Group Management Report as at 31 December 2022

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 2023.[1] Despite the pandemic, it estimated that global GDP grew by 3.4% in 2022 and forecast growth of 2.9% for 2023. The forecast for 2023 is 0.2 percentage point higher than predicted in October 2022 but is below the historical (2000 -2019) average of 3.8%. The rise in central bank rates to fight inflation and Russia's war in Ukraine continue to weigh heavily on economic activity.

The rapid spread of COVID-19 in China dampened growth in 2022 but the recent reopening has paved the way for a faster-than-expected recovery. The balance of risks remains tilted to the downside, but adverse risks have moderated since the World Economic Outlook Update of October 2022. Global inflation looks set to fall from 8.8% in 2022 to 6.6% in 2023 and 4.3% in 2024. However, that would still be above the pre-pandemic level of around 3.5% (2017-2019).

The IMF estimates that the US economy grew by 2.0% in 2022 (2023:1.4%). Further, it anticipates that growth in the euro zone was 3.5% in 2022 (2023: 0.7%). For the major economies in the euro zone it predicts different growth rates in 2022 and 2023: the growth projections for 2022 are 1.9% for Germany (2023: 0.1%), 2.6% for France (2023: 0.7%), 3.9% for Italy (2023: 0.6%), and 5.2% for Spain (2023: 1.1%). The forecast for the UK is 4.1% growth in 2022 (2023: -0.6%).

For the emerging and developing economies in Asia, the projection is 4.3% growth in 2022 (2023: 5.3%). The IMF estimates that Latin America grew by 3.9% in 2022 (2023: 1.8%). The projection for the Middle East and Central Asia is 5.3% growth (2023: 3.2%).

[1] https://www.imf.org/en/Publications/WEO/Issues/2023/01/31/world-economic-outlook-update-january-2023

Business performance

The operating business was still held back to some extent by the COVID-19 pandemic, which subsided during 2022. The war in Ukraine, which started in February 2022, indirectly impacted the Frequentis Group through higher inflation (initially for electricity, gas, and fuels). Inflation then filtered through to the cost of goods sourced from suppliers, salary rises, and thus earnings.

Revenues rose, partly due to the companies acquired from L3Harris Technologies during 2021, which were included in the financial statements for the full year in 2022, and the acquisition of the Italian company Regola in January 2022. 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 increase in order intake.

Significant events in 2022

Acquisition of Regola

On 5 January 2022, Frequentis acquired a 51% interest in Regola S.r.l. (based in Turin, Italy). This Italian company's innovative software solutions complement Frequentis' public safety product portfolio and therefore support its long-term growth strategy in this business domain.

Frequentis and Regola supply integrated control room solutions to improve the response of emergency services. Regola's command and control (CAD) solutions complement Frequentis' portfolio in the area of public safety and adjacent markets. Its main product is the UNIQUE CAD product family, accompanied by products offered on a software-as-a-service basis. The aim is to step up international marketing.

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

Investment in Aviamaps

In September 2022, Frequentis acquired a 25% stake in the Finnish software producer Aviamaps Oy. This company's software enables users of its platform to book drone flights directly online by clicking on a map (real-time aviation maps platform). This platform is a user-friendly flight planning and airspace management tool. In 2023, Aviamaps' software will be integrated into the Frequentis solution for automatic approval of drone flights in Austria. Frequentis has worked with this company on drone research projects in the past.

75th-year anniversary of Frequentis

In 2022, Frequentis celebrated its 75th anniversary. From its origins as a small company – what would be called a start-up today – founded by two ambitious engineers in post-war Vienna in 1947, it grew first into a medium-sized company and eventually into a successful global group of companies.

The distinctive culture with a safety-critical focus plays a key role in the success of the Frequentis team. 75 years of experience with projects in the safety-critical sector have resulted in extensive expertise and a deep understanding of customers' needs. Frequentis intends to continue to use this knowledge on the world's markets in the future – wherever the mission is to protect people and property.

Impact of the geopolitical situation

Almost concurrently with the weakening of the COVID-19 pandemic, war broke out in Ukraine in Eastern Europe. As well as causing immense local suffering, this affected Frequentis' internal and external stakeholders in many ways.

The war in Ukraine did not have a relevant impact on Frequentis' revenues because total revenues generated with Ukraine, Russia, and Belarus in 2022 were less than EUR 100 thousand. Indirectly, it resulted in higher prices, especially for electricity, gas, and fuels. Consequently, prices of other everyday products rose, so inflation increased sharply almost everywhere in the world and was well above the average of recent years. This resulted in the need to adjust prices for existing and new customer projects. The inflation-related salary adjustments under individual and collective salary agreements are reflected in the Frequentis Group's personnel expenses in both 2022 and 2023.

Frequentis was affected to some extent by supply chain bottlenecks and, in some cases, sharp increases in procurement prices and delivery delays. 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.

Impact of the COVID-19 pandemic

From March 2020, Frequentis had an internal coronavirus crisis team. This was an interdisciplinary team composed of representatives of relevant departments and headed by the Chairman of the Executive Board. The crisis team met at regular intervals, depending on the course of the pandemic, to evaluate the situation and define the action to be taken.

The measures were scaled back from early summer 2022 as the pandemic subsided, but some general precautions such as mandatory testing of participants at large meetings remained in place until the end of the year.

The principal areas of action that enabled Frequentis to navigate the COVID-19 pandemic well were health & safety and facility management, plus increased use of digital technologies, both internally and with customers and partners.

Important factors in this were customers' strong confidence in Frequentis, while their flexibility and creativity supported the ability to find good solutions. Despite the ongoing travel restrictions, it was therefore possible to continue to work on projects remotely (via video conferences) and perform acceptance procedures.

Frequentis' corporate culture permitted mobile working practices before the pandemic (working from home or on-site at customers' premises), so both employees and the existing IT infrastructure handled the extensive shift to working from home very well.

Experience during the pandemic provided some key lessons that can be used for Frequentis' long-term sustainable development. The findings and experience include important impetus for more extensive use of digital opportunities such as modifying processes and tools to optimise remote working and to drive forward product innovations.

Order intake

Order intake in the Frequentis Group was EUR 404.8 million in 2022, an increase of 21.5% (EUR 71.6 million) compared with 2021, when order intake was EUR 333.2 million.

The distribution of order intake between the two segments in 2022 was as follows: Air Traffic Management 68% (EUR 275.4 million) compared with 69% in 2021 (EUR 230.4 million), Public Safety & Transport 32% (EUR 129.4 million), compared with 31% in 2021 (EUR 102.8 million).

Highlights of order intake in the Air Traffic Management segment

Frequentis' Air Traffic Management segment acquired a wide variety orders across its product range from all over the world.

Demand for remote digital towers remains consistently high. The French air navigation service provider, DSNA (Direction des Services de la Navigation Aérienne), has placed an order with Frequentis to supply its state-of-the-art remote digital tower solution for France.

In the area of drones, the Australian air traffic control organisation has selected Frequentis to participate in the tender procedure for the country's first Flight Information Management System (FIMS). This system will support the secure integration of drones as emerging airspace users into Australia's low-altitude airspace.

The Austrian air navigation service provider Austro Control and Frequentis have started to build a digital traffic management solution for secure integration of drones into Austrian airspace.

The German armed forces have awarded Frequentis a contract to deliver IT equipment for the National Air Defence command centre. The Frequentis command and control system will support the "National Situation and Command Centre for Security in Airspace" in securing German airspace. With the support of this system, security-critical scenarios such as unauthorised intrusion into airspace, aircraft hijackings, and terrorist attacks can be handled efficiently and effectively.

The Royal Netherlands Airforce has decided to replace its three existing voice communication systems (VCS) with a single system. In the international selection procedure, the Frequentis Secure VCS proved the safest, most suitable, and most economically advantageous solution.

Highlights of order intake in the Public Safety & Transport segment

In the Public Safety & Transport segment, the Public Safety business domain increased its market leadership with the emergency services in Germany by securing an order to supply a system to connect the emergency rescue services and fire brigades to the safety-critical digital communication network in the federal state of North Rhine-Westphalia as well as an order for an integrated control centre solution for the federal state of Saarland.

In the Public Transport business domain, orders were mainly secured from the installed base in Europe. As well as orders for releases and upgrades, these include add-on and maintenance contracts.

Through an innovation partnership with Austrian Federal Railways, Frequentis is working on hangar-based drone operations. Routine maintenance flights by drones could quickly detect damage to infrastructure or hazards in the vicinity of the track so they can be dealt with swiftly.

In the Maritime business domain, Frequentis acquired an order to upgrade the control centre communications for the coastal surveillance (search and rescue) services in Australia and Iceland, as well as orders from the installed base, for example from the Dutch coastal surveillance organisation.

Orders on hand

Orders on hand amounted to EUR 522.0 million as at 31 December 2022 (including orders on hand at the new acquisition, Regola). That was an increase of 11.6% or EUR 54.1 million compared with year-end 2021 (EUR 467.9 million). The Air Traffic Management segment accounted for around 63% of total orders on hand (December 2021: 64%) and the Public Safety & Transport segment for 37% (December 2021: 36%).

Revenues and operating performance

In 2022, revenues increased by 15.7% (EUR 52.4 million) to EUR 386.0 million (2021: EUR 333.5 million). Organic growth – i.e. growth excluding the acquisition of the Italian company Regola in 2022 – was 12.7%.

Revenues in the Air Traffic Management segment grew by 17.3% to EUR 257.8 million. In the Public Safety & Transport segment, revenues increased by 12.4% to EUR 127.7 million. The revenue split between the Air Traffic Management and Public Safety & Transport segments was 67% : 33% in 2022 (2021: 66% : 34%).

Looking at the regional revenue split, in 2022 Europe accounted for 65% (2021: 68%), the Americas for 16% (2021: 15%), Asia for 12% (2021: 9%), Australia/Pacific for 5% (2021: 5%), and Africa for 2% (2021: 2%). Less than 1% (2021: 1%) of revenue was not allocated to a region.

The change in inventories of finished goods and work in progress was less than EUR 0.1 million in 2022 (2021: EUR -0.2 million). Own work capitalised rose to EUR 2.6 million (2021: EUR 0.1 million), mainly due to voice communication systems produced in 2022 for leasing.

The other operating income increased to EUR 10.5 million (2021: EUR 9.5 million). The biggest single items here are grants and subsidies for research and development costs and income from research subsidies.

No profit from business combinations was recorded in 2022. In 2021, there was a profit from business combinations of EUR 2.0 million resulting from the L3Harris transaction.

The operating performance increased by 15.7% to EUR 399.1 million in 2022 (2021: EUR 344.8 million).

Earnings

The cost of materials and purchased services increased by 31.1% to EUR 99.2 million (2021: EUR 75.7 million). This was attributable, among other things, to the acquisitions and to supply chain bottlenecks, which affected Frequentis to some extent (at times, it registered significant price rises and delays in the delivery of purchased goods). Personnel expenses rose 11.9% to EUR 203.9 million (2021: EUR 182.1 million). This was attributable to the acquisitions made in 2021 and 2022, salary rises, and the increase in the workforce.

The other operating expenses were 24.3% higher at EUR 50.3 million (2021: EUR 40.5 million), driven principally by higher travel and advertising expenses, for example for trade shows and the new companies acquired in 2021 and 2022. Since unrestricted travel is now possible and air fares have risen, travel expenses increased by EUR 5.3 million year-on-year to EUR 10.7 million in 2022. Even so, they are still lower than they were in 2019, before the COVID-19 pandemic (2019: EUR 11.9 million).

EBITDA (earnings before interest, taxes, depreciation, amortisation, and impairment losses) declined to EUR 45.6 million in 2022 (2021: EUR 46.5 million). The EBITDA margin (relative to revenues) was 11.8%, compared with 13.9% in 2021.

Depreciation and amortisation increased to EUR 17.5 million (2021: EUR 15.8 million). This increase was mainly due to higher additions of property, plant and equipment. Impairment losses of EUR 3.1 million were recognised in 2022 (2021: EUR 1.7 million) 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 decreased to EUR 25.0 million in 2022 (2021: EUR 29.0 million). The EBIT margin (relative to revenues) was 6.5%, compared with 8.7% in 2021.

Profit before tax was EUR 24.7 million in 2022 (2021: EUR 27.9 million). Income tax expense was EUR 5.9 million (2021: EUR 7.2 million), giving a tax rate of 23.7% (2021: 25.6%).

The profit for the period was EUR 18.9 million (2021: EUR 20.8 million). Basic and diluted earnings per share were EUR 1.41 in 2022 (2021: EUR 1.50).

Employees

Starting with the half-year report in 2022, the number of employees is now expressed as full-time equivalents (FTEs) as increasing use is being made of opportunities to work part-time. This development reflects the general trend on the labour market, where there is increasing demand for part-time jobs.

The number of employees increased by 7.4% to an average of 2,081 FTEs in 2022 (including the additional employees from the acquisition of Regola). The restated figure for 2021 was 1,937 FTEs.

Asset and capital structure

Total assets increased by 7.8% to EUR 340.3 million as at end-December 2022 (end-December 2021: EUR 315.7 million). This was partly attributable to an increase in contract assets. The equity ratio was 43.3% (end-December 2021: 41.1%). Equity increased by EUR 17.5 million to EUR 147.3 million (end-December 2021: EUR 129.9 million).

The net cash position (cash and cash equivalents and time deposits less liabilities to banks and other financial liabilities) was EUR 91.0 million as at end-December 2022, which was below the net cash position of EUR 101.1 million recorded at the end of December 2021.

Non-current assets amounted to EUR 80.4 million at the end of December 2022 (end-December 2021: EUR 72.6 million). The main items here were property, plant and equipment, which totalled EUR 53.3 million (end-December 2021: EUR 47.7 million), and intangible assets, which amounted to EUR 14.5 million (end-December 2021: EUR 17.7 million).

Current assets totalled EUR 259.8 million at the end of December 2022 (end-December 2021: EUR 243.1 million). The most important item here is cash and cash equivalents, including time deposits, which amounted to EUR 91.4 million (end-December 2021: EUR 106.0 million), followed by trade accounts receivable totalling EUR 77.0 million (end-December 2021: EUR 69.4 million), contract assets, which amounted to EUR 50.5 million (end-December 2021: EUR 38.4 million), and inventories, which totalled EUR 21.7 million (end-December 2021: EUR 17.1 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 2022, more than 75% of total cash and cash equivalents and time deposits were deposited with eleven system-relevant major banks in Austria and Germany. Less than 25% were deposited with approximately 25 other banks in Europe, Australia, Asia, and the Americas.

On the liabilities side, the main item was equity of EUR 147.3 million as at end-December 2022 (end-December 2021: EUR 129.9 million). The second largest item comprised current liabilities, which amounted to EUR 131.0 million as at end-December 2022 (end-December 2021: EUR 125.2 million). Contract liabilities accounted for EUR 68.0 million of this amount (end-December 2021: EUR 65.4 million).

Non-current liabilities (third-largest item on the liabilities side) totalled EUR 61.9 million (end-December 2021: EUR 60.6 million). The biggest item here comprised non-current lease liabilities, which totalled EUR 30.8 million (end-December 2021: EUR 29.8 million).

Cash flow

The cash flow from operations fell to EUR 43.6 million in 2022 (2021: EUR 47.9 million).

The cash flow for operating activities decreased to EUR 14.2 million in 2022 (2021: EUR 48.8 million), mainly due to the change in contract assets and other receivables.

The cash outflow for investing activities was EUR 20.1 million in 2022, compared with an outflow of EUR 24.6 million in 2021. This includes all expenses for the acquisition of the Italian company Regola and the investment in the Finnish company Aviamaps. Capital expenditures (cash outflows for the purchase of intangible assets, property, plant and equipment) were EUR 10.1 million, which was higher than in 2021 (EUR 6.3 million). The cash outflows in 2022 were influenced by own work capitalised, mainly in connection with voice communication systems produced in 2022.

The cash outflow for financing activities was EUR 16.5 million in 2022, compared with an outflow of EUR 12.6 million in 2021. This was mainly due to loan repayments.

The total cash flow in 2022 was EUR -22.4 million (2021: EUR 11.5 million). Cash and cash equivalents, excluding time deposits, amounted to EUR 81.4 million as at end-December 2022 (end-December 2021: EUR 103.8 million).

Business relations with related parties

For details see ↗ *Consolidated financial statements as at 31 December 2022, note 37.*

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 17.3% to EUR 257.8 million in 2022 (2021: EUR 219.8 million). EBIT was EUR 10.2 million (2021: EUR 12.5 million).

Highlights from the operating business

Project acceptances took place around the world in 2022. They included key milestones and acceptances of voice communication systems for the British, French, Spanish, and Brazilian air navigation service providers. To handle the increased air traffic during the World Cup 2022 in Qatar, the country's voice communication system was upgraded and air traffic control at the airport tower was digitalised and modernised. State-of-the-art aviation message handling systems were taken into service in eight countries in Africa and in Argentina.

A prototype for multiple remote tower modules developed within the framework of the SESAR programme funded by the EU was set up and tested by Frequentis and the German Aerospace Centre (DLR) during validation exercises in Germany. Located in a remote tower centre outside the airport, these modules allow control of several airports from a single location. This supports centralisation of air traffic services (ATS) and the pooling of resources, thus providing efficiency gains.

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 12.4% to EUR 127.7 million in 2022 (2021: EUR 113.6 million). EBIT decreased to EUR 14.9 million (2021: EUR 16.6 million).

Highlights from the operating business

In the Public Safety business domain, the rollout of the regional solution for the police force in the German state of North Rhine-Westphalia should be highlighted. Frequentis has been presented with the International Critical Communications Award (ICCA) in the category control room innovations for the integration and brokering of multiform critical communications via the 3020 LifeX platform.

In 2022, the MissionX innovation was exhibited internationally for the first time at the Critical Communications World trade show in Vienna. MissionX is an integrated end-to-end (E2E) system solution for the operation of mission-critical communication services via 4G/5G networks.

The pilot phase of the EU's Horizon 2020 Broadway project was completed in 2022. In the final test after several years of development work, the BroadPort consortium led by Frequentis was able to demonstrate the practicability of a pan-European safety-critical broadband network based on the new international 3GPP MCX standard. The exercise involved more than 40 public protection and disaster relief organisations from across Europe and eight local Spanish authorities.

The Public Transport business domain achieved key milestones, for example in European rail projects. The Maritime business domain reported important project acceptances in Greenland and on the Faeroe Islands.

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 communication 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.

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 http: //www.frequentis.com/en/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 our 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 sound 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.

To simplify the communication channels that can be used internally and externally to report such breaches, 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.

Essentially, Frequentis systematically evaluates and summarises the strategy, the prevailing competitive landscape, the political situation in the countries with the greatest project exposure, the organisation ensuring professional project execution, and liquidity management. The resulting measures to utilise opportunities and reduce any risks identified are discussed by an extended management circle and the appropriate action is decided on. The Vice President Finance is responsible for this process.

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 2023, 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.

Risk relating to the COVID-19 (coronavirus) pandemic or other pandemics

The ongoing development of the COVID-19 pandemic or other pandemics could continue to 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, as has been seen in connection with the spread of coronavirus, 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 products 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.

Risks relating to the (macro)economic and political environment

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.

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 many of its subsidiaries.

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.

Risks relating to Frequentis' industry and business

Unpredictabilities, which are characteristic of the tender project business, and by 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 a business 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.

Impact of climate change.
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 climate change.

Cyberattacks.
Given that Frequentis' business is heavily dependent on IT security, cyberattacks could pose a substantial risk to the company's 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.

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.

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.

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.

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.

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.

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.

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.

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.

Further risks in this area:

- Uncertain, delayed, or deferred orders.
- Non-negotiable contract terms in public tender processes and, in particular, unlimited liability clauses in public-sector contracts.
- Malfunctioning of products and product shortcomings.
- Embargoes and other trade restrictions.
- Generation of inadequate cash flows from operating activities to finance liquidity and net working capital requirements.
- Loss of key personnel and failure to attract qualified employees.
- Fluctuation of raw material and energy prices and labour costs.
- Rising cost pressure triggered, in particular, by competitors in low-wage countries.
- Loss of suppliers or interruptions or bottlenecks in the supply of the Group's services, software, component parts, sub-assemblies or modules.
- Fluctuations in exchange rates and rising interest rates.
- High inflation rates or inflation rates above the long-term average.
- Failure to deal successfully with the challenges of (organic) growth, and excess capacities or capacity shortages in Frequentis' organisational units.

Regulatory, legal, and tax 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 subcontractor).
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.
- Compliance-related risks.

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 2022 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 2022, the company held 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 2022, 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 2022.

4. As at 31 December 2022, 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 chairman of the Supervisory Board. The chairman'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. Under the resolution of the Annual General Meeting of 8 April 2019, the Executive Board is authorised, subject to the approval of the Supervisory Board, to increase the company's share capital up to 7 April 2024 by up to EUR 4,720,000 (four million seven hundred and twenty thousand) by issuing up to 4,720,000 (four million seven hundred and twenty thousand) new 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 was authorised by the Annual General Meeting of 2 June 2022, pursuant to Section 65 (1) No. 4 and No. 8 AktG, 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 many 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 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.

No shares in the company were purchased in 2022.

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 2022. Revenues rose 15.7% to EUR 386.0 million. Order intake increased 21.5% to EUR 404.8 million and therefore topped the EUR 400 million threshold for the first time. EBIT was EUR 25.0 million and the EBIT margin was 6.5%, which was within the target range of 6-8%.

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

At the start of 2022, Frequentis continued its growth strategy in the Public Safety domain by acquiring a 51% interest in the Italian company Regola. Regola offers innovative software solutions such as an integrated control room solution to improve the emergency response of public safety teams. Regola's command and control (CAD) solutions complement Frequentis' portfolio in the area of public safety and adjacent markets. The aim is to step up international sales and marketing.

In September 2022, Frequentis acquired a 25% interest in the Finnish software producer Aviamaps Oy. This company's software enables users of its platform to book drone flights directly in the internet by clicking on a map (real-time aviation maps platform). This platform is a user-friendly flight planning and airspace management tool. In 2023, Aviamaps' software will be integrated into the Frequentis solution for automatic approval of drone flights in Austria. Frequentis has worked with this company on drone research projects in the past.

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 2023

Although the COVID-19 pandemic has now been overcome, the uncertainties have not decreased in 2023:

- the war in Ukraine is entering its second year,
- inflation is far from the customary average of less than 2% (in the euro zone) since the turn of the millennium,
- geopolitical tensions have become part of normal life again,
- the major economic areas such as the USA and the euro zone will probably achieve growth of just 1.4% and 0.7%, respectively, in 2023 (IMF forecast).

Although the tensions in south-east Asia are lower, even the outbreak of limited conflicts could rapidly cause disruption on 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 and the resulting interdependencies make that more difficult at present.

It is not possible to make a reliable estimate of the exact effect on 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.

In 2023, expenses for company-funded research & development will be higher than in 2022. Capital expenditure (capex) will be around EUR 8 million.

Depending on the aspects outlined above, Frequentis has the following targets for 2023 compared with 2022:

- Increase revenues
- Increase order intake
- EBIT margin of around 6-8%.

Vienna, 13 March 2023

Consolidated Financial Statements as at 31 December 2022

Consolidated income statement

	Note	2022 EUR thousand	2021 EUR thousand
Revenues	**(3) (4)**	**385,970**	**333,526**
Change in inventories of finished goods and work in progress	(3)	22	-202
Own work capitalised	(3) (5)	2,574	92
Other operating income	(3) (6)	10,514	9,451
Profit from business combinations		0	1,951
Total income (operating performance)		**399,080**	**344,818**
Cost of materials and purchased services	(7)	-99,250	-75,696
Personnel expenses	(8)	-203,872	-182,137
Other operating expenses	(9)	-50,326	-40,479
Earnings before interest, taxes, depreciation, amortisation, and impairment losses (EBITDA)		**45,632**	**46,506**
Depreciation of property, plant and equipment and amortisation of intangible assets	(10)	-17,535	-15,808
Impairment losses	(3) (17) (18)	-3,106	-1,730
Earnings before interest and taxes (EBIT)	**(3)**	**24,991**	**28,968**
Financial income	(11)	209	79
Financial expenses	(12)	-738	-607
Net change in impairment losses on financial assets	(13)	0	-857
Earnings from investments accounted for at equity	(19)	275	342
Profit/loss before tax		**24,737**	**27,925**
Income taxes	(14)	-5,859	-7,158
Profit/loss for the period		**18,878**	**20,767**
Profit/loss attributable to:			
Equity holders of the company		**18,723**	**19,970**
Non-controlling interests	**(29)**	**155**	**797**
		18,878	**20,767**
Basic earnings per share	**(15)**	**1.41**	**1.50**
Diluted earnings per share	**(15)**	**1.41**	**1.50**

Consolidated statement of comprehensive income

	Note	2022 EUR thousand	2021 EUR thousand
Profit/loss for the period		**18,878**	**20,767**
Items that may be reclassified to the income statement in subsequent periods			
Foreign currency translation	(27)	284	1,117
Measurement of cash flow hedges	(27) (35)	297	-298
Income taxes relating to cash flow hedges	(27)	-76	74
Items that may not be reclassified to the income statement			
Remeasurement of post-employment benefits	(27) (30)	4,024	-169
Income taxes relating to the remeasurement of post-employment benefits	(27)	-1,176	23
Other comprehensive income, net of tax		**3,353**	**747**
Total comprehensive income		**22,232**	**21,515**
Total comprehensive income attributable to:			
Equity holders of the company		**21,963**	**20,755**
Non-controlling interests		**269**	**760**
		22,232	**21,515**

Consolidated statement of financial position

ASSETS	Note	31 Dec. 2022 EUR thousand	31 Dec. 2021 EUR thousand
Non-current assets			
Property, plant and equipment	(16)	53,298	47,717
Intangible assets	(17)	14,501	17,717
Goodwill	(18)	5,834	3,433
Investments accounted for at equity	(19)	2,097	1,656
Advance payments for non-current assets	(19)	35	0
Other non-current financial assets		885	241
Deferred tax assets	(14)	3,785	1,849
		80,435	**72,613**
Current assets			
Inventories	(21)	21,726	17,077
Trade accounts receivable	(22)	76,990	69,435
Contract assets	(23)	50,475	38,353
Contract costs	(24)	4,024	3,712
Other current financial assets	(25)	2,759	672
Other current non-financial assets	(25)	11,360	7,389
Income tax receivables		1,126	448
Time deposits	(20)	10,000	2,199
Cash and cash equivalents	(20)	81,380	103,798
		259,840	**243,083**
Total assets		**340,275**	**315,696**

LIABILITIES AND EQUITY	Note	31 Dec. 2022 EUR thousand	31 Dec. 2021 EUR thousand
Shareholders' equity			
Share capital	(26)	13,280	13,280
Capital reserves	(27)	21,138	21,138
Retained earnings	(27) (28)	110,494	92,274
Treasury shares		-221	-384
Adjustments for foreign currency translation		364	106
Equity attributable to equity holders of the parent company		**145,055**	**126,414**
Non-controlling interests	(29)	2,224	3,436
Total shareholders' equity		**147,279**	**129,850**
Non-current liabilities			
Liabilities to banks and other financial liabilities		218	3,820
Provisions	(30)	17,263	19,992
Lease liabilities	(36)	30,763	29,785
Other non-current financial liabilities	(32)	4,239	858
Deferred tax liabilities	(14)	9,441	6,166
		61,924	**60,621**
Current liabilities			
Liabilities to banks and other financial liabilities		199	1,085
Contract liabilities	(31)	68,035	65,388
Trade accounts payable		16,258	13,422
Provisions	(33)	14,914	17,415
Lease liabilities	(36)	8,422	7,794
Other current financial liabilities	(32)	6,087	4,996
Other current non-financial liabilities	(32)	10,261	10,133
Current tax liabilities		6,896	4,992
		131,072	**125,225**
Total shareholders' equity and liabilities		**340,275**	**315,696**

Consolidated cash flow statement

	Note	2022 EUR thousand	2021 EUR thousand
Profit/loss before tax		24,737	27,925
Net interest income/expense		529	529
Foreign currency translation		**126**	-91
Profit/loss from the disposal of non-current assets		12	13
Depreciation of property, plant and equipment and amortisation of intangible assets	(13) (16) (17)	20,641	18,401
Earnings from investments accounted for at equity	(19)	-275	-342
Change in provisions	(30) (33)	-2,151	3,860
Profit from business combinations		0	-1,951
Income from changes in variable purchase price payments	(32)	-402	-850
Other non-cash income/expenses		389	363
Net cash flow from operations		**43,606**	**47,857**
Change in inventories	(21)	-4,448	-2,902
Change in trade accounts receivable	(22)	-1,578	-6,139
Change in contract assets	(23)	-12,122	8,565
Change in contract costs	(24)	-312	-550
Change in other receivables	(25)	-6,298	3,402
Change in trade accounts payable		2,868	1,340
Change in contract liabilities	(31)	-1,910	-1,388
Change in other liabilities	(32)	239	2,482
Change in net working capital		**-23,561**	**4,810**
Interest paid		-705	-608
Interest received		169	83
Dividends received		114	195
Income taxes paid/refunded	(14)	-5,400	-3,584
Net cash flow from operating activities		**14,223**	**48,753**

	Note	2022 EUR thousand	2021 EUR thousand
Cash inflows from the sale of intangible assets		1	7
Cash inflows from the sale of property, plant and equipment		20	4
Cash inflows from time deposits		2,199	0
Cash outflows for the purchase of intangible assets		-946	-2,456
Cash outflows for the purchase of property, plant and equipment		-9,160	-3,883
Cash outflows for time deposits		-10,000	-2,006
Cash outflows for the purchase of investments accounted for at equity		-160	0
Cash outflows for the acquisition of subsidiaries, less acquired cash and cash equivalents		**-2,097**	**-16,279**
Net cash flow from investing activities		**-20,143**	**-24,613**
Dividends paid to owners	(26)	-2,654	-1,990
Dividends paid to non-controlling interests	(29)	-953	-603
Purchase of treasury shares	(26)	0	-384
Cash inflows from loans and other financing		398	0
Cash outflows for repayment of loans and other financing		-4,599	-1,400
Cash outflows for payments of principal on lease liabilities	(36)	-8,686	-8,228
Net cash flow from financing activities		**-16,494**	**-12,605**
Change in cash and cash equivalents:			
Net cash flow from operating activities		14,223	48,753
Net cash flow from investing activities		-20,143	-24,613
Net cash flow from financing activities		-16,494	-12,605
Net change in cash and cash equivalents		**-22,413**	**11,535**
Cash and cash equivalents at start of period		**103,798**	**91,265**
Cash-flow related change in cash and cash equivalents		-22,413	11,535
Foreign currency translation		-5	992
Other loss allowances		0	6
Cash and cash equivalents at end of period		**81,380**	**103,798**

For further information on the consolidated cash flow statement, see Note 34.

Consolidated statement of changes in shareholders' equity

in EUR thousand	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
Note	(26)	(27)	(30)	(28)	(35)	(27)	(26)			(29)	
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	3,253
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**

in EUR thousand	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
Note	(26)	(27)	(30)	(28)	(35)	(27)	(26)			(29)	
As at 1 January 2021	13,280	21,138	-6,133	232	-123	80,699		-1,053	108,041	3,382	111,423
Profit/loss for the period						19,970			19,970	797	20,767
Other comprehensive income			-151		-223			1,159	785	-37	747
Total comprehensive income			-151		-223	19,970		1,159	20,754	760	21,515
Dividends						-1,990			-1,990	-603	-2,593
Purchase of treasury shares							-384		-384		-384
Changes in connection with put options						-377			-377	-103	-480
Other changes				370					370		370
As at 31 December 2021	**13,280**	**21,138**	**-6,284**	**602**	**-346**	**98,302**	**-384**	**106**	**126,414**	**3,436**	**129,850**

Notes to the consolidated financial statements

1. General information

Reporting

The consolidated financial statements of Frequentis AG for the 2022 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 International Financial Reporting Interpretations Committee (IFRIC) that were mandatory for 2022 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 Innovationsstrasse 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 2022.

The financial year is 1 January to 31 December 2022.

In the reporting period, the Executive Board comprised:

- Norbert Haslacher, Chairman
- 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 (from 1 September 2022)
- Siegfried Meisel, member pursuant to Section 110 ArbVG (until 31 August 2022)
- 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 29 March 2023.

Consolidated group

Besides Frequentis AG, which is the parent company of the consolidated group, the consolidated financial statements of Frequentis AG include 6 (2021: 6) domestic subsidiaries and 28 (2021: 26) 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.

7 (2021: 3) foreign companies and 2 (2021: 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

- BlueCall Systems GmbH, Vienna (100%) (renamed Frequentis Invest4Tech GmbH on 20 February 2023)
- 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 (51%)
- ELARA Leitstellentechnik GmbH, Aachen (51%)
- Frequentis Comsoft GmbH, Karlsruhe (100%)
- Frequentis Czech Republic s.r.o., Prague (100%)
- Frequentis Deutschland GmbH, Langen (100%)
- Frequentis France SARL, Toulouse (100%)
- Frequentis Norway AS, Oslo (100%)
- Frequentis Orthogon GmbH, Bremen (100%)
- Frequentis Romania S.R.L., Cluj-Napoca (100%)
- Frequentis Solutions & Services s.r.o., Bratislava (100%)
- Frequentis UK Ltd., Twickenham (100%)
- Regola S.r.l., Turin (51%)

- Secure Service Provision GmbH, Leipzig (80%)
- Systems Interface Ltd., Bordon (51%)
- TEAM Technology Management GmbH, Gräfelfing (51%; effective shareholding 26%)

c) Fully consolidated subsidiaries in the Americas

- Frequentis California Inc., Columbia (100%)
- Frequentis Canada ATM Ltd., Gatineau (100%)*)
- Frequentis Canada Ltd., Ottawa (100%)
- Frequentis Defense Inc., Columbia (100%)
- Frequentis do Brasil Assessoria, Serviços e Comércio de Sistemas de Informação e Comunicação Ltda., São Paulo (100%)
- Frequentis USA Inc., Columbia (100%)
- Frequentis USA Holdings, Inc., Columbia (100%)

d) Fully consolidated subsidiaries in Asia

- Frequentis Middle East Limited, Abu Dhabi (100%)
- Frequentis (Shanghai) Co. Ltd., Shanghai (100%)
- Frequentis Singapore Pte. Ltd., Singapore (100%)

e) Fully consolidated subsidiaries in Australia/Pacific

- C4i Pty Ltd, Melbourne (100%)
- Frequentis Australia Holding Pty Ltd, Hendra (100%)
- Frequentis Australasia Pty. Ltd, Hendra (100%)

f) Companies accounted for using the equity method

- AIRlabs Austria GmbH, Graz (18%)
- AIRNAV Technology Services Inc., Iloilo (40%)**)
- AMANTEA Ltd., Zabbar (50%, effective shareholding 25.5%)
- Aviamaps Oy, Valkeakoski (25%)
- GroupEAD Europe S.L., Madrid (28%)
- Lift S.r.l., Cagliari (24%, effective shareholding 12.24%)
- Mission Embedded GmbH, Vienna (20%)
- Nowtech S.r.l., Sassari (20%, effective shareholding 10.2%)
- Nemergent Solutions S.L., Bilbao (15%)

*) As at 1 January 2023, Frequentis Canada ATM Ltd. was merged into Frequentis Canada Ltd.

**) As at 20 February 2023, the interest in AIRNAV Technology Services Inc. was increased to 65%.

All information on the consolidated group relates to the circumstances as at 31 December 2022.

Changes to the consolidated group

On January 5, 2022, Frequentis acquired a 51% interest in **Regola S.r.l.** (registered office Turin, Italy) and its associated companies AMANTEA Ltd., Lift S.r.l., and Nowtech S.r.l., which are accounted for using the equity method. Regola's innovative software solutions complement Frequentis' public safety product portfolio and therefore support its long-term growth strategy in this business domain.

Frequentis and Regola supply integrated solutions to improve the response of emergency services. Regola's command and control (CAD) solutions complement Frequentis' portfolio in the area of public safety and adjacent markets. Its main product is the UNIQUE CAD product family, accompanied by products offered on a software-as-a-service basis. The aim is to step up international sales and marketing. Regola has been allocated to the Public Safety & Transport (PST) segment.

The purchase agreement was signed on 22 October 2021 and the transaction was closed on 5 January 2022.

The contractually agreed purchase price comprised the following components:

	Fair value as at 5 Jan. 2022 100% EUR thousand	Fair value as at 5 Jan. 2022 51% EUR thousand
Basic purchase price	4,020	2,050
Earn-out payments	980	500
	5,000	**2,550**
Regola NFP (net financial position)	-130	-66
Target Regola NFP	0	0
	-130	**-66**
Regola working capital	1,104	563
Target Regola working capital	560	286
	544	**277**
Total consideration	**5,414**	**2,761**

Based on the local annual financial statements as at 31 December 2021, Regola achieved the EBIT target for 2021 and the earn-out payment of EUR 250 thousand was paid in 2022. Based on the annual financial statements for 2022, the EBIT target for 2022 was also achieved. This will result in a further earn-out payment of EUR 250 thousand.

In accordance with the purchase agreement, EUR 2,050 thousand was paid at the closing date and EUR 461 thousand (earn-out-payment of EUR 250 thousand and EUR 211 thousand due to NFP and working capital adjustments) was paid as at 1 April 2022 following final approval of the local financial statements for 2021.

In addition, the purchase agreement includes an option for non-controlling shareholders in Regola to transfer their interests to Frequentis. If this option is exercised, Frequentis has an irrevocable obligation to acquire the interests in this business. The put option can be exercised at the earliest on 30 June 2027. It is based on the enterprise value, calculated as a multiples-based valuation less net financial debt. The multiples-based valuation is based on EBIT as at 31 December 2027. The liability from this put option in the amount of EUR 2,375 thousand, which has already been recognised as other non-current financial liabilities, reduced the non-controlling interests to EUR 278 thousand as at the acquisition date. The put option was remeasured at EUR 3,262 thousand. as at 31 December 2022 and is recognised in other non-current financial liabilities.

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

	Fair value as at 5 Jan. 2022 100% EUR thousand	Fair value as at 5 Jan. 2022 51% EUR thousand
Intangible assets	3,088	1,575
Property, plant, and equipment	447	228
Investments accounted for at equity	152	77
Other non-current receivables	15	8
Advance payments made	201	103
Trade accounts receivable	5,977	3,048
Other assets	349	178
Cash and cash equivalents	414	211
Deferred tax liabilities	-771	-393
Non-current lease liabilities	-175	-89
Provisions for severance payments	-816	-416
Contract liabilities	-4,557	-2,324
Trade accounts payable	-769	-392
Current lease liabilities	-65	-33
Other liabilities	-280	-143
Current tax liabilities	-83	-42
Other current provisions	-125	-64
Net assets	**3,002**	**1,532**
Consideration paid	5,414	2,761
Goodwill	2,412	1,230

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 their fair value.

Since the acquisition, Regola has contributed revenues of EUR 10,005 thousand and EBIT of EUR 953 thousand to the consolidated figures of the Frequentis Group.

Other changes to the consolidated group

Frequentis USA Holdings, Inc. (based in Maryland, USA) was established in February 2022. This company is wholly owned by Frequentis AG. The Group companies in the USA are assigned to Frequentis USA Holdings, Inc.

Further, 25% of the shares in Aviamaps Oy were acquired in the reporting period. The interest was acquired through BlueCall Systems GmbH (a wholly owned subsidiary of Frequentis AG). Further details are given in Note 19. Investments accounted for at equity (associated companies).

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. 2022	Closing rate 31 Dec. 2021	Average rate 31 Dec. 2022	Average rate 31 Dec. 2021
AED	Emirati dirham	3.92	4.16	3.86	4.34
AUD	Australian dollar	1.57	1.56	1.52	1.58
BRL	Brazilian real	5.64	6.31	5.41	6.38
CAD	Canadian dollar	1.44	1.44	1.37	1.48
CNY	Chinese renminbi yuan	7.36	7.19	7.07	7.61
CZK	Czech koruna	24.12	24.86	24.54	25.65
GBP	British pound	0.89	0.84	0.85	0.86
NOK	Norwegian krone	10.51	9.99	10.11	10.16
RON	Romanian leu	4.95	4.95	4.93	4.93
SGD	Singapore dollar	1.43	1.53	1.45	1.59
USD	US dollar	1.07	1.13	1.05	1.18

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 2022 and were effective at that date:

- Property, Plant and Equipment – Proceeds before Intended Use (IAS 16)
- Onerous Contracts – Cost of Fulfilling a Contract (IAS 37)
- Reference to the Conceptual Framework (IFRS 3)

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 2022 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 17	Insurance Contracts	19 November 2021	2023	None
IAS 1	Classification of Liabilities as Current or Non-Current	Open	2024	None
IAS 1	Disclosure of Accounting Policies	2 March 2022	2023	None
IAS 8	Accounting Policies; Changes in Accounting Estimates and Errors	2 March 2022	2023	None
IAS 12	Deferred Tax related to Assets and Liabilities arising from a Single Transaction	11 August 2022	2023	None
IFRS 16	Lease Liability in a Sale and Leaseback	Open	2024	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 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 determined, 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.

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, the assets must be assessed to see 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 is 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.

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 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 remeasurement of the lease liability, a corresponding adjustment is made to the carrying amount of the right-of-use asset, or is recognised in profit or loss if the carrying amount of the right-of-use asset has been reduced (taking into consideration the reduction in the lease liability) or if it has been 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 used. 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 leases 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 2022 or 2021.

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. In the 2022 and 2021 financial years, the Group did not hold any financial assets designated at FVTPL.

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 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 the fair value are recognised in profit or loss, unless the derivatives are designated in a hedging relationship classified as a cash flow hedge.

In connection with hedging of future cash flows ("cash flow hedges") relating to a recognised receivable or liability or a highly probable future transaction, the effective portion of the change in fair value is recognised in other comprehensive income and any ineffectiveness is recognised in profit or loss. The amounts recognised in other comprehensive income are reclassified to profit or loss (revenues, other operating income or other operating expenses) in the period in which the hedged item affects profit or loss.

At the initial designation of a hedging relationship, the Group documents the risk management objectives and strategies of the hedge. Further, it documents the economic relationship between the hedged item and the hedging instrument, and whether it expects changes in cash flows from the hedged item and the hedging instrument to offset each other. Hedging instruments were only designated as cash flow hedges for projects where execution commenced prior to 1 January 2019.

A prospective effectiveness test is performed when the derivative is concluded to make a quantitative assessment of the hedging relationship. If the criteria for hedge accounting are met, the financial derivative is designated as a hedging instrument. The effectiveness of the hedge is tested annually using a retrospective effectiveness test based on a hypothetical derivative.

Under IFRS 9, a company may separate the forward and spot elements of a forward transaction and designate only the changes in the fair value of the spot element as hedging instruments. The Frequentis Group applies this option. Accordingly, it has separated the forward element and credit risk relating to the derivatives and recognised them in profit or loss. The change in the fair value of the designated element (spot component) is recognised in other comprehensive income.

In the absence of such a documented allocation of derivative financial instruments to highly probable future cash flows, which economically hedge a foreign currency risk, the changes in fair value were 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 from customer contracts 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 share 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, the criteria for recognition as an asset were not met in either 2022 or 2021.

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 or substantially 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 (2021: between 16% and 33%).

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) The Frequentis Group holds less than 20% of the shares and voting rights of two associated companies, but classifies its influence as significant as it is represented on the management of these companies (see Note 19. Investments accounted for at equity [associated companies]).

b) 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 18 for information on the assumptions and sensitivity analyses used in the goodwill impairment test.

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 as 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 30. 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, in addition to the basic purchase price, an earn-out payment was agreed. This is dependent on the achievement of certain earnings targets, the level of working capital on 31 December 2024, and the net cash/debt position as at 31 December 2024 (all parameters based on German accounting standards) and which are accounted for as additions to or deductions from the agreed target value. To measure the earn-out liability as at 31 December 2022, assumptions were made on the development of these items. For further information, see Note 32. 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 and Regola S.r.l. The enterprise value of both ELARA Leitstellentechnik GmbH and Regola S.r.l. is determined using a multiples-based method. In the case of ELARA Leitstellentechnik GmbH, it is based on the average revenues and EBIT of the last two annual financial statements immediately preceding exercise of the option, while for Regola S.r.l., it is based on EBIT in the twelve months immediately preceding exercise of the option. To measure the liabilities, assumptions were made about the development of these items. For further information, see Note 32. 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 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.

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, 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 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 2022.

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 rose 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 reflected directly in the Frequentis Group's personnel expenses in 2022 and 2023. 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.

   Frequentis was affected to some extent by supply chain bottlenecks. Moreover, in some cases it was affected by sharp increases in procurement prices and delivery delays. 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.

   The war in Ukraine did not have a relevant impact on Frequentis' revenues because the total revenues generated with Ukraine, Russia, and Belarus were less than EUR 100 thousand in 2022 and these receivables were either fully impaired or had been settled before the start of the war.

Notes to the consolidated income statement

3. Segment report

Operating segments

- Air Traffic Management
- Public Safety & Transport

The main customer groups in the market served by the Air Traffic Management (ATM) segment are civil and military air traffic control and homeland security organisations. The Frequentis Group supports its customers in their central role of air traffic management and efficient and safe control and management of aviation. Product solutions for control centres in the ATM segment range from voice communication, networks, (remote) digital towers, ATC towers, surveillance, AIM (aeronautical information management), and AMHS (aeronautical message handling systems) to ATM/UTM (unmanned traffic management) integration. For the defence sector, the portfolio is supplemented by secure communications and situational awareness applications.

The market served by the Public Safety & Transport (PST) segment comprises public safety (police, fire, and emergency rescue services), public transport (railways), and maritime (coastguards, port authorities, and organisations that monitor shipping on inland waterways). The Frequentis Group's PST segment delivers control centre solutions for police, ambulance, and fire service organisations, search and rescue, coastal surveillance, operations communications, and incident and crisis management. The acquisition made in 2022, which has been allocated to the PST segment, generated revenues of EUR 10,005 thousand and EBIT of EUR 953 thousand from the acquisition date.

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 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**

	Air Traffic Management 2021 EUR thousand	Public Safety & Transport 2021 EUR thousand	Reconciliation/ consolidation 2021 EUR thousand	Total 2021 EUR thousand
Revenues	219,756	113,639	131	333,526
Change in inventories of finished goods and work in progress	-316	67	48	-202
Own work capitalised	38	0	53	92
Other operating income	7,211	1,253	987	9,451
Profit from business combinations	1,951	0	0	1,951
Total income (operating performance)	**228,640**	**114,960**	**1,219**	**344,818**
EBIT	**12,464**	**16,635**	**-131**	**28,968**
Impairment losses	**-1,730**	**0**	**0**	**-1,730**

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 2022, nor in 2021, did the Frequentis Group generate more than 10% of its total revenues with any single customer.

In terms of revenue categories, 41% (2021: 44%) of the Group's revenues were generated principally with new products for established customers and existing products sold to new customers, 56% (2021: 53%) comprised IBB (installed base business, i.e. follow-on business for installed systems and solutions), and 3% (2021: 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:

	2022	2021
Europe	63.3%	69.6%
Asia	18.0%	12.3%
Americas	11.6%	13.7%
Australia/Pacific	6.3%	3.3%
Africa	**0.7%**	**1.1%**

Orders on hand as at 31 December 2022 totalled EUR 522,033 thousand (2021: EUR 467,930 thousand). The ATM segment accounted for EUR 329,709 thousand (2021: EUR 297,567 thousand) of this amount and the PST segment for EUR 192,323 thousand (2021: EUR 170,363 thousand).

Regional breakdown of non-current assets

	2022 EUR thousand	2021 EUR thousand
Austria	37,253	38,689
Europe (excluding Austria)	23,730	20,502
Australia/Pacific	7,916	6,977
Americas	6,391	3,873
Asia	440	481
	75,730	**70,522**

Non-current assets comprise property, plant and equipment, intangible assets, goodwill, and investments accounted for at equity.

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 12,122 thousand (2021: decreased by EUR 67 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 18,377 thousand in the reporting period (2021: EUR 14,612 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:

	2022 EUR thousand	2021 EUR thousand
New products and/or new customer business	157,693	145,126
IBB (installed base business)	217,628	177,370
Other revenues	10,649	11,031
	385,970	**333,526**

The regional breakdown of revenues by end-users was as follows:

	2022 EUR thousand	2021 EUR thousand
Europe	252,747	226,207
Americas	60,691	49,840
Asia	45,034	31,489
Australia/Pacific	19,418	15,142
Africa	6,393	8,295
Small orders (not allocated)	1,687	2,554
	385,970	**333,526**

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 522.0 million (31 December 2021: EUR 467.9 million) and corresponds to the orders on hand in the Frequentis Group at the reporting date. It is expected that revenue of approximately EUR 275.7 million will be recognised in 2023 and revenue of EUR 246.3 million will be recognised in 2024 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 2022 comprise EUR 2,261 thousand (2012: EUR 0 thousand) for self-produced assets in connection with operating leases (see Note 36 Leases) and EUR 313 thousand (2021: EUR 92 thousand) for self-produced internal demonstration and test systems.

6. Other operating income

	2022 EUR thousand	2021 EUR thousand
Grants and subsidies for research and development costs	4,238	3,872
Income from research incentives	2,618	1,862
Exchange rate differences	1,339	1,374
Change in the earn-out payment liability	402	850
Changes in the fair value of forward exchange contracts	216	0
Revenue from operating leases	182	26
Gain from the sale of intangible assets, property, plant and equipment	19	3
Miscellaneous other operating income	1,500	1,464
	10,514	**9,451**

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 earn-out payment liability in connection with the acquisition of ATRiCS Advanced Traffic Solutions GmbH in 2020 was reduced by EUR 402 thousand in 2022 (2021: EUR 850 thousand). For further information, see Note 32. Other liabilities.

The miscellaneous other operating income relates mainly to compensation from insurance and revenue from the reversal of loss allowances and provisions.

7. Cost of materials and purchased services

	2022 EUR thousand	2021 EUR thousand
Cost of materials	41,338	28,905
Cost of purchased services	57,912	46,791
	99,250	**75,696**

An increase of EUR 7,778 thousand in the cost of materials and an increase of EUR 1,759 thousand in the cost of purchased services are attributable to the acquisitions made in 2021 and 2022.

8. Personnel expenses

	2022 EUR thousand	2021 EUR thousand
Salaries	162,237	145,364
Expenses for severance payments	2,215	2,808
Expenses for pensions	2,471	1,676
Social security contributions	31,547	28,520
Other voluntary social welfare expenses	5,402	3,769
	203,872	**182,137**

The headcount at the end of the financial year was 2,116 (2021: 2,043), measured as full-time equivalents (FTE). The average was 2,081 FTE (2021: 1,937). Calculation of the headcount was altered to FTE in the reporting period. The prior-year figures have been adjusted accordingly.

EUR 8,775 thousand of the increase in personnel expenses is attributable to the acquisitions made in 2021 and 2022. Most of the remainder is due to individual and collectively agreed salary rises, the increase in the accrual for holidays not yet taken, and the increase in the headcount.

9. Other operating expenses

	2022 EUR thousand	2021 EUR thousand
Travel expenses	10,687	5,377
Other consulting expenses	5,775	4,449
External personnel	4,514	3,103
Advertising	3,849	2,131
Licenses (terms of up to 1 year)	2,907	1,395
Exchange rate differences	2,694	1,455
Insurance expenses	2,527	2,327
Legal and consulting expenses	2,526	3,605
Maintenance	2,290	2,212
Energy	2,014	1,172
Transport	1,891	1,232
Operating expenses (buildings)	1,472	1,201
Telephone and communications expenses	1,264	1,102
Vehicles	1,159	916
Staff recruitment	1,072	920
Cleaning	1,015	863
Other taxes and levies	736	755
Short-term leases and leases for low-value assets	677	573
Impairment of receivables and contract assets	313	908
Translation costs	202	244
Changes in the fair value of forward exchange contracts	94	1,955
Losses from the disposal of intangible assets, property, plant and equipment	30	16
Miscellaneous	618	2,568
	50,326	**40,479**

Since unrestricted travel is now possible, travel expenses were EUR 5,310 thousand higher than in the previous year. However, they were still lower than in 2019 (EUR 11,861 thousand).

EUR 4,091 thousand of the increase in other operating expenses is attributable to the acquisitions made in 2021 and 2022.

The impairment contains EUR 292 thousand (2021: EUR 916 thousand) for receivables and EUR 5 thousand (2021: EUR -8 thousand) for contract assets. The impairment is not presented separately in the income statement as the amount is insignificant.

10. Depreciation of property, plant and equipment and amortisation of intangible assets

	2022 EUR thousand	2021 EUR thousand
Depreciation of right-of-use assets	9,066	8,231
Depreciation of property, plant and equipment and amortisation of intangible assets	7,632	7,042
Depreciation and amortisation of low-value assets	837	535
	17,535	**15,808**

Assets with an acquisition or manufacturing cost of up to EUR 800 (country-specific) are defined as low-value assets and are recognised as expenses in the year of acquisition.

11. Financial income

	2022 EUR thousand	2021 EUR thousand
Interest and similar income	209	79
	209	**79**

The interest and similar income exclusively comprises interest income from assets recognised at amortised cost. Interest income is recognised using the effective interest method.

12. Financial expenses

	2022 EUR thousand	2021 EUR thousand
Interest and similar expenses	738	607
	738	**607**

EUR 412 thousand (2021: EUR 215 thousand) of the interest and similar expenses is attributable to IFRS 16. Interest expenses are recognised using the effective interest method.

13. Net change in impairment losses on financial assets

	2022 EUR thousand	2021 EUR thousand
Impairment loss on the equity instrument Altitude Angel Ltd.	0	-863
Other	0	6
	0	**- 857**

In the previous period, an impairment loss of EUR 863 thousand was recognised on the 4.56% equity investment in the start-up Altitude Angel Ltd., Reading, UK, as Frequentis could not demonstrate its fair value.

14. Income taxes

	2022 EUR thousand	2021 EUR thousand
Current income taxes	6,396	6,608
Taxes relating to other periods	75	-33
Non-deductible withholding tax	62	67
Change in deferred tax assets/liabilities	-674	516
	5,859	**7,158**

The following table presents the reconciliation from the expected tax rate to the effective tax rate:

	2022 EUR thousand	2021 EUR thousand
Profit/loss before tax	24,737	27,925
Theoretical tax income/expense based on a tax rate of 25%	6,184	6,981
Differences in tax rates	-171	317
Tax additions	444	379
Tax deductions	-777	-451
Changes in tax rates	-485	-158
Tax-free income from associated companies	-69	-86
Impairment loss on goodwill	0	433
Profit from business combinations	0	-488
Tax losses for which no deferred tax assets were recognised	699	207
Realised tax losses for which no deferred tax assets were recognised	-103	-10
Taxes relating to other periods	75	-33
Non-deductible withholding tax	62	67
Actual tax expense	**5,859**	**7,158**
Effective tax rate	**23.7%**	**25.6%**

The tax additions comprise non-tax-deductible expenses such as hospitality expenses. The tax deductions mainly comprise the research incentives.

The effect from the change in tax rates in 2022 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. As at 31 December 2022, deferred taxes were calculated using a tax rate of 23% or 24%, depending when the temporary differences are expected to reverse.

The deferred tax assets and liabilities recognised in the statement of financial position relate to the following items:

	Assets 2022 EUR thousand	Liabilities 2022 EUR thousand	Assets 2021 EUR thousand	Liabilities 2021 EUR thousand
Property, plant, and equipment	116	-10,605	13	-9,750
Intangible assets	202	-3,563	97	-4,108
Goodwill	17		55	
Financial assets	173	-4	221	
Inventories	81	-570	55	-477
Contract assets	94	-6,800	209	-4,118
Contract costs		-72		-170
Trade accounts receivable and other assets	93	-3,606	88	-1,633
Provisions	2,276	-897	3,837	-1,807
Trade accounts payable and other liabilities	10,129	-139	10,080	-137
Contract liabilities	4,331	-204	1,881	-3
Deferred taxes on exchange rate differences, debt consolidation	112	-112	96	-95
Tax loss carryforwards	3,293		1,349	
Total	**20,916**	**-26,572**	**17,981**	**-22,298**
Netting	-17,131	17,131	-16,132	16,132
Deferred taxes	**3,785**	**-9,441**	**1,849**	**-6,166**

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 3,768 thousand (2021: EUR 3,914 thousand).

As at the reporting date, the Frequentis Group had loss carryforwards totalling EUR 16,379 thousand (2021: EUR 6,869 thousand). Deferred taxes were recognised for loss carryforwards of EUR 12,539 thousand (2021: EUR 4,694 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 1,408 thousand (2021: EUR 1,256 thousand). There is no time limit on use of the other loss carryforwards.

The amount of tax-deductible impairments on equity investments that is spread over seven years under Austrian tax law is EUR 632 thousand (2021: EUR 787 thousand). Deferred tax assets of EUR 147 thousand (2021: EUR 197 thousand) were recognised on this amount.

As at 31 December 2022, no material income tax uncertainties existed.

15. 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 13,268,833 (2021: 13,269,358).

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 51,370 shares. The average weighted number of shares and options was 13,317,764 (2021: 13,307,220).

Notes to the consolidated statement of financial position

16. 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	Advances and plants under construction	Advances and plants under construction for operating leases	Total
Carrying amount as at 31 December 2020	**38,976**	**904**	**0**	**6,498**	**227**	**0**	**46,605**
Foreign currency translation difference	314	0	0	41	9	0	364
Reclassification	113	0	0	123	-236	0	0
Additions from business combinations	1,748	68	0	581	0	0	2,397
Addition	5,364	32	0	4,576	383	0	10,355
Disposal	0	0	0	-44	0	0	-44
Depreciation	-7,851	-218	0	-3,891	0	0	-11,960
Carrying amount as at 31 December 2021	**38,664**	**786**	**0**	**7,884**	**383**	**0**	**47,717**
Cost of acquisition/production	65,526	4,405	0	32,249	383	0	102,563
Accumulated depreciation	-26,862	-3,619	0	-24,365	0	0	-54,846
Carrying amount as at 31 December 2021	**38,664**	**786**	**0**	**7,884**	**383**	**0**	**47,717**
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**

During 2022, the Frequentis Group concluded agreements for the acquisition of property, plant and equipment totalling EUR 673 thousand (2021: EUR 740 thousand), which will be delivered and invoiced in 2023.

For information on the recognised right-of-use assets resulting from the application of IFRS 16, which are contained in the above table, see Note 36. Leases.

17. Intangible assets

in EUR thousand	Software and licences	Advances	Total
Carrying amount as at 31 December 2020	**9,009**	**11**	**9,020**
Foreign currency translation difference	200	0	200
Reclassification of advances	5	-5	0
Additions from business combinations	10,909	0	10,909
Addition	1,418	23	1,441
Disposal	-2	-4	-6
Amortisation	-3,847	0	-3,847
Carrying amount as at 31 December 2021	**17,692**	**25**	**17,717**
Cost of acquisition/production	35,406	25	35,431
Accumulated amortisation	-17,714	0	-17,714
Carrying amount as at 31 December 2021	**17,692**	**25**	**17,717**
Carrying amount as at 31 December 2021	**17,692**	**25**	**17,717**
Foreign currency translation difference	-6	0	-6
Reclassification of advances	0	0	0
Additions from business combinations	3,088	0	3,088
Addition	620	94	715
Disposal	-1	0	-1
Amortisation	-3,905	0	-3,905
Impairment losses recognised in profit or loss	-3,106	0	-3,106
Carrying amount as at 31 December 2022	**14,382**	**119**	**14,501**
Cost of acquisition/production	39,031	119	39,151
Accumulated amortisation	-24,649	0	-24,649
Carrying amount as at 31 December 2022	**14,382**	**119**	**14,501**

Having focused on software development for customer orders and made temporary savings on development projects in 2020 and 2021 due to the COVID-19 pandemic, in the reporting period the Frequentis Group spent EUR 26.8 million (2021: EUR 15.0 million) on in-house research and development work that was not funded by customers. This was expensed as incurred.

During 2022, the Frequentis Group concluded agreements for the purchase of intangible assets totalling EUR 12 thousand, which will be delivered and invoiced in 2023 (2021: EUR 14 thousand).

The amortisation of intangible assets included impairment losses of EUR 3,106 thousand. These impairment losses comprised the necessary valuation adjustments in connection with the purchase price allocation of capitalised product rights and intellectual property rights for four product families at two companies (ATRiCS Advanced Traffic Solutions GmbH and Frequentis Comsoft GmbH). These were necessary due to the negative development of these product areas. In both cases, the product rights were written down to zero.

As at the reporting date, there were no scenarios that would have resulted in a lower impairment loss.

18. Goodwill

in EUR thousand	Goodwill
Carrying amount as at 31 December 2020	**2,886**
Foreign currency translation difference	14
Additions from business combinations	2,263
Addition	0
Disposal	0
Impairment losses	-1,730
Carrying amount as at 31 December 2021	**3,433**
Cost of acquisition/production	6,235
Accumulated impairment losses	-2,802
Carrying amount as at 31 December 2021	**3,433**
Carrying amount as at 31 December 2021	**3,433**
Foreign currency translation difference	-11
Additions from business combinations	2,412
Addition	0
Disposal	0
Impairment losses	0
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**

For the purpose of impairment testing, goodwill has been allocated to the Frequentis Group's cash-generating units (CGUs) as follows:

	31 Dec. 2022 EUR thousand	31 Dec. 2021 EUR thousand
ATRiCS Advanced Traffic Solutions GmbH	0	0
Frequentis Comsoft GmbH	909	909
Frequentis Orthogon GmbH	2,263	2,263
Regola S.r.l.	2,412	0
Systems Interface Ltd.	197	208
team Technology Management GmbH	53	53
	5,834	**3,433**

Goodwill was tested for impairment when preparing the consolidated financial statements by estimating the recoverable amount of the relevant subsidiaries 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 all cash-generating units 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% (2021: 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.

Impairment test 2022	ATRiCS Advanced Traffic Solutions GmbH	Frequentis Comsoft GmbH	Frequentis Orthogon GmbH	Regola S.r.l.	Systems Interface Ltd.	team Technology Management GmbH
Interest rate (WACC before taxes)	13.91%	12.4%	13.70%	16.63%	10.27%	11.44%
Recoverable amount in EUR thousand	negative	9,221	10,862	8,501	644	7,966
Carrying amount of the CGU including goodwill in EUR thousand	2,213	8,874	8,533	6,244	-63	2,007

Impairment test 2021	ATRiCS Advanced Traffic Solutions GmbH	Frequentis Comsoft GmbH	Frequentis Orthogon GmbH	Systems Interface Ltd.	team Technology Management GmbH
Interest rate (WACC before taxes)	10.85%	11.70%	10.72%	11.13%	9.16%
Recoverable amount in EUR thousand	3,706	31,107	10,599	340	23,655
Carrying amount of the CGU including goodwill in EUR thousand	7,098	16,075	10,093	-482	1,816

In 2020, an impairment loss was recognised for the goodwill of Systems Interface Ltd. Since business stabilised in 2022 and future cash flows show a stable trend, it was not necessary to recognise an additional impairment loss in 2022. In view of the negative working capital, the Systems Interface Ltd. CGU has a negative carrying amount of EUR -63 thousand.

The impairment test in 2021 resulted in recognition of an impairment loss for ATRiCS Advanced Traffic Solutions GmbH. The difficult order situation, which was already evident in 2021 and was exacerbated in 2022 by the COVID-19 pandemic, led to a reduction in the forecast cash flows.

In 2021, the impairment test resulted in recognition of an impairment loss of EUR 1,730 thousand on the goodwill of ATRiCS Advanced Traffic Solutions GmbH. Due to the ongoing difficult situation in the airport business, in 2022 a further impairment loss had to be recognised for the product rights capitalised in the purchase price allocation (see Note 17. Intangible assets).

Regola S.r.l. was included in Frequentis' consolidated financial statements from the closing of the transaction in January 2022. In this context, a purchase price allocation was undertaken. As at the reporting date, there had not been any significant changes in the planning assumptions. As at the reporting date, the carrying amount of Regola S.r.l. would correspond to the recoverable amount if there was a reduction of 24.9% in cash flows or an increase of 4.2% in the discount rate.

The carrying amount of the CGU Frequentis Comsoft GmbH, including goodwill, would correspond to the recoverable amount if there was a reduction of 3.1% in cash flows or an increase of 0.3% in the discount rate.

The carrying amount of the CGU Frequentis Orthogon GmbH, including goodwill, would correspond to the recoverable amount if there was a reduction of 19.6% in cash flows or an increase of 2.39% in the discount rate.

As at the reporting date, the Executive Board did not identify any realistic scenarios for team Technology Management GmbH 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 WACC before taxes.

19. Investments accounted for at equity (associated companies)

	31 Dec. 2022 EUR thousand	31 Dec. 2021 EUR thousand
Investments accounted for at equity	2,097	1,656

Name of associated company	Registered office	Voting rights and shareholding as at 31 Dec. 2022	Voting rights and shareholding as at 31 Dec. 2021
Aviamaps Oy	Valkeakoski	25%	
GroupEAD Europe S.L.	Madrid	28%	28%
Mission Embedded GmbH	Vienna	20%	20%
Nemergent Solutions S.L.	Bilbao	15%	15%
AIRNAV Technology Services Inc.	Iloilo	40%	40%
AIRlabs Austria GmbH	Graz	18%	18%

The acquisition of the 51% interest in Regola S.r.l. includes the following associated companies:

Name of associated company	Registered office	Voting rights and shareholding as at 31 Dec. 2022	Equity investment as at the acquisition date (5 January 2022) EUR thousand
AMANTEA Ltd.	Zabbar	50%	2
Lift S.r.l.	Cagliari	24%	0
Nowtech S.r.l.	Sassari	20%	150

The reporting date for all associated companies is 31 December and they are all accounted for using the equity method. There were neither any unrealised losses nor any significant restrictions on the repayment of loans. Only AIRlabs Austria GmbH is subject to a restriction on the distribution of profits imposed by the shareholder agreement.

On 1 September 2022, the Frequentis Group acquired a 25% stake in Aviamaps Oy, which has its registered office in Valkeakoski, Finland. The interest was acquired through BlueCall Systems GmbH (a wholly owned subsidiary of Frequentis AG).

Aviamaps produces software for drone flight planning and airspace management and offers a real-time aviation maps platform for drone flights. The Frequentis Group had previously worked with Aviamaps on drone research projects. In 2023, Aviamaps' software will be integrated into the Frequentis solution for automatic approval of drone flights in Austria.

The table shows the development of this investment:

		2022 EUR thousand
Sep. 2022	Purchase price payment	125
	Attributable profit/loss in the reporting period	15
31 Dec. reporting period	**Equity investment in Aviamaps Oy**	**140**

Initial recognition resulted in goodwill of EUR 124 thousand, which is recognised in investments accounted for at equity.

The following table contains summarised financial information on this company as at the last reporting date (31 December 2022) and the pro rata earnings since purchase of the equity investment (September to December 2022):

Aviamaps Oy	31 Dec. 2022 EUR thousand
Non-current assets	5
Current assets	87
Non-current liabilities	0
Current liabilities	27
Net assets (100%)	**65**
Frequentis Group's share of net assets (25%)	16
Goodwill	**124**
Carrying amount of the stake in the associated company	**140**
Revenues	89
Profit from continuing operations (100%)	61
Other comprehensive income (100%)	0
Total comprehensive income (100%)	**61**
Frequentis Group's share of the profit from continuing operations (25%)	**15**
Frequentis Group's share of other comprehensive income (25%)	**0**
Frequentis Group's share of total comprehensive income (25%)	**15**

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 2021 and the dividends already received for 2022):

		2022 EUR thousand	2021 EUR thousand
31 Dec. prior year	**Equity investment in GroupEAD Europe S.L.**	**491**	**491**
	Attributable profit in prior year	58	124
	Less dividend paid for the prior year	-58	-124
	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 2021):

GroupEAD Europe S.L.	31 Dec. 2021 EUR thousand	31 Dec. 2020 EUR thousand
Non-current assets	301	264
Current assets	2,779	2,870
Non-current liabilities	0	0
Current liabilities	1,119	940
Net assets (100%)	**1,961**	**2,194**
Frequentis Group's share of net assets (28%)	549	614

GroupEAD Europe S.L.	31 Dec. 2021 EUR thousand	31 Dec. 2020 EUR thousand
Dividend paid in the following year	-58	-124
Carrying amount of the stake in the associated company	**491**	**491**
Revenues	7,127	7,159
Profit from continuing operations (100%)	409	642
Other comprehensive income (100%)	0	0
Total comprehensive income (100%)	**409**	**642**
Total comprehensive income (28%)	114	180
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	**114**	**180**

The Frequentis Group holds 20% of the shares and voting rights in **Mission Embedded GmbH**, Vienna. The development of this investment is presented below:

		2022 EUR thousand	2021 EUR thousand
31 Dec. prior year	**Equity investment in Mission Embedded GmbH**	**362**	**246**
	Attributable profit/loss in the reporting period	116	116
	Actuarial losses in in accordance with IAS 19	4	0
31 Dec. reporting period	**Equity investment in Mission Embedded GmbH**	**482**	**362**

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 2022):

Mission Embedded GmbH	31 Dec. 2022 EUR thousand	31 Dec. 2021 EUR thousand
Non-current assets	412	307
Current assets	6,577	4,820
Non-current liabilities	275	256
Current liabilities	4,302	3,061
Net assets (100%)	**2,412**	**1,809**
Frequentis Group's share of net assets (20%)	482	362
Carrying amount of the stake in the associated company	**482**	**362**
Revenues	8,766	8,354
Profit from continuing operations (100%)	580	581
Other comprehensive income (100%)	22	0
Total comprehensive income (100%)	**602**	**581**
Frequentis Group's share of the profit from continuing operations (20%)	**116**	**116**
Frequentis Group's share of other comprehensive income (20%)	**4**	**0**
Frequentis Group's share of total comprehensive income (20%)	**120**	**116**

In 2020, the Frequentis Group acquired a 15% interest in **Nemergent Solutions S.L.**, which has its registered office in Bilbao. The interest was acquired through BlueCall Systems GmbH (a wholly owned subsidiary of Frequentis AG).

Nemergent Solutions S.L. operates in mission-critical services (3GPP), for example, MCPTT (mission-critical push-to-talk) via LTE. 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 Frequentis Group has classified its influence as significant, despite the 15% shareholding, due to the significant level of management involvement in this associated company.

The table shows the development of this investment:

		2022 EUR thousand	2021 EUR thousand
31 Dec. prior year	**Equity investment in Nemergent Solutions S.L.**	**731**	**707**
	Attributable profit/loss in the reporting period	16	39
	Less dividend paid in the reporting period	0	-15
31 Dec. reporting period	**Equity investment in Nemergent Solutions S.L.**	**747**	**731**

The next table contains summarised financial information on this company as at the last reporting date (31 December 2022):

Nemergent Solutions S.L.	31 Dec. 2022 EUR thousand	31 Dec. 2021 EUR thousand
Non-current assets	1,359	521
Current assets	1,034	1,606
Non-current liabilities	543	450
Current liabilities	249	182
Net assets (100%)	**1,601**	**1,495**
Frequentis Group's share of net assets (15%)	240	224
Goodwill	**507**	**507**
Carrying amount of the stake in the associated company	**747**	**731**
Revenues	1,036	1,226
Profit from continuing operations (100%)	106	265
Other comprehensive income (100%)	0	0
Total comprehensive income (100%)	**106**	**265**
Frequentis Group's share of the profit from continuing operations (15%)	16	39
Frequentis Group's share of other comprehensive income (15%)	0	0
Frequentis Group's share of total comprehensive income (15%)	**16**	**39**

The Frequentis Group holds 40% of the shares and voting rights in **AIRNAV Technology Services Inc.**, which is registered in the Philippines (Iloilo). The table shows the development of this investment:

		2022 EUR thousand	2021 EUR thousand
31 Dec. prior year	**Equity investment in AIRNAV Technology Services Inc.**	**49**	**40**
	Attributable profit/loss in the reporting period	2	9
31 Dec. reporting period	**Equity investment in AIRNAV Technology Services Inc.**	**51**	**49**

This company was established in 2017 and operates in the ATM segment. Its operations comprise testing, installation, and maintenance services and on-site training for international customer projects (especially in the Asian and Arab markets).

The interest in AIRNAV Technology Services Inc. was increased from 40% to 65% as at 20 February 2023, so control over this company was obtained. The consideration of EUR 35 thousand paid for this in the reporting period is recognised in the line item advance payments for non-current assets.

The Frequentis Group holds 18% of the shares and voting rights in **AIRLABS Austria GmbH**, Graz. The Group has classified its influence as significant due to the significant level of management involvement in this associated company.

The table shows the development of this investment:

		2022 EUR thousand	2021 EUR thousand
31 Dec. prior year	**Equity investment in AIRlabs Austria GmbH**	24	26
	Attributable profit/loss in the reporting period	-2	-2
31 Dec. reporting period	**Equity investment in AIRlabs Austria GmbH**	**22**	**24**

In summer 2019, the Austrian Federal Ministry of Transport, Innovation and Technology awarded the AIRlabs consortium led by the FH JOANNEUM university of applied sciences in Graz, Austria, the contract to create the innovation laboratory **AIRlabs Austria GmbH**. This company was established in December 2019 and registered in the commercial register in January 2020. This company builds and operates testing areas and test infrastructure for drones in Austria, including the related research, development, and registration.

Since AIRNAV Technology Services Inc. and AIRlabs Austria GmbH are not material associated companies, the key financial data are summarised in aggregate form in the following table:

	31 Dec. 2022 EUR thousand	31 Dec. 2021 EUR thousand
Non-current assets	147	108
Current assets	1,037	923
Non-current liabilities	78	73
Current liabilities	860	705
Net assets (100%)	**246**	**253**
Frequentis Group's share of net assets	**72**	**73**
Revenues	1,081	928
Profit/loss for the period	-4	9
Frequentis Group's share of profit/loss for the period	0	7
Frequentis Group's share of other comprehensive income	0	0
Frequentis Group's share of total comprehensive income	**0**	**7**

The interests in AMANTEA Ltd., Lift S.r.l., and Nowtech S.r.l. acquired as part of the acquisition of Regola S.r.l. developed as follows:

		2022 EUR thousand
5 Jan.	Acquisition of Regola S.r.l.	152
	Attributable profit/loss in the reporting period	13
31 Dec. reporting period	**Equity investments in AMANTEA Ltd., Lift S.r.l., and Nowtech S.r.l.**	**165**

Since these companies are not material associated companies, the key financial data for Lift S.r.l. and Nowtech S.r.l. (as at 31 December 2022) are summarised in aggregate form in the following table. The table does not contain any key financial data for AMANTEA Ltd. because the financial data for this company were not available as at the reporting date.

	31 Dec. 2022 EUR thousand
Non-current assets	327
Current assets	532
Non-current liabilities	203
Current liabilities	410
Net assets (100%)	**246**
Frequentis Group's share of net assets	**49**
Revenues	432
Profit/loss for the period	54
Frequentis Group's share of profit/loss for the period	13
Frequentis Group's share of other comprehensive income	0
Frequentis Group's share of total comprehensive income	**13**

From the annual profit of all investments accounted for at equity, a proportionate share of EUR 275 thousand (2021: EUR 342 thousand) is recognised. There were no unrecognised losses in the reporting period or the prior year.

20. Time deposits, cash and cash equivalents

	31 Dec. 2022 EUR thousand	31 Dec. 2021 EUR thousand
Long-term time deposits	10,000	10,000
Loss allowance	-10,000	-10,000
	0	**0**

	31 Dec. 2022 EUR thousand	31 Dec. 2021 EUR thousand
Short-term time deposits	18,000	10,199
Loss allowance	-8,000	-8,000
	10,000	**2,199**

	31 Dec. 2022 EUR thousand	31 Dec. 2021 EUR thousand
Cash and cash equivalents	94,198	116,616
Loss allowance	-12,818	-12,818
	81,380	**103,798**

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 full amount of the time deposits and 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. An expected credit loss of 0.04% was derived for another bank due to a poorer rating and higher balance as at 31 December 2022 and a loss allowance of EUR 9 thousand was calculated. Since the loss allowance was not significant, it was not recognised in the reporting period.

No loss allowances had to be recognised for the other bank balances due to good ratings and the short-term nature of the deposits (due on demand).

More than 75% of the cash and cash equivalents, including deposits due on demand, of EUR 91,380 thousand as at 31 December 2022 was deposited with eleven system-relevant major banks in Austria and Germany. Less than 25% was deposited with approximately 25 other banks in Europe, Australia, Asia, and the Americas.

21. Inventories

	31 Dec. 2022 EUR thousand	31 Dec. 2021 EUR thousand
Raw materials and supplies	15,407	9,264
Work in progress	948	672
Finished goods	2,277	2,411
Merchandise	2,370	2,801
Advance payments made	724	1,929
	21,726	**17,077**

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 tangible assets, mainly for use in future customer projects.

The impairment loss on inventories was EUR 346 thousand in 2022 (2021: EUR 299 thousand). Reversals of EUR 445 thousand were recognised in 2022 (2021: EUR 55 thousand).

22. Trade accounts receivable

	2022 EUR thousand	2021 EUR thousand
Trade accounts receivable, gross	78,322	70,981
Individual loss allowances	-931	-1,144
Loss allowances pursuant to IFRS 9	-403	-404
Receivables from affiliated companies	2	2
Total trade accounts receivable, net	**76,990**	**69,435**

The trade accounts receivable as at 31 December 2022 include EUR 1,707 thousand resulting from the acquisition.

Trade accounts receivable contain non-current items of EUR 729 thousand (31 December 2021: EUR 789 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 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, credit insurance, 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:

	2022 EUR thousand	2021 EUR thousand
As at 31 December of the previous year	**1,548**	**738**
Foreign currency translation	-14	23
Change in loss allowances pursuant to IFRS 9	-1	109
Additions	293	806
Utilisation	-195	0
Reversal	-297	-128
As at 31 December of the financial year	**1,334**	**1,548**

The structure of overdue trade accounts receivable as at 31 December was as follows:

	Weighted average loss rate 2022	Weighted average loss rate 2021	2022 EUR thousand	2021 EUR thousand
Trade accounts receivable, net			**76,988**	**69,422**
of which: neither overdue nor impaired	**0.05%**	**0.04%**	**54,574**	**55,099**
of which, overdue but not impaired				
Up to 30 days	0.16%	0.15%	17,170	9,491
30-60 days	0.70%	0.64%	2,187	1,603
60-90 days	0.61%	1.60%	999	298
90-180 days	4.29%	1.79%	827	1,729
180-210 days	7.24%	8.64%	93	7
> 210 days	19.33%	20.69%	1,138	1,195

Due to their insignificance, receivables from affiliated companies in the amount of EUR 2 thousand (2021: receivables from affiliated and associated companies in the amount of EUR 13 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, the COVID-19 pandemic and the war in Ukraine did not result in any significant defaults on receivables in the reporting period. Although longer payment terms have been agreed with some customers, due to its customer structure, the Frequentis Group does not expect an increase in defaults. However, since an increase in insolvencies is expected in 2023 and subsequent years, the Frequentis Group 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 COVID-19 pandemic and the war in Ukraine. If a customer is granted a temporary extension of a payment deadline (which may be up to 60 days), the payment is still classified as overdue on the basis of the original due date.

23. Contract assets

	31 Dec. 2022 EUR thousand	31 Dec. 2021 EUR thousand
Contract assets, gross	85,364	70,658
Loss allowances pursuant to IFRS 9	-19	-15
Total contract assets	**85,345**	**70,643**
Advances from customers	-34,870	-32,290
	50,475	**38,353**

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 38,353 thousand recognised as at 1 January (2021: EUR 38,420 thousand) include EUR 32,055 thousand (2021: EUR 30,731 thousand) that were invoiced in the reporting period.

Of the total contract assets of EUR 50,475 thousand as at December 31, 2022 (2021: EUR 38,353 thousand), it is expected that EUR 41,161 thousand (2021: EUR 36,492 thousand)will be charged to customers in the following year – based on the expected project progress and contractual clauses. Contract assets with a carrying amount of EUR 9,314 thousand (2021: EUR 1,861 thousand) are not expected to be invoiced until after 2023. 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 allowances for contract assets recognised in the reporting period amounted to EUR 19 thousand (2021: EUR 15 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 6,516 thousand (2021: EUR 5,986 thousand), while a 10% increase in contract costs not yet incurred would reduce contract assets by EUR 5,966 thousand (2021: EUR 5,521 thousand).

24. 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 capitalised contract costs is as follows:

	2022 EUR thousand	2021 EUR thousand
As at 1 January	**3,711**	**3,028**
Changes in reporting entities	0	133
Contract costs capitalised in the reporting period	3,480	2,446
Amortisation in the reporting period	-3,146	-1,896
Impairment losses	-21	0
As at 31 December	**4,024**	**3,711**

The amortisation expense for contract costs in the next 12 months is expected to amount to EUR 3,148 thousand (2021: EUR 2,501 thousand). Since the contract costs are expected to be incurred within the 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.

25. Other current assets

	31 Dec. 2022 EUR thousand	31 Dec. 2021 EUR thousand
Receivables from grants and subsidies	1,860	435
Positive fair value of cash flow hedges and MTM valuation	661	92
Other financial assets	238	145
Other current financial assets	**2,759**	**672**
Prepaid expenses and deferred charges	5,869	4,462
Receivables from fiscal authorities (excluding income taxes)	1,508	1,281
Receivables from research grants and incentives	3,569	1,167
Receivables from investment grants	152	247
Other assets	262	232
Other current non-financial assets	**11,360**	**7,389**

26. Share capital and retained earnings

At the Annual General Meeting on 8 April 2019, 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 million up to 7 April 2024 by issuing up to 6 million new no-par-value bearer shares in one or more tranches in return for cash or payment in kind. 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).

Capital increase in 2021

The capital increase for cash excluding existing shareholders' subscription rights for the employee participation programme, as resolved by the Executive Board on 2 March 2021 and approved by the Supervisory Board on 27 March 2021, was successfully completed in May 2021. Frequentis AG thus increased its share capital by EUR 80 thousand, from EUR 13,200 thousand to EUR 13,280 thousand by issuing 80,000 new bearer shares in return for cash contributions, excluding the subscription rights of existing shareholders. The total number of issued shares as at 31 December 2021 was 13,280,000.

Treasury shares

At the Extraordinary General Meeting of Frequentis AG on 20 September 2019, 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.

Moreover, 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.

In May 2021, Frequentis AG repurchased a total of 15,500 treasury shares with a total value of EUR 384 thousand. With the approval of the Supervisory Board, in May 2022 the Executive Board passed a resolution to transfer 6,590 treasury shares to the Chairman of the Executive Board for achievement of the targets for the LTIP 2019, under exclusion of the subscription rights of existing shareholders. As at 31 December 2022, Frequentis held 8,910 treasury shares (31 December 2021: 15,500). That was 0.0671% of the share capital.

The total number of issued shares was 13,280,000 (2021:13,280,000).

At year-end 2022, 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 2022 is EUR 18,953 thousand (31 December 2021: EUR 13,628 thousand) and the accumulated profit is EUR 62,361 thousand (31 December 2021: EUR 46,062 thousand).

The Annual General Meeting of Frequentis AG on 2 June 2022 passed a resolution to pay a dividend of EUR 0.20 per no-par-value share entitled to the dividend for the 2021 financial year. The dividend less statutory capital gains tax of 27.5% was paid in June 2022.

In 2022, the issued shares received a dividend distribution of EUR 2,654 thousand (EUR 0.20 per share) for 2021 (2021 for 2020: EUR 1,990 thousand or EUR 0.15 per share).

27. Reserves

The following table presents the expenses and income and the related tax liability recognised in other comprehensive income:

Item	Amount before income taxes 2022 EUR thousand	Income taxes 2022 EUR thousand	Amount after income taxes 2022 EUR thousand	Amount before income taxes 2021 EUR thousand	Income taxes 2021 EUR thousand	Amount after income taxes 2021 EUR thousand
Foreign currency translation	284	0	284	1,117	0	1,117
Measurement of cash flow hedges	297	-76	221	-298	74	-224
Remeasurement of post-employment benefits	4,020	-1,176	2,844	-169	23	-146
Investments accounted for at equity – amounts recognised in other comprehensive income	4	0	4	0	0	0
			3,353			**747**

28. Share-based payment

Frequentis AG agreed long-term incentive plans with the Chairman of the Executive Board, Mr. Norbert Haslacher, in 2019, 2020, 2021, and 2022 (LTIP 2019, LTIP 2020, LTIP 2021, and LTIP 2022).

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 14,000 shares for the LTIP 2019, 17,000 shares each for the LTIP 2020 and 2021, and maximum of 18,000 shares for the LTIP 2022 (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 2019 ended in the reporting period):

	LTIP 2022	LTIP 2021	LTIP 2020	LTIP 2019
Beginning of the plan	1 Jan. 2022	1 Jan. 2021	1 Jan. 2020	1 Jan. 2019
Date of approval by General Meeting	2 June 2022	20 May 2021	14 May 2020	20 Sep. 2019
Grant date	2 June 2022	15 June 2021	14 May 2020	30 Sep. 2019
End of service period	31 Dec. 2024	31 Dec. 2023	31 Dec. 2022	31 Dec. 2021
Vesting date	30 Apr. 2025	30 Apr. 2024	30 Apr. 2023	30 Apr. 2022
Expected target achievement	97%	126%	130%	103%
Expected no. of shares	17,370	17,000	17,000	14,000
Maximum no. of shares	18,000	17,000	17,000	14,000
Bonus shares allocated	None	None	None	None

The agreed targets are measured against the following performance indicators:

LTIP 2022	LTIP 2021	LTIP 2020	LTIP 2019
Total shareholder return (TSR)	Total shareholder return (TSR)	Total shareholder return (TSR)	Total shareholder return (TSR)
Revenue growth	Increase in operating performance through key accounts	Orders on hand	Organic growth in operating performance
Earnings increase	Growth through new business development	Growth in the regions	EBIT margin
Employee satisfaction		Growth through acquisitions	Profit margin
			Development of key accounts
			Non-refinanced R&D expenses as a percentage of total operating performance
			Employee satisfaction
			Customer satisfaction

In May 2022, the targets set for the LTIP 2019 were evaluated for the performance period from 1 January 2019 to 31 December 2021 and it was established that they had been fully met, so 14,000 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, 6,590 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 427 thousand (2021: EUR 399 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 was estimated that both the market-oriented targets and the non-market-oriented targets will be met. Therefore, 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.

29. Non-controlling interests

The non-controlling interests relate to the following subsidiaries:

	31 Dec. 2022 EUR thousand	31 Dec. 2021 EUR thousand
ATRiCS Advanced Traffic Solutions GmbH, Freiburg	132	1,725
ELARA Leitstellentechnik GmbH, Aachen	0	0
Frequentis DFS Aerosense GmbH, Vienna	135	95
Regola S.r.l., Turin	0	0
Secure Service Provision GmbH, Leipzig	472	407
Systems Interface Ltd., Bordon	-432	-603
team Technology Management GmbH, Vienna	1,766	1,793
TEAM Technology Management GmbH, Gräfelfing	151	19
	2,224	**3,436**

Due to the existence of put options for non-controlling shareholders in ELARA Leitstellentechnik and Regola, the corresponding interests are recognized as financial liabilities.

There is also a put option held by non-controlling interests at Systems Interface Ltd. However, this option is not exercisable due to the contractual provisions and is not expected to be exercisable in the future.

team Technology Management GmbH distributed a proportionate dividend of EUR 588 thousand to non-controlling shareholders in the reporting period, Secure Service Provision GmbH distributed a proportionate dividend of EUR 57 thousand, and ELARA Leitstellentechnik distributed a proportionate dividend of EUR 308 thousand.

The following table provides information on the statement of financial position of consolidated subsidiaries with material 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 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

Statement of financial position as at 31 December 2021	Non-current assets*)	Current assets	Non-current liabilities	Current liabilities	Net assets	Carrying amount of non-controlling interests
ATRiCS Advanced Traffic Solutions GmbH	3,017	2,026	936	586	3,521	1,725
ELARA Leitstellentechnik GmbH	468	1,295	242	560	961	0
Frequentis DFS Aerosense GmbH	30	1,463	0	1,177	316	95
Secure Service Provision GmbH	154	2,227	38	311	2,032	407
Systems Interface Ltd.	41	2,611	1,417	2,465	-1,230	-603
team Technology Management GmbH	1,089	5,410	841	1,897	3,761	1,793
TEAM Technology Management GmbH	31	132	5	132	26	19
						3,436

*) 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):

	Amounts before intragroup elimination				Earnings attributable to non-controlling interests		
2022	Operating performance	Profit for the period	Other earnings	Total comprehensive income	Profit for the period	Other earnings	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**	**113**	**269**

	Amounts before intragroup elimination				Earnings attributable to non-controlling interests		
2021	Operating performance	Profit for the period	Other earnings	Total comprehensive income	Profit for the period	Other earnings	Total comprehensive income
ATRiCS Advanced Traffic Solutions GmbH	1,885	-951	0	-951	-466	0	-466
ELARA Leitstellentechnik GmbH	3,308	631	0	631	309	0	309
Frequentis DFS Aerosense GmbH	1,192	17	0	17	5	0	5
Secure Service Provision GmbH	3,234	571	0	571	114	0	114
Systems Interface Ltd.	3,680	111	0	111	54	-41	13
team Technology Management GmbH	10,427	1,773	9	1,782	869	4	873
TEAM Technology Management GmbH	278	-119	0	-119	-88	0	-88
Total					**797**	**- 37**	**760**

30. Non-current provisions

	31 Dec. 2022 EUR thousand	31 Dec. 2021 EUR thousand
Provisions for severance payments	14,529	16,110
Provisions for pensions	4,356	6,046
Less pension insurance scheme	-2,365	-3,427
	1,991	**2,619**
Provisions for anniversary bonuses	302	389
Other provisions	441	874
Total non-current provisions	**17,263**	**19,992**

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 service with the Frequentis Group and the remuneration applicable when the employee leaves the Group.

The corresponding severance payments will result in outflows between 2023 and 2047.

Obligations for severance payments were measured using the following parameters:

	2022	2021
Interest rate	4.14%	1.0%
Wage and salary trend	4.6%	3.3%
Average term of the defined benefit obligation	9.88 years	11.2 years

The following table provides the reconciliation of the severance payment obligations from the opening to the closing balance for the reporting period:

	2022 EUR thousand	2021 EUR thousand
Present value of severance payment obligations (DBO) as at 1 January = provisions as at 1 January	**16,110**	**15,395**
Foreign currency translation	3	2
Additions from business combinations	816	0
Current service cost (CSC)	839	704
Interest cost (IC)	173	152
Actual payments made	-659	-425
Recognised actuarial loss (+)/gain(-)	-2,753	282
Present value of severance payment obligations (DBO) as at 31 December = provisions as at 31 December	**14,529**	**16,110**

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 1,018 thousand in the reporting period (2021: EUR 934 thousand).

In addition, voluntary severance payments amounting to EUR 185 thousand were made in the reporting period (2021: EUR 1,015 thousand).

The actuarial gains/losses for severance payment obligations recognised in other comprehensive income were as follows:

	2022 EUR thousand	2021 EUR thousand
Changes in demographic assumptions	0	0
Changes in financial assumptions	-2,990	500
Other changes	237	-218
Total	**-2,753**	**282**

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 remaining assumptions remained unchanged.

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

Interest rate	Salary increases	DBO 31 Dec. 2021 EUR thousand
1.0%	3.8%	16,990
0.85%	3.3%	16,376
1.0%	3.3%	16,110
1.15%	3.3%	15,851
1.0%	2.8%	15,287

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:

	2022	2021
Interest rate	4.2%	1.3%
Retirement age	60/65 years	60/65 years
Average term of the defined benefit obligation	11.75 years	14.17 years

Development of pension provisions and plan assets:

	2022 EUR thousand	2021 EUR thousand
Present value of the defined benefit obligation (DBO) as at 1 January	6,046	3,260
Fair value of plan assets	-3,427	-2,696
+ Provisions/- surplus plan assets as at 1 January	**2,619**	**564**
Present value of the defined benefit obligation (DBO) as at 1 January	6,046	3,260
Additions from business combinations	0	2,720
Service cost	228	204
Interest cost	78	47
Pension payments	-137	-109
Recognised actuarial losses (+)/gains (-)	-1,859	-76
Present value of the pension benefit obligations (DBO) as at 31 December	**4,356**	**6,046**
Fair value of plan assets as at 1 January	3,427	2,696
Reclassified	-573	0
Additions from business combinations	0	537
Return on plan assets	37	41
Payments made	175	222
Payments received from plan assets	-108	-88
Recognised actuarial losses (-)/gains (+)	43	19
Adjustments for the net asset ceiling	-636	0
Fair value of plan assets as at 31 December	**2,365**	**3,427**
Provisions as at 31 December		
Present value of the pension benefit obligation (DBO)	4,356	6,046
Fair value of plan assets	-2,365	-3,427
+ Provisions/- surplus plan assets as at 31 December	**1,991**	**2,619**

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 expenses in the amount of EUR 2,218 thousand were recognised in the reporting period (2021: EUR 1,453 thousand).

It is expected that EUR 221 thousand will be paid into the pension insurance in 2023 (2022: EUR 222 thousand).

The actuarial gains and losses recognised in other comprehensive income in the reporting period are as follows:

	2022 EUR thousand	2021 EUR thousand
Changes in demographic assumptions	0	0
Changes in financial assumptions	-1,858	-112
Other changes	-1	36
Other changes to plan assets	-43	-19
Total	**-1,902**	**-95**

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. 2022 EUR thousand
4.05%	4,445
4.20%	4,356
4.35%	4,269

Interest rate	DBO 31 Dec. 2021 EUR thousand
1.15%	6,196
1.30%	6,046
1.45%	5,901

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 4.14% (2021: 1.0%) and an average term of 7.2 years (2021: 7.1 years).

	2022 EUR thousand	2021 EUR thousand
Present value of the anniversary bonus obligations (DBO) corresponding to the provisions as at January 1	**389**	**369**
Current service cost (CSC)	41	42
Interest cost (IC)	4	4
Actual payments made	-47	-23
Recognised actuarial loss (+)/gain(-)	-85	-3
Present value of the defined benefit anniversary bonus obligations (DBO) as at 31 December = provisions as at 31 December	**302**	**389**

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. 2022 EUR thousand
3.99%	305
4.14%	302
4.29%	300

Interest rate	DBO 31 Dec. 2021 EUR thousand
0.85%	393
1.00%	389
1.15%	385

Other non-current provisions

The other non-current provisions comprise:

	As at 31 Dec. 2021 EUR thousand	Foreign currency translation EUR thousand	Interest EUR thousand	Utilisation EUR thousand	Reversal EUR thousand	Added EUR thousand	Reclassified liabilities EUR thousand	As at 31 Dec. 2022 EUR thousand
Provisions for leave based on period of service	99	-1	8	-11	-38	47	-1	103
Provisions for projects	529	0	0	-318	0	0	0	211
Other	246	-1	1	-172	0	53	0	127
	874	**-2**	**9**	**-501**	**-38**	**100**	**-1**	**441**

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.

31. 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. 2022 EUR thousand	31 Dec. 2021 EUR thousand
Advances for customer projects	80,029	83,106
Advances offset against contract assets	-32,048	-29,075
	47,981	**54,031**
Other contract liabilities	13,382	6,332
Other contract liabilities offset against contract assets	-2,822	-3,215
	10,560	**3,117**
Accrued revenue for maintenance contracts	8,798	7,500
Liabilities for outstanding performance obligations for customer orders after final invoicing (current)	691	708
Liabilities for outstanding performance obligations for customer orders after final invoicing (non-current)	5	32
Total contract liabilities	**68,035**	**65,388**

Other contract liabilities contain contractual claims to advance payments.

EUR 3,018 thousand (2021: EUR 908 thousand) of the contract liabilities have a term of more than 12 months. Since the contract costs are expected to be incurred within an operating cycle, all contract costs are classified as current.

32. Other liabilities

The other liabilities comprise:

	31 Dec. 2022 EUR thousand	31 Dec. 2021 EUR thousand
Liability for put option, non-controlling interests	3,262	0
Loans from non-controlling interests	426	449
Earn-out payment liability	0	402
Loan from FFG (Austrian Research Promotion Agency)	284	0
Other liabilities	267	7
Total non-current financial liabilities	**4,239**	**858**
Liability for put option, non-controlling interests	2,786	2,036
Negative fair values of cash flow hedges and MTM valuation	1,591	1,562
Earn-out payment liability	250	0
Loans from non-controlling interests	30	30
Other liabilities	1,430	1,368
Total current financial liabilities	**6,087**	**4,996**
Accrual for holidays not yet taken	4,642	3,919
Liabilities to the Austrian fiscal authorities (excluding income taxes)	1,968	2,694
Advances received in connection with grants and subsidies	762	1,065
Liabilities to health insurers	702	370
Accrual for overtime	635	710
Accrual for consultancy costs	595	702
Other liabilities	957	673
Total current non-financial liabilities	**10,261**	**10,133**

The non-current earn-out payment liability is one element of the contractually agreed purchase price for ATRiCS Advanced Traffic Solutions GmbH, which was acquired in 2020. It is based on the relevant annual financial statements prepared in accordance with the German Commercial Code and is dependent on achievement of an EBIT target and the net cash/debt ratio as at 31 December 2024 and the deviation from the target working capital as at 31 December 2024.

This liability was remeasured as at the reporting date. Due to the difficult order situation, which was already evident in 2021 and was exacerbated in 2022 by the COVID-19 pandemic, the liability was reduced to zero. The development of the fair value of the earn-out payment, which is allocated to level 3, is as follows:

Earn-out	Estimate as at 31 Dec. 2022 EUR thousand	Estimate as at 31 Dec. 2021 EUR thousand
Target value	**3,570**	**3,570**
+/- Earnings-related adjustment (achievement of an EBIT target)	-3,570	-3,570
+/- Net cash/debt as at 31 December 2024	0	402
+/- Difference from target working capital as at 31 December 2024	0	0
Earn-out claim	**0**	**402**

The fair value of this earn-out liability was reduced by EUR 402 thousand in the reporting period (2021: EUR 850 thousand); this was recognised in other operating income.

The current earn-out liability is a component of the contractually agreed purchase price for Regola S.r.l., which was acquired in 2022. It is based on the local financial statements and is contingent upon achievement of an EBIT target as at 31 December 2022.

The non-current liability for a put option of non-controlling interests relates to an option held by non-controlling interests in Regola S.r.l. to transfer these interests to Frequentis. If this option is exercised, Frequentis has an irrevocable obligation to acquire the interests in this business. The put option can be exercised at the earliest on 30 June 2027.

The current liability for a put option of non-controlling interests relates to an option held by non-controlling interests in ELARA Leitstellentechnik GmbH to transfer these interests to Frequentis. If this option is exercised, Frequentis has an irrevocable obligation to acquire the interests in this business. The put option became exercisable on 14 November 2022.

The relevant equity amount is the enterprise value less net financial debt of Regola S.r.l. and ELARA Leitstellentechnik GmbH. 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.) and 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).

33. Other current provisions

The other current provisions comprise:

	As at 31 Dec. 2021 EUR thousand	Foreign exchange difference EUR thousand	Additions from business combinations EUR thousand	Utilisation EUR thousand	Reversal EUR thousand	Added EUR thousand	As at 31 Dec. 2022 EUR thousand
Bonuses	11,221	13	91	-11,326	0	11,207	11,207
Provisions for projects	2,977	91	0	-3,068	0	**1,220**	1,220
Litigation costs	1,744	0	0	-119	-598	0	1,027
Other	1,473	0	34	-955	-303	1,211	1,460
	17,415	**104**	**125**	**-15,468**	**- 901**	**13,638**	**14,914**

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 lawsuits filed in connection with Commerzialbank Mattersburg.

It is expected that the current provisions will result in actual outflows in the 2023 financial year.

Based on the sensitivity analyses performed, a 10% reduction in the remaining costs would reduce the provisions for projects by EUR 543 thousand (2021: EUR 1,104 thousand) and a 10% increase in the remaining costs would increase the provisions for projects by EUR 582 thousand (2021: EUR 1,469 thousand).

Other information

34. 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 reduction in the cash flow from operating activities from EUR 48,753 thousand to EUR 14,112 thousand was mainly attributable to the rise of EUR 12,122 thousand in contract assets, compared with a reduction of EUR 8,565 thousand in 2021, and to the change in other receivables (increase of EUR 6,298 thousand in 2022 compared with a decrease of EUR 3,402 thousand in 2021).

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. 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**

	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. 2021 EUR thousand
Non-current liabilities	5,387	0	37	-70	0	0	-1,085	4,269
Non-current lease liabilities	31,811	90	242	0	4,996	0	-7,354	29,785
Current liabilities	1,315	0	14	-1,329	0	0	1,085	1,085
Current lease liabilities	7,292	457	90	-8,228	857	-28	7,354	7,794
Total liabilities for financing activities	**45,805**	**547**	**383**	**-9,627**	**5,853**	**-28**	**0**	**42,933**

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.

35. 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 purchasing forward exchange contracts in the required foreign currency and 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 and non-derivative financial liabilities. The variable interest payments for financial instruments were derived from the last applicable interest rates prior to 31 December 2022 and 31 December 2021. 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.

2022 in EUR thousand	Carrying amount	Contractual cash flows			
		Less than 1 year	Between 1 and 5 years	More than 5 years	Total
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**

2021 in EUR thousand	Carrying amount	Contractual cash flows			
		Less than 1 year	Between 1 and 5 years	More than 5 years	Total
Liabilities to banks and other financial liabilities	4,905	1,145	3,880	0	**5,025**
Lease liabilities	37,579	8,072	20,296	10,109	38,477
Trade accounts payable	13,422	13,238	184	0	13,422
Other liabilities	4,292	1,878	2,414	0	4,292
Non-derivative liabilities	**60,198**	**24,333**	**26,774**	**10,109**	**61,216**
Derivative financial instruments	1,562	34,812	0	0	34,812
Derivative financial liabilities	**1,562**	**34,812**	**0**	**0**	**34,812**
Total	**61,760**	**59,145**	**26,774**	**10,109**	**96,028**

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 (2022: EUR 76,990 thousand; 2021: EUR 69,435 thousand), contract assets (2022: EUR 50,475 thousand; 2021: EUR 38,353 thousand), other financial assets (2022: EUR 2,759 thousand; 2021: EUR 672 thousand), time deposits (2022: EUR 10,000 thousand; 2021: EUR 2,199 thousand), and cash and cash equivalents (2022: EUR 81,380 thousand; 2021: EUR 103,798 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 measures used in the past to assess creditworthiness did not have to be tightened as a result of the COVID-19 pandemic.

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 22. Trade accounts receivable and Note 23 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.

Apart from investments and deposits totalling EUR 14,769 thousand (31 December 2021: EUR 15,499 thousand) at one bank, there is no significant concentration or material credit risk in respect of individual banks, customers, contractual partners or individual financial instruments. In response to the insolvency of Commerzialbank Mattersburg in 2020, counterparty risk management has been extended by defining core banks. Every 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 81,380 thousand (31 December 2021: EUR 103,798 thousand) and bear interest at variable rates or are not interest-bearing. A reduction in interest rates would not result in any significant change because the majority of the deposits with banks do not bear interest and a reduction would not result in negative interest. In the reporting period, negative interest of EUR 147 thousand (2021: EUR 155 thousand) was paid. This is recognised in other operating expenses. An increase in interest rates of one percentage point would increase interest income by EUR 814 thousand (2021: EUR 1,038 thousand).

As in the previous year, within financial liabilities, the non-current liabilities to banks and other non-current financial liabilities and lease liabilities bear interest at fixed rates.

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).

2022	Measured at fair value			Measured at amortised cost		Total carrying amount
	Hedge accounting	Mandatory recognition at fair value through profit or loss	Equity instrument – 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**		**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
Other liabilities		6,298			2,437	8,735
Total	**273**	**7,616**			**58,297**	**66,186**

2021	Measured at fair value			Measured at amortised cost		Total carrying amount
	Hedge accounting	Mandatory recognition at fair value through profit or loss	Equity instrument – at fair value through profit or loss	Financial assets	Other financial liabilities	
Financial assets						
Equity instruments			0			0
Time deposits				2,199		2,199
Trade accounts receivable				69,435		69,435
Derivative financial instruments		92				92
Other current and non-current assets				821		821
Cash and cash equivalents				103,798		103,798
Total		**92**	**0**	**176,253**		**176,345**
Financial liabilities						
Liabilities to banks and other financial liabilities					4,905	4,905
Trade accounts payable					13,422	13,422
Lease liabilities					37,579	37,579
Derivative financial instruments	716	846				1,562
Other liabilities		2,438			1,854	4,292
Total	**716**	**3,284**			**57,760**	**61,760**

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.

For the equity instrument, Altitude Angel Ltd., there is no quoted price available on an active market. Therefore, it is measured using parameters that are unobservable on the market. Measurement is based on the discounted cash flow method or any equity transactions close to the reporting date. The fair value is allocated to level 3 in the fair value hierarchy. There is currently no intention of selling the equity instrument.

The earn-out liabilities relating to the acquisition of ATRiCS Advanced Traffic Solutions GmbH and Regola S.r.l. 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 and Regola S.r.l. 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):

2022	Derivative financial instruments	Other financial instruments measured at fair value through profit or loss	Financial instruments measured at fair value through OCI	Financial assets measured at amortised cost	Financial liabilities measured at amortised cost
Net interest income/expense				209	-738
Valuation	122				
Impairment losses 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**

2021	Derivative financial instruments	Other financial instruments measured at fair value through profit or loss	Financial instruments measured at fair value through OCI	Financial assets measured at amortised cost	Financial liabilities measured at amortised cost
Net interest income/expense				79	-607
Valuation	-1,955	-13		6	
Impairment losses pursuant to IFRS 9				-908	
Exchange rate gains/losses				-264	-220
Disposal gains/losses					
Net gains/losses recognised in profit or loss	**-1,955**	**-13**	**0**	**-1,087**	**-827**
Net gains/losses recognised in other comprehensive income	-298				
Net gains/losses	**-2,253**	**-13**	**0**	**-1,087**	**-827**

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, CHF, GBP, HUF, 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 (cash flow hedges). The hedging instruments (forwards, swaps) are concluded for a year and extended annually in the amount of the cash flows still expected (extension at historical rates). Payments from the hedged cash flows are expected to occur in the years 2023 to 2027.

Changes in the fair value of forward exchange contracts that are not designated in a hedging relationship are recognised in other operating income or other operating expense.

In 2021 and 2022, there was no reduction in forecast underlying transactions due to either the COVID-19 pandemic or the war in Ukraine.

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 2022, verified by corresponding bank confirmations.

The following table shows the development of the derivative financial instruments:

2022	Derivative			Cash flow hedge		For MTM valuation		Total
Sale currency	Sale amount	Purchase amount EUR thousand	Average hedging rate	Foreign currency amount	Fair value EUR thousand	Foreign currency amount	Fair value EUR thousand	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**

2021	Derivative			Cash flow hedge		For MTM valuation		Total
Currency	Sale amount	Purchase amount EUR thousand	Average hedging rate	Foreign currency amount	Fair value EUR thousand	Foreign currency amount	Fair value EUR thousand	Fair value EUR thousand
GBP	349	-401	0.87	0	0	349	8	8
SGD	427	-265	1.61	0	0	427	12	12
USD	-10,860	9,502	1.14	0	0	-10,860	72	72
		8,836			**0**		**92**	**92**
AUD	-2,351	1,439	1.63	0	0	-2,351	-49	-49
CAD	-2,600	1,703	1.53	0	0	-2,600	-28	-28
CHF	-345	318	1.09	0	0	-345	-17	-17
GBP	-15,045	16,706	0.90	-7,572	-695	-7,474	-274	-969
HKD	-700	77	9.11	0	0	-700	-2	-2
NOK	-1,672	152	11.01	0	0	-1,672	-13	-13
SGD	-5,030	3,120	1.61	0	0	-5,030	-128	-128
USD	-13,385	11,296	1.18	-327	-21	-13,058	-335	-356
		34,811			**- 716**		**- 846**	**-1,562**

For the carrying amount of the cash flow hedge and the carrying amount of the MTM valuation, a positive fair value of EUR 661 thousand was recognised in other receivables in 2022 (2021: EUR 92 thousand), while a negative fair value of EUR 1,591 thousand was recognised in other liabilities (2021: EUR 1,562 thousand). When the hedged item (revenue) is realised, the amount relating to the hedging transaction recognised in other comprehensive income is reclassified to revenues. The amount reclassified to revenues is shown in the development of the cash flow hedge reserve presented in the next table.

In principle, a prospective effectiveness test is performed when a derivative is designated as a hedging instrument. At every reporting date, the effectiveness of the hedge is reviewed and any potential ineffectiveness is determined. Ineffectiveness is measured by comparing the accumulated changes in the fair value of the designated hedging instruments since designation of the hedge and the accumulated changes in the fair value of the hedged item with reference to the hedged risk. A hypothetical derivative is used to determine the accumulated changes in the fair value of the hedged item with reference to the risk of a change in the exchange rate.

Ineffectiveness may arise if there is a significant discrepancy between the credit risk of the trading partner and that of the Frequentis Group. In addition, a reduction in the hedged revenues can result in over-hedging in the short term, resulting in ineffectiveness. There was no ineffectiveness in 2022 or 2021.

The table shows the development of the cash flow hedge reserve:

	2022 EUR thousand	2021 EUR thousand
As at 31 December of the previous year	**-346**	**-123**
Result from changes in fair value	194	-300
Deferred taxes on this amount	-46	75
Reclassification to the income statement	103	3
Deferred taxes on this amount	-25	-1
Adjustments due to changes in tax rates	-5	0
As at 31 December of the financial year	**-125**	**-346**

Based on the sensitivity analyses performed, a 10% increase in exchange rates on the reporting date would have increased the fair value of the cash flow hedge by EUR 599 thousand and the fair value of the MTM valuation by EUR 4,384 thousand, while a 10% reduction in exchange rates would have reduced the fair value of the cash flow hedge by EUR 738 thousand and the fair value of the MTM valuation by EUR 5,433 thousand.

36. 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 cannot be terminated until 2026. As at 31 December 2021, it was assumed that the lease would be extended to 2029. This was reviewed as at 31 December 2022 and the period was adjusted to 2030. As a result, the right-of-use asset increased by EUR 1,763 thousand.

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 included 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:

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**

2021	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 2021	49,363	587	2,707	**52,657**
Foreign currency translation	499	0	10	509
Changes in reporting entities	2,670	0	198	2,868
Addition	5,003	0	850	5,853
Disposal	-507	0	-321	- 828
As at 31 December 2021	**57,028**	**587**	**3,444**	**61,059**
Accumulated depreciation				
As at 1 January 2021	-12,775	-19	-1,112	-13,906
Foreign currency translation	-231	0	-5	-236
Changes in reporting entities	-2,004	0	-113	-2,117
Addition	-7,336	-96	-799	-8,231
Disposal	507	0	294	801
As at 31 December 2021	**-21,839**	**- 115**	**-1,735**	**-23,689**
Carrying amount				
As at 31 December 2021	35,189	472	1,709	**37,370**

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 37,579 thousand (comprising EUR 29,785 thousand non-current and EUR 7,794 thousand current) as at 1 January 2022 to EUR 39,185 thousand (comprising EUR 30,763 thousand non-current and EUR 8,422 thousand current) as at 31 December 2022.

The following expenses for leases are recognised in the income statement:

	2022 EUR thousand	2021 EUR thousand
Depreciation of right-of-use assets	9,066	8,231
Interest expense for lease obligations	412	215
Lease payments for short-term leases	614	540
Lease payments for low-value assets	64	33
Total	**10,156**	**9,019**

Amounts recognised in the cash flow statement in connection with leases:

	2022 EUR thousand	2021 EUR thousand
Payments of principal on lease liabilities	8,686	8,228
Interest paid on lease liabilities	412	215
Lease payments for short-term leases and low-value assets	678	573
	9,776	**9,016**

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 2022, the Frequentis Group concluded several leases that start in 2023. However, these are insignificant leases for vehicles and the rental of buildings.

Frequentis as lessor

Lease payments from 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. 2022 EUR thousand	31 Dec. 2021 EUR thousand
Due in one year	1,731	9
Due in two years	1,457	0
Due in three years	11	0
Due in four years	0	0
Due in five years	0	0
Due in more than five years	0	0
	3,199	**9**

EUR 182 thousand (2021: EUR 50 thousand) was recognised in other operating income in the income statement.

37. 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:

	2022 EUR thousand	2021 EUR thousand
Goods and services supplied and other income	19	24
Goods and services received and other expenses (consulting services)	590	558
Receivables outstanding as at 31 December	2	1
Liabilities outstanding as at 31 December	0	0

All transactions are undertaken 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:

	2022 EUR thousand	2021 EUR thousand
Goods and services supplied and other income	1,084	453
Goods and services received and other expenses	2,813	2,305
Receivables outstanding as at 31 December	192	11
Liabilities outstanding as at 31 December	419	38
Advances from customers as of 31 December	588	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 undertaken with companies and persons classified as related parties:

	2022 EUR thousand	2021 EUR thousand
Expenses for consulting services	283	488
Expenses for project support services	220	338
Expenses for software development and engineering	1,856	464
Rental payments (principal and interest) and operating costs	3,954	3,801
Interest expense for loans received	1	
Revenues	1,897	18
Receivables as at December 31	1,068	0
Payables as at December 31	105	104
Loans received as at Dec. 31	30	30

The expenses for software development and engineering also contain EUR 467 thousand relating to companies that would not be not classified as related parties under IAS 24. The associated liabilities are EUR 46 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.

In the reporting period, advance payments for future research revenues in the amount of EUR 188 thousand (2021: EUR 144 thousand) were disbursed by FFG. Funding received from FFG in the reporting period totalled EUR 502 thousand (2021: EUR 237 thousand). EUR 210 thousand of this amount (2021: EUR 63 thousand) is presented in other receivables. In the reporting period, FFG disbursed a loan of EUR 284 thousand with a term of five years in connection with a research project.

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
- Hermann Mattanovich
- Peter Skerlan

The total remuneration paid to the Executive Board (excluding payroll-related costs) was EUR 2,368 thousand in the reporting period (2021: EUR 2,737 thousand). The remuneration of the Executive board comprised fixed components (annual base salary, premiums for pension reinsurance, and benefits in kind) and variable components (short-term variable remuneration and long-term incentive plans [LTIP]). The short-term variable components are linked to the achievement of financial targets for the company and individual targets.

Frequentis AG agreed long-term incentive plans with the Chairman of the Executive Board, Mr. Norbert Haslacher, in 2019, 2020, 2021, and 2022 (LTIP 2019, LTIP 2020, LTIP 2021, and LTIP 2022). For further information, see Note 28. 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 383 thousand were incurred in the reporting period (2021: EUR 391 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 167 thousand (2021: EUR 159 thousand), interest cost of EUR 42 thousand (2021: EUR 32 thousand), and pension insurance expense of EUR 175 thousand (2021: EUR 200 thousand).

In the event of termination of employment, severance payments are due in accordance with the legal regulations in Austria and contractual agreements. Reversal of the corresponding provisions for severance payments amounted to EUR 62 thousand in the reporting period (2021: additions of EUR 259 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 167 thousand in the reporting period (2021: EUR 148 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 73 thousand (2021: EUR 52 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 2022, there was an outstanding receivable of EUR 0.3 thousand for this (2021: EUR 4 thousand).

No advances or loans were granted to members of the Supervisory Board of Frequentis AG.

38. Significant events after the reporting date

Monika Haselbacher was appointed as an additional member of the Executive Board with effect from 1 January 2023 for a term of five years (1 January 2023 to 31 December 2027). She strengthens the Executive Board of Frequentis AG in her role as Chief Operating Officer (COO).

With effect from 1 January 2023, the Executive Board comprises:

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

The interest in AIRNAV Technology Services Inc., which has its registered office in Iloilo, Philippines, was increased from 40% to 65% as at 20 February 2023. The purchase price of EUR 35 thousand was paid in 2022 and is recognised in the line item advance payments for non-current assets.

On 20 February 2023, an agreement was signed to acquire 76.67% of the shares in FRAFOS GmbH, which has its registered office in Berlin, Germany. The shares were acquired by BlueCall Systems GmbH, a wholly owned subsidiary of Frequentis AG. Closing of this transaction is contingent upon the approval of Germany's Federal Ministry for Economic Affairs and Climate Action.

The purchase price for the shares in this company comprises a basic purchase price of EUR 2,300 thousand, a possible increase in the purchase price of EUR 465 thousand (depending on the receipt of certain outstanding receivables), and a variable performance-related earn-out component.

39. Additional information

The Frequentis Group had an average of 2,081 employees in 2022 (2021: 1,937 employees). For the first time, the number of employees is presented as full-time equivalents; the figures for 2021 have been adjusted accordingly.

Audit fees

In the reporting period, audit expenses of EUR 133 thousand (2021: EUR 127 thousand) were incurred for the audit of the consolidated financial statements and the annual financial statements of Frequentis AG, expenses of EUR 71 thousand (2021: EUR 45 thousand) were incurred for other consulting services, and expenses of EUR 23 thousand (2021: EUR 17 thousand) were incurred for other services.

40. 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:

	2022	2021
EBIT margin (based on revenues)	6.5%	8.7%
Equity ratio	43.3%	41.1%
Net cash in EUR thousand	90,963	101,093

The Frequentis Group calculates EBIT as follows:

	2022 EUR thousand	2021 EUR thousand
Profit/loss before tax	24,737	27,925
Financial income	-209	-79
Financial expenses	738	607
Net change in impairment losses on financial assets	0	857
Earnings from investments accounted for at equity	-275	-342
EBIT	**24,991**	**28,968**

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.

41. 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, 13 March 2023

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 December 31, 2022, 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 December 31, 2022 and its financial performance for the year then ended in accordance with International Financial Reporting Standards (IFRS), as adopted by the EU and with requirements stated in par. 245a UGB.

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 in accordance with any other regulations or requirements agreed 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

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 form 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 judgment”. Further information can be found in chapter 4 “Revenues” within the notes on the consolidated income statement and in chapter 23 “Contract assets from contracts with customers” and chapter 31 “Contract liabilities from contracts with customers”.

Audit repsonse:

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, the corporate governance report and the compensation 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 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 requirements stated in par. 245a UGB 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 June 2, 2022. We were appointed by the Supervisory Board on September 19, 2022. 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. Mag. Gerhard Posautz, Certified Public Accountant.

Vienna, 13 March 2023

BDO Assurance GmbH
Wirtschaftsprüfungs- und Steuerberatungsgesellschaft
(as universal successor to BDO Austria GmbH Wirtschaftsprüfungs- und Steuerberatungsgesellschaft)

Mag. Gerhard Posautz	Mag. Gerhard Fremgen
Auditor	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, 13 March 2023

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