneous	1,911	1,736
	62,431	50,326

The provisions for projects contain project costs for which provisions are recognised due to an excess of estimated future expenses over revenues.

The impairments contain EUR 465 thousand (2022: EUR 308 thousand) for receivables and EUR -1 thousand (2022: EUR 5 thousand) for contract assets. The impairments are not presented separately in the income statement as the amount is insignificant.

10. Depreciation of property, plant and equipment and amortisation of intangible assets

	2023 EUR thousand	2022 EUR thousand
Depreciation of right-of-use assets	8,946	9,066
Depreciation of property, plant and equipment and amortisation of intangible assets	7,586	7,632
Depreciation and amortisation of low-value assets	995	837
	17,527	17,535

Assets with an acquisition or manufacturing cost of up to EUR 1 thousand (country-specific) are defined as low-value assets and are recognised as expenses in the year of acquisition.

11. Financial income

	2023 EUR thousand	2022 EUR thousand
Interest and similar income	946	209
	946	209

The interest and similar income relates exclusively to interest income from assets recognised at amortised cost. Interest income is recognised using the effective interest method.

12. Financial expenses

	2023 EUR thousand	2022 EUR thousand
Interest and similar expenses	1,442	738
	1,442	738

EUR 916 thousand (2022: EUR 412 thousand) of the interest and similar expenses is attributable to IFRS 16. Interest expenses are recognised using the effective interest method.

13. Income taxes

	2023 EUR thousand	2022 EUR thousand
Current income taxes	7,950	6,396
Taxes relating to prior periods	550	75
Non-deductible withholding tax	199	62
Change in deferred tax assets/liabilities	-2,260	-674
	6,439	5,859

The following table presents the reconciliation from the expected tax rate to the effective tax rate:

	2023 EUR thousand	2022 EUR thousand
Profit/loss before tax	26,419	24,737
Theoretical tax income/expense based on a tax rate of 24% (2022: 25%)	6,341	6,184
Differences in tax rates	253	-171
Tax additions	432	444
Tax deductions	-779	-777
Changes in tax rates	-271	-485
Tax-free income from associated companies	-64	-69
Profit from business combinations	-1	0
Tax assets for which deferred tax assets were not previously recognised	-547	
Tax losses for which no deferred tax assets were recognised	521	699
Realised tax losses for which no deferred tax assets were recognised	-195	-103
Taxes relating to other periods	550	75
Non-deductible withholding tax	199	62
Actual tax expense	6,439	5,859
Effective tax rate	24.4%	23.7%

The tax additions comprise non-tax-deductible expenses such as non-deductible payroll expenses and hospitality expenses. The tax deductions mainly comprise the research incentives.

The effect from the change in tax rates totalling EUR 271 thousand in 2023 (2022: EUR 485 thousand) was attributable to the reduction in the corporation tax rate in Austria from 25% to 24% for 2023 and 23% for financial years from 2024.

The deferred tax assets and liabilities recognised in the statement of financial position relate to the following items:

	Assets 2023 EUR thousand	Liabilities 2023 EUR thousand	Assets 2022 EUR thousand	Liabilities 2022 EUR thousand
Property, plant and equipment	246	-9,287	116	-10,605
Intangible assets	349	-3,574	202	-3,563
Goodwill	0	-20	17	
Financial assets	137	-10	173	-4
Inventories	122	-308	81	-570
Contract assets	0	-6,813	94	-6,800
Contract costs		-104		-72
Trade accounts receivable and other assets	26	-1,946	93	-3,606
Provisions	2,616	-1,992	2,276	-897
Trade accounts payable and other liabilities	582	-153	570	-139
Lease liabilities	8,646	0	9,559	0
Contract liabilities	3,166	-299	4,331	-204
Deferred taxes on exchange rate differences, debt consolidation	6	-7	112	-112
Tax loss carryforwards	4,156		3,293	
Total	20,052	-24,513	20,916	-26,572
Netting	-14,435	14,435	-17,131	17,131
Deferred taxes	5,617	-10,078	3,785	-9,441

Deferred tax liabilities resulting from temporary differences in connection with investments in subsidiaries are not recognised if the date of reversal of the temporary differences can be controlled by the Frequentis Group and it is probable that the temporary differences will not be reversed in the near future. Such temporary differences for which no deferred tax liabilities are recognised amounted to EUR 3,771 thousand (2022: EUR 3,768 thousand).

As at the reporting date, the Frequentis Group had loss carryforwards totalling EUR 19,666 thousand (2022: EUR 16,379 thousand). Deferred taxes were recognised for loss carryforwards of EUR 15,008 thousand (2022: EUR 12,539 thousand) because it is probable that there will be future taxable income against which the Frequentis Group can offset the deferred tax assets. There is a 20-year time limit on the use of a tax loss carryforward of EUR 1,736 thousand (2022: EUR 1,408 thousand). The other loss carryforwards will not expire.

The amount of tax-deductible impairments on equity investments that is spread over seven years under Austrian tax law is EUR 499 thousand (2022: EUR 632 thousand). Deferred tax assets of EUR 115 thousand (2022: EUR 147 thousand) were recognised on this amount.

As at 31 December 2023, no material income tax uncertainties existed.

14. Earnings per share

Basic earnings per share are calculated by dividing the result for the period attributable to equity holders of Frequentis AG by the weighted average number of shares outstanding in the reporting period. In the reporting period, the weighted average number of shares was 13,271,909 (2022: 13,268,833).

Diluted earnings per share are calculated by dividing the result for the period attributable to the equity holders of Frequentis AG by the weighted average number of outstanding shares in the reporting period, adjusted in each case by the dilutive effect of the share-based payment of 44,630 shares (2022: 51,370 shares). The average weighted number of shares and options was 13,316,012 (2022: 13,317,764).

Notes to the consolidated statement of financial position

15. Property, plant and equipment

in EUR thousand	Land and buildings and buildings on leased land	Technical plant, and machinery	Technical equipment for operating leases	Other plant, factory and office equipment	Plants under construction	Advances and plants under construction for operating leases	Total
Carrying amount as at 31 December 2021	38,664	786	0	7,884	383	0	47,717
Foreign currency translation difference	205	0	0	43	18	0	266
Reclassification	42	0	0	256	-298	0	0
Additions from business combinations	382	0	0	64	0	0	446
Addition	9,614	142	1,420	5,787	884	801	18,648
Disposal	-117	0	0	-32	0	0	-149
Depreciation	-8,752	-207	-20	-4,651	0	0	-13,630
Carrying amount as at 31 December 2022	40,038	721	1,400	9,351	987	801	53,298
Cost of acquisition/production	75,207	4,537	1,420	36,599	987	801	119,551
Accumulated depreciation	-35,169	-3,816	-20	-27,248	0	0	-66,253
Carrying amount as at 31 December 2022	40,038	721	1,400	9,351	987	801	53,298
Carrying amount as at 31 December 2022	40,038	721	1,400	9,351	987	801	53,298
Foreign currency translation difference	-139	0	-70	-47	-12	0	-268
Reclassification	382	-35	801	654	-1,001	-801	0
Additions from business combinations	14	0	0	166	0	0	180
Addition	5,706	796	2,529	7,262	872	0	17,164
Disposal	-5	0	0	-76	0	0	-81
Depreciation	-8,563	-175	-294	-5,374	0	0	-14,406
Carrying amount as at 31 December 2023	37,433	1,307	4,366	11,936	846	0	55,888
Cost of acquisition/production	79,387	5,179	4,677	40,484	846	0	130,573
Accumulated depreciation	-41,954	-3,872	-311	-28,548	0	0	-74,685
Carrying amount as at 31 December 2023	37,433	1,307	4,366	11,936	846	0	55,888

During 2023, the Frequentis Group concluded agreements for the acquisition of property, plant and equipment totalling EUR 537 thousand (2022: EUR 673 thousand), which will be delivered and invoiced in 2024.

For information on the recognised right-of-use assets resulting from the application of IFRS 16, which are included in the above table, see Note 35. Leases.

16. Intangible assets

in EUR thousand	Software and licences	Customer base	Self-produced intangible assets under development	Advances	Total
Carrying amount as at 31 December 2021	17,692	0	0	25	17,717
Foreign currency translation difference	-6	0	0	0	-6
Reclassification of advances	0	0	0	0	0
Additions from business combinations	3,088	0	0	0	3,088
Addition	620	0	0	94	715
Disposal	-1	0	0	0	-1
Amortisation	-3,905	0	0	0	-3,905
Impairment losses recognised in profit/loss	-3,106	0	0	0	-3,106
Carrying amount as at 31 December 2022	14,382	0	0	119	14,501
Cost of acquisition/production	39,031	0	0	119	39,150
Accumulated amortisation	-24,649	0	0	0	-24,649
Carrying amount as at 31 December 2022	14,382	0	0	119	14,501
Carrying amount as at 31 December 2022	14,382	0	0	119	14,501
Foreign currency translation difference	-190	0	0	0	-190
Reclassification of advances	99	0	0	-99	0
Additions from business combinations	2,257	2,848	0	0	5,105
Addition	840	0	380	0	1,220
Disposal	0	0	0	0	0
Amortisation	-2,938	-184	0	0	-3,122
Carrying amount as at 31 December 2023	14,450	2,664	380	20	17,514
Cost of acquisition/production	41,976	2,848	380	20	45,224
Accumulated amortisation	-27,526	-184	0	0	-27,710
Carrying amount as at 31 December 2023	14,450	2,664	380	20	17,514

The Frequentis Group spent EUR 25.2 million [2022: EUR 26.8 million] on in-house research and development work that was not funded by customers. This was expensed as incurred. Development costs of EUR 380 thousand were capitalised in the reporting period.

During 2023, the Frequentis Group concluded agreements for the acquisition of intangible assets totalling EUR 22 thousand, which will be delivered and invoiced in 2024 (2022: EUR 12 thousand).

17. Goodwill

in EUR thousand	Goodwill
Carrying amount as at 31 December 2021	3,433
Foreign currency translation difference	-11
Additions from business combinations	2,412
Carrying amount as at 31 December 2022	5,834
Cost of acquisition/production	8,636
Accumulated impairment losses	-2,802
Carrying amount as at 31 December 2022	5,834
 Carrying amount as at 31 December 2022	 5,834
Foreign currency translation difference	145
Additions from business combinations	5,372
Carrying amount as at 31 December 2023	11,351
Cost of acquisition/production	14,153
Accumulated impairment losses	-2,802
Carrying amount as at 31 December 2023	11,351

The accumulated impairment losses include EUR 1,730 thousand relating to the full impairment of the goodwill in ATRiCS Advanced Technology Solutions GmbH in 2021 and EUR 1,072 thousand for the partial impairment of the goodwill of Systems Interface Ltd. in 2020.

For the purpose of impairment testing, goodwill has been allocated to the Frequentis Group's cash-generating units (CGUs) as follows:

	31 Dec. 2023 EUR thousand	31 Dec. 2022 EUR thousand
FRAFOS GmbH	1,976	
Frequentis Comsoft GmbH	909	909
Frequentis Orthogon GmbH	2,263	2,263
Business Recording	3,537	
Regola S.r.l.	2,412	2,412
Systems Interface Ltd.	201	197
team Technology Management GmbH	53	53
	11,351	5,834

The Business Recording cash-generating unit is Frequentis' recorder unit, which comprises the Frequentis recording solution DIVOS and Frequentis Recording AS.

Goodwill was tested for impairment when preparing the consolidated financial statements by estimating the recoverable amount of the relevant cash-generating units using discounted cash flows for a three-year detailed planning period and a perpetual annuity derived from this.

The impairment test in accordance with IAS 36 was based on detailed plans for earnings, the statement of financial position, and capital expenditure for the next three years. These are prepared annually as part of the Group-wide budget planning process, taking into consideration the current business situation. For periods after the budget planning period, a long-term growth rate of 1% (2022: 1%) was determined and used to forecast future cash flows.

Forecast future cash flows were discounted using discount rates based on common market and country-specific risks.

	FRAFOS GmbH	Frequentis Comsoft GmbH	Frequentis Orthogon GmbH	Business Recording	Regola S.r.l.	Systems Interface Ltd.	Technology Management GmbH	team
Impairment test 2023								
Interest rate (WACC before taxes)	13.26%	11.66%	12.64%	11.55%	16.17%	11.53%	11.08%	
Recoverable amount in EUR thousand	5,349	8,100	10,732	27,059	7,155	1,903	7,651	
Carrying amount of the CGU including goodwill in EUR thousand	4,784	3,252	7,113	8,236	6,236	548	1,165	

	Frequentis Comsoft GmbH	Frequentis Orthogon GmbH	Regola S.r.l.	Systems Interface Ltd.	Technology Management GmbH	team
Impairment test 2022						
Interest rate (WACC before taxes)	12.4%	13.70%	16.63%	10.27%	11.44%	
Recoverable amount in EUR thousand	9,221	10,862	8,501	644	7,966	
Carrying amount of the CGU including goodwill in EUR thousand	8,874	8,533	6,244	-63	2,007	

In 2020, an impairment loss was recognised for the goodwill of Systems Interface Ltd. Since the business has stabilised since 2022 and future cash flows also show a stable trend, no additional impairment loss was recognised in either 2022 or 2023. Due to the negative working capital in 2022, Systems Interface Ltd. CGU had a negative carrying amount of EUR -63 thousand in this year. In 2023, working capital was positive, so the CGU had a positive carrying amount of EUR 548 thousand.

FRAFOS GmbH was initially included in Frequentis' consolidated financial statements from the closing of the transaction in April 2023. As a result, a purchase price allocation was performed and no significant changes in the planning assumptions had been identified by the reporting date.

To illustrate the effect of changes in the parameters, sensitivity analyses were performed. The following table shows the percentage by which the cash flows would have to be reduced or the discount rates increased for the carrying amounts of the cash-generating units, including goodwill, to correspond to the recoverable amount.

	Frequentis FRAFOS GmbH	Frequentis Orthogon GmbH	Regola S.r.l.
Sensitivity analysis 2023			
Reduction in cash flows	9.6%	30.8%	12.1%

	1.1 PP	4.6 PP	1.9 PP
Increase in discount rates			

As at the reporting date, the Executive Board did not identify any realistic scenarios for Frequentis Comsoft GmbH, Systems Interface Ltd., team Technology Management GmbH or Business Recording that would result in impairment of goodwill.

Discount rate: The discount rate applied is the weighted average cost of capital (WACC). The discount rate does not reflect the risks underlying the adjustments to the estimated cash flow. The discount rate is an interest rate after taxes based on the interest rate on 30-year government bonds, taking into account common market and country-specific risks. This is converted into a WACC before taxes.

18. Investments accounted for at equity (associated companies)

	31 Dec. 2023 EUR thousand	31 Dec. 2022 EUR thousand
Investments accounted for at equity	2,903	2,097

Name of associated company	Registered office	Voting rights and shareholding as at	
		31 Dec. 2023	31 Dec. 2022
Flyk Oy	Valkeakoski	25%	25%
GroupEAD Europe S.L.	Madrid	28%	28%
Mission Embedded GmbH	Vienna	20%	20%
Nemergent Solutions S.L.	Bilbao	24.83%	15%
AIRNAV Technology Services Inc.	Iloilo	65%	40%
AIRlabs Austria GmbH	Graz	18%	18%
		50%	50%
AMANTEA Ltd.	Zabbar	(effective shareholding 25.5%)	(effective shareholding 25.5%)
		24%	24%
Lift S.r.l.	Cagliari	(effective shareholding 10.2%)	(effective shareholding 10.2%)
		20%	20%
Nowtech S.r.l.	Sassari	(effective shareholding 10.2%)	(effective shareholding 10.2%)

The reporting date for all associated companies is 31 December and they are all accounted for by applying the equity method of accounting. There were neither any unrealised losses nor any significant restrictions on the repayment of loans.

The increase in the interest in AIRNAV Technology Services Inc., (registered office: Iloilo, Philippines) from 40% to 65% was successfully completed on 20 February 2023. As a result, this company became a fully consolidated subsidiary (see Note 1. Changes in the consolidated group).

Since Frequentis no longer delegates a managing director for AIRlabs Austria GmbH (18% interest) and has thus relinquished its significant influence, this company is no longer accounted for by applying the equity method of accounting; it is now presented as an equity instrument.

The Frequentis Group holds 28% of the shares and voting rights in **GroupEAD Europe S.L.**, Madrid. The carrying amount of this investment developed as follows (based on the most recent available financial statements for 2022 and the dividends already received for 2023):

		2023 EUR thousand	2022 EUR thousand
31 Dec. prior year	Equity investment in GroupEAD Europe S.L.	491	491
	Attributable profit in prior year	156	58
	Less dividend paid for the prior year	-156	-58
	Provisional attributable profit in the reporting period	56	56
	Less dividend paid in the reporting period	-56	-56
31 Dec. reporting period	Equity investment in GroupEAD Europe S.L.	491	491

GroupEAD Europe S.L. acts as operational manager of the EAD system on behalf of EUROCONTROL. The EAD system was developed by the Frequentis Group, which is responsible for technical operation. The close relationship between the technical and operational managers has a positive impact on the quality of service and the customer relationship. In addition, the Frequentis Group is able to use the experience and operational expertise of GroupEAD Europe S.L. in the ongoing development of the EAD system and to develop other AIM systems for the international market.

The next table contains summarised financial information on this company as at the last reporting date (31 December 2022):

	31 Dec. 2022 EUR thousand	31 Dec. 2021 EUR thousand
GroupEAD Europe S.L.		
Non-current assets	365	301
Current assets	3,277	2,779
Non-current liabilities	0	0
Current liabilities	1,332	1,119
Net assets (100%)	2,310	1,961
Frequentis Group's share of net assets (28%)	647	549
Dividend paid in the following year	-156	-58
Carrying amount of the stake in the associated company	491	491
Revenues	7,862	7,127
Profit from continuing operations (100%)	758	409
Other comprehensive income (100%)	0	0
Total comprehensive income (100%)	758	409
Total comprehensive income (28%)	212	114
Earnings included in the prior year (28%)	-56	-56
Share of earnings for the following year included due to dividends received (28%)	56	56
Frequentis Group's share of total comprehensive income	212	114

The Frequentis Group holds 20% of the shares and voting rights in **Mission Embedded GmbH**, Vienna. The development of this investment is presented below:

		2023 EUR thousand	2022 EUR thousand
31 Dec. prior year	Equity investment in Mission Embedded GmbH	482	362
	Attributable profit/loss in the reporting period	58	116
	Actuarial losses in accordance with IAS 19	-2	4
31 Dec. reporting period	Equity investment in Mission Embedded GmbH	538	482

Mission Embedded GmbH was created by the spin-off of the "Mission Embedded" department in 2014 to drive forward the positive development of Frequentis' expertise in hardware and hardware-related software for safety-critical applications by giving it greater independence.

The next table contains summarised financial information on this company as at the last reporting date (31 December 2023):

Mission Embedded GmbH	31 Dec. 2023 EUR thousand	31 Dec. 2022 EUR thousand
Non-current assets	366	412
Current assets	7,534	6,577
Non-current liabilities	190	275
Current liabilities	5,018	4,302
Net assets (100%)	2,692	2,412
Frequentis Group's share of net assets (20%)	538	482
Carrying amount of the stake in the associated company	538	482
Revenues	9,563	8,766
Profit from continuing operations (100%)	290	580
Other comprehensive income (100%)	-12	22
Total comprehensive income (100%)	278	602
Frequentis Group's share of the profit from continuing operations (20%)	58	116
Frequentis Group's share of other comprehensive income (20%)	-2	4
Frequentis Group's share of total comprehensive income (20%)	56	120

In 2020, the Frequentis Group acquired a 15% interest in **Nemergent Solutions S.L.**, which has its registered office in Bilbao, Spain. The interest was acquired through Frequentis Invest4Tech GmbH (a wholly owned subsidiary of Frequentis AG). On 19 December 2023, the interest in Nemergent Solutions S.L. was increased to 24.83% through a capital increase.

Nemergent Solutions S.L. is a technology provider with high expertise in 3GPP standard-based mission-critical solutions over mobile broadband technologies. The Frequentis Group had previously worked on joint projects in the field of public transport and public safety, where Nemergent Solutions contributed technology for application services and mobile end devices for emergency services. This collaboration was strategically expanded and deepened because the LTE mobile communications standard offers new opportunities in safety-critical broadband communication.

The table shows the development of this investment:

		2023 EUR thousand	2022 EUR thousand
31 Dec. prior year	Equity investment in Nemergent Solutions S.L.	747	731
	Attributable loss (profit) in the reporting period	-36	16
	Purchase price for increase in the investment	836	0
31 Dec. reporting period	Equity investment in Nemergent Solutions S.L.	1,547	747

The next table contains summarised financial information on this company as at the last reporting date (31 December 2023):

Nemergent Solutions S.L.	31 Dec. 2023 EUR thousand	31 Dec. 2022 EUR thousand
Non-current assets	1,606	1,359
Current assets	1,397	1,034
Non-current liabilities	593	543
Current liabilities	212	249
Net assets (100%)	2,198	1,601
Frequentis Group's share of net assets (24.83%)	546	240
Goodwill	1,001	507
Carrying amount of the stake in the associated company	1,547	747
Revenues	772	1,036
Profit from continuing operations (100%)	-239	106
Other comprehensive income (100%)	0	0
Total comprehensive income (100%)	-239	106
Frequentis Group's share of the profit from continuing operations (15%)	-36	16
Frequentis Group's share of other comprehensive income (15%)	0	0
Frequentis Group's share of total comprehensive income (15%)	-36	16

On 1 September 2022, the Frequentis Group acquired a 25% interest in Aviamaps Oy, which has its registered office in Valkeakoski, Finland. This company was renamed **Flyk Oy** in 2023.

Flyk produces software for drone flight planning and airspace management and offers a real-time aviation maps platform for drone flights. Its software is integrated into the Frequentis solution for automatic approval of drone flights in Austria.

The table shows the development of this investment:

	2023 EUR thousand	2022 EUR thousand
31 Dec. prior year	Equity investment in Flyk Oy	140
Purchase price		125
Correction of attributable profit in the prior year	-3	
Attributable profit in the reporting period	4	15
31 Dec. reporting period	Equity investment in Flyk Oy	141
		140

The acquisition of the 51% interest in Regola S.r.l. in 2022 included the acquisition of interests in associated companies. The interests in these equity investments – AMANTEA Ltd., Lift S.r.l., and Nowtech S.r.l. – developed as follows:

	2023 EUR thousand	2022 EUR thousand
31 Dec. prior year	Equity investments in AMANTEA Ltd., Lift S.r.l., and Nowtech S.r.l.	165
Acquisition of Regola S.r.l.		152
Attributable profit/loss in the reporting period	22	13
31 Dec. reporting period	Equity investments in AMANTEA Ltd., Lift S.r.l., and Nowtech S.r.l.	187
		165

Since these companies are not significant associated companies, the following table presents the key financial data in aggregated from for Flyk Oy, Lift S.r.l., and Nowtech S.r.l. as at the most recent reporting date [31 December 2023]. Since the financial data for AMANTEA Ltd. as at 31 December 2023 were not available in time, the data from the latest available financial statements (as at December 31, 2022) are included in the table in the column as at 31 December 2023 and no data for this company are included in the table in the column as at December 31, 2022:

	31 Dec. 2023 EUR thousand	31 Dec. 2022 EUR thousand
Non-current assets	336	332
Current assets	752	619
Non-current liabilities	163	203
Current liabilities	571	437
Net assets (100%)	353	312
Frequentis Group's share of net assets	86	64
Goodwill	242	242
Carrying amount of the stake in the associated company	328	306
Revenues	1,043	520
Profit from continuing operations (100%)	91	115
Other comprehensive income (100%)	0	0
Total comprehensive income (100%)	91	115
Frequentis Group's share of the profit from continuing operations	26	28
Frequentis Group's share of other comprehensive income	0	0
Frequentis Group's share of total comprehensive income	26	28

From the annual profit of all associated companies accounted for at equity, a proportionate share of EUR 268 thousand (2022: EUR 275 thousand) is recognised. In the reporting period, proportionate losses of EUR 15 thousand (2022: EUR 0 thousand) at AMANTEA Ltd. were not recognised because this equity investment was measured at zero when it was initially included in the consolidated financial statements in 2022.

19. Inventories

	31 Dec. 2023 EUR thousand	31 Dec. 2022 EUR thousand
Raw materials and supplies	19,405	15,407
Work in progress	770	948
Finished goods	1,918	2,277
Merchandise	3,145	2,370
Advance payments made	1,390	724
	26,628	21,726

The increase in raw materials and supplies was mainly due to increased stocking of electronic components to ensure an adequate safety net to meet long-standing delivery and maintenance obligations despite the withdrawal of products by producers and supply bottlenecks.

Work in progress mainly comprises assemblies that were still being processed at the reporting date.

The finished goods are assemblies that are part of overall solutions for customers and can only be invoiced as distinct components of a contract with a customer in exceptional cases. The inventories result from optimisation of manufacturing batches (larger production batches reduce unit costs) and procurement lots, as well as the management of a safety stock for maintenance obligations.

Merchandise comprises assets, mainly for use in future customer projects.

The impairment loss on inventories was EUR 634 thousand in 2023 (2022: EUR 346 thousand). Reversals of EUR 35 thousand were recognised in 2023 (2022: EUR 445 thousand).

20. Trade accounts receivable

	2023 EUR thousand	2022 EUR thousand
Trade accounts receivable, gross	82,129	78,322
Individual loss allowances	-729	-931
Loss allowances pursuant to IFRS 9	-374	-403
Receivables from affiliated companies	3	2
Total trade accounts receivable, net	81,029	76,990

The trade accounts receivable as at 31 December 2023 include EUR 766 thousand resulting from business combinations.

Trade accounts receivable contain non-current items of EUR 365 thousand (31 December 2022: EUR 729 thousand) that have to be recognised as current items pursuant to IAS 1.68.

Trade accounts receivable are not interest-bearing and are generally due within 30 days.

Since most of the Frequentis Group's customers are public authorities, government-related businesses or, in the case of general contractors, large international companies, the credit risk is classified as low. One aspect of risk management at the Frequentis Group is that business relationships are only entered into with third parties that are deemed to be creditworthy. The creditworthiness of customers is systematically evaluated and deliveries are only made if they have appropriate credit standing or if adequate steps are taken to address the risks identified.

If a higher risk is identified during the proposal process, advances by customers or letters of credit are used to reduce the credit risk.

All identifiable risks are taken into account by appropriate loss allowances. In the event of default, the receivables are derecognised.

The Frequentis Group uses a loss allowance matrix to measure the expected credit losses (ECLs) on trade accounts receivable. The loss rates are calculated using a "roll-rate" method, which is based on the probability that a receivable will roll through successive stages of delinquency up to derecognition. The roll-rate analysis is performed for the aggregated amount of receivables. The loss rates are based on actual payment and credit loss experience in the past ten years.

The table shows the development of the loss allowance for trade accounts receivable:

	2023 EUR thousand	2022 EUR thousand
As at 31 December of the previous year	1,334	1,548
Foreign currency translation	-3	-14
Change in loss allowances pursuant to IFRS 9	-28	-1
Additions	481	293
Utilisation	-9	-195
Reversal	-672	-297
As at 31 December of the financial year	1,103	1,334

As at 31 December 2023, the loss rate of trade accounts receivable was as follows:

	Weighted average loss rate 2023	Weighted average loss rate 2022	2023 EUR thousand	2022 EUR thousand
Trade accounts receivable, net			81,026	76,988
of which: neither overdue nor impaired	0.03%	0.05%	63,709	54,574
of which, overdue but not impaired				
Up to 30 days	0.06%	0.16%	11,128	17,170
30-60 days	0.50%	0.70%	2,797	2,187
60-90 days	1.32%	0.61%	629	999
90-180 days	2.81%	4.29%	868	827
180-210 days	1.94%	7.24%	912	93
> 210 days	20.20%	19.33%	983	1,138

Due to their insignificance, receivables from affiliated companies in the amount of EUR 3 thousand (2022: EUR 2 thousand) are not included in the presentation of the structure of overdue trade accounts receivable.

The Frequentis Group's experience with public sector customers shows that the payment date often deviates from the due date. This is frequently due to approval processes and budget procedures within the authorities (especially around year-end). Past experience shows that such payment delays do not in themselves indicate a higher risk of default.

Since most customers are in the public sector or are large international companies, there were no significant defaults on receivables in the reporting period. In view of its customer structure, the Frequentis Group does not expect the credit risk to increase. However, since an increase in insolvencies is expected in 2024 and subsequent years, it has defined a scale factor of 1.5, which is taken into consideration when calculating loss allowances pursuant to IFRS 9. This reflects the actual and forecast insolvency rates due to the economic consequences of the war in Ukraine.

21. Contract assets

	31 Dec. 2023 EUR thousand	31 Dec. 2022 EUR thousand
Contract assets, gross	98,154	85,364
Loss allowances pursuant to IFRS 9	-19	-19
Total contract assets	98,135	85,345
Advances from customers	-36,863	-34,870
	61,272	50,475

The contract assets mainly result from performance obligations already satisfied by the Group but not yet invoiced. Contract assets are reclassified to trade accounts receivable when there is an unconditional right to receive consideration. This is normally the case when the Group issues an invoice for the goods and services provided.

The contract assets of EUR 50,475 thousand recognised as at 1 January (2022: EUR 38,353 thousand) include EUR 43,085 thousand (2022: EUR 32,055 thousand) that were invoiced in the reporting period.

Of the total contract assets of EUR 61,272 thousand as at 31 December 2023 (2022: EUR 50,475 thousand), it is expected that EUR 49,143 thousand (2022: EUR 41,161 thousand) will be charged to customers in the following year – based on expected project progress and contractual clauses. Contract assets with a carrying amount of EUR 12,129 thousand (2022: EUR 9,314 thousand) are not expected to be invoiced until after 2024. Since realisation of the contract assets is expected to take place within the operating cycle, all contract assets are classified as current.

It is assumed that there are no relevant default risks for contract assets. The loss allowance for contract assets was EUR 19 thousand in 2023 (2022: EUR 19 thousand). In the case of orders for which the Group makes advance payments, the creditworthiness of customers is carefully reviewed. These orders primarily relate to work for public authorities or major international companies.

Based on the sensitivity analysis, a 10% reduction in contract costs not yet incurred would increase contract assets by EUR 9,037 thousand (2022: EUR 6,516 thousand), while a 10% increase in contract costs not yet incurred would reduce contract assets by EUR 6,375 thousand (2022: EUR 5,966 thousand).

22. Contract costs

In the Frequentis Group, contract costs mainly comprise sales commission. These contract costs are recognised and amortised in line with the transfer of control over goods and services to the customer.

The development of the contract costs recognised is as follows:

	2023 EUR thousand	2022 EUR thousand
As at 1 January	4,024	3,711
Contract costs recognised in the reporting period	1,368	3,480
Amortisation in the reporting period	-2,984	-3,146
Impairment losses	-14	-21
As at 31 December	2,394	4,024

The amortisation expense for contract costs in the next 12 months is expected to amount to EUR 1,664 thousand (2022: EUR 3,148 thousand). Since the contract costs are expected to be incurred within an operating cycle, all contract costs are classified as current.

The Frequentis Group uses the practical expedient of recognising contract costs as an expense if the amortisation period is less than one year.

The amortisation expense for capitalised contract costs is recognised in the cost of materials and purchased services.

23. Other assets

	31 Dec. 2023 EUR thousand	31 Dec. 2022 EUR thousand
Pension reinsurance	454	610
Equity instruments	22	0
Other financial assets	220	275
Other non-current financial assets	696	885
Receivables from grants and subsidies	1,925	1,860
Positive fair value of cash flow hedges and MTM valuation	728	661
Other financial assets	604	238
Other current financial assets	3,257	2,759
Prepaid expenses and deferred charges	7,293	5,869
Receivables from research grants and incentives	5,896	3,569
Receivables from fiscal authorities (excluding income taxes)	1,691	1,508
Receivables from investment grants	0	152
Other assets	322	262
Other current non-financial assets	15,202	11,360

24. Cash and cash equivalents

	31 Dec. 2023 EUR thousand	31 Dec. 2022 EUR thousand
Cash and cash equivalents	86,998	94,198
Loss allowances	-12,818	-12,818
	74,180	81,380

The cash and cash equivalents comprise investments and bank deposits, all of which are short-term and have an original term of up to three months. The carrying amount of these assets corresponds to their fair value. All components of cash and cash equivalents are freely available to the company.

The loss allowances comprise the total amount of the deposit due on demand at Commerzialbank Mattersburg, for which an impairment loss had to be recognised in 2020, with the exception of the EUR 100 thousand covered and paid out by the deposit insurance.

In accordance with IFRS 9, based on the expected credit loss (ECL) model, loss allowances were established at the date of recognition of the bank deposits on the basis of the expected potential credit losses. No loss allowances had to be recognised for bank balances – with the exception of those at Commerzialbank Mattersburg – due to good ratings and the short-term nature of the deposits (due on demand).

More than two-thirds of the cash and cash equivalents (including time deposits) of EUR 84,680 thousand as at 31 December 2023 was deposited with eleven system-relevant major banks in Austria and Germany. Around one-third was deposited with approximately 25 other banks in Europe, Australia, Asia, and the Americas.

25. Share capital and retained earnings

At the Annual General Meeting on 1 June 2023, the Executive Board was authorised, subject to the approval of the Supervisory Board, to increase the share capital of Frequentis AG by up to EUR 6.64 million up to 31 May 2028 by issuing up to 6.64 million new no-par-value bearer shares in return for cash or contributions in kind, in one or more tranches, or through a direct subscription offer following acceptance by one or more banks in accordance with Section 153 (6) of the Austrian Companies Act (AktG). The Executive Board was also authorised, subject to the approval of the Supervisory Board, to fully or partially exclude shareholders' subscription rights and, subject to the approval of the Supervisory Board, to define further details of the issue conditions (especially the issue price, type of contribution in kind, rights of the shares, exclusion of subscription rights, etc.) (authorised capital).

Treasury shares

At the Extraordinary General Meeting of Frequentis AG on 20 September 2019, the Executive Board was authorised, pursuant to Section 65 (1b) AktG, for a period of five years from the date of the resolution, therefore up to and including 19 September 2024, with the consent of the Supervisory Board but without a further resolution by the General Meeting to sell or use treasury shares, also in a manner other than by sale on the stock exchange or by means of a public offer, in particular to sell or use treasury shares

- a) to grant treasury shares to employees, senior managers, and/or members of the Executive Board or the managing boards of its affiliates, including for purposes of share transfer programmes, in particular stock options, long-term incentive plans, and other stock ownership plans,
- b) to deliver treasury shares under convertible bonds issued by Frequentis AG,
- c) as consideration for the acquisition of entities, business operations, parts of business operations or shares in one or several domestic or foreign companies, and
- d) for any other legally permissible purpose

and to exclude the subscription rights of shareholders. This authorisation may be exercised in full or in part or in several tranches and for several purposes.

At the Annual General Meeting of Frequentis AG on 2 June 2022, the Executive Board was authorised, for a period of 30 months, to purchase shares in Frequentis AG pursuant to Section 65 (1) subsections 4 and 8 of the Austrian Companies Act (AktG), both via the stock market and outside the stock exchange, and to exclude the general selling possibilities of shareholders related to such purchase. Furthermore, the Executive Board was authorised to reduce the share capital by cancelling shares in Frequentis AG without a further resolution of the General Meeting.

With the approval of the Supervisory Board, in May 2022 and May 2023 the Executive Board passed a resolution to transfer to the Chairman of the Executive Board 6,590 treasury shares for the achievement of the targets for the LTIP 2019 and 7,925 treasury shares for the achievement of the targets for the LTIP 2020, under exclusion of the subscription rights of existing shareholders.

On 17 August 2023, the Executive Board of Frequentis AG decided to undertake a share buyback in accordance with Section 65 (1) subsections 4 and 8 of the Austrian Companies Act (AktG) on the basis of the authorisation of the Annual General Meeting of 2 June 2022. A total of 17,500 shares with a total value of EUR 520 thousand (including incidental expenses) were repurchased. The share buyback programme ended on 13 November 2023.

As at 31 December 2023, Frequentis held 18,485 treasury shares (31 December 2022: 8,910). That was 0.1392% of the share capital.

The total number of issued shares was 13,280,000 (2022: 13,280,000).

At year-end 2023, the shareholder structure of Frequentis AG was as follows:

Johannes Bardach has a shareholding of approximately 68% (approximately 8% held directly and 60% held indirectly via Frequentis Group Holding GmbH), B&C Holding Österreich GmbH holds more than 10% of the shares, and the free float is around 22%. The shareholder structure is basically unchanged compared with the previous year.

The development of shareholders' equity is presented in the consolidated statement of changes in shareholders' equity.

Dividend

The net profit of Frequentis AG stated in the individual financial statements as at 31 December 2023 is EUR 16,601 thousand (31 December 2022: EUR 18,953 thousand) and the accumulated profit is EUR 75,552 thousand (31 December 2022: EUR 62,361 thousand).

The Annual General Meeting of Frequentis AG on 1 June 2023 passed a resolution to pay a dividend of EUR 0.22 per no-par-value share entitled to the dividend for the 2022 financial year. The dividend less statutory capital gains tax of 27.5% was paid in June 2023.

In 2023, a dividend of EUR 2,921 thousand (EUR 0.22 per share) was distributed for the 2022 financial year (2022 for 2021: EUR 2,654 thousand / EUR 0.20 per share).

26. Reserves

The following table presents the expenses and income and the related tax liability recognised in other comprehensive income:

Item	Amount before income taxes	Amount after income taxes	Amount before income taxes	Amount after income taxes
	2023	2023	2022	2022
	EUR	EUR	EUR	EUR
Foreign currency translation	-484	0	-484	284
Measurement of cash flow hedges	164	-39	125	-76
Remeasurement of post-employment benefits				
	-1,357	322	-1,035	4,020
Investments accounted for at equity – amounts recognised in other comprehensive income	-2	0	-2	4
			-1,396	3,353
				2,844

27. Share-based payment

Frequentis AG agreed long-term incentive plans with the Chairman of the Executive Board, Mr. Norbert Haslacher, in 2020, 2021, 2022, and 2023 (LTIP 2020, LTIP 2021, LTIP 2022, and LTIP 2023).

The share-based payment is measured in accordance with IFRS 2 at fair value on the grant date. The expense is allocated over the required vesting period. Since the agreements stipulate that the shares awarded under the LTIP cannot be settled in cash, the share-based payment is recognised in a separate item of equity.

The participant in the plans is not required to make a personal investment in Frequentis AG shares. From the grant date, in each calendar year the beneficiary can sell a maximum of one third of the shares awarded under the LTIPs. However, the beneficiary may only sell the number of shares awarded under the current LTIPs or any subsequent long-term incentive plan if, at all times, he holds at least 7,000 of the shares awarded under a long-term incentive plan ("minimum shareholding").

The service period for the fulfilment of the targets has been set at three years. The targets for the key indicators were set by the Supervisory Board. On the settlement date (at the earliest three years after the grant date), a maximum of 17,000 shares for the LTIP 2020 and 2021 and a maximum of 18,000 shares for the LTIP 2022 and 2023 (gross, i.e., before deduction of taxes and fees) but no more than 200% of the beneficiary's annual gross base salary will be granted if the targets are fully achieved. Settlement is effected by transferring the number of shares corresponding to the net amount of the award to the respective securities account.

The entitlement to the maximum number of shares arises at 100% target achievement. A lower target achievement level will result in a proportionate reduction in the entitlement. No shares will be allocated if target achievement is less than 50%.

In order to qualify for the allocation of shares in the company, targets must be achieved. The achievement of the targets for each of the plans is measured over a three-year performance period.

The following table summarises the main conditions for the share-based payment granted in the reporting period (the LTIP 2020 ended in the reporting period):

	LTIP 2023	LTIP 2022	LTIP 2021	LTIP 2020
Beginning of the plan	1 Jan. 2023	1 Jan. 2022	1 Jan. 2021	1 Jan. 2020
Date of approval by General Meeting	1 June 2023	2 June 2022	20 May 2021	14 May 2020
Grant date	1 June 2023	2 June 2022	15 June 2021	14 May 2020
End of service period	31 Dec. 2025	31 Dec. 2024	31 Dec. 2023	31 Dec. 2022
Vesting date	30 Apr. 2026	30 Apr. 2025	30 Apr. 2024	30 Apr. 2023
Expected target achievement	86.5%	67%	119%	100%
Expected no. of shares	15,570	12,060	17,000	17,000
Maximum no. of shares	18,000	18,000	17,000	17,000
Bonus shares allocated	None	None	None	None

The agreed targets are measured against the following performance indicators:

LTIP 2023	LTIP 2022	LTIP 2021	LTIP 2020
Total shareholder return (TSR)	Total shareholder return (TSR)	Total shareholder return (TSR)	Total shareholder return (TSR)
Orders on hand / book-to-bill ratio	Revenue growth	Increase in operating performance through key accounts	Orders on hand
Order intake at selected Group companies	Earnings increase	Growth through new business development	Growth in the regions
Growth in operating performance in the Public Safety & Transport segment	Employee satisfaction		Growth through acquisitions
Trainee programmes in the areas of sales, project management, and/or systems engineering			

In May 2023, the targets set for the LTIP 2020 were evaluated for the performance period from 1 January 2020 to 31 December 2022 and it was established that they had been fully met, so 17,000 treasury shares (gross number of shares before taxes) were to be transferred to the Chairman of the Executive Board. Taking into consideration the tax to be withheld, 7,925 treasury shares were transferred in this context.

Of the expected total future expense relating to the LTIPs, the portion already earned as at the reporting date is recognised in shareholders' equity. This is based on the fair value on the grant date. The total expected expense for the LTIP obligation is measured at the fair value of the share relative to the share price on the date of the agreement, multiplied by the number of shares granted and the expected target achievement. In the reporting period, EUR 389 thousand (2022: EUR 427 thousand) including payroll-related costs was recognised in personnel expenses in the consolidated statement of comprehensive income and in shareholders' equity for the LTIPs.

For the LTIPs, it is assumed that both the market-oriented targets and the non-market-oriented targets will be achieved so the effect of the market-oriented targets must be reflected in the expected level of target achievement and not in the fair value of the shares.

28. Non-controlling interests

The non-controlling interests relate to the following subsidiaries:

	31 Dec. 2023 EUR thousand	31 Dec. 2022 EUR thousand
AIRNAV Technology Services Inc., Iloilo	63	-
ATRiCS Advanced Traffic Solutions GmbH, Freiburg	-156	132
ELARA Leitstellentechnik GmbH, Aachen	0	0
FRAFOS GmbH, Berlin	262	-
FRAFOS CZ s.r.o., Prague	6	-
Frequentis DFS Aerosense GmbH, Vienna	162	135
Regola S.r.l., Turin	0	0
Secure Service Provision GmbH, Leipzig	-	472
Systems Interface Ltd., Bordon	0	-432
team Technology Management GmbH, Vienna	1,599	1,766
TEAM Technology Management GmbH, Gräfelfing	221	151
	2,157	2,224

Due to the put options of the non-controlling shareholders in ELARA Leitstellentechnik GmbH, FRAFOS GmbH, Regola S.r.l., and Systems Interface Ltd., the corresponding interests are recognized as financial liabilities.

team Technology Management GmbH distributed a proportionate dividend of EUR 735 thousand to non-controlling shareholders in the reporting period, Secure Service Provision GmbH distributed a proportionate dividend of EUR 61 thousand, and ELARA Leitstellentechnik distributed a proportionate dividend of EUR 407 thousand.

The following table provides information on the statement of financial position of consolidated subsidiaries with significant non-controlling interests and the carrying amount of the non-controlling interests (amounts stated in EUR thousand, before intragroup eliminations):

Statement of financial position as at 31 December 2023	Non- current assets*)	Current assets	Non- current liabilities	Current liabilities	Net assets	Carrying amount of non- controlling interests
AIRNAV Technology Services Inc.	93	204	5	113	179	63
ATRiCS Advanced Traffic Solutions GmbH	102	1,250	232	1,439	-319	-156
ELARA Leitstellentechnik GmbH	375	1,369	48	447	1,250	0
FRAFOS GmbH, Berlin	2,609	2,262	1,108	771	2,992	262
FRAFOS CZ s.r.o., Prague	29	62	0	65	26	6
Frequentis DFS Aerosense GmbH	3	5,709	5,172	0	540	162
Regola S.r.l.	3,379	4,162	1,355	2,082	4,104	0
Systems Interface Ltd.	211	1,861	1,372	755	-56	0
team Technology Management GmbH	933	6,002	687	2,882	3,366	1,599
TEAM Technology Management GmbH	40	731	20	452	299	221
					2,157	

*) excluding goodwill

Statement of financial position as at 31 December 2022	Non-current assets*)	Current assets	Non-current liabilities	Current liabilities	Net assets	Carrying amount of non- controlling interests
ATRiCS Advanced Traffic Solutions GmbH	385	1,106	179	1,043	269	132
ELARA Leitstellentechnik GmbH	393	1,410	142	498	1,163	0
Frequentis DFS Aerosense GmbH	4	3,628	2	3,181	449	135
Regola S.r.l.	3,344	3,853	1,484	1,837	3,876	0
Secure Service Provision GmbH	194	2,407	85	155	2,361	472
Systems Interface Ltd.	34	1,835	1,317	1,434	-882	-432
team Technology Management GmbH	979	5,033	728	1,576	3,707	1,766
TEAM Technology Management GmbH	12	491	1	298	204	151
						2,224

*) excluding goodwill

The following table provides information on the income statement and statement of comprehensive income of the consolidated subsidiaries with significant non-controlling interests (in EUR thousand):

2023	Amounts before intragroup elimination					Earnings attributable to non-controlling interests		
	Operating performance	Profit for the period	Other comprehensive income	comprehensive income	Total	Profit for the period	Other comprehensive income	Total comprehensive income
AIRNAV Technology Services Inc.*]	858	33	0	33	12	-2	10	
ATRiCS Advanced Traffic Solutions GmbH	2,360	-587	0	-587	-288	0	-288	
ELARA Leitstellentechnik GmbH	5,177	919	0	919	450	0	450	
FRAFOS GmbH, Berlin*)	2,062	391	0	391	91	0	91	
FRAFOS CZ s.r.o., Prague*)	346	7	0	7	2	0	2	
Frequentis DFS Aerosense GmbH	4,142	92	0	92	28	0	28	
Regola S.r.l.	5,374	281	-53	228	138	-26	112	
Secure Service Provision GmbH**]	1,952	401	0	401	80	0	80	
Systems Interface Ltd.	5,558	846	0	846	414	-9	405	
team Technology Management GmbH	10,798	1,158	1	1,159	567	0	567	
TEAM Technology Management GmbH	2,300	94	0	94	70	0	70	
Total					1,564	- 37	1,527	

*) Pro rata amounts from 20 February 2023 (AIRNAV) and 3 April 2023 (FRAFOS and FRAFOS CZ)

**) Pro rata amounts until 2 July 2023

2022	Amounts before intragroup elimination					Earnings attributable to non-controlling interests		
	Operating performance	Profit for the period	Other comprehensive income	Total comprehensive income	Profit for the period	Other comprehensive income	Total comprehensive income	
ATRiCS Advanced Traffic Solutions GmbH	1,265	-3,253	0	-3,253	-1,594	0	-1,594	
ELARA Leitstellentechnik GmbH	4,274	831	0	831	407	0	407	
Frequentis DFS Aerosense GmbH	5,737	133	0	133	40	0	40	
Regola S.r.l.	10,115	712	162	874	349	79	428	
Secure Service Provision GmbH	3,362	614	0	614	123	0	123	
Systems Interface Ltd.	4,207	295	0	295	144	27	171	
team Technology Management GmbH	9,924	1,130	16	1,146	554	8	562	
TEAM Technology Management GmbH	1,148	178	0	178	132	0	132	
Total					155	114	269	

29. Non-current provisions

	31 Dec. 2023 EUR thousand	31 Dec. 2022 EUR thousand
Provisions for severance payments	16,609	14,529
Provisions for pensions	4,599	4,356
Less pension insurance scheme	-2,645	-2,365
	1,954	1,991
Provisions for anniversary bonuses	295	302
Other provisions	807	441
Total non-current provisions	19,665	17,263

Since the life insurance policies are pledged to cover pension obligations, the corresponding amount accumulated in the pension insurance scheme is offset against the pension provisions.

Provisions for severance payments

This item mainly comprises claims by employees in Austria to one-off severance payments on the basis of statutory regulations and collective agreements. These payments may arise due to dismissal by the employer, termination of the employment contract by mutual consent, retirement or death of the employee. The level of the severance payment depends on the number of years of service with the Frequentis Group and the remuneration applicable when the employee leaves the Group.

The corresponding severance payments will result in outflows between 2024 and 2047.

Obligations for severance payments were measured using the following parameters:

	2023	2022
Interest rate	3.5%	4.14%
Wage and salary trend	4.6%	4.6%
Average term of the defined benefit obligation	9.41 years	9.88 years

The following table provides the reconciliation of the severance payment obligations from the opening to the closing balance for the reporting period:

	2023 EUR thousand	2022 EUR thousand
Present value of severance payment obligations (DBO)		
as at 1 January = provisions as at 1 January	14,529	16,110
Foreign currency translation	-2	3
Additions from business combinations	0	816
Current service cost (CSC)	689	839
Interest cost (IC)	587	173
Actual payments made	-301	-659
Recognised actuarial loss (+)/gain (-)	1,107	-2,753
Present value of severance payment obligations (DBO)		
as at 31 December = provisions as at 31 December	16,609	14,529

The provisions for severance payments relate mainly to employees who joined the Austrian companies in the Frequentis Group before 31 December 2002 as a change in Austrian law led to a switch from defined benefit to defined contribution severance payments on 1 January 2003. The new regulation applies to employees who took up employment with the Group after 31 December 2002. For these employees, the Group pays a monthly contribution to an external post-employment benefit plan which has to guarantee the severance payments, so the Group has no severance payment obligations for these employees. The expenses for this were EUR 1,134 thousand in the reporting period (2022: EUR 1,018 thousand).

In addition, voluntary severance payments amounting to EUR 87 thousand were made in the reporting period (2022: EUR 185 thousand).

The actuarial gains/losses for severance payment obligations recognised in other comprehensive income were as follows:

	2023 EUR thousand	2022 EUR thousand
Changes in demographic assumptions	5	0
Changes in financial assumptions	914	-2,990
Other changes	188	237
Total	1,107	-2,753

The main risk relating to severance payment obligations is the development of inflation and salary increases.

The following sensitivity analysis for severance payment obligations shows the effect of changes in the key actuarial parameters, while the other assumptions remained unchanged.

Interest rate	Salary increases	DBO 31 Dec. 2023 EUR thousand
3.5%	5.1%	17,334
3.35%	4.6%	16,833
3.5%	4.6%	16,609
3.65%	4.6%	16,389
3.5%	4.1%	15,923

Interest rate	Salary increases	DBO 31 Dec. 2022 EUR thousand
4.14%	5.1%	15,195
3.99%	4.6%	14,734
4.14%	4.6%	14,529
4.29%	4.6%	14,328
4.14%	4.1%	13,901

Provisions for pensions

Generally, the pension benefits for employees are provided by state social security institutions. The Frequentis Group has a legal obligation to pay pension and health care contributions for its employees. In addition, there are the defined benefit obligations outlined below.

The pension benefit obligations are defined benefit obligations arising from individual commitments to current members of the Executive Board and two former members of the Executive Board. The beneficiaries receive a lifelong monthly retirement pension or pension benefits for surviving dependants, resulting from reinsurance contributions.

In addition, Frequentis Orthogon GmbH has defined benefit obligations arising from individual commitments to four employees. The beneficiaries are entitled to a lifelong fixed retirement pension, which is only partly covered by reinsurance.

The plan assets comprise funded insurance of Frequentis AG, which is pledged to the entitled beneficiaries. Since the funded insurance of Frequentis Orthogon GmbH is not pledged to the entitled beneficiaries, it is recognised in the statement of financial position in other non-current financial assets.

The pension benefit obligations were measured using the following parameters:

	2023	2022
Interest rate	3.6%	4.2%
Retirement age	60/65 years	60/65 years
Average term of the defined benefit obligation	12.13 years	11.75 years

Development of pension provisions and plan assets:

	2023 EUR thousand	2022 EUR thousand
Present value of the defined benefit obligation (DBO) as at 1 January	4,356	6,046
Fair value of plan assets	-2,365	-3,427
+ Provisions / - surplus plan assets as at 1 January	1,991	2,619
Present value of the defined benefit obligation (DBO) as at 1 January	4,356	6,046
Service cost	123	228
Interest cost	179	78
Pension payments	-387	-137
Recognised actuarial losses (+)/gains (-)	328	-1,859
Present value of the pension benefit obligations (DBO) as at 31 December	4,599	4,356
Fair value of plan assets as at 1 January	2,365	3,427
Reclassified	0	-573
Return on plan assets	126	37
Payments made	200	175
Payments received from plan assets	-124	-108
Recognised actuarial losses (-)/gains (+)	-57	43
Change in the asset ceiling	135	-636
Fair value of plan assets as at 31 December	2,645	2,365
Provisions as at 31 December		
Present value of the pension benefit obligation (DBO)	4,599	4,356
Fair value of plan assets	-2,645	-2,365
+ Provisions / - surplus plan assets as at 31 December	1,954	1,991

In 2022, EUR 573 thousand relating to Frequentis Orthogon GmbH was reclassified from plan assets to other non-current financial assets.

In addition, voluntary and statutory defined contribution pension payments of EUR 2,669 thousand were made in the reporting period (2022: EUR 2,218 thousand).

It is expected that EUR 216 thousand will be paid into the pension insurance in 2024 (2023: EUR 221 thousand).

The actuarial gains recognised in other comprehensive income in the reporting period were as follows:

	2023 EUR thousand	2022 EUR thousand
Changes in demographic assumptions	0	0
Changes in financial assumptions	349	-1,858
Other changes	-21	-1
Other changes to plan assets	57	-43
Total	385	-1,902

For the Frequentis Group, the principal risks relating to pension obligations are the development of life expectancy and the development of inflation, because the pension benefits comprise lifelong pension payments. The risk remaining with the Frequentis Group is that the development of the plan assets may not cover the anticipated minimum return or preserve the value of the capital.

The following sensitivity analysis for the defined benefit obligation shows the effect of changes in the key actuarial assumptions, while the other assumptions remained unchanged.

Interest rate	DBO 31 Dec. 2023
	EUR thousand
3.45%	4,693
3.6%	4,599
3.75%	4,314

Interest rate	DBO 31 Dec. 2022
	EUR thousand
4.05%	4,445
4.20%	4,356
4.35%	4,269

Provisions for anniversary bonuses

Provisions for obligations to pay anniversary bonuses relate to long-term employee benefits at Frequentis Comsoft GmbH based on company practice. Employees are granted a one-off bonus of between EUR 1 thousand and EUR 3 thousand for a certain length of service.

Obligations for anniversary bonuses were measured by applying an interest rate of 3.5% (2022: 4.14%) and an average term of 6.7 years (2022: 7.2 years).

	2023 EUR thousand	2022 EUR thousand
Present value of the anniversary bonus obligations (DBO) corresponding to the provisions as at January 1	302	389
Current service cost [CSC]	30	41
Interest cost [IC]	11	4
Actual payments made	-49	-47
Recognised actuarial loss (+)/gain (-)	1	-85
Present value of the anniversary bonus obligations (DBO) as at 31 December = provisions as at 31 December	295	302

The main risk relating to anniversary bonus obligations is the development of inflation.

The following sensitivity analysis for anniversary bonus obligations shows the effect of changes in the key actuarial assumptions, while the other assumptions remained unchanged.

Interest rate	DBO 31 Dec. 2023
	EUR thousand
3.35%	298
3.5%	295
3.65%	292

Interest rate	DBO 31 Dec. 2022
	EUR thousand
3.99%	305
4.14%	302
4.29%	300

Other non-current provisions

The other non-current provisions comprise:

	As at 31 Dec. 2022 EUR thousand	Foreign currency translation EUR thousand	Interest EUR thousand	Utilisation EUR thousand	Reversal EUR thousand	Additions EUR thousand	Reclassified to liabilities EUR thousand	As at 31 Dec. 2023 EUR thousand
Provisions for leave based on period of service	103	-3	4	-7	-21	9	0	85
Provisions for projects	211	0	-21	-0	0	429	0	619
Other	127	-1	1	-55	0	30	0	102
	441	-4	-16	-62	-21	468	0	807

A long-term holiday provision is recognised for two foreign subsidiaries for an additional holiday entitlement which is dependent on length of service. Short-term holiday entitlements are recognised in other liabilities.

The provisions for projects relate to projects where the expected future expenses exceed expected revenues. They are not expected to be utilised within the next twelve months.

The interest on the provisions for leave based on period of service is recognised in personnel expenses, while the interest on the provisions for projects and the other provisions is recognised in interest expense.

30. Contract liabilities

Contract liabilities comprise obligations to transfer goods or services to customers, for which consideration has already been received. These primarily relate to advance payments, some of which are secured by prepayment guarantees. In addition, in some cases payments are secured by bank guarantees. No collateral existed, either on the reporting dates or during the year.

The following table shows the structure of contract liabilities:

	31 Dec. 2023 EUR thousand	31 Dec. 2022 EUR thousand
Advances for customer projects	86,504	80,029
Advances offset against contract assets	-33,411	-32,048
	53,093	47,981
Other contract liabilities	9,422	13,382
Other contract liabilities offset against contract assets	-3,452	-2,822
	5,970	10,560
Accrued revenue for maintenance contracts	11,927	8,798
Liabilities for outstanding performance obligations for customer orders after final invoicing (current)	939	691
Liabilities for outstanding performance obligations for customer orders after final invoicing (non-current)	195	5
Total contract liabilities	72,124	68,035

Other contract liabilities contain contractual claims to advance payments.

EUR 1,233 thousand (2022: EUR 3,018 thousand) of the contract liabilities have a term of more than 12 months. Since the contract costs are expected to be incurred within a normal operating cycle, all contract costs are classified as current.

31. Other liabilities

The other liabilities comprise:

	31 Dec. 2023 EUR thousand	31 Dec. 2022 EUR thousand
Liability for put options, non-controlling interests	10,818	3,262
Earn-out payment liabilities	1,502	0
Loan from FFG (Austrian Research Promotion Agency)	850	284
Loans from non-controlling interests	434	426
Other liabilities	368	267
Total non-current financial liabilities	13,972	4,239
Liabilities in connection with an operating lease	2,625	0
Liability for put options, non-controlling interests	1,244	2,786
Negative fair values of cash flow hedges and MTM valuation	787	1,591
Earn-out payment liabilities	502	250
Loans from non-controlling interests	30	30
Other liabilities	1,403	1,430
Total current financial liabilities	6,591	6,087
Accrual for holidays not yet taken	5,607	4,642
Liabilities to the Austrian fiscal authorities (excluding income taxes)	3,884	1,968
Advances received in connection with grants and subsidies	3,072	762
Liabilities to health insurers	829	702
Accrual for overtime	716	635
Accrual for consultancy costs	768	595
Other liabilities	568	957
Total current non-financial liabilities	15,444	10,261

The non-current earn-out payment liabilities, which are allocated to level 3 in the fair value hierarchy, are one element of the contractually agreed purchase prices for FRAFOS GmbH and Frequentis Recording AS, which were acquired in 2023. The earn-out payment for FRAFOS GmbH is based on the annual financial statements prepared in accordance with the German Commercial Code and is dependent on achievement of an EBIT target. The earn-out payment for Frequentis Recording AS is based on the number of recording solutions sold.

These liabilities were remeasured as at the reporting date. In view of the increase in EBIT in the reporting period and the expected increase in subsequent years, the liability relating to FRAFOS GmbH was increased from the original amount of EUR 752 thousand to EUR 955 thousand. This increase is recognised in other operating expenses. In the case of Frequentis Recording, there was no change in the assumptions made at the acquisition date.

There is a further agreement on an earn-out payment for ATRiCS Advanced Traffic Solutions GmbH. This is dependent on achievement of an EBIT target, the net cash/debt ratio as of 31 December 2024, and the deviation from the target working capital as at 31 December 2024. Based on the challenging order situation and the available figures, payment is no longer expected.

The non-current liability for put options of non-controlling interests relates to options held by non-controlling shareholders in Regola S.r.l., ELARA Leitstellentechnik GmbH, and FRAFOS GmbH to transfer these interests to Frequentis. If the options are exercised, Frequentis has an irrevocable obligation to acquire the interests in these businesses. The earliest exercise dates for these put options are 2027 (Regola S.r.l. and FRAFOS GmbH) and 2028 (ELARA Leitstellentechnik GmbH). The agreement with ELARA Leitstellentechnik GmbH was modified in the reporting period. This altered the calculation of the enterprise value and postponed the initial exercise date to January 2028.

For Regola S.r.l. and ELARA Leitstellentechnik GmbH, the value of the put option corresponds to the enterprise value less net financial debt, while for FRAFOS GmbH it corresponds to the enterprise value less net financial debt and the deviation from target working capital. The enterprise value is determined using a multiples-based valuation. The basis for this multiples-based valuation is EBIT for the 12 months directly prior to exercise of the option (in the case of Regola S.r.l.), the average revenues and EBIT reported in the annual financial statements for the last two financial years immediately prior to exercise of the option (in the case of ELARA Leitstellentechnik GmbH), or the average EBIT in the three years immediately prior to exercise of the option (in the case of FRAFOS GmbH).

The current liability for a put option of non-controlling interests relates to an option held by non-controlling shareholders in Systems Interface Ltd. to transfer these interests to Frequentis. Based on the contractual terms, this option could be exercised for the first time as at the reporting date and Frequentis had an irrevocable obligation to acquire the interests in this business. This put option was exercised on 26 January 2024.

32. Other current provisions

The other current provisions comprise:

	As at 31 Dec. 2022 thousand	Foreign exchange difference EUR	Additions from business combinations EUR thousand	Utilisation EUR thousand	Reversal EUR thousand	Added EUR thousand	As at 31 Dec. 2023 EUR thousand
Bonuses	11,207	-69	7	11,145	0	12,144	12,144
Provisions for projects	1,220	-13	0	1,207	0	1,503	1,503
Litigation costs	1,027	0	0	182	0	0	845
Other	1,460	-1	1	1,099	64	1,034	1,331
	14,914	-83	8	13,633	64	14,681	15,823

The provisions for bonuses contain employee bonuses and variable salary components that are not yet due for payment.

The provisions for projects contain project costs for which provisions are recognised due to the excess of estimated future expenses over revenues.

The provisions for litigation costs relate to the lawsuit filed in connection with Commerzialbank Mattersburg.

It is expected that the current provisions will result in actual outflows in the 2024 financial year.

Based on the sensitivity analyses performed, a 10% reduction in the remaining costs would reduce the provisions for projects by EUR 983 thousand (2022: EUR 543 thousand) and a 10% increase in the remaining costs would increase the provisions for projects by EUR 1,187 thousand (2022: EUR 582 thousand).

Other information

33. Consolidated cash flow statement

In the consolidated cash flow statement, cash inflows and outflows for operating, investing, and financing activities are reported separately. The operating cash flow is reported using the indirect method. Non-cash expenses (mainly depreciation and amortisation) and income are therefore added to or deducted from the profit/loss before tax. Taking into consideration changes in net working capital, this gives the cash flow from operating activities. Cash flows from forward exchange contracts are recognised in the cash flow from operating activities.

The increase in the cash flow from operating activities from EUR 14,223 thousand to EUR 25,655 thousand was mainly due to the increase of EUR 6,757 thousand (2022: EUR 239 thousand) in other liabilities and the increase in the net cash flow from operations from EUR 43,606 thousand to EUR 46,819 thousand.

Investing activities mainly comprise cash inflows and outflows for intangible assets, property plant, and equipment and cash outflows for business combinations.

Financing activities comprise dividend payments, cash outflows for repayment of loans, and payments of principal on lease liabilities.

The change in financial liabilities, where cash inflows and outflows are presented in the cash flow statement as cash flows from financing activities, is as follows:

	Carrying amount as at 1 Jan. 2023 EUR thousand	Changes in reporting entities EUR thousand	Exchange rate differences EUR thousand	Cash flow EUR thousand	Addition IFRS 16 EUR thousand	Disposal IFRS 16 EUR thousand	Reclassification of maturities EUR thousand	Carrying amount as at 31 Dec. 2023 EUR thousand
Non-current liabilities	928	49	9	566	0	0	-119	1,433
Non-current lease liabilities	30,763	0	-93	0	4,069	0	-5,552	29,187
Current liabilities	199	18	0	-122	0	0	119	214
Current lease liabilities	8,422	0	-52	-8,417	2,580	-17	5,552	8,068
Total liabilities for financing activities	40,312	67	-136	-7,973	6,649	-17	0	38,902

	Carrying amount as at 1 Jan. 2022 EUR thousand	Changes in reporting entities EUR thousand	Exchange rate differences EUR thousand	Cash flow EUR thousand	Addition IFRS 16 EUR thousand	Disposal IFRS 16 EUR thousand	Reclassification of maturities EUR thousand	Carrying amount as at 31 Dec. 2022 EUR thousand
Non-current liabilities	4,269	0	-26	-3,228	0	0	-87	928
Non-current lease liabilities	29,785	175	80	0	5,834	0	-5,111	30,763
Current liabilities	1,085	0	0	-973	0	0	87	199
Current lease liabilities	7,794	65	31	-8,686	4,224	-117	5,111	8,422
Total liabilities for financing activities	42,933	240	85	-12,887	10,058	-117	0	40,312

The liability for put options held by non-controlling interests are not included in the above table because there were no cash-effective changes in either 2023 or 2022.

The cash and cash equivalents presented in the cash flow statement correspond to the line item "cash and cash equivalents" in the statement of financial position. The cash and cash equivalents comprise cash on hand, cheques, and bank deposits that are due on demand, with an original maturity of up to three months.

34. Financial instruments

Overview

The Frequentis Group is exposed to various market risks in respect of its financial assets, liabilities, and forecast transactions. These risks comprise interest rate, exchange rate, credit, and liquidity risks. The Frequentis Group uses derivative financial instruments as currency hedging instruments. The risk of fluctuations in exchange rates is therefore limited by concluding forward exchange contracts of the necessary amount, based on forecast future transactions. The principles are set out in treasury guidelines, which have been approved by the management.

The Executive Board of Frequentis AG bears the responsibility for setting up and overseeing risk management for the Frequentis Group. It is also responsible for the development and ongoing monitoring of the risk limitation guidelines.

These guidelines serve to identify and analyse the risks to which the Frequentis Group is exposed, set appropriate risk limits, introduce controls, and constantly monitor the risks and observance of the limits. The risk management guidelines and workflows are regularly reviewed in order to reflect changes in market conditions and changes in the Group's business activities. The Frequentis Group strives to create a constructive and disciplined control environment where all employees are aware of their role and responsibilities.

In accordance with IFRS 9, the Frequentis Group presents all financial assets, financial liabilities, and derivative financial instruments in its statement of financial position as assets and liabilities. They are measured at fair value or at amortised cost.

Liquidity risk

Liquidity risk is the risk that the Frequentis Group might not be able to meet its financial obligations when they are due or might not be able to realise its investments. The aim of risk management in the Frequentis Group is to create sufficient liquidity to ensure that it can settle all obligations when due, in both normal and stressed conditions. Furthermore, all measures required to secure this level of liquidity have to be taken, as set out in the liquidity plan. The liquidity risk is shown by the monthly and annual accumulated difference between cash inflows and outflows (dynamic liquidity risk) and the structure of the statement of financial position (structural liquidity risk).

Liquidity planning is used to analyse the dynamic liquidity risk. The monthly liquidity requirements, based on liquidity planning, are compared with the available funding or the available liquid financial assets. The difference is either a shortfall in liquidity, which needs to be funded, or excess liquidity, which may have to be invested. Liquidity planning forms the basis for decisions on strategy and measures to safeguard liquidity. The liquidity plan is reviewed regularly and the corresponding investments are initiated.

The Treasury department operates as an internal financial services centre by making optimum use of potential synergies in the financing of subsidiaries. The overriding aim is to secure (provide) liquidity at the lowest cost. In this way, management of short-term financial investments and loans is ensured on optimum interest terms and with minimum administrative work. The operating cash flow basically creates the liquidity required. The external sources of any necessary financing requirements are the capital market and the credit market. To ensure the solvency and financial flexibility of the Frequentis Group at all times, a liquidity reserve is held in the form of cash and cash equivalents and credit lines.

A functioning banking system is of fundamental importance for the Frequentis Group and its customers. The Frequentis Group requires access to debt to pre-finance upfront project services up to settlement of the invoice. Therefore, it continuously monitors, controls, and evaluates its financial and liquidity position in order to limit the associated risks. The Frequentis Group manages liquidity risks through careful planning and management of its liquidity requirements. Suitable measures are defined on the basis of cash flow forecasts and the Group ensures that it has adequate financial reserves to cover operational requirements and monitors credit lines.

The following table shows the contractually agreed (undiscounted) payments of interest and principal for derivative financial instruments and non-derivative financial liabilities. The variable interest payments for financial instruments were derived from the last applicable interest rates prior to 31 December 2023 and 31 December 2022. Foreign currency amounts were translated in each case at the closing rate on the reporting date. It is not expected that the cash flows from the financial liabilities included in the maturity analysis could occur much earlier or that the amounts could differ significantly.

2023 in EUR thousand	Carrying amount	Contractual cash flows			Total
		Less than 1 year	Between 1 and 5 years	More than 5 years	
Liabilities to banks and other financial liabilities	363	220	151	0	371
Lease liabilities	37,255	8,923	23,422	7,780	40,125
Trade accounts payable	18,937	18,937	0	0	18,937
Other liabilities	19,776	5,812	13,984	0	19,796
Non-derivative liabilities	76,331	33,892	37,557	7,780	79,229
Derivative financial instruments	787	13,329	0	0	13,329
Derivative financial liabilities	787	13,329	0	0	13,329
Total	77,118	47,221	37,557	7,780	92,558

2022 in EUR thousand	Carrying amount	Contractual cash flows			Total
		Less than 1 year	Between 1 and 5 years	More than 5 years	
Liabilities to banks and other financial liabilities	417	216	212	0	428
Lease liabilities	39,185	9,063	22,914	9,971	41,948
Trade accounts payable	16,258	16,258	0	0	16,258
Other liabilities	8,735	4,496	4,241	0	8,738
Non-derivative liabilities	64,595	30,033	27,367	9,971	67,372
Derivative financial instruments	1,591	21,305	0	0	21,305
Derivative financial liabilities	1,591	21,305	0	0	21,305
Total	66,186	51,338	27,367	9,971	88,676

Credit risk

Credit risk is the risk of a financial loss if a customer or the counterparty to a financial instrument does not satisfy its contractual obligations. Credit risks mainly relate to receivables from customers (2023: EUR 81,029 thousand; 2022: EUR 76,990 thousand), contract assets (2023: EUR 61,272 thousand; 2022: EUR 50,475 thousand), other financial assets (2023: EUR 3,953 thousand; 2022: EUR 3,644 thousand), time deposits (2023: EUR 10,500 thousand; 2022: EUR 10,000 thousand), and cash and cash equivalents (2023: EUR 74,180 thousand; 2022: EUR 81,380 thousand).

The credit risks, their origin, the objectives, guidelines, and workflows for ongoing risk monitoring, and the methods used to measure credit risks were unchanged in the reporting period.

The offer process specifies that the creditworthiness of each new customer must be analysed separately before the Frequentis Group's standard terms of payment and delivery are offered. This includes examining external ratings, where available, annual financial statements, and information from credit agencies.

The risk of default by customers is reduced by mandatory credit assessments and measures to secure payment. For information on the measurement of any impairment losses based on the expected credit losses model, see Note 20. Trade accounts receivable and Note 21. Contract assets.

The estimated loss allowances for cash and cash equivalents were measured on the basis of the expected 12-month credit losses and reflect their maturities. Based on the external ratings of the banks and financial institutions used, the Frequentis Group estimates that there is a low default risk in respect of its cash and cash equivalents (with the exception of Commerzbank Mattersburg, where an impairment loss has been recognised for the amounts concerned).

There is no significant concentration or material credit risk in respect of individual banks, contractual partners, or individual financial instruments. In response to the insolvency of Commerzbank Mattersburg in 2020, counterparty risk management was extended. Every bank defined as a core bank must be system-relevant, and a bank-specific limit has been set for the entire banking relationship, based on the bank's credit rating.

Interest rate risk

The Frequentis Group is exposed to interest rate risk resulting from fluctuations in interest rates on the capital market. Accordingly, changes in interest rates may lead to fluctuations in the fair value or future cash flows of financial assets and financial liabilities.

The bank deposits included in cash and cash equivalents amount to EUR 74,180 thousand (31 December 2022: EUR 81,380 thousand) and bear interest at variable rates or do not bear any significant interest. A reduction in interest rates would not result in any significant change because the majority of the deposits with banks do not bear significant interest and a reduction would not automatically result in negative interest. No negative interest was paid in the reporting period (2022: negative interest of EUR 147 thousand, recognised in other operating expenses). An increase in interest rates of one percentage point would increase interest income by EUR 742 thousand (2022: EUR 814 thousand).

Within financial liabilities, non-current liabilities to banks and other non-current financial liabilities bear interest at fixed rates, while some (EUR 94 thousand) of the current liabilities to banks and other current financial liabilities bear variable interest rates (2022: fixed interest rates on all current liabilities). Interest rates for all lease liabilities are fixed.

Since the interest rate risk is insignificant, it is not presented in tabular form.

Exchange rate risk

The operating business of the companies in the Frequentis Group results in cash inflows and outflows in foreign currencies, which are not always matched by payments of the same amount in the same currency and with the same maturity. Therefore, the companies in the Frequentis Group are exposed to exchange rate risks.

For information on the hedging of exchange rate risks, see the "Derivative financial instruments" section.

Relationship between the items in the statement of financial position, categories of financial instruments, carrying amounts, and fair values

The following table shows the carrying amounts and fair values of financial assets and financial liabilities, including the categories to which they are allocated. It does not contain any information on the fair value of financial assets and financial liabilities that are not measured at fair value if the carrying amount is a reasonable approximation of the fair value (amounts in EUR thousand).

2023	Hedge accounting	Measured at fair value	Equity instruments – at fair value through profit or loss	Measured at amortised cost		Total carrying amount
		Mandatory recognition at fair value through profit or loss		Financial assets	Other financial liabilities	
Financial assets						
Equity instruments			22			22
Time deposits			10,500			10,500
Trade accounts receivable			81,029			81,029
Derivative financial instruments	0	728				728
Other current and non-current assets			3,203			3,203
Cash and cash equivalents			74,180			74,180
Total	0	728	22	168,912		169,662
Financial liabilities						
Liabilities to banks and other financial liabilities				363		363
Trade accounts payable				18,937		18,937
Lease liabilities				37,255		37,255
Derivative financial instruments	0	787				787
Liabilities relating to put options and earn-out agreements		14,066				14,066
Other liabilities				5,710		5,710
Total	0	14,853			62,265	77,118

2022	Hedge accounting	Measured at fair value	Equity instruments – at fair value through profit or loss	Measured at amortised cost		Total carrying amount
		Mandatory recognition at fair value through profit or loss		Financial assets	Other financial liabilities	
Financial assets						
Equity instruments			0			0
Time deposits			10,000			10,000
Trade accounts receivable			76,990			76,990
Derivative financial instruments	3	658				661
Other current and non-current assets			2,983			2,983
Cash and cash equivalents			81,380			81,380
Total	3	658	0	171,353		172,014
Financial liabilities						
Liabilities to banks and other financial liabilities				417		417
Trade accounts payable				16,258		16,258
Lease liabilities				39,185		39,185
Derivative financial instruments	273	1,318				1,591
Liabilities relating to put options and earn-out agreements		6,298				6,298
Other liabilities				2,437		2,437
Total	273	7,616			58,297	66,186

Fair value

Trade accounts receivable, contract assets, other receivables, time deposits, cash and cash equivalents, trade accounts payable, contract liabilities, and other liabilities are measured at their carrying amount, which is a reasonable approximation of the fair value, due to their essentially short remaining term.

There is no quoted price available an active market for the equity instruments Altitude Angel Ltd., or for AIRlabs Austria GmbH. Therefore, they are measured using parameters that are unobservable on the market. The fair value is allocated to level 3 in the fair value hierarchy. There is currently no intention of selling the equity instruments.

The earn-out liabilities relating to the acquisition of ATRiCS Advanced Traffic Solutions GmbH, FRAFOS GmbH, and Frequentis Recording AS are measured at fair value and allocated to the category at fair value through profit or loss. The fair value is allocated to level 3 in the fair value hierarchy.

The liabilities relating to the put options of the non-controlling interests in ELARA Leitstellentechnik GmbH, Systems Interface Ltd., Regola S.r.l., and FRAFOS GmbH are recognised at fair value, while changes are recognised in equity with no impact on profit or loss in accordance with IFRS 10. The fair value is allocated to level 3 in the fair value hierarchy. Since there is no category for this, in the above table the amount is recognised in other liabilities at fair value through profit or loss.

The carrying amounts of derivative financial assets and liabilities correspond to their fair values. Derivatives that have not been designated as a hedging instrument nevertheless serve economically to hedge fluctuations in exchange rates. Their fair values are based on the present value of expected future cash flows, discounted by the interest rate that the Group estimates could be obtained for comparable financial instruments. They are allocated to level 2 in the fair value hierarchy.

The long-term incentive plans (LTIP), which are classified as an equity-settled share-based payment, were measured at fair value and allocated to level 3 in the fair value hierarchy.

The following hierarchy was used to allocate all financial instruments measured at fair value to a valuation method:

Level	Financial instruments at fair value
Level 2: Measurement based on quoted prices for similar assets	Derivative financial instruments
Level 3: Measurement based on models with significant valuation parameters that are unobservable on the market	Equity instruments, earn-out liabilities, liabilities from put options

A distinction is made between derivative and non-derivative financial instruments. The derivative financial instruments primarily include hedging instruments to hedge exchange rate fluctuations.

Net gains and losses are as follows (in EUR thousand):

	Derivative financial instruments	Other financial assets measured at fair value through profit or loss	Financial assets measured at fair value through OCI	Financial assets measured at amortised cost	Financial liabilities measured at amortised cost
2023					
Net interest income/expense				946	-1,442
Valuation	599				
Loss allowance pursuant to IFRS 9				29	
Exchange rate gains/losses				-819	-22
Disposal gains/losses					
Net gains/losses recognised in profit or loss	599	0	0	156	-1,464
Net gains/losses recognised in other comprehensive income	164				
Net gains/losses	763	0	0	156	-1,464

	Derivative financial instruments	Other financial assets measured at fair value through profit or loss	Financial assets measured at fair value through OCI	Financial assets measured at amortised cost	Financial liabilities measured at amortised cost
2022					
Net interest income/expense				209	-738
Valuation	122				
Loss allowance pursuant to IFRS 9				-313	
Exchange rate gains/losses				-950	-187
Disposal gains/losses					
Net gains/losses recognised in profit or loss	122	0	0	-1,054	-925
Net gains/losses recognised in other comprehensive income	297				
Net gains/losses	419	0	0	-1,054	-925

The loss allowances and exchange rate gains/losses are recognised in other operating expenses and other operating income.

Derivative financial instruments

In international business, it is necessary to conclude contracts in foreign currencies. The Frequentis Group's foreign currency risk results mainly from future business transactions, insofar as they are performed in a currency other than the functional currency of the parent company or the respective subsidiary.

Foreign currency exchange risks are managed using derivative financial instruments, unless a natural hedge can be used (e.g. contracts with suppliers in the same foreign currency). The largest foreign currency exposures arise from customer orders in AUD, CAD, CZK, GBP, HKD, MXN, NOK, QAR, SGD, and USD.

Forward exchange contracts are concluded to hedge the risk of exchange rate fluctuations. Derivative financial instruments are not used for speculative purposes.

The Frequentis Group aims to manage and monitor the foreign currency risks for future payments under contracts with customers on a rolling basis throughout the entire project period through hedging with forward exchange contracts at the date of order intake. The forward exchange contracts (economic hedges – MTM) are concluded for a year and extended annually in the amount of the cash flows still expected (extension at historical rates).

Hedging transactions are accounted for individually (designated hedging relationships are not used). The remaining designated hedging relationships (hedging of contractually agreed cash flows) from previous years ended in the reporting period. Changes in the fair value of forward exchange contracts are recognised in other operating income or other operating expense.

The carrying amount of derivative financial instruments corresponds to their current fair value, whereby the fair value was determined from the current market value based on the closing exchange rate for the foreign currency as at 31 December 2023, verified by corresponding bank confirmations.

The following table shows the development of the derivative financial instruments:

Sale currency	Derivative		Total	
	Sale amount	Purchase amount EUR thousand	Average hedging rate	Fair value EUR thousand
AUD	-4,242	2,665	1.59	76
CAD	1,000	-662	1.51	13
GBP	-89	110	0.81	8
HKD	-7,610	894	8.51	20
NOK	2,200	-188	11.69	6
QAR	-5,174	1,301	3.98	18
SGD	-194	134	1.45	1
USD	-21,416	19,539	1.10	586
		23,793		728
AUD	-309	186	1.66	-3
CAD	-1,664	1,088	1.53	-41
CZK	30,361	-1,225	24.78	-16
GBP	-4,748	5,216	0.91	-130
HKD	16,307	-1,916	8.51	-43
MXN	-92,838	4,521	20.54	-88
NOK	-9,185	794	11.57	-15
QAR	4,311	-1,084	3.98	-15
SGD	-378	207	1.82	-51
USD	-6,669	5,542	1.20	-385
		13,329		- 787

2022 Sale currency	Derivative		Cash flow hedge			For MTM valuation		Total Fair value EUR thousand
	Sale amount	Purchase amount EUR thousand	Average hedging rate	Foreign currency amount	Fair value EUR thousand	Foreign currency amount	Fair value EUR thousand	
AUD	-7,456	4,751	1.57	0	0	-7,456	72	72
CHF	-104	107	0.98	0	0	-104	0	0
GBP	-3,465	3,954	0.88	-264	3	-3,201	94	97
SGD	-227	157	1.44	0	0	-227	0	0
USD	-25,810	24,022	1.07	0	0	-25,810	491	491
		32,991			3		657	661
AUD	-533	323	1.65	0	0	-533	-12	-12
CAD	-1,820	1,173	1.55	0	0	-1,820	-60	-60
GBP	-6,668	7,101	0.94	-5,672	-273	-996	-59	-332
HUF	-10,029	22	452.83	0	0	-10,029	0	0
QAR	-5,174	1,301	3.98	0	0	-5,174	-24	-24
SGD	-1,300	815	1.60	0	0	-1,300	-83	-83
USD	-12,656	10,570	1.20	0	0	-12,656	-1,080	-1,080
		21,305			-273		-1,318	-1,591

For the carrying amount of the MTM valuation, a positive fair value of EUR 728 thousand was recognised in other receivables in 2023 (2022: EUR 661 thousand), while a negative fair value of EUR 787 thousand was recognised in other liabilities (2022: EUR 1,591 thousand).

The table shows the development of the cash flow hedge reserve:

	2023 EUR thousand	2022 EUR thousand
As at 31 December of the previous year	-125	-346
Result from changes in fair value	0	194
Deferred taxes on this amount	0	-46
Reclassification to the income statement	164	103
Deferred taxes on this amount	-39	-25
Adjustments due to changes in tax rates	0	-5
As at 31 December of the financial year	0	-125

35. Leases

Frequentis as lessee

The Frequentis Group has concluded leases with some contractual partners, in particular for buildings, machinery, vehicles, and IT equipment.

The leases for buildings are concluded either for a defined period or for an indefinite period with short termination periods for the lessee and lessor. Where office premises are leased for small subsidiaries, they are classified as short-term leases because termination does not result in any penalties and new premises are readily available. The lease for the office building used as the company's headquarters is for an indefinite period and cannot be terminated until 2026. As at 31 December 2022 and 31 December 2023, a lease term until 2030 was estimated.

In 2020, a lease for an indefinite period was concluded for a placement machine. Since this lease cannot be terminated for 72 months, the right-of-use asset was recognised in accordance with this lease term.

The leases for motor vehicles have a term of approximately 3 to 6 years, while IT equipment is generally leased for 5 years. There are neither options to terminate nor to extend the leases, or the exercise of such options is not considered to be virtually certain, so they are not included in the assessment of the right-of-use asset.

The Frequentis Group also leases IT and other equipment. These leases are classified as short-term leases or leases for low-value assets, for which the exemptions are applied. Therefore, they are not recognised in the consolidated financial statements as either assets or liabilities.

The following table presents details of the right-of-use assets recognised in property, plant and equipment:

2023	Right-of-use assets for land and buildings EUR thousand	Right-of-use assets for machinery EUR thousand	Right-of-use assets for other plant, factory and office equipment EUR thousand	Total EUR thousand
Acquisition cost				
As at 1 January 2023	65,823	587	4,426	70,836
Foreign currency translation	-348	0	-5	-353
Changes in reporting entities	0	0	0	0
Addition	5,430	0	1,220	6,650
Disposal	-904	0	-848	-1,752
As at 31 December 2023	70,001	587	4,793	75,381
Accumulated depreciation				
As at 1 January 2023	-29,600	-211	-2,378	-32,189
Foreign currency translation	220	0	4	224
Changes in reporting entities	0	0	0	0
Addition	-7,878	-96	-972	-8,946
Disposal	904	0	828	1,732
As at 31 December 2023	-36,354	-307	-2,518	-39,179
Carrying amount				
As at 31 December 2023	33,647	280	2,275	36,202

2022	Right-of-use assets for land and buildings EUR thousand	Right-of-use assets for machinery EUR thousand	Right-of-use assets for other plant, factory and office equipment EUR thousand	Total EUR thousand
Acquisition cost				
As at 1 January 2022	57,028	587	3,444	61,059
Foreign currency translation	164	0	1	165
Changes in reporting entities	347	0	35	382
Addition	8,835	0	1,240	10,075
Disposal	-551	0	-294	-845
As at 31 December 2022	65,823	587	4,426	70,836
Accumulated depreciation				
As at 1 January 2022	-21,839	-115	-1,735	-23,689
Foreign currency translation	-2	0	2	0
Changes in reporting entities	-123	0	-22	-145
Addition	-8,082	-96	-888	-9,066
Disposal	446	0	265	711
As at 31 December 2022	-29,600	-211	-2,378	-32,189
Carrying amount				
As at 31 December 2022	36,223	376	2,048	38,647

In addition to new leases, the additions to right-of-use assets include adjustments resulting from contract modifications, contract extensions, reassessment of contract terms, and index adjustments.

The lease liabilities changed from EUR 39,185 thousand (comprising EUR 30,763 thousand non-current and EUR 8,422 thousand current) as at 1 January 2022 to EUR 37,255 thousand (comprising EUR 29,187 thousand non-current and EUR 8,068 thousand current) as at 31 December 2023.

The following expenses for leases are recognised in the income statement:

	2023 EUR thousand	2022 EUR thousand
Depreciation of right-of-use assets	8,946	9,066
Interest expense for lease obligations	916	412
Lease payments for short-term leases	613	614
Lease payments for low-value assets	63	64
Total	10,538	10,156

Amounts recognised in the cash flow statement in connection with leases:

	2023 EUR thousand	2022 EUR thousand
Payments of principal on lease liabilities	8,417	8,686
Interest paid on lease liabilities	916	412
Lease payments for short-term leases and low-value assets	676	678
Total	10,009	9,776

Interest paid on leases and lease payments for short-term leases and low-value assets are presented in the net cash flow from operating activities, while the payments of principal on lease liabilities are reported in the net cash flow from financing activities.

During 2023, the Frequentis Group concluded several leases that start in 2024. However, these are insignificant leases for vehicles and the rental of buildings.

Frequentis as lessor

Leases payments for operating leases where the Frequentis Group is the lessor relate to insignificant subleases and to operating leases for the use of voice communication systems. The lease terms are between one and four years. There are no extension options, nor are there any options to acquire the asset at the end of the lease term.

Due dates of future payments from operating leases:

	31 Dec. 2023 EUR thousand	31 Dec. 2022 EUR thousand
Due in one year	3,964	1,731
Due in two years	11	1,457
Due in three years	0	11
Due in four years	0	0
Due in five years	0	0
Due in more than five years	0	0
Total	3,975	3,199

EUR 2,115 thousand (2022: EUR 182 thousand) was recognised in the income statement as revenue (2022: other operating income).

36. Information on business relations with related parties

Parent company

Frequentis Group Holding GmbH holds a majority stake of around 60% of the shares in Frequentis AG.

In the reporting period, revenues from transactions with Frequentis Group Holding GmbH were as follows:

	2023 EUR thousand	2022 EUR thousand
Goods and services supplied and other income	17	19
Goods and services received and other expenses (consulting services)	642	590
Receivables outstanding as at 31 December	3	2
Liabilities outstanding as at 31 December	66	0

All transactions are effected on an arm's length basis.

Associated companies

The Frequentis Group maintains relationships with associated companies within the scope of ordinary business activities and buys and sells services at arm's length.

In the reporting period, revenues from transactions with the associated companies were as follows:

	2023 EUR thousand	2022 EUR thousand
Goods and services supplied and other income	904	1,084
Goods and services received and other expenses	2,080	2,813
Receivables outstanding as at 31 December	69	192
Liabilities outstanding as at 31 December	339	419
Advances payments received as of 31 December	750	588
Advance payments made as at 31 December	43	0

Related companies

A number of key management personnel or related parties have functions in other entities that result in them having control or significant influence over the financial and operating policies of those entities.

In the reporting period, the following transactions were effected with companies and persons classified as related parties:

	2023 EUR thousand	2022 EUR thousand
Expenses for consulting services	105	283
Expenses for project support services	562	220
Expenses for software development and engineering	2,732	1,856
Rental payments (principal and interest) and operating costs	3,971	3,954
Interest expense for loans received	2	1
Revenues	694	1,897
Receivables as at December 31	666	1,068
Payables as at December 31	296	105
Loans received as at Dec. 31	30	30

The expenses for software development and engineering also contain charges of EUR 955 thousand (2022: EUR 467 thousand) from companies that would not be classified as related parties under IAS 24. The related liabilities amount to EUR 105 thousand (2022: EUR 46 thousand) and the related receivables amount to EUR 1 thousand (2022: EUR 0 thousand).

The rental payments mainly comprise rent for the office premises at the company's headquarters in Vienna.

Austrian Research Promotion Agency (Österreichische Forschungsförderungsgesellschaft/FFG): Johannes Bardach is a member of the Supervisory Board of FFG. FFG's core business is granting subsidies and loans for research purposes. To ensure the necessary strategic focus of the Supervisory Board, in accordance with the FFG law, representatives of companies that receive funding from FFG are nominated as members of the Supervisory Board. However, the members of the Supervisory Board do not have any role in or influence on the funding processes.

In the reporting period, advance payments for future research revenues in the amount of EUR 48 thousand (2022: EUR 188 thousand) were disbursed by FFG. Funding received from FFG in the reporting period totalled EUR 618 thousand (2022: EUR 502 thousand). EUR 237 thousand of this amount (2022: EUR 210 thousand) is presented in other receivables. Furthermore, in the reporting period FFG disbursed two further instalments of a loan that had previously been granted and the first instalment of a loan granted in 2023 in connection with a research project in the amount of EUR 567 thousand. The remaining terms of these loans are three and four years respectively.

Since the Supervisory Board of FFG is not involved in the awarding of grants, no conflicts of interest arise from this.

Related persons

Executive Board

In the reporting period, the Executive Board comprised:

- Norbert Haslacher, Chairman
- Monika Haselbacher
- Hermann Mattanovich
- Peter Skerlan

The total remuneration paid to the Executive Board (excluding payroll-related costs) was EUR 2,715 thousand in the reporting period (2022: EUR 2,368 thousand). The remuneration of the Executive Board comprises fixed components (annual base salary, premiums for pension reinsurance, and benefits in kind), short-term variable components for all Executive Board members, and long-term incentive plans (LTIP) for the Chairman of the Executive Board. The variable components are performance-related and are based on the achievement of short-term financial targets for the company.

Frequentis AG agreed long-term incentive plans with the Chairman of the Executive Board, Mr. Norbert Haslacher, in 2021, 2022, and 2023 (LTIP 2021, LTIP 2022, and LTIP 2023). For further information, see Note 27. Share-based payment.

The members of the Executive Board have been granted pension benefits. In addition to the post-retirement payments, these include pension benefits for surviving dependants after the death of the beneficiary. The post-retirement benefits are generally paid when the beneficiary reaches a specific age, provided that the employment contract has ended at this date. Expenses of EUR 377 thousand were incurred in the reporting period (2022: EUR 383 thousand) for contributions to pension insurance and the recognition of pension provisions for members of the Executive Board. This amount includes service cost of EUR 80 thousand (2022: EUR 167 thousand), interest cost of EUR 97 thousand (2022: EUR 42 thousand), and pension insurance expense of EUR 200 thousand (2022: EUR 175 thousand).

In the event of termination of employment, severance payments are due in accordance with the legal regulations in Austria and contractual agreements. Additions to the corresponding provisions for severance payments amounted to EUR 120 thousand in 2023 (2022: reversal of provisions in the amount of EUR 62 thousand).

No advances or loans were granted to members of the Executive Board of Frequentis AG.

Supervisory Board

The Supervisory Board of Frequentis AG comprises six representatives of the shareholders and three representatives of the workforce.

The remuneration of the Supervisory Board amounted to EUR 149 thousand in the reporting period (2022: EUR 167 thousand).

An office and support services are provided free of charge for the Chairman of the Supervisory Board, Mr. Johannes Bardach, for the performance of his function as Chairman of the Supervisory Board. EUR 111 thousand (2022: EUR 73 thousand) was invoiced for office and support services that do not relate to the performance of his function as Chairman of the Supervisory Board of Frequentis. As at 31 December 2023, there was an outstanding receivable of EUR 9 thousand for this (2022: EUR 0.3 thousand).

No advances or loans were granted to members of the Supervisory Board of Frequentis AG.

37. Significant events after the reporting date

The co-owners of Systems Interface Ltd. exercised the contractually agreed put option in January 2024. As a result, the remaining non-controlling interests (49%) were acquired in March 2024.

38. Additional information

The Frequentis Group had an average of 2,217 employees (full-time equivalents / FTEs) in 2023 (2022: 2,081 FTEs).

Audit fees

In the reporting period, audit expenses of EUR 154 thousand (2022: EUR 133 thousand) were incurred for the audit of the consolidated financial statements and the annual financial statements of Frequentis AG, expenses of EUR 118 thousand (2022: EUR 71 thousand) were incurred for other assurance services, and expenses of EUR 5 thousand (2022: EUR 23 thousand) were incurred for other services.

39. Capital management

In addition to a sustained increase in the value of the company, financial management of the Frequentis Group aims to maintain an appropriate capital structure. The principal performance indicators used to manage the capital structure are the EBIT margin, the equity ratio, and net debt. Since the Frequentis Group currently has a net cash position, it refers to net cash rather than net debt. The net cash position comprises cash and cash equivalents plus time deposits less liabilities to banks and other financial liabilities. The key performance indicators developed as follows in the reporting period:

	2023	2022
EBIT margin (based on revenues)	6.2%	6.5%
Equity ratio	41.9%	43.3%
Net cash in EUR thousand	84,317	90,963

The Frequentis Group calculates EBIT as follows:

	2023 EUR thousand	2022 EUR thousand
Profit/loss before tax	26,419	24,737
Financial income	-946	-209
Financial expenses	1,442	738
Earnings from investments accounted for at equity	-268	-275
EBIT	26,647	24,991

The Frequentis Group meets the minimum capital requirements defined by law and the articles of association. The capital managed comprises the shareholders' equity reported in the consolidated statement of financial position.

40. Risk management

The Frequentis Group has an internal control system (ICS) for its accounting process. The reliability of the internal control system is monitored by the internal audit department. The Frequentis Group has initiated several processes based on best practice standards to ensure that its risk management is effective. The fundamental aim is to identify opportunities and risks as soon as possible and take suitable measures to maintain profitability and secure the continued existence of the Group. Risk awareness, the vigilance of all staff, and early identification of business risks are well developed and are incorporated in a solid risk management policy.

The risks are outlined in more detail in the opportunity and risk management section of the Group Management Report.

Vienna, 11 March 2024

Auditor's Report

Report on the consolidated financial statements

Audit Opinion

We have audited the consolidated financial statements of Frequentis AG, Vienna, and of its subsidiaries (the Group) comprising the consolidated balance sheet as of 31 December 2023, the consolidated income statement, the consolidated statement of changes in equity and the consolidated statement of cash flows for the fiscal year then ended and the notes to the consolidated financial statements.

Based on our audit the accompanying consolidated financial statements were prepared in accordance with the legal regulations and present fairly, in all material respects, the assets and the financial position of the Group as of 31 December 2023 and its financial performance for the year then ended in accordance with International Financial Reporting Standards (IFRS), as adopted by the EU and with the additional requirements stated in section 245a UGB (Austrian Company Code).

Basis for opinion

We conducted our audit in accordance with the regulation (EU) no. 537/2014 (in the following "EU regulation") and in accordance with Austrian Standards on Auditing. Those standards require that we comply with International Standards on Auditing (ISAs). Our responsibilities under those regulations and standards are further described in the "Auditor's Responsibilities for the Audit of the Financial Statements" section of our report. We are independent of the Company in accordance with the Austrian General Accepted Accounting Principles and professional requirements and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained until the date of this auditor's report is sufficient and appropriate to provide a basis for our opinion by this date.

Key audit matters

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

In the following, we present the audit matters that we consider to be of particular importance:

Project Accounting

Situation and reference to further information:

A major part of the presented revenues is derived from project related business, which in the main comprises delivery and maintenance contracts. The large number of projects are different in order volume, technical complexity and duration, with a few contracts having terms of several years. In general, revenue of maintenance contracts is realised over the service period. When the requirements for realisation over time are met, revenues from delivery projects are recorded in accordance with IFRS 15 based on the stage of completion applying the cost-to-cost method.

Contractual claims arising from these projects are reported as contract assets from contracts with customers and outstanding obligations as contract liabilities from contracts with customers. In case that a project loss is expected from a further execution of a project, including maintenance contracts, that loss will be immediately recognised in the income statement.

For several ongoing or completed projects there may be different views regarding the type or scope of the performance and the contractual obligations. Such differences can have an impact on the project costs and results. The determination of the stage of completion, the estimate of costs to complete as well as the measurement of project provisions require a significant number of assumptions and forward-looking estimates. Additional estimates may be required due to the inflation-related effects on the expected project costs. Due to the significant volume of the project business, the risk for the consolidated statements consist of a material misstatement of the project revenue, the related project costs as well as the corresponding balance sheet items.

Information on the accounting of the project business can be found in chapter 2 of the notes under the accounting and valuation policy "IFRS 15 Revenue from Contracts with Customers" as well as "Significant estimates and use of judgement". Further information can be found in chapter 4 "Revenues" within the notes on the consolidated income statement and in chapter 21 "Contract assets from contracts with customers" and chapter 30 "Contract liabilities from contracts with customers".

Audit response:

In the course of our audit, we have gained an understanding of the processes and internal controls relevant to the accounting of revenues from customer contracts and we tested the effectiveness of certain internal controls. These controls mainly address the review and approval of project calculation for new contracts, the recognition of purchased services on the corresponding projects as well as the continuing monitoring and assessment for project calculations until the completion of the project.

Based on the results of the control tests, we have performed a more in-depth analysis for a sample of projects under special assessment of the discretionary decisions made. We have selected our samples considering various risk-oriented parameters, e.g. size, margin, start and duration of the project. In addition, we considered the fact of significant adjustments to the assessment compared to previous year for our determination of the sample. The audit procedures performed on the selected sample included, in particular, the review of the underlying contracts and agreements, discussions with the commercial and operating project managers concerning their estimates and assumptions, including the impact of inflation-related economic effects. We performed an analysis of current project data as well as the reconciliation of assumptions and estimates with contracts and further documents.

In addition, we have examined the recording of costs on the projects and the determination of the stage of completion. Finally, we have assessed whether the presentation of the project business in the consolidated financial statement as well as the disclosures in the notes are in accordance with the requirements of IFRS 15.

Other information

Management is responsible for the other information. The other information comprises the information included in the annual report, but does not include the consolidated financial statements, the Group's management report and the auditor's report thereon.

We received the non-financial report and the corporate governance report until the date of this audit opinion; the rest of the annual report is estimated to be provided to us after the date of the auditor's report.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, to consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

If, based on the work we have performed, 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.

Responsibilities of management and of the audit committee for the consolidated financial statements

Management is responsible for the preparation of the consolidated financial statements in accordance with International Financial Reporting Standards (IFRS), as adopted by the EU and with the additional requirements stated in section 245a UGB (Austrian Company Code) for them to present a true and fair view of the assets, the financial position and the financial performance of the Group and for such internal controls as management determines are necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

The Audit Committee is responsible for overseeing the Group's financial reporting process.

Auditor's responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and 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 the EU regulation and in accordance with Austrian Standards on Auditing 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 these consolidated financial statements.

As part of an audit in accordance with the EU regulation and in accordance with Austrian Standards on Auditing, which require the application of ISAs, we exercise professional judgment and maintain professional scepticism throughout the audit.

We also:

- identify and assess the risks of material misstatement of the consolidated 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 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 management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated 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 Group to cease to continue as a going concern.
- evaluate the overall presentation, structure, and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- 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 the Audit Committee 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 the Audit Committee with a statement that we have complied with relevant ethical requirements regarding independence, and to 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 the Audit Committee, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter 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.

REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS

Comments on the management report for the Group

Pursuant to Austrian generally accepted accounting principles, the group management report is to be audited as to whether it is consistent with the consolidated financial statements and as to whether it was prepared in accordance with the applicable legal regulations.

Management is responsible for the preparation of the Group's management report in accordance with Austrian Generally Accepted Accounting Principles.

We conducted our audit in accordance with Austrian Standards on Auditing for the audit of the Group's management report.

Opinion

In our opinion, the management report for the group was prepared in accordance with the valid legal requirements, comprising the details in accordance with section 243a UGB (Austrian Company Code) and is consistent with the consolidated financial statements.

Statement

Based on the findings during the audit of the consolidated financial statements and due to the thus obtained understanding concerning the Group and its circumstances no material misstatements in the Group's management report came to our attention.

Additional information in accordance with article 10 of the EU regulation

We were elected as auditor by the ordinary general meeting at 1 June 2023. We were appointed by the Supervisory Board on 18 September 2023. We are auditors without cease since 2018.

We confirm that the audit opinion in the section "Report on the consolidated financial statements" is consistent with the additional report to the audit committee referred to in article 11 of the EU regulation.

We declare that no prohibited non-audit services (article 5 par. 1 of the EU regulation) were provided by us and that we remained independent of the audited company in conducting the audit.

Responsible Austrian certified public accountant

The engagement partner on the audit resulting in this independent auditor's report is Mr. Gerhard Posautz, Certified Public Accountant.

Vienna, 12 March 2024



BDO Assurance GmbH
Wirtschaftsprüfungs- und Steuerberatungsgesellschaft

Gerhard Posautz
Auditor

Gerhard Fremgen
Auditor

Statement by all legal representatives

We confirm to the best of our knowledge that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position, and profit or loss of the Group as required by the applicable accounting standards and that the Group management report gives a true and fair view of the development and performance of the business and the position of the Group, together with a description of the principal risks and uncertainties the Group faces.

Vienna, 11 March 2024



Norbert Haslacher
Chairman
of the Executive Board



Monika Haselbacher
Member
of the Executive Board



Hermann Mattanovich
Member
of the Executive Board



Peter Skerlan
Member
of the Executive Board

Glossary

This glossary explains technical terms and abbreviations relating to Frequentis' business as well as financial and commercial terminology.

Glossary of technical terms relating to Frequentis' business

Term	Explanation
3GPP	3 rd Generation Partnership Project Worldwide cooperation of standards organisations which develop protocols for mobile telecommunications
5G	5 th generation technology standard for broadband cellular networks
AIM	Aeronautical Information Management Aeronautical information services that provide pilots with all the information necessary for a flight
ATC	Air Traffic Control
ATM	Air Traffic Management <ul style="list-style-type: none">• Air traffic management (ATM) ensures the safe and efficient movement of aircraft during all phases of their operation• Name of a Frequentis business segment that comprises the Air Traffic Management Civil, Aeronautical Information Management, and Defence business domains
BCHÖ	B&C Holding Österreich GmbH
CANSO	Civil Air Navigation Services Organisation International organisation which represents the interests of air navigation service providers
CERT	Computer Emergency Response Team A group of IT security experts that issues warnings about information security vulnerabilities and offers recommendations for mitigating the associated risks, also in the event of specific IT security incidents
EAD	European AIS (Aeronautical Information Services) Database The European AIS Database has been successfully operating since 2003. The EAD system was developed by Frequentis and is operated by GroupEAD. It ensures standardisation and harmonisation of the relevant aviation data and therefore greater safety, while reducing maintenance costs. It therefore represents an initial milestone for the concept of a "Single European Sky"
EASA	European Union Aviation Safety Agency
ESD	ElectroStatic Discharge A sudden flow of electricity between two electrically charged objects
ETSI	European Telecommunications Standards Institute An independent, not-for-profit, standardisation organisation in the field of information and communications, which supports the development and testing of global technical standards for systems, applications, and services

EUROCAE	<p>European Organisation for Civil Aviation Equipment</p> <p>EUROCAE is a not-for-profit organisation that deals with the standardisation of electronics for aviation</p>
FIRST	<p>Forum of Incident Response and Security Teams</p> <p>Global association of CERTs and IT security professionals</p>
IBB	<p>Installed Base Business</p> <p>Follow-up business to installed systems and solutions</p>
ICAO	<p>International Civil Aviation Organization</p> <p>ICAO is a UN specialised agency based in Montreal, Canada. Its aim is to foster sustained growth in the global civil aviation system</p>
ISSS	<p>International System Safety Society</p> <p>A not-for-profit organisation that supports safety professionals worldwide with the focus on the application of systems engineering and systems management in hazard, safety, and risk analysis</p>
LTE	<p>Long Term Evolution</p> <p>A broadband standard for mobile communications</p>
MarTRX	Integrated Frequentis solution for maritime control centres, which covers the areas of search & rescue, vessel traffic services, and coastal surveillance systems
MRCC	Maritime Rescue and Coordination Centre
NAVTEX	<p>Navigational Information over Telex</p> <p>An international service for the dissemination of nautical and meteorological warning messages</p>
[Advanced] NMS	<p>Advanced Network Management System</p> <p>A solution providing a comprehensive situational awareness picture of the status of all systems, subsystems, and networks used for secure exchange of information between air navigation service providers</p>
PST	<p>Public Safety & Transport</p> <p>Name of the Frequentis business segment comprising the Public Safety, Public Transport (i.e. railways) and Maritime (i.e. coastguard and port authorities) business domains</p>
SaaS	<p>Software as a Service</p> <p>A software licensing and delivery model – considered to be part of cloud computing – in which software is licensed on a subscription basis and the software and IT infrastructure are hosted centrally by an external provider</p>
SESAR	<p>Single European Sky ATM Research</p> <p>A pan-European initiative for the unification, harmonisation, and synchronisation of services within the framework of European air traffic management, which was initiated by the European Commission and the European Organisation for the Safety of Air Navigation, EUROCONTROL</p>
SIRT	<p>Security Incident Response Team</p> <p>Coordinating entity for the assessment of information security vulnerabilities, risk mitigation, and information security incident management</p>
TETRA	<p>TErrestrial Trunked RAdio</p> <p>Open standard for digital trunked radio which enables the setup of universal networks</p>
UTM	<p>Uncrewed aircraft system Traffic Management</p> <p>An air traffic management system for remotely and autonomously controlled operations of uncrewed aerial systems</p>

Voice C2	VOICE C2 (command and control) is an advanced IP communication system based on simplified hardware and software components that, when combined, deliver a sophisticated communication platform
VoIP	Voice over Internet Protocol Transmission of voice communication over an IP network
VCS	Voice Communication System
X10	Latest release of the Frequentis Voice Communication System (VCS)

Glossary of financial and commercial terms

Term	Explanation
AktG	Aktiengesetz Austrian Companies Act
ArbVG	Arbeitsverfassungsgesetz Austrian Labour Relations Act
C rules	Principles of the Austrian Code of Corporate Governance ("comply or explain"), which have to be followed; any deviation has to be explained and the reasons stated to be in compliance with the Code
CAPEX / CapEx	Capital expenditure Funds that are used by a company for the purchase, improvement, or maintenance of long-term assets
CGU	Cash Generating Unit
CPI	Corruption Perception Index
CSR	Corporate Social Responsibility
CSRD	EU Corporate Sustainability Reporting Directive
EBIT	Earnings Before Interest and Taxes
EBIT margin	EBIT as a percentage of revenues
EBITDA	Earnings Before Interest, Taxes, Depreciation, Amortisation, and impairment losses
ECL	Expected credit losses
EcoVadis	Independent platform to assess the sustainability performance of companies
EFRAG	European Financial Reporting Advisory Group European expert group for the development and promotion of high-quality, globally recognised accounting standards in Europe
Equity ratio	Equity/total equity and liabilities
ERP	Enterprise Resource Planning Software solution
ESG	Environment, Social, and (corporate) Governance An orientation towards environment, social, and governance aspects; concepts are developed for each of these dimensions and verifiable criteria are defined

ESRS	European Sustainability Reporting Standards European Union standards regulating the details of corporate sustainability reporting
FFG	Österreichische Forschungsförderungsgesellschaft mbH Austrian Research Promotion Agency; national funding agency for industrial research and development in Austria
FN	Commercial register number, unique identifier of a legal entity in Austria
FQT	Ticker symbol of the shares of Frequentis AG
FTE	Full-Time Equivalent
FVOCI	Fair Value through Other Comprehensive Income Classification and measurement category for financial assets; changes in the fair value are recognised in other comprehensive income (i.e., outside of profit and loss)
FVTPL	Fair Value Through Profit and Loss Classification and measurement category for financial assets; changes in the fair value are recognised in profit or loss
GHG	Greenhouse Gases
GRI	Global Reporting Initiative An international independent standards organisation that helps communicate impacts on issues such as climate change, human rights and corruption; GRI's framework for sustainability reporting helps companies identify, gather, and report this information in a clear and comparable manner
GSES	Global Sustainable Enterprise System Independent assessment platform for the sustainability performance of companies
HSE	Health, Safety and Environment
IAS	International Accounting Standards
ICS	Internal Control System
IFRIC	International Financial Reporting Interpretations Committee
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
IPCC	Intergovernmental Panel on Climate Change The United Nations body for assessing the science related to climate change
ISIN	International Securities Identification Number, Frequentis' ISIN: ATFREQUENT09
L rules	Legal requirements of the Austrian Code of Corporate Governance
LTIP	Long-Term Incentive Plan/Programme
M&A	Mergers & Acquisitions
MTM	Mark-To-Market Accounting method where the value of an asset or liability is based on the current market price
NaDiVeG	Nachhaltigkeits- und Diversitätsverbesserungsgesetz Austrian Sustainability and Diversity Improvement Act
OCI	Other Comprehensive Income

PPE	Personal Protective Equipment
R rules	Recommendations of the Austrian Code of Corporate Governance
SDGs	Sustainable Development Goals United Nations (UN) objectives for sustainable economic, social, and environmental development
Shareholders' equity	Funds made available to the company by its owners through cash or contributions in kind, plus retained earnings
TSR	Total Shareholder Return
UGB	Austrian Commercial Code
WACC	Weighted Average Cost of Capital
WKN	Wertpapier-Kennnummer / Securities identification number A six-digit combination of numbers and letters used in Germany to identify securities
XETRA	A share trading platform operated by the Frankfurt Stock Exchange

Financial Calendar 2024

09.04.2024	Annual financial statements 2023
27.05.2024	Record date for General Meeting
06.06.2024	Annual General Meeting, Vienna
11.06.2024	Ex-dividend day
12.06.2024	Record date for dividend
14.06.2024	Dividend payment day
14.08.2024	Half-year financial report 2024

www.frequentis.com/ir > Financial Calendar

Notes / Disclaimer

The terms "Frequentis" and "Frequentis Group" in this publication refer to the Group; "Frequentis AG" is used to refer to the parent company.

Minimal arithmetical differences may arise from the application of commercial rounding to individual items and percentages.

The forecasts, plans, and forward-looking statements contained in this publication are based on the knowledge and information available and the assessments made at the time that this publication was prepared. As is true of all forward-looking statements, these statements are subject to risk and uncertainties. As a result, actual events may deviate significantly from these expectations. No liability whatsoever is assumed for the accuracy of projections or for the achievement of planned targets or for any other forward-looking statements.

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Diversity, inclusion, and equality of all genders are an integral part of the Frequentis corporate culture and are reflected in our language. All references to people are therefore gender-neutral.

Frequentis accepts no liability for any error or omission in this publication. The information in this publication may not be used without the express written permission of Frequentis.

This document has been prepared in German, which is the official version. The English translation is for information only. In case of discrepancies in the English translation, the German version shall prevail.

The annual financial statements in accordance with Section 124 of the Austrian Stock Exchange Act (Börsegesetz) are available at www.frequentis.com/ir > Publications (available in German only).

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