FREQUENTIS

FOR A SAFER WORLD

FOR A SAFER WORLD

Annual Report

2020

Innovative solutions from Frequentis set standards

Key figures Frequentis Group

All figures in EUR million, except where otherwise stated.

Earnings data

Earnings data	2020	2019[1]	+/- in %	+/- EUR million	2018	2017
Revenues	**299.4**	303.6	-1.4%	-4.3	285.8	266.9
EBITDA	**41.9**	30.2	+38.9%	+11.7	21.6	20.0
EBITDA margin	**14.0%**	9.9%	+4.1PP	–	7.6%	7.5%
EBIT	**26.8**	17.2	+55.7%	+9.6	15.6	14.3
EBIT margin	**9.0%**	5.7%	+3.3PP	–	5.5%	5.4%
Profit/loss for the financial year	**-3.4**	12.5	–	-15.9	11.8	10.7
Earnings per share in EUR	**-0.30**	0.93	–	–	0.94	0.82

Order data

Order data	2020	2019	+/- in %	+/- EUR million	2018	2017
Order intake	**314.6**	333.7	-5.7%	-19.1	306.3	287.8
Orders on hand (at year-end)	**427.6**	391.5	+9.2%	+36.1	355.2	335.3

Statement of financial position

Statement of financial position	2020	2019[1]	+/- in %	+/- EUR million	2018	2017
Total assets	**277.6**	272.1	+2.0%	+5.5	198.0	194.6
Shareholders´equity	**113.0**	116.2	-2.8%	-3.2	85.6	90.1
Equity ratio	**40.7%**	42.7%	-2.0 PP	–	43.3%	46.3%
Net cash	**85.0**	77.8	+9.4%	+7.3	55.4	70.0
No. of employees (average)	**1,907**	1,849	+3.1%	–	1,763	1,697

Cash flow statement

Cash flow statement	2020	2019[1]	+/- in %	+/- EUR million	2018	2017
Cash flow from operating activities	54.8	17.7	>+100,0%	+37.0	4.6	16.7
Cash flow from investing activities	-7.0	-4.6	-53.4%	-2.4	-4.4	-4.4
Cash flow from financing activities	-10.1	8.0	–	-18.1	-14.2	-3.7
Cash and cash equivalents at year-end	91.3	66.9	+36.5%	+24.4	45.5	77.7

Note: The addition of rounded amounts and percentages may result in rounding differences as a result of the use of automatic data processing.

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

2020 at a glance

Revenues in EUR million	EBITDA in EUR million	EBIT in EUR million
299.4	41.9	26.8
-1.4%	+38.9%	+55.7%

Net cash in EUR million	Order intake in EUR million	Orders on hand in EUR million
85.0	314.6	427.6
+9.4%	-5.7%	+9.2%

Dividend per share	Average no. of employees	Equity ratio
EUR 0.15	1,907	40.7%

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Norbert Haslacher
Chairman of the
Executive Board

Sylvia Bardach
Member of the
Executive Board

Hermann Mattanovich
Member of the
Executive Board

Preface

Ladies and gentlemen,

The COVID-19 pandemic has had a severe impact on society and the economy since the beginning of 2020 and this will continue, albeit with regional differences. Based on our resilient business model, our business operations continued on the usual scale. That is something Frequentis can be proud of – together with our customers, suppliers, and partners. The trust placed in us by our customers enabled us to complete most projects, despite lockdowns and global travel restrictions. At the same time, we drove forward digital progress in sales (Sales Goes Digital) and project execution.

2020 made it clear that our organisation is robust and flexible. We would like to thank our customers and partners for their excellent cooperation. We would also like to say a big thank you to all our employees – including those who are new to the Frequentis Group – and especially those who also had to cope with family responsibilities. Other very positive aspects in this context were the diversity of our teams and the sense of community within the Frequentis Group.

Highlights

Given the restrictions resulting from the pandemic, we are satisfied with our operating performance in 2020 compared with 2019.

- Order intake was EUR 314.6 million (2019: EUR 333.7 million)
- Orders on hand therefore increased by 9.2% to EUR 427.6 million at year-end 2020 (2019: EUR 391.5 million).
- Revenues were almost unchanged at EUR 299.4 million (2019: EUR 303.6 million)
- EBITDA improved by almost 40% to EUR 41.9 million (2019: EUR 30.2 million)
- EBIT increased by more than 50% to EUR 26.8 million (2019: EUR 17.2 million)
- The Group made a loss of EUR 3.4 million as a result of the impairment loss on deposits at Commerzialbank Mattersburg (2019: profit of EUR 12.5 million)
- The equity ratio was 40.7% (2019: 42.7%)
- Net cash increased to EUR 85.0 million (2019: EUR 77.8 million).

Further highlights of 2020:

- Acquisition of 51% of ATRiCS, Germany; fully consolidated from 1 April 2020
- Acquisition in August 2020 of a 15% interest in Nemergent, Spain, enhancing access to new possibilities for safety-critical broadband communication (LTE)
- Our employee participation programme in 2020 had a high take-up of over 35% of eligible employees, bringing proceeds of just over EUR 1 million
- The virtual Annual General Meeting went well; dividend payment of EUR 0.15 per share

Digital marketing activities were performed as webinars and using online demonstration rooms. Incidentally, we registered far more direct participants than at conventional trade shows. We also introduced a "Sales Goes Digital" initiative to secure order intake. That went well, as shown by the only moderate year-on-year drop in order intake. We secured significant orders in both segments.

Orders on hand at year-end 2020 totalled EUR 427.6 million, an increase of 9.2% compared with year-end 2019. Thanks to the good order situation and the digitisation drive in project execution, capacity utilisation at Frequentis has been – and remains – good despite the pandemic.

To protect our staff around the world and to manage the pandemic as best as possible, an internal coronavirus crisis team headed by the Chairman of the Executive Board was established in March 2020. A variety of measures and initiatives were implemented to keep the business running smoothly and efficiently, while keeping our employees safe. As a result, we were able to hold revenues almost unchanged at EUR 299.4 million in 2020. In view of the travel restrictions, there was a sharp drop in business trips, resulting in a reduction in our travel expenses. That made a significant contribution to the considerable increase in EBITDA to EUR 41.9 million, as well as the improvement in EBIT to EUR 26.8 million. The EBITDA margin (based on revenues) increased to 14.0% and the EBIT margin was 9.0%.

Now for a brief look at our solid financial position. Despite the complete impairment loss in connection with the insolvency of Commerzialbank Mattersburg, which was already recognised in the half-year financial report in 2020, the equity ratio was 40.7% at year-end 2020 and our net cash position increased to EUR 85.0 million. We have already filed lawsuits to assert our claims in connection with the Commerzialbank Mattersburg case. At present, it appears that these lawsuits and the pursuit of further potential claims will take a significant period of time.

Dividend

In view of the good operating result and our solid financial position, at the Annual General Meeting we will be proposing a dividend of EUR 0.15 per share, as in the previous year. Our dividend policy remains unchanged despite the acquisitions.

Acquisitions

The acquisition of ATRiCS (Air Traffic Management segment/ATM) and the equity investment in Nemergent (Public Safety & Transport segment/PST) in 2020 as well as the planned acquisition of business units of the listed US company L3Harris Technologies (L3Harris), which was announced in February 2021, broaden and diversify the Frequentis product portfolio.

The proposed transaction with L3Harris comprises the acquisition of all the civil and military ATM voice and communications product lines, and software and cloud solutions for traffic optimisation (traffic synchronisation). The traffic optimisation solutions can help reduce air traffic emissions. This transaction involves the acquisition of entities in Germany, Canada, and Australia with around 200 employees.

In addition to these acquisitions, we have signed cooperation agreements with L3Harris. As an L3Harris technology partner, we will provide voice communication systems for use in L3Harris' large-scale solutions and service business. The acquisition is expected to be completed in the second half of 2021 and is subject to competition clearance and regulatory approvals. Since closing and thus the full consolidation of the various L3Harris entities is expected to take place at different times in the second half of 2021 and will involve both transaction costs and post-merger integration costs, these entities are not expected to make a significant contribution to revenues and earnings in the 2021 financial year. We expect this transaction to contribute revenues of around EUR 30 million in 2022.

Business model

Frequentis has a stable and resilient business model that is also able to withstand crises. Since we supply communication and information systems for the safety-critical sector, our customers are mainly authorities, who plan and award orders on a long-term basis. Our customers are the world's air traffic control organisations and control centres for the police, emergency rescue services, fire service, public transport systems, and shipping. The products supplied by Frequentis are part of the safety-critical infrastructure, in other words, the essential national infrastructure of the relevant countries.

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

Despite the pandemic, further growth is forecast: according to a report published in December 2020, the air traffic management market should grow by 4% a year up to 2027. This growth forecast is based, among other things, on increased use of automated and digital technologies, including digital (remote) towers.

We intend to continue to grow in keeping with our present strategy. Areas of focus are our New Business Development activities and conclusion of our transaction with L3Harris Technologies and the integration of the various entities.

Innovations

We are proud to be an innovation leader in our markets, which enables us to play a part in shaping the industry. Our focus here is on UTM/drone management and mission-critical communication via 5G/LTE. This is highlighted by the rollout in Norway of the first national drone management system and our investment in the Spanish company Nemergent. In this way, we are making new technologies usable for the safety-critical sector.

The supply of cloud-enabled software and the acquisitions we have made show that we are consistently implementing our strategy of steadily increasing our position as a software company. In the Public Safety & Transport segment, in particular, there is rising demand for purely software- and private cloud-based solutions. We are playing an active part in this transformation of our industry.

Expenses for company-financed research and development work that was not ordered by customers dropped to EUR 12.8 million in 2020. In view of the COVID-19 pandemic, this was due to a focus on software development for customers and temporary savings on development activities. Expenses are expected to be higher in 2021.

Our innovation strategy is also recognised by the stock market. In 2020, we were presented with the European Star of Innovation award for small and mid-cap companies. This award was initiated by the European Commission and is presented by the Federation of European Securities Exchanges (FESE) and EuropeanIssuers.

Forecast for 2021

The present financial year is characterised by rising demand from customers for software solutions. Commercial technologies, such as cloud-based solutions and 5G/LTE, are continuing their advance into safety-critical control centres operated by the public sector.

Important developments such as digital remote towers and flight information systems to integrate drones into commercial and military airspace are gradually becoming reality. Frequentis is positioned on the front line in all these topics and is therefore also involved in the related standard-setting bodies. Planned capital expenditure (capex) remains at EUR 5 million.

Despite global measures to contain the pandemic and the increasing availability of vaccines, Frequentis faces a number of uncertainties in 2021. It is not possible to make a reliable estimate of the exact effect of the ongoing pandemic on costs (e.g. travel expenses), revenues (e.g. due to the deferral of project acceptances), supply chains, the budgets available, and the potential postponement of investments.

Nevertheless, in 2021 Frequentis aims to maintain revenues and order intake at around the 2020 level, or even increase them. In view of the need to visit customer premises (e.g. for go-lives, maintenance, system upgrades, and marketing and sales activities), travel expenses, in particular, are expected to rise again. Frequentis expects to report an EBIT margin of around 5-7% in 2021 – depending on how the pandemic develops and on the transaction and post-merger integration costs for the planned integration of the L3Harris units.

We would like to thank our customers, partners, and investors for their continued trust and our employees, who are keen to shape the future development with us, safely, securely, and positively.

Vienna, 15 March 2021

Best regards and stay safe

Norbert Haslacher
Chairman of the
Executive Board

Sylvia Bardach
Member of the
Executive Board

Hermann Mattanovich
Member of the
Executive Board

Report of the Supervisory Board

Worldwide, 2020 was dominated by the COVID-19 pandemic. The effects of this pandemic did not leave Frequentis AG unscathed. Thanks to its stable business model as a supplier of communication and information systems for control centres in the safety-critical sector and the measures introduced by the Executive Board to deal with the challenges arising from the pandemic, Frequentis was able to continue its business with almost no disruption. I would especially like to thank our employees for the creativity and ingenuity with which they drove forward and successfully completed individual customer projects with the aid of digital media.

Despite the pandemic, consolidated revenues were close to the prior-year level at EUR 299.4 million and consolidated EBIT increased to EUR 26.8 million. At the end of 2020, Frequentis had a net cash position of EUR 85.0 million, so it has a very solid financial base.

Changes on the Supervisory Board

Dr. Karl Michael Millauer and Dr. Boris Nemsic were both appointed to the Supervisory Board for the period until the end of the 13th Annual General Meeting on 14 May 2020. At this General Meeting, Dr. Karl Michael Millauer and Dr. Boris Nemsic were both re-elected as members of the Supervisory Board of Frequentis AG for the maximum period permitted by law. At the meeting of the Supervisory Board following the Annual General Meeting, Dr. Millauer was also re-elected as Deputy Chairman of the Supervisory Board and Chairman of the Audit Committee. Dr. Nemsic was re-elected as a member of the Committee for Executive Board Issues.

Work of the Supervisory Board and its committees

In 2020, the Supervisory Board performed the tasks imposed on it by the law, the articles of association, and the rules of procedure with the utmost care. We regularly advised and supervised the Executive Board in the management of the company. The Executive Board kept the Supervisory Board informed at all times about the business situation and development of Frequentis AG. In addition, the chairmen of the committees and I maintained regular contact with the Executive Board to discuss opportunities and risks for the company.

The Supervisory Board of Frequentis AG held five meetings in 2020. At these meetings, the Supervisory Board received detailed reports from the Executive Board on the company's business performance and situation, as well as the principal projects in progress, material events, possible acquisitions, and the related questions. In this context, the Supervisory Board discussed, questioned, and examined the information provided by the Executive Board. This examination, which took the form of an open discussion between the Executive Board and the Supervisory Board, did not result in any objections. The approval of the Supervisory Board was obtained on matters where this was required by the articles of association or rules of procedure.

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

The Committee for Executive Board Issues met twice in the reporting period. As well as evaluating target attainment in the 2019 financial year, it mainly discussed the remuneration policy for the Supervisory Board and the Executive Board, and defined the modalities of the Long-Term Incentive Plan 2020 (LTIP 2020) for the Chairman of the Executive Board. The remuneration policies and the LTIP 2020 were subsequently adopted at the company's Annual General Meeting on 14 May 2020.

In connection with the insolvency of Commerzialbank Mattersburg, the Supervisory Board set up a special committee chaired by Dr. Millauer. The other members of this committee are Ms. Petra Preining and Mr. Siegfried Meisel. The tasks of the special committee are, on the one hand, supervising the measures to recover the company's deposits at Commerzialbank Mattersburg and the related pursuit of claims against the bank and third parties and, on the other hand, investigating and appraising the internal workflows relating to the case and revising the relevant processes and regulations. The special committee held three meetings in 2020 and reported continuously to the Supervisory Board.

None of the members of the Supervisory Board were present at only half or less than half of the meetings of the Supervisory Board and the committees they belong to.

Financial statements of Frequentis AG and consolidated financial statements for 2020

The annual financial statements of Frequentis AG and the consolidated financial statements as at 31 December 2020 submitted by the Executive Board, as well as the management report for the company and the Group for the 2020 financial year were audited by the appointed auditors, BDO Austria GmbH Wirtschaftsprüfungs- und Steuerberatungsgesellschaft. The audit did not give rise to any objections and the statutory requirements were complied with in full, so the auditors issued an unqualified audit opinion. BDO Austria GmbH Wirtschaftsprüfungs- und Steuerberatungsgesellschaft performed a limited assurance review of the data and disclosures on sustainability reporting in the non-financial report. This review did not give rise to any objections.

The Supervisory Board's Audit Committee examined the annual financial statements, the consolidated financial statements, the auditors' reports, the Executive Board's proposal for the distribution of the profit, the corporate governance report, and the consolidated non-financial report in detail with auditors at its meeting on 31 March 2021 and proposed that they should be approved by the Supervisory Board. The Supervisory Board examined the documents in accordance with Section 96 of the Austrian Companies Act and agreed with the findings of the Audit Committee. The annual financial statements for Frequentis AG for 2020 were accepted by the Supervisory Board, so they are deemed to be approved pursuant to Section 96(4) of the Austrian Companies Act. The consolidated financial statements prepared in accordance with the International Financial Reporting Standards (IFRS), the management report, the Group management report, the consolidated corporate governance report, and the consolidated non-financial report were approved by the Supervisory Board. The Supervisory Board agreed to the Executive Board's proposal for the distribution of the profit. At the Annual General Meeting on 20 May 2021, the Executive Board will therefore propose payment of a dividend of EUR 0.15 per share for the 2020 financial year.

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

Vienna, 31 March 2021

Dr. Johannes Bardach
Chairman of the Supervisory Board of Frequentis AG

The Company

Nearly 75 years of innovation – for a safer world.

Wherever Frequentis systems are used, people bear responsibility for the safety of other people and of goods. As an international provider of communication and information systems for control centres for safety-critical tasks, Frequentis has two segments that develop custom-tailored control centre solutions, which are marketed in around 150 countries. The Frequentis Group's revenues amounted to EUR 299.4 million in 2020 and EBIT was EUR 26.8 million.

The Air Traffic Management segment (around 70% of revenues) comprises the following business domains:

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

The Public Safety & Transport segment (around 30% of revenues) comprises the following business domains:

- Police / fire brigades / emergency rescue services
- Railways and local public transport systems
- Shipping

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

Frequentis control centres for people's lives

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

Frequentis' solutions are already used operationally by air traffic controllers, dispatchers, and operators at more than 35,000 working positions in air traffic control, public safety, railways/public transport, and the maritime sector. The knowledge and experience of around 1,900 employees worldwide (including nearly 1,000 at the company's headquarters in Vienna), together with a network of subsidiaries and local representatives in more than 50 countries, enable Frequentis to serve more than 500 customers in some 150 countries.

Founded in 1947, Frequentis is the global market leader in voice communication systems for air traffic control with a market share of around 30%. Moreover, the Frequentis Group's systems are global leaders in AIM (aeronautical information management) and aeronautical message handling, as well as in GSM-R systems for railways. Since May 2019, shares in Frequentis AG have been listed on the Vienna and Frankfurt stock exchanges under ticker symbol FQT, ISIN ATFREQUENT09.

Safety-critical DNA

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

Cross-sector solutions for control centres

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

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

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

Voice & data communication	Tactical situation tools	Planning & management tools	Safety-critical networks
Backbone of operational control	**Displaying the current situation**	**Supporting decisions**	**Ensuring seamless business continuity**
Channelling information and transmitting to all relevant recipients.	Objects to be controlled and the operational environment.	Basing decisions on the information available. Documenting the process.	Brokering between safety-critical applications and non-specialised commercially available networks.

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

Frequentis sets standards

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

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

High innovative capability

Innovation is very important to Frequentis. The company is proud to be an innovation leader providing sustainable innovations and solutions to extend the market it addresses. The basis for this is interdisciplinary collaboration, which leverages the domain-specific know-how of the segments and the specialist expertise of the central support and governance functions. These activities are managed by the New Business Development department. The present focus is on the ongoing development of the digital (remote) tower technology, drone management, and the use of the 5G/LTE mobile communication standard in safety-critical applications. In addition to digital (remote) towers, which have already been used for a number of years, the realisation of this strategy includes the rollout in Norway of the first national drone management system and the investment in Nemergent, a Spanish software company operating in the field of mission-critical services.

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Subsidiaries and associated companies

The parent company of the Frequentis Group is Frequentis AG, which is based in Vienna, Austria. The main business activities and strategic corporate functions are bundled at the parent company. The Frequentis Group is managed through a Group-wide governance structure.

FREQUENTIS-GROUP

FREQUENTIS AG

Sales & Operations

Europe
- ATRiCS, Germany, 51%
- Frequentis Comsoft, Germany
- Frequentis DFS Aerosense, Austria, 70%
- Frequentis France
- Frequentis Deutschland, Germany
- Frequentis Norway
- Frequentis UK
- Systems Interface, UK, 51%

Americas
- Frequentis Canada
- Frequentis do Brasil, Brazil
- Frequentis USA
- Frequentis California, USA

Asia
- Frequentis China
- Frequentis Middle East
- Frequentis Singapore

Australia
- Frequentis Australasia, Australia

Software & Services

Europe
- CNS-Solutions & Support, Austria
- ELARA Leitstellentechnik, Germany, 51%
- Frequentis Czech Republic
- Frequentis Romania
- Frequentis Solutions & Services, Slovakia
- Nemergent Solutions, Spain, 15%
- PDTS GmbH, Austria

Asia
- AIRNAV Technology Services, Philippines, 40%

Further participations

Europe
- AIRlabs Austria, 18%
- GroupEAD Europe, Germany/Spain, 28%
- Mission Embedded, Austria, 20%
- Secure Service Provision, Germany, 80%
- TEAM Communication Technology, Austria, 51%

Simplified visualisation; all shareholdings 100% unless otherwise stated. Company names abbreviated. As of March 2021.

The subsidiaries bundled in Sales & Operations bear the main responsibility for building and extending Frequentis' global presence and regional value-added. They are responsible for the region allocated to them. Software & Services comprises the companies that provide internal development work, especially software programming, and a wide range of internal and external services.

Acquisition of ATRiCS, Germany

In March 2020 (effective 1 April 2020), Frequentis acquired a 51% stake in ATRiCS Advanced Traffic Solutions GmbH, which is based in Freiburg, Germany. ATRiCS was established in 2002 and is an owner-run company. It offers airport-specific software solutions for runway taxi operations management as well as consultancy services for airports and air traffic control organisations to improve safety at airports. This acquisition enables the Frequentis Group to significantly extend the technology it offers.

Investment in Nemergent, Spain

In August 2020, Frequentis intensified its collaboration with Nemergent Solutions S.L., a young Spanish company based in Bilbao, by taking a 15% shareholding in this company. The combined software and technology expertise will allow better use to be made of the opportunities for safety-critical broadband communication offered by the 5G/LTE mobile communications standard. This investment broadens and diversifies the Frequentis product portfolio.

The share

Shareholder structure

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

Analysts

BankM (Roger Becker, Daniel Großjohann), Commerzbank (Adrian Pehl) and Raiffeisen Bank International (Teresa Schinwald) regularly publish reports and commentaries on Frequentis shares.

Share price performance

In common with many areas of the economy and society, the stock markets were overshadowed by the coronavirus pandemic in 2020. The outbreak and increasing spread of the virus resulted in considerable volatility on the financial markets. At times, the world's major stock indices dropped massively. Hardly any other year has seen the stock markets exposed to highs and lows on this scale.

In this environment, Frequentis shares were subject to considerable volatility. Having ended 2019 at EUR 19.85 / 20.20 (Vienna Stock Exchange / XETRA Frankfurt), the shares made a positive start to 2020, rising to a high for the year of EUR 21.40 / 21.10 in mid-February. They then traded sideways with a slight downward trend, before dropping to a low for the year of EUR 13.47 / 13.95 in mid-March due to the mounting uncertainty caused by the global outbreak of the COVID-19 pandemic.

The shares rebounded relatively quickly to levels of up to EUR 18.00 in May, partly thanks to active communication, the company's robust business model, and a positive corporate news flow. In mid-July, the share price dipped briefly to EUR 15.50 / 15.20 following the announcement that Frequentis held deposits at Commerzialbank Mattersburg, which had been declared insolvent. Supported by successful projects, the investment in the Spanish technology company Nemergent Solutions, and the half-year figures, the share price rapidly recovered from the beginning of September, rising to over EUR 17.00. Following another period of sideways trading with a slight upward trend, the closing price at year-end 2020 was EUR 18.10 / 18.20.

The most important exchanges for shares in Frequentis were the Vienna Stock Exchange and XETRA Frankfurt, which accounted for 39 percent and 38 percent of trading respectively, followed by Tradegate (16 percent) and the trading floor in Frankfurt (5 percent). The average daily turnover at all exchanges together was around 7,000 shares per day in 2020 (2019: around 8,200 shares per day, excluding the first week of trading after the IPO in May 2019).

Dividend, dividend policy, and treasury shares

A dividend of EUR 0.15 for the 2020 financial year (2019 financial year: EUR 0.15) will be proposed at the Annual General Meeting on 20 May 2021. If this is approved, the total dividend distribution will be almost EUR 2.0 million, giving a dividend yield of 0.83% based on the closing price on the Vienna Stock Exchange at end-December 2020 (2019: 0.76%).

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

As at 31 December 2020, Frequentis AG did not hold any treasury shares.

Employee participation programme 2020

The employee participation programme 2020 was a key step in long-term retention of company staff. Participation by the approximately 1,300 eligible employees in Austria and Germany was high: around 35% (approximately 460 employees) are now shareholders. The programme entitled eligible employees to purchase shares in Frequentis at a discount of 20% to the closing price on the Vienna Stock Exchange on 4 May 2020. The gross proceeds received by Frequentis were EUR 1.3 million. After deduction of the employee discount, the proceeds were just over EUR 1.0 million. 80,000 new shares were issued, so since May 2020 the total number of shares has been 13,280,000 shares.

Capital market communication

As the interface to the capital market, Investor Relations focuses on providing extensive and transparent information for the financial community. The aim is to raise awareness of Frequentis and strengthen trust in the company and its shares. The Executive Board and the Investor Relations department engaged in extensive communication with private and institutional investors in 2020 to provide transparent information on Frequentis and foster dialogue. In addition to continuous financial reporting, this comprised regular conference calls and participation in various capital market conferences in Europe. As a consequence of the pandemic, all formats were switched from physical to digital from March 2020. As a result, it was also possible to address investors in more distant financial centres such as Canada and the USA. An overview of all past and future events is available at www.frequentis.com/en/IR > Financial calendar.

One highlight was the first virtual General Meeting in May 2020, which attracted more shareholders and other interested parties than the conventional-style meeting in 2019. In keeping with its security-critical focus, Frequentis offered shareholders the opportunity to follow the proceedings via three different channels: two separate internet streams or by phone.

European Star of Innovation award

In November 2020, Frequentis received the European Star of Innovation award for small and mid-caps. This award was initiated by the European Commission and is presented by the Federation of European Securities Exchanges (FESE) and EuropeanIssuers.

Key share data

		2020 XETRA Frankfurt	2020 Vienna Stock Exchange
Closing price on 31 December	in EUR	18.20	18.10
Lowest price (closing price)	in EUR	13.95	13.47
Highest price (closing price)	in EUR	21.10	21.40
No. of shares as at 31 December	in millions	13.28	13.28
Market capitalisation as at 31 December	in EUR million	241.7	240.4
Share price performance in 2020 (31 December 2020 vs. 31 December 2019)		-9.9%	-8.8%
Share price performance since the IPO in May 2019 (31 December 2020 vs. issue price of EUR 18.00)		+1.1%	+0.6%
Index performance in 2020 (31 December 2020 vs. 31 December 2019)		DAX +3.5%	ATX -12.8%

Basic information on the share

ISIN	ATFREQUENT09
Date of initial listing	14 May 2019
Issue price	EUR 18.00
Free float	around 22%
Stock exchanges	Vienna Stock Exchange, XETRA Frankfurt, Frankfurt Stock Exchange
Market makers / designated sponsor	Raiffeisen Bank International (Vienna), BankM (Frankfurt)
Ticker symbol	FQT
Reuters ticker symbol	FQT.VI (Vienna), FQT.DE (Frankfurt)
Bloomberg ticker symbol	FQT:AV (Vienna), FQT:GY (XETRA Frankfurt)

Investor Relations contact

Frequentis' Investor Relations website, www.frequentis.com/en/ir, offers a variety of information for shareholders – from press releases, presentations, and financial reports to share charts, financial calendars, and information on corporate governance.

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

Corporate social repsonsibility: Insights into 2020

Christmas-tide social activities

Instead of a Christmas party, AIRNAV Technology Services, a subsidiary in the Philippines, used an outreach programme to take the spirit of Christmas to children in Igbaras, a small village at an altitude of around 600 metres, around 50 km from the town of Iloilo. The village is only accessible by walking for 2.5 hours or by motorcycle. Igbaras has a small population, including around 100 elementary school children.

The AIRNAV team took them school supplies and personal gifts such as vitamin preparations, toys, clothing, and some tasty treats.

Similar initiatives for children from socially disadvantaged families were organised by the Frequentis organisations in Australia and Romania, including donations of laptops and books and support to improve learning conditions in IT labs in schools.

Frequentis employee participation programme

A total of 80,000 new shares were offered to employees in 2020. The subscription period started on 3 April and around 1,300 employees in Austria and Germany were eligible to take part. Despite COVID-19, demand for the shares was high and the offer was oversubscribed. Around 35% of eligible employees took up the offer, demonstrating their interest in the company's success and their confidence in the Executive Board's crisis management.

Frequentis CEO, Norbert Haslacher: "We see the enormous interest and high participation as a clear sign of trust by our staff. Our employees believe in the future of the company".

Christmas with a difference ...

Traditionally, Frequentis ends the year with regional Christmas parties. Consequently, the Executive Board was keen to bring some (pre-)Christmas cheer to the workplace in 2020. A special Frequentis advent calendar was therefore created.

Behind each of the 24 windows was a surprise and the wide-ranging contributions from the various locations brought together employees from around world. Alongside fun and informative team presentations, traditions and Christmas recipes were exchanged, a Christmas hit parade was created on interactive platforms, and an X-MAS Social Wall was set up for personal greetings. The Executive Board members and the Chairman of the Supervisory Board recorded personal videos thanking staff for their creative and untiring work during an exceptional year.

Frequenty-Kinderwochen

The Frequenty-Kinderwochen activity programme for kids continued in 2020 despite the challenging conditions. In view of the health-related risks, this time the programme was not held on Frequentis' premises. To provide support for childcare in the challenging conditions of last summer, the programme was redesigned. In partnership with Science Pool, two exciting, experimental weeks were organised for 71 kids aged between 4 and 12, with age-related workshops on "Save our earth" and "Virtual reality" – naturally with suitable measures to protect their health. The programme included popular outings to a high rope adventure park and a waterpark. Planning for the 10th Frequenty-Kinderwochen in summer 2021 has already started.

Frequentis România and Frequentis Australasia sponsor education

Frequentis România offers mentoring and scholarships to help students define and write their theses. In 2020, two of the students were nominated for a period of study in Vienna as part of the Erasmus programme. A local internship programme was organised for them in the summer months, giving them an opportunity to work on interesting, practice-oriented projects. Sponsorship also helped BEST, the local students organisation at Bucharest Technical University and Alumni Politehnica Aerospace Engineering, the alumni organisation at the university, organise the Air Navigation Convention.

The initiatives at Frequents Australasia mainly focused on supporting STEM (science, technology, engineering and mathematics) & Young Minds. Worldwide, we recognise the importance of investing in STEM subjects and fostering tomorrow's talent. The rising generation of technology pioneers needs our support. Frequentis therefore cooperates with IONA College in Brisbane as part of the Aerospace Gateway to Industry Schools Program (AGISP), which includes 19 high schools in Queensland. The programme is geared to the needs of tomorrow's young engineers. It offers the students access to information and support to help them plan their education and their careers. Frequentis Australasia also supports the upcoming generation of STEM students with guest lectures aligned to the curriculum. In addition, field trips are organised to give school students an insight into the pioneering OneSky programme.

Frequentis systems support environment-friendly solutions

Environmentally friendly solutions are offered, for example, by Frequentis' subsidiary ATRiCS in Germany. This company supplies systems to integrate and automate workflows for air traffic controllers to reduce workloads and draw attention to potential risk situations. Its DNA is artificial intelligence to automate runway taxi operations at airports.

ATRiCS' departure management system is geared to efficient and ecological management of plane departures by improving slot allocation and minimising delays in order to reduce runway waiting times.

Modern technologies like these reduce carbon emissions by cutting aircraft taxi times at major airports.

Virtual customer training

The Frequentis Technical Education Centre, which is responsible for customer training, faced enormous challenges as a result of the travel restrictions. Suddenly, all planned training sessions had to be postponed indefinitely. The solution: training studios were set up at short notice and became increasingly professional as time went on. Now, up to three online training sessions can be run in parallel. In this way, it was possible to complete project milestones, secure revenues, and gather key experience for the future.

The positive experience with online training has been used as the basis for the next step: the production of video tutorials for customers. This is an effective way of dealing with challenges that arise at short notice, such as inserting an assembly into a system that has already been delivered. The video tutorials provide assistance for customers in all necessary steps from installing hardware and cabling to configuration and explanations of functions.

"Frequentis Goes Digital" Sales and marketing activities

At the beginning of the pandemic, Frequentis introduced a Global Sales Call as a platform to bring together members of the Frequentis sales community every three to four weeks. What started as an emergency measure is now established as an essential tool to drive forward the digital transformation of sales and a key platform for regular communication with sales colleagues to share relevant information and best practices on digital sales activities.

Traditionally, trade shows have played an important part in Frequentis' communication strategy. To simulate personal meetings as effectively as possible, the Frequentis team has developed virtual demonstration rooms. The concept comprises interactive touch points that give access to information areas, demonstration stations, video sequences, and documents. This concept was introduced for the Air Traffic Management and Maritime business domains in 2020 and further rollouts are planned.

Virtual careers fairs

The organisers of the most important job fairs in Vienna also switched to a virtual recruiting format as a new way of reaching out in 2020. At TUday 2020 at Vienna Technical University, an entire exhibition hall was presented as a digital world. Frequentis' digital booth made the event a real experience and attracted many students. One advantage of this format was that interested students could find out about career opportunities at Frequentis in the virtual world even after the event.

Collaborative Aeronautical User Group at Frequentis Comsoft

Frequentis Comsoft set up CAUG – Collaborative Aeronautical User Group – as a platform for networking with all stakeholders involved in the future development of AMHS and SWIM. The aims of CAUG are to share experience, requirements, and visions to benefit from a joint strategy and future planning and drive forward the AMHS portfolio of Comsoft & Frequentis.

This user community met for the 13th time in October 2020 at its first ever digital event. The sessions at this two-day event attracted more than 40 participants from 16 different ANSPs (air navigation service providers), mainly from Europe, the Middle East, and Southeast Asia.

Although the digital format did not allow the personal contact and social interaction enjoyed at face-to-face meetings, where breaks are an opportunity to meet up with customers and network in an informal atmosphere, the digital format reaches customers in more distant regions who are unable to travel to Europe for meetings.

A hybrid format is planned for the future to combine the benefits of physical and digital meetings and maintain regular contact to AIM customers around the world.

Some insights into Frequentis' projects

Infrastructure programme in Africa confirms world AMHS market leadership

ASECNA, the Agency for the Safety of Air Navigation in Africa and Madagascar, has selected the advanced aeronautical message handling system (AMHS) from Frequentis to enhance message handling for eight African countries.

Cote d'Ivoire, Central African Republic, Gambia, Guinea-Bissau, Cameroon, Gabon, Equatorial Guinea, and Comoros will therefore benefit from an innovative, fully integrated messaging technology that enables the harmonised operation of all messaging services in one application.

High-performance network solution for Brazilian air traffic control

Frequentis AG and the Brazilian air service authorities DECEA and CISCEA are working on the realisation of a nationwide network for air traffic control. The airspace of Brazil, the fifth largest country in the world in terms of area and population, is divided into four so-called CINDACTA regions ("Centro Integrado de Defesa Aérea e Controle de Tráfego Aéreo").

The contract for a nationwide network for voice and data integration, based on the latest Frequentis IP technology, was awarded in 2014. Frequentis has worked closely with the customers in the extensive preliminary system design phase to overcome challenges and complexities and ensure a smooth transition to the new software solution. The successful commissioning of the first CINDACTA region underlines Frequentis' performance.

Integrated remote tower and approach centre from Frequentis DFS Aerosense for Naviair in Denmark

Naviair, the Air Navigation Service Provider of Denmark, is installing a remote tower centre at Billund Airport to manage surrounding air traffic. The intention is to provide air traffic control for other regional airports centrally, instead of locally from the individual airports.

The integrated tower and approach centre is a combination of a remote digital tower and an approach automation solution. This is the first time that a digital tower and approach services have been combined in one integrated system.

Skyguide appoints Frequentis as consultant to streamline processes

Switzerland's air navigation services provider, Skyguide, enlisted the support of Frequentis Control Room Consulting (CRC) to analyse potential to enhance their internal information streams in order to improve customer satisfaction and deliver the best possible service to customers.

Skyguide manages one of the most complex and dense airspaces in Europe. The City-Pair flight route from Geneva to Zurich, with its very short airtime and close proximity to neighbouring countries, was a major challenge for the delivery of the best possible air navigation services for passengers.

In the Frequentis analysis, bottlenecks in the information flow were identified and suitable solutions were worked out.

Poland: New Electronic Flight progrEss Strips (EFES) system taken into service

Polish Air Navigation Services Agency (PANSA) has worked with Frequentis to implement the next-generation tower flight data management system, Electronic Flight ProgrEss Strips (EFES), to reduce the workload of air traffic controllers and increase situational awareness. The tool has now been certified and come into operation in Poland.

EFES acts as an information exchange centre: a processor that increases the predictability of air traffic, makes flight operations safer, automates the technical environment, and simplifies network management. The deployment of EFES allows PANSA to serve as an information hub for tower-related data for all airports in Poland.

Frequentis to deliver next-generation voice communication system to Austrian air navigation service provider Austro Control

The award of a contract for a new voice communication system is a major milestone for Frequentis and Austro Control and continues decades of successful cooperation.

Frequentis is providing a highly innovative solution that will enhance Austria's air traffic control, in line with future requirements. In the final stage, this will enable the provision of voice communication for the operation of all controller working positions in Austria from one of two data centres.

ATRiCS: TowerPad® as the new airfield lighting panel for Sabiha Gökçen International Airport in Istanbul

By acquiring a 51% stake in ATRiCS Advanced Traffic Solutions GmbH in April 2020, Frequentis has continued to grow by expanding its tower automation operations.

ATRiCS became part of the Frequentis Group shortly after the coronavirus pandemic brought passenger air traffic to an almost complete standstill. Despite the challenges, important successes were achieved: For example, ATRiCS was awarded the contract for the installation of its innovative TowerPad® at Istanbul Sabiha Gökçen Airport in Turkey.

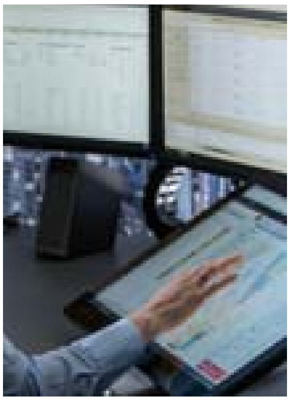
Swiss Department of Defence completes essential communication project milestones with Frequentis

The Swiss Federal Office for Defence Procurement, armasuisse, has worked closely with Frequentis to complete important contract milestones, despite the pandemic travel restrictions.

Frequentis is replacing the voice communication infrastructure of the air defence direction centres and military airbases: The state-of-the-art voice-over-IP technology from Frequentis will provide the Swiss Air Force with a voice communication system which, with the latest updates, meets its high requirements. The Frequentis iSecCOM system provides single and dual security domain (RED/BLACK, secure/unsecured communication) IP voice communications for mission-critical tactical and operational command and control systems, meeting both security and safety requirements in one system.

Frequentis' Global Maritime Distress and Safety System successfully put into operation in Greenland

The GMDSS module, which is an integral part of the MarTRX control room solution from Frequentis in Aasiaat, Greenland, enables onshore search and rescue authorities onshore and ships in the immediate vicinity of a vessel or person in distress to be alerted rapidly to the incident. Greenland's postal and telecommunications provider, Telepost, selected Frequentis to provide an integrated maritime control room solution for the Technical and Operator Centre in Aasiaat to increase maritime safety. Following successful deployment of this solution in autumn 2020, TelePost was able to permanently switch off the old platform. The transition was completed without any outages.

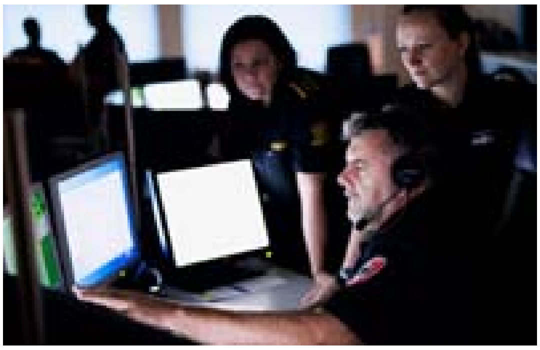


Frequentis to equip Hamburg’s police and fire service control rooms with a multimedia communication system

The German city of Hamburg has selected a Frequentis communication system for both the police and fire services. Frequentis will deliver its multimedia communication system, 3020 LifeX™, enabling uniform contact via telephone and digital radio, as well as preparing them for the future integration and use of multimedia messaging, including text, webchat, and social media.

The control room renewal project will provide the two emergency services with a modern technical control room solution to meet their current and future requirements and increase safety for local inhabitants and visitors to Hamburg.

Virtual site acceptance test completed with Norwegian public safety agencies



Frequentis is delighted to provide a highly resilient control room solution and services that fully utilise the capabilities of the secure, digital radio network Nødnett for all emergency services in Norway.

Because of the restraints resulting from COVID-19, the Frequentis teams in Vienna and Norway had to develop digital alternatives at short notice to ensure uninterrupted support for Nødnett. This resulted in a historical first: the first ever “virtual site acceptance test”, based on the excellent collaboration with customer, the public safety agencies, and Norway’s Directorate for Civil Protection (DSB).

Contract for the city fire brigades in Bochum and Herne strengthens Frequentis‘ market position in public safety

Frequentis has secured a contract under an EU-wide tender to harmonise the systems used by the Bochum and Herne fire brigade control centres as part of a collaboration project between the two cities. ASGARD will be used as the communication system for the geo-redundant control centres for both cities’ professional fire brigades. As prime contractor, Frequentis Germany will be responsible for delivery, integration, and servicing of the system.

The fully redundant ASGARD voice-over-IP (VoIP)-based communication system, which is specifically designed for use in fire brigade and industrial control centres in Germany, provides professional communication management at Germany’s public safety control centres.

Some insights into R&D projects & initiatives

Drone management: 5G!Drones

The EU-funded 5G!Drones project is demonstrating various use cases involving 5G technology, unmanned aerial vehicles, unmanned traffic management systems, and related technologies. Frequentis is part of the consortium, consisting of 20 partners from eight European countries.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no. 857031.

Drone management in Estonian airspace

Estonian Air Navigation Services (EANS) enlisted the support of unmanned aerial systems (UAS) manufacturer Threod Systems and safety-critical technology provider Frequentis to support the Estonian emergency services by providing a series of essential drone operations during the COVID-19 lockdown. The operations supported the emergency services in medical transport and information gathering.
The Frequentis flight information management system provides the common information services function for all airspace users.
The system facilitates real-time situational awareness for air traffic controllers, enabling both manned flights and Threod drones to safely share the same airspace by providing controllers with the complete air situation picture.

Avinor begins roll out of first Nordic UTM system at two airport towers in Norway

Norwegian air navigation service provider Avinor is working with Frequentis and Altitude Angel to implement an unmanned traffic management (UTM) system at 18 airport towers across Norway.
The system, which has been tested in a real-world environment at the first two airport towers since August, before being rolled out nationwide, will support the country's future drone strategy. The cloud-based UTM system provides an operational overview of the airspace and allows two-way communication between air traffic control (ATC) and drone operators, enabling safe drone use close to airports.

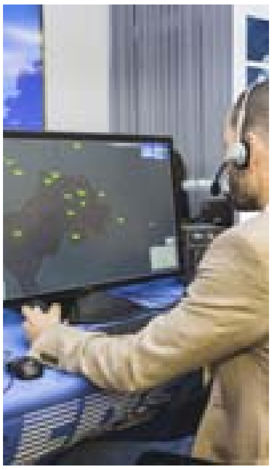
BroadWay project: BroadPort consortium led by Frequentis to build a prototype for a pan-European broadband communication system

In the face of current crises, the need for improved cross-border operations is evident. BroadWay, an innovative European pre-commercial procurement project, is working towards that objective and will allow European first responders and public safety services to communicate at any time, regardless of their geographical location, by establishing a pan-European interoperable mobile broadband system for public protection & disaster relief (PPDR) users. Contracts were signed on 6 July 2020, marking the start of the prototype phase. This is an important step in Frequentis' New Business Development activities in the field of 5G/LTE mission-critical broadband communication.

This project has received funding from the European Union's Horizon 2020 research and development programme under grant agreement no. 786912.

Frequentis sets standards: publication of another ETSI standard

ETSI is a European standards organisation and a recognised regional standardisation body for telecommunications, broadcasting, and other electronic communications networks and services. Frequentis has been a member of ETSI since 2018. An important technical specification (TS 103 698) was finalised and published by ETSI SC EMTEL (Special Committee Emergency Telecommunication) at the end of 2020. This standard defines an extension to support a messenger service to access emergency control rooms. The main purpose is to enable a simplified chat session mode combined with the means to redirect or transfer a chat session. This is very important to enable efficient handling of barrier-free emergency calls. The new standard highlights the fact that Frequentis is playing an active role in the standardisation of safety-critical applications.



Frequentis emphasises benefit of SESAR Virtual Centre concept during the pandemic

Today's operational ATC concept does not allow other sectors to immediately take over operations if area control centres (ACCs) are taken out of service due to COVID-19 or for other reasons. This calls for modernisation of the ATM system, building on virtual ATC centres for ACCs and towers, with built-in business continuity, beyond national or regional borders. The Frequentis VCS3020X is the only ATC voice communication system currently available that fully supports the virtual centre concept, designed and developed by Frequentis in collaboration with SESAR partners.

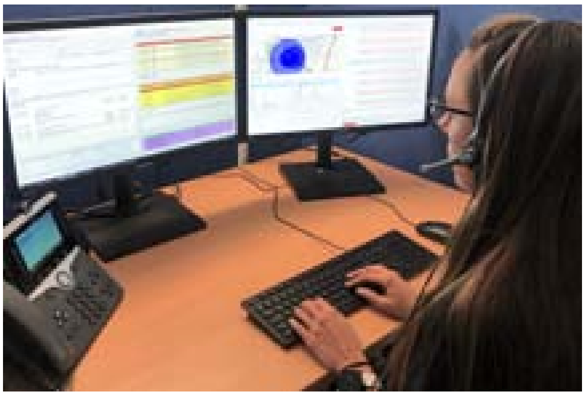
This project has received funding from the SESAR Joint Undertaking under the European Union's Horizon 2020 research and innovation programme under grant agreement nos. 734141 and 874463.

EU-funded project SlotMachine: Keeping costs low by swapping slots between airlines

Passenger numbers are expected to rise again and the aviation industry will be confronted with increasing flight volume and limited resources at airports and in the air. At the same time, airlines are struggling with increased cost pressure from a growing number of market participants, while the highest safety standards demand compliance with complex processes. The EU-funded project SlotMachine is investigating the allocation of Air Traffic Flow Management (ATFM) slots, using blockchain technology to extend swapping between airlines.

This project has received funding from the SESAR Joint Undertaking under the European Union's Horizon 2020 research and innovation programme under grant no. 890456.

Text-based emergency calling V2.0



The DEC(Deaf Emergency Call)112 solution, initiated by a group of Frequentis employees, aims to provide the deaf and hearing-impaired community with better access to emergency services. Up to now, they have had to send SMS/FAX messages or emails, which are processed by different organisations until they eventually reach the correct control centre - a highly inefficient process which wastes valuable time. DEC112 provides text-based emergency chat services, including current location and additional information (such as health data) sent from an easy-to-use DEC112 mobile app to the responsible control room. A simple yet flexible control room interface to DEC112 services allows easy integration of different vendors and systems. This reduces costs and increases control centre operators' acceptance of DEC112.

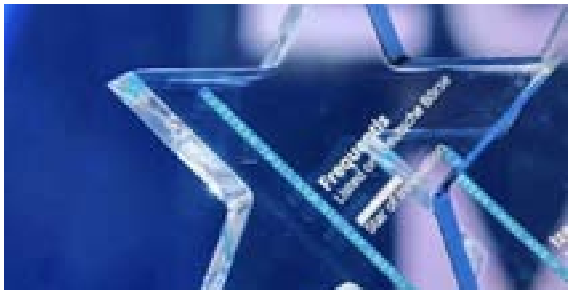
Awards and honours

Congratulations to Hannes Bardach on the award of the HERMES. Wirtschafts.Preis Entrepreneur 2020

In 2020, Hannes Bardach, majority shareholder and Chairman of the Supervisory Board of Frequentis AG, was awarded the "Entrepreneur 2020" award for his life's work. The award ceremony took place in the Vienna Hofburg on 9 October under strict COVID safety precautions.

The HERMES.Wirtschafts.Preis is an annual award for peak performance by Austrian companies. It is presented by the Federal Ministry for Digital and Economic Affairs, the leading companies in Austria, and the Austrian Economic Chambers (WKO) together with the media company KURIER. The aim is to strengthen the public image of the Austrian economy and to highlight outstanding economic achievements.

Frequentis received European "Star of Innovation" award for small and mid-cap companies



Frequentis was presented with the "Star of Innovation" award at the annual European Small and Mid-Cap Awards ceremony, which was held virtually during the European Commission's SME Assembly. The nomination was based on Frequentis' status as a newly listed mid-cap company which places innovation at the centre of its business development strategy by introducing innovative technology to the market or using innovative techniques in its day-to-day operations.

Frequentis and Avinor win Air Traffic Management award for ATM/UTM integration in Norway

The Air Traffic Management (ATM) magazine has selected Frequentis and Norwegian ANSP Avinor as the winners of its 2020 award for ATM/UTM (unmanned traffic management) integration.

The project caught the attention of judges for its ability to provide situational awareness of the unified airspace and safe, secure, and reliable communication between air traffic control (ATC) and drone operators. The UTM project in Norway supports the Norwegian government's drone strategy for safer use of drones and helps tackle the rising number of reported incidents and airspace violations.

Consolidated Corporate Governance Report 2020

Commitment to the Austrian Code of Corporate Governance

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

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

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

Corporate Governance Declaration

Frequentis AG complies with all mandatory L rules and – with the exception of the deviations set forth below – all C rules set out in the Austrian Code of Corporate Governance in the version dated January 2021:

Rule 2

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

Rule 27

- This rule applies for the conclusion of new contracts with the Executive Board (including extensions and significant changes to existing contracts). Since the IPO of Frequentis AG in May 2019, one contract has been extended, taking into account the requirements of the C rule no. 27. The other contracts that are currently still in force do not contain any way of reclaiming short-term variable remuneration components, but there is a possibility of reclaiming long-term variable components (LTIP) that have been granted. Further, based on the old contracts still in force at present, there is currently no provision for the payment of variable long-term components to all members of the Executive Board. These provisions of the Austrian Code of Corporate Governance will also be taken into account when concluding new contracts or extending old contracts.

Rule 39

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

- At present, none of the committees is authorised to take decisions in urgent cases as recommended by the C rule no. 39. The company endeavours to obtain the opinion and experience of all Supervisory Board members even in urgent cases. Moreover, given the size of the Supervisory Board, it has so far refrained from setting up a separate committee for urgent decisions.

Executive Board

Members of the Executive Board

In 2020, the Executive Board of Frequentis AG comprised the following members:

Name (Year of birth)	Function	Date of initial appointment	End of current term of office	Supervisory Board or similar offices [1]
Norbert Haslacher (1970)	Chairman of the Executive Board (CEO)	1 April 2015 (member of the Executive Board) 16 April 2018 (Chairman)	15 April 2023	None
Sylvia Bardach (1962)	Member of the Executive Board (CFO)	3 July 2007	31 July 2022	None
Hermann Mattanovich (1960)	Member of the Executive Board (CTO and COO)	1 January 2009	31 December 2022	None

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

Norbert Haslacher has been a member of the Executive Board of Frequentis AG since April 2015. Prior to his appointment as CEO in April 2018, Mr. Haslacher was responsible for the sales and marketing division.

Responsibilities: Strategy, Sales, Strategic Business Units, Business Development, and Investor Relations.

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

Sylvia Bardach has been Chief Financial Officer of Frequentis AG since July 2007. Furthermore, until 31 December 2020, Mrs. Bardach was also Managing Director of the following Frequentis Group company: BlueCall Systems GmbH.

Responsibilities: Finance, IT, Legal & Procurement, Human Resources, Corporate Communications, Corporate Affairs, and Facility Management.

Sylvia Bardach has extensive training in accounting, controlling, and corporate management. In addition to this, she has taken courses in personnel development and in project portfolio and risk management. She started her career as a bookkeeper at CDS Computer and Data Systems and joined Frequentis in 1989 as Head of the Finance and Controlling department.

Hermann Mattanovich has been Chief Technology Officer of Frequentis AG since January 2009. In addition, Mr. Mattanovich is Managing Director of the following Frequentis Group companies: Frequentis Czech Republic s.r.o., PDTS GmbH, Mission Embedded GmbH. Until 31 December 2020 Mr. Mattanovich was Managing Director of Frequentis Slovakia s.r.o.

Responsibilities: Technology Management, Production & Logistics, Project Management, Customer Services, Information & System Security, Safety Management, Quality Management, and Health Safety Environment (HSE) Management.

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

Supervisory Board

Members and independence of the Supervisory Board

In 2020, the Supervisory Board of Frequentis AG comprised the following members:

Name (Year of birth)	Function	Date of initial appointment	End of current term of office	Supervisory Board or similar offices[1]
Johannes Bardach (1952)	Chairman of the Supervisory Board (shareholder representative)	16 April 2018	Indefinite (member delegated pursuant to article 5.1.2 of the articles of association)	None
Karl Michael Millauer (1958)	Deputy Chairman (shareholder representative)	17 July 2007[2]	Until the Annual General Meeting in 2025	None
Boris Nemsic (1957)	Member of the Supervisory Board (shareholder representative)	17 July 2007[2]	Until the Annual General Meeting in 2025	None
Reinhold Daxecker (1970)	Member of the Supervisory Board (shareholder representative)	16 April 2018	Indefinite (member delegated pursuant to article 5.1.2 of the articles of association)	None
Petra Preining (1973)	Member of the Supervisory Board (shareholder representative)	20 September 2019	Until the Annual General Meeting in 2024	Semperit AG Holding (Austria)[3]
Gabriele Schedl (1968)	Member of the Supervisory Board (employee representative)	1 January 2015	Indefinite (delegated pursuant to Section 110 ArbVG)	None
Siegfried Meisel (1955)	Member of the Supervisory Board (employee representative)	1 January 2019	Indefinite (delegated pursuant to Section 110 ArbVG)	None
Reinhard Steidl (1962)	Member of the Supervisory Board (employee representative)	20 September 2019	Indefinite (delegated pursuant to Section 110 ArbVG)	None

1 Supervisory Board or similar offices at publicly listed Austrian or foreign companies.
2 Previously a member of the Supervisory Board of Frequentis GmbH (from 2002), which became Frequentis AG on 17 July 2007.
3 Ms. Preining's seat on the Supervisory Board of Semperit AG Holding was dormant from 20 March 2020 until 11 October 2020.

The Supervisory Board's **criteria for independence** are based on the "Guidelines for Independence" set out in the Austrian Code of Corporate Governance, which specify – among other things – that a Supervisory Board member shall not have served as member of the Executive Board or as a management-level staff member at the company in the past five years. Mr. Bardach was Chairman of the Executive Board of Frequentis AG before being appointed to the Supervisory Board in April 2018 and is married to Mrs. Bardach (member of the Executive Board). Mr. Daxecker held a management position at Frequentis AG before being appointed to the Supervisory Board in April 2018. Consequently, Mr. Bardach and Mr. Daxecker are not deemed to be independent. The other members of the Supervisory Board (shareholder representatives) are independent of the company and the members of its governance bodies. Moreover, Mr. Millauer and Mr. Nemsic are independent members of the Supervisory Board; neither hold more than 10% of the company's shares or represent the interests of such shares.

Apart from the disclosures made in the notes to the consolidated financial statements for 2020 (↗ Note 38 "Information on business relations with related parties"), in 2020 there were no business relations requiring approval pursuant to Section 95 (5) subsection 12 of the Austrian Companies Act or L Rule no. 48 of the Austrian Code of Corporate Governance.

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

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

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

The **Supervisory Board** advises and oversees the management of the company by the Executive Board. It held five meetings in 2020. All members of the Supervisory Board took part in more than half of the meetings of the Supervisory Board. At its meetings, the Supervisory Board openly discussed with the Executive Board the business development and situation of the Frequentis Group. It also examined in detail the key projects and individual measures and business activities requiring its consent.

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

Committee	Members
Audit Committee	Karl Michael Millauer (Chairman/financial expert) Reinhold Daxecker Gabriele Schedl
Committee for Executive Board Issues	Johannes Bardach (Chairman) Boris Nemsic
Special Committee on Commerzialbank Mattersburg	Karl Michael Millauer (Chairman) Petra Preining Siegfried Meisel

The **Audit Committee** has been established in accordance with the provisions of Section 92 (4a) of the Austrian Companies Act. It is responsible, in particular, for the audit and for preparations for adoption of the annual financial statements for the company and the consolidated financial statements, the management report, the corporate governance report, and the proposal for the distribution of the profit. It also puts forward a proposal for election of the auditor for the resolution of the Annual General Meeting. In addition, the Audit Committee performs the preliminary examination of the non-financial report. The Audit Committee held four meetings in 2020. The auditor also took part in these meetings.

The **Committee for Executive Board Issues** deals, on the one hand, with matters relating to the relationship between the company and members of the Executive Board, especially the content and conclusion of employment contracts, and on the other hand, with all aspects of succession planning for the Executive Board and the Supervisory Board. Therefore, it combines the typical agendas of a remuneration committee and a nomination committee ("identical committee" as defined in the C rule no. 43 of the Austrian Code of Corporate Governance). In 2020, this committee held two meetings.

The **Special Committee on Commerzialbank Mattersburg** was set up by the Supervisory Board in connection with the incidents relating to Commerzialbank Mattersburg. This committee monitors the measures to reclaim the company's deposits at Commerzialbank Mattersburg and the related assertion of claims against Commerzialbank Mattersburg and third parties. Furthermore, this special committee has monitored the investigations and reappraisal of the internal processes and responsibilities relating to the Commerzialbank Mattersburg case and has also monitored the revision of the relevant processes and regulations. As part of its remit, the committee may also engage and consult independent experts on individual aspects of the case. This special committee held three meetings in 2020.

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

Measures to foster women

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

The percentage of women on the Supervisory Board is 25% (the statutory percentage of women on the Supervisory Board pursuant to Section 86 (7) of the Austrian Companies Act is not applicable to the company because the Supervisory Board has fewer than six shareholder representatives). The percentage of women on the Executive Board is 33%. As at 31 December 2020, the percentage of women in the Frequentis Group was around 22%. However, in some regions and organisational units (e.g. in administration) the proportion of women is far higher.

Frequentis would like to increase the percentage of female employees, especially as mixed teams generally perform better and are an important enrichment for the company. However, the proportion of women in technical occupations and companies is generally still comparatively low. Among other things, Frequentis therefore endeavours to optimise ways of combining work with family life. A flexible working time model aligned to the legal requirements in different regions allows personal needs to be taken into account and encourages a good work-life balance. To facilitate the pursuit of personal interests, the company also supports parental and educational leave. Moreover, Frequentis offers a wide range of educational and training opportunities covering both specialist topics and personal development.

Diversity concept

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

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

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

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

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

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

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

- The Supervisory Board should comprise shareholder representatives from business, science, technology, or research, who have gained experience in sectors or markets which are of significance for Frequentis' business activities (e.g. in project business and public sector contracts);
- The Supervisory Board should include shareholder representatives with experience of the management and/or oversight of international companies;

- The Supervisory Board as a whole should have appropriate knowledge of the areas of finance, financial statements, accounting, law, compliance and risk management as well as a basic knowledge of capital market law;
- Attention should be paid to ensuring a suitable mixture of ages on the Supervisory Board; consequently, no specific age limit is set for Supervisory Board members;
- Insofar as there is no statutory requirement, no specific target is set for the percentage of female Supervisory Board members. Rather, in the interests of the company, the proposals submitted to the General Meeting for the election of Supervisory Board members are based exclusively on the professional and personal qualifications of the candidates.

Vienna, 15 March 2021

Consolidated Non-financial Report 2020

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Introduction

In keeping with its mission "for a safer world", the Frequentis Group is committed to sustainability in everything it does. Appropriate initiatives are implemented locally in conformance with local law. The reporting period covered by this Non-Financial Report is 2020.

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

The Frequentis Group aims to make a clear statement by publishing this second Non-Financial Report. The topics considered will be integrated step by step into established management systems to emphasise their global significance. The present report does not conform to the GRI standards (Global Reporting Initiative). However, greater attention has been paid to using these as a guide for the key performance indicators and management approaches. In this way, the ultimate goal is to continue to develop this report and give all stakeholders an opportunity to gain an objective and transparent overview of the company and the measures taken in the past year. Key performance indicators in this report that are already compiled and evaluated on the basis of the GRI standards are listed in the section ↗ *Reference to GRI standards*.

In addition to representative initiatives and relevant KPIs, this report includes topics that have had a significant influence on the company's business activities, together with their social and ecological impact.

Frequentis is committed to continuously improving its social and ecological performance in all aspects, fulfilling its compliance obligations, and actively working towards sustainable development. Topics such as the SDGs (sustainable development goals), respecting human rights, improving working conditions, fair operating and business practices, consumer concerns, the involvement and development of society, developing the supply chain, sustainable product development, and utilisation of resources will be taken into account in the selection of future measures.

The non-financial information is outside the scope of the audit of the consolidated financial statements. The consolidated group on which this report is based is the same as for the financial reporting. If any information applies only to Frequentis AG or to a selected group of consolidated companies, this is specifically stated.

To avoid redundancy, where appropriate the report refers to the notes to the consolidated financial statements for 2020 ("consolidated financial statements"), the Group management report ("management report"), the consolidated corporate governance report for 2020, or the profile of the company. References within this report are indicated by an arrow ↗ followed by the title of the section *in italics*.

Business model

Wherever Frequentis' systems are used, people bear responsibility for the safety of other people and of goods. The Frequentis Group is an international provider of communication and information systems for safety-critical control centres. Custom-tailored control centre solutions are developed and marketed by the Air Traffic Management segment (for civil and military air traffic control and air defence) and the Public Safety & Transport segment (for police forces, fire brigades, emergency rescue services, shipping, and railways).

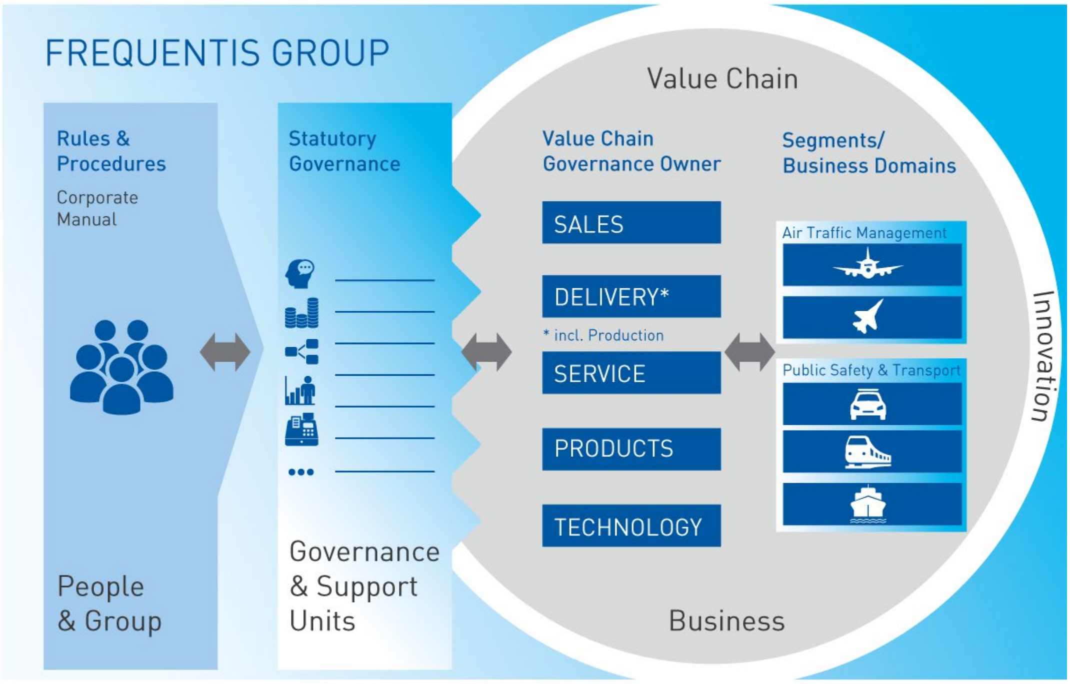
As a recognised specialist for the supply of safety-critical infrastructure, Frequentis develops future-oriented solutions for control centres in collaboration with key customers and makes new technologies usable for safety-critical applications. Using a human-centred design process, integrated systems are created to provide safer and more stable working environments for end-users in control centres, such as air traffic controllers, operators, and dispatchers.

This business model has proven resilient and stable, even in periods of crisis such as the COVID-19 pandemic in 2020. Investment in safety-critical infrastructure cannot simply be put on ice. The increased use of digital opportunities, high flexibility, and creative solutions by both customers and the company have enabled most business processes to continue without massive disruption or changes.

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

Governance organisation

Frequentis' business model is based on a strong governance organisation introduced in 2018 that ensures optimised interaction between the central units, the business domains, and the international subsidiaries.



Frequentis' two segments (and the business domains grouped in these segments) focus on successful business operations as their contribution to the Group's overall performance. The main responsibility is allocated to local value-generating functions such as Domain Sales, Key Accounts, Product Management, and Project Management. As an integral part of the value chain, the subsidiaries and participations make a significant contribution to the overall success of the Frequentis Group.

The role of the central governance and support functions (which include, for example, Human Resources, IT, Finance & Controlling, Legal, ...) is to ensure smooth global collaboration. These functions focus on supporting the business, minimising risk, optimising workflows, and maintaining a general overview of the company.

Innovations have very high priority at Frequentis. The company is proud to extend its position as an innovation leader in the markets it addresses through sustainable innovations. This is achieved through interdisciplinary collaboration which leverages domain-specific know-how, the strengths of the business domains, and the specialist expertise of the support and governance functions.

People & Group covers units / assignments that are mandatory but do not have a direct impact on the value chain. They are defined in the rules and procedures of the Frequentis Group.

Integrated management system

Frequentis assumes its social responsibility through an integrated management system organised via processes. These processes, which are divided into core processes, management processes, and support processes, form the basis for ongoing optimisation and efficiency improvements.

- The core processes directly create value for customers.
- The management processes define the activities for the strategic alignment and management of the company. They include, for example, innovation and product management.
- The support processes support the core processes. They cover processes such as the supply chain and development.

These processes form the principal basis for initial and ongoing validation of the company in conformance with the following standards:

- ISO 9001:2015 (quality management system)
- ISO 14001:2015 (environmental management system)
- ISO 27001:2013 (information security) & UK Cyber Essentials Certificate
- ISO 45001:2018 (occupational health & safety management system)

The content of these processes and their application are reviewed regularly in the course of recertification and monitoring audits by external certification authorities. The initial certifications are listed in the following table.

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

In 2020, the ISO monitoring audit was performed almost entirely remotely due to COVID-19. This was particularly challenging but went very well.

Following the merger of Frequentis Solutions and Frequentis Slovakia to form Frequentis Solutions & Services s. r. o., the focus in 2021 is on certification in conformance with ISO 9001 and ISO 27001.

Frequentis has certified quality management systems in many organisational units to ensure that it meets the high quality specifications for its products and services. The ongoing development of a global process model requires efficient collaboration and the use of synergies within the Frequentis Group.

The concepts developed for individual issues are based on the integrated management system. This system is used to manage them and evaluate the related KPIs.

Materiality analysis – Key elements

The starting point for the Non-Financial Report is the materiality analysis undertaken in 2019. For this, potential aspects of sustainable corporate management were examined in a number of workshops with internal and external experts and evaluated in the light of the Austrian Sustainability and Diversity Improvement Act (NaDiVeG). All relevant functions at Frequentis were involved (Procurement, Quality / Environment / Occupational Safety / Safety and Security Management, IT, HR, Investor Relations, Finance & Controlling, Production, Workers' Council, etc.).

This process identified the following four stakeholder groups:

- Customers
- Employees & prospective employees
- Shareholders / representatives of the capital market
- Statutory requirements

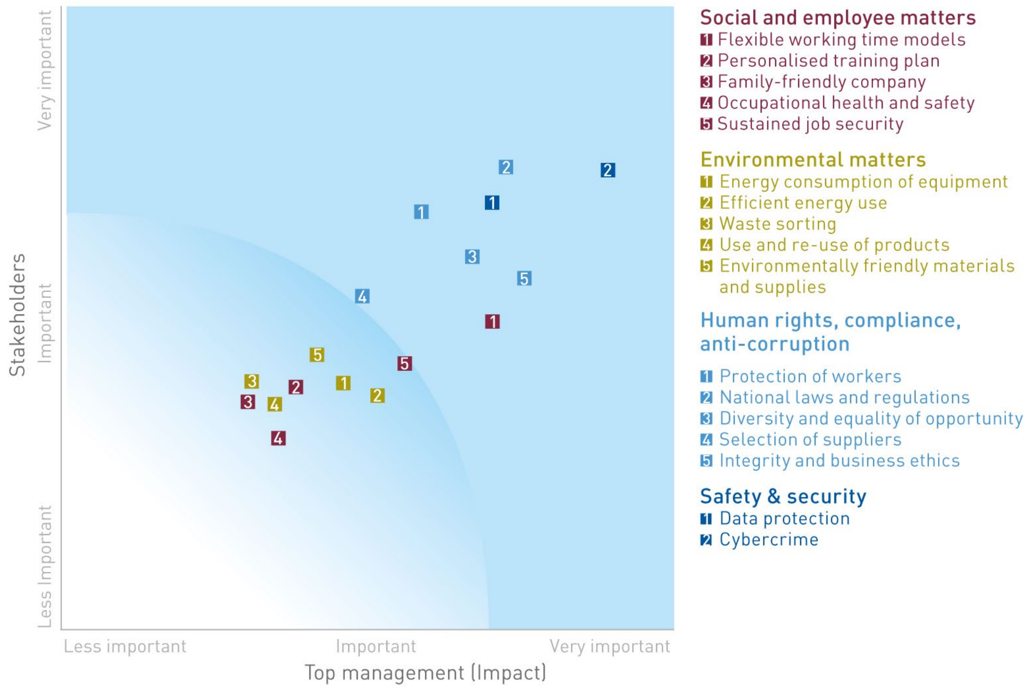
The feedback based on the statements in the survey was allocated among the following four areas:

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

The results were discussed and agreed with the Executive Board at a meeting in November 2019. The concept for the Non-Financial Report was also presented at a meeting of the Supervisory Board in early December 2109.

The results of the materiality analysis, which was performed in autumn 2019 based on a standardised questionnaire, are presented in the following matrix. The assessment of the top management (Executive Board and Vice Presidents) is shown on the x axis. They were asked to assess the significance of the aspects in the light of the statutory requirements of the Austrian Sustainability and Diversity Improvement Act (NaDiVeG). The y axis shows the stakeholder assessment. The key topics for Frequentis are thus the nine aspects that have the greatest impact or are most important to stakeholders and that are classified as being most significant for Frequentis' business activities.

An extended materiality analysis is planned for the Non-Financial Report 2021.



The results of the present materiality analysis formed the basis for the Non-Financial Report 2019. They are used unchanged in the Non-Financial Report 2020, although it should be noted that the impact of the COVID-19 pandemic had a significant effect on the aspects listed.

Impact of the COVID-19 pandemic

This section provides an overview of the impact of the coronavirus pandemic on the company in the context of Non-Financial Reporting. The economic effects are outlined in the Group Management Report (↗ *Business performance*). The following comments relate to the effects of the crisis on Frequentis' internal and external stakeholders.

To supplement this, each of the stakeholder chapters includes the effects of the COVID-19 pandemic or an estimate of how the individual aspects might have developed without the pandemic.

Overview of the action taken

To optimise management of the pandemic, an internal coronavirus crisis team was set up in March 2020. This is an interdisciplinary team from relevant departments, headed by the Chairman of the Executive Board. At the meetings of this team, which took place twice a week in the early phase of the crisis (once a week from the summer), the present situation was evaluated and the next steps were defined. Overall, the COVID-19 crisis team held 53 virtual meetings between mid-March and end-December.

As well as extensive measures in the areas of health & safety and facility management, the response to the travel restrictions included targeted use of the company's strength in digitisation. One important factor here was that customers have strong confidence in Frequentis, while their flexibility and creativity supported the ability to find effective solutions. Despite the travel restrictions, it was therefore possible to continue a high proportion of projects remotely (via video conferences) and even perform acceptance procedures.

For many years, Frequentis' corporate culture has permitted mobile working practices (working from home or on-site at customers' premises), so both employees and the existing IT infrastructure handled the temporary shift to working entirely from home very well.

In addition to the requirements imposed / recommended by national authorities, the following measures were defined and implemented:

- **Health & Safety**: specific rules and support measures for essential business travel to affected regions, installation of hand sanitiser dispensers, compliance with social distancing rules, mandatory face masks at Frequentis' locations, rules for direct and indirect contact persons

- **External and internal communication**: establishment of a Group-wide email address for questions and suggestions and a coronavirus information point in the intranet, introduction of an internal traffic light system to ensure rapid recognition of the measures to be implemented depending on the current situation

- **IT and facility management**: keeping the IT infrastructure operating and ensuring IT security, limiting the number of people per room / per department at the company's offices (switch to working from home / mobile working), installation of signs

- **HR and legal**: survey at several locations on working from home

- **Business continuity**: stepping up project acceptance by video conference, implementation of the Sales Goes Digital initiative, establishment of a special Project Task Force for end-to-end monitoring of projects (this task force held 40 virtual meetings to manage factory and on-site acceptance procedures)

- **Subsidiaries**: focus on sharing knowledge, implementation of Group-wide measures

The actual implementation and impact of these measures on the individual aspects of the materiality analysis are outlined in the relevant sections.

In addition to the ongoing COVID-19 risk management, Frequentis' Executive Board set up an internal interdisciplinary team to carry out a "black swan" analysis with the support of an external consultant. During the year, the team drew up a list of black swan aspects (risks that are considered very unlikely to materialise, but which would have a very high impact). These risks will be examined in detail in 2021 and risk mitigation concepts will be developed.

In addition, in June 2020 the Executive Board paved the way for "life after the pandemic". A Frequentis Think Tank – a small team of people with diverse skills and experience – is taking a structured approach to innovative topics that should deliver key impetus to continue to drive forward the development of Frequentis in the long term. The aim is, on the one hand, to use lessons learnt from the pandemic - for example, how processes and tools can be aligned optimally for remote working - and, on the other, to drive forward product innovations and step up the development of solutions based on existing products.

Social and employee matters

Employees are the most important factor for the successful achievement of Frequentis' corporate objectives and its international growth. Their commitment and dedication and the innovative capability of multi-cultural teams are the foundations on which Frequentis has built more than 30 years of profitable growth and give the company key competitive advantages on the international market.

The high identification and trust of Frequentis' staff were visible in the overwhelming success of the employee participation programme provided for Frequentis Group companies in Austria and Germany in May 2020. Despite the coronavirus pandemic, the project was completed with extremely high interest from employees.

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

In 2020, recruitment of new employees concentrated on technical staff. In addition to system engineers, there was particularly high demand for software engineers, project managers, and IT and sales staff. The company gives high priority to a thorough and exhaustive recruiting process. Alongside professional qualifications, Frequentis looks for an understanding of its business and its specific safety-critical culture. Certain functions where there are frequent recruiting requirements, especially in technical areas where filling vacancies is difficult, have been defined as key functions to draw particular attention to them. A specific salary progression is defined for these functions in the employment contract. This underscores the importance of these functions and gives the new colleagues a perspective, which enhances employee retention. To ensure uniform, transparent, and fair salary structures, the salaries of employees in these functions who had been employed for 1-5 years were reviewed and increased during the year where necessary.

Impact of coronavirus

The Human Resources function at Frequentis already made extensive use of the benefits of digitisation and virtualisation and these activities were stepped up during the coronavirus pandemic in 2020. For example, learning & development offered an extended range of virtual courses, recruitment was switched to virtual interviews, and administrative processes were digitised. In this way, support for the Frequentis team was ensured even in the challenging conditions of the pandemic.

Risks

Excessively high staff turnover would be extremely detrimental for the long-term focus of Frequentis' customer relationships. This would lead to a loss of domain know-how, which is particularly important in the safety-critical area, and continuity in customer and project management could not be assured.

Concepts

The long-term nature of Frequentis' business relationships and the extensive periods for which its systems are used by customers require special action to secure the know-how and stability of project teams. Therefore, Frequentis has a range of staff retention measures.

In addition, there is an extensive occupational health and safety programme including measures to avert accidents at work and preventive health measures to enhance the long-term well-being and job satisfaction of Frequentis staff.

The number of employees in the Frequentis Group rose from an average of 1,849 in 2019 to 1,907 in 2020, a growth rate of 3.1%. Nearly 50% of employees work at the Vienna location. Despite COVID-19, thanks to the successful development of Frequentis and the measures introduced in relation to the pandemic, the number of employees was not simply held stable, but actually increased.

Attractive workplaces

As a responsible employer, Frequentis has a genuine desire to actively foster the health of its employees. Vaccinations (influenza, FSME), annual health checks, and specific supplementary measures such as heart check days, lung function tests, eye tests, and vein checks are offered annually to staff at the Vienna location as part of the company's occupational healthcare activities.

Many of these measures could be offered with almost no restriction in 2020, providing that the pandemic-related precautions were observed. However, high-contact series test examinations were not carried out in order to avoid unnecessary exposure to the risk of infection.

These measures are complemented by stress checks and occupational psychology measures to prevent burnout, which were stepped up during the coronavirus pandemic. A bio-impedance analysis and other health promotion initiatives were offered at the company's headquarters in Vienna as part of the vitality programme – in digital format due to the coronavirus pandemic. The programme included many fitness videos, which were accessible through the Frequentis Learning Centre. In addition, in cooperation with the occupational medicine centre, practical webinars were made available on dealing with neck tension and taking breaks from work.

Further, the statutory evaluation of psychological stress in the workplace has recommenced in an extended form (workshops).

A key aspect of the Frequentis vitality programme is healthy nutrition for employees and guests at the Vienna location. Meals are freshly cooked every day and up to four different menus are available. Great emphasis is placed on the top quality of ingredients and on using regional and seasonal products. Cooking and eating also generate waste. At the restaurant on Frequentis' premises, various steps have therefore been taken to reduce food waste and avoid it wherever possible.

Despite the coronavirus pandemic, catering was provided at the Vienna location without interruption and the staff restaurant offered a choice of several lunch menus almost every day. Various take-away offers organised by the catering provider SV were very well received. They comprised a wide range of food and ready-made meals as well as special offers during the year.

Where possible, subsidiaries of the Frequentis Group also offer programmes to promote health, check-ups, and activities to support physical and mental health. These include regular running groups, sometimes accompanied by special trainers, participation in regional runs and other sports events, subsidised or free gym memberships, and joint exercise sessions for office staff in the workplace. Due to country-specific restrictions during the coronavirus pandemic, some of these activities had to be suspended temporarily or were replaced by online courses.

Flexible working hours and the working environment

A flexible working time model aligned to the legal requirements in different regions allows personal needs to be taken into account and encourages a good work-life balance.

Since working from home was already used by the Frequentis Group, the switch to this mode of working during the coronavirus lockdown was quick and easy. More than 97% of employees have IT equipment that enables them to work from home. In addition, at the start of the first lockdown in 2020, the IT systems were tested to check their theoretical capacities and resilience. Using Skype for Business, Microsoft Teams, and other web-based platforms, planned face-to-face events were recast as online meetings, video conferences, webinars, etc.

Impact of coronavirus

In the early summer 2020, when staff had been working from home for several weeks, Frequentis started a broadly based internal staff survey. The survey covered all employees with an active employment contract at the Vienna location. By agreement with the relevant managing directors, employees at all subsidiaries were also invited to take part. The aim was to get an initial feeling for the "mood" among employees. The high participation rate of 70% and the feedback itself confirmed the smooth switch to working from home, along with pointers to some problem areas (e.g. childcare). The survey also highlighted a desire for more flexible working practices by improving the ability to combine mobile working with working on the company's premises. To define extended flexibilisation of this type for and at Frequentis, the NewWork@Frequentis pilot project was launched at the end of the year. This involves more than one hundred employees from five organisational units in Vienna and representatives of the Workers' Council. Areas being examined include optimising guidance for the Frequentis Group and specific organisational units. This involves analysing employment law conditions and the impact on the Frequentis culture, as well as the capacity required at company premises and function-specific requirements. The pilot project is scheduled for completion by summer 2021 and will form the basis for further decisions.

Enabling staff to combine work and family life is important to Frequentis. As a family-friendly company, Frequentis AG has offered the Frequenty Kinderwochen summer activity weeks for employees' children since 2012. This initiative was continued in 2020 despite the challenging conditions. Due to the health risks, it was not possible to organise the activity weeks on the company's premises as in the past. Nevertheless, Frequentis considered it important to support employees with childcare in the very challenging summer of 2020. With the aid of a pandemic-compliant concept, it was possible to organise two exciting weeks for 71 children in partnership with "Science Pool", which offered age-specific workshops on "Save our earth" and "Virtual reality".

The Frequenty Kinderwochen will be organised again in 2021. Through this initiative Frequentis actively contributes to the Austrian Family Ministry's "Companies for Families" programme. Frequentis has been a network partner for this programme since 2015.

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

In the Frequentis Group, the responsible managers and, where appropriate, various management and corporate governance bodies, conduct an annual salary review on the basis of statutory requirements and external benchmarks to examine whether salaries meet the minimum requirements and also correspond to market conditions.

Succession planning is supported by a leadership development programme, which can be adapted for international use. Since March 2020, the entire programme has been available digitally. Group-wide building and sharing of knowledge is aided, for example, by ongoing extension of skills management, virtual platforms, and distance learning.

Broadly based staff development

Training and continuing professional development are very important at Frequentis and staff commitment is a key factor in the company's success. To remain successful on the market, it is important to be able to adapt quickly to new challenges and to constantly update knowledge of laws, requirements, technical specifications, and also global issues such as the environment. Frequentis has a lifelong learning concept, which starts when staff join the company. It is important to offer employees an individually agreed training plan. This is discussed at the annual appraisal interview.

An onboarding programme and trainee programmes within the Frequentis Group ensure that new employees, in particular, are rapidly integrated into the company and given the knowledge required for their job, for example, project management, systems engineering, and software development, and can build up a personal network. New staff are supported by a tutor in their first months with the company. The onboarding programme at Frequentis' headquarters in Vienna sets the standard for the other companies in the Group. Subsidiaries offer their new staff a combination of corporate standards and a local touch.

Impact of coronavirus

The onboarding programme also had to be adapted because of the coronavirus pandemic. For example, the monthly welcome workshops are held online and mandatory training sessions have been switched to distance learning or a virtual classroom. The tutors still make sure that new staff get off to a smooth start and provide virtual onboarding.

Appraisal interviews are the main tool used for employee development and leadership. In 2020, a documented appraisal interview was held with 83% of staff in the Frequentis Group. This included agreeing and defining targets for the coming year.

The aim of these appraisal interviews is to reflect on work and the results achieved in the past year, establish the status quo, and make plans for the coming year. That includes a two-way discussion of expectations, mutual feedback on performance and personal development, and defining binding targets.

In addition to the Frequentis career model, which places management, expert, and project management careers on an equal footing, specific attention is paid to cross-departmental and cross-border development of talented employees and those with potential. Talent management, which covers more than three-quarters of all employees in the Frequentis Group, provides an overview of the distribution of performance and potential in the company and its organisational units and teams. At the same time, it provides a specific case-by-case insight into where development measures are necessary. Company-wide vocational training and continuing professional development programmes are aligned to these needs. Further, identifying key staff and key functions allows long-term succession planning. Data on succession planning for management and key staff also formed the basis for the ongoing development of the Group-wide talent programme in 2020.

Thanks to the extensive training offering, Frequentis employees participated in more than 5,800 training sessions in 2020. These were mainly held by internal trainers. This in an important element in passing on knowledge and safeguarding Frequentis-specific know-how.

Impact of coronavirus

In 2019, Frequentis worked intensively on a digitisation strategy for learning & development. This made it easier to respond to the coronavirus pandemic as many training courses had to be reorganised and switched to digital and blended learning concepts at very short notice. To provide the best possible support for the large number of internal trainers, a special intranet platform was set up under the acronym FIT (Frequentis Internal Trainers) to provide training tools, useful content, and tips on how to prepare training sessions.

In the area of personal development, the focus was on intercultural training and training in lateral leadership. Training was also provided in specialist areas and new technologies. This was supplemented by well-attended security training sessions and mandatory training on protection of personal data.

A survey of Frequentis subsidiaries in 2018 showed enormous interest in extending the distance learning modules. The findings were taken into account in planning, extending, and sharpening the offer in recent years. As a result, the number of distance learning modules available to employees in the Frequentis Group almost doubled from 83 to 165 in 2019. This trend continued in 2020 and more than 311 distance learning courses are now available.

Frequentis sees informal learning as an important element in modern vocational training and continuing professional development: it enhances the effectiveness and durability of learning processes. Communities of practice provide a platform for communication and for sharing knowledge across functional and organisational boundaries at Frequentis. Two such communities were established in 2020 and another three were in the process of being set up. By year-end 2020, there were therefore eight Group-wide expert communities, covering a wide range of topics, from security aspects to engineering challenges. New areas of focus are data science, artificial intelligence, and cloud technologies.

Sales Excellence Programme

The Sales Excellence Programme, which was introduced in 2013, is an extensive training programme for all sales staff at Frequentis. Staff from the strategic business domains, regions, and international subsidiaries who work in the areas of sales & operations were involved in designing this programme. The aim is to ensure that all sales staff in the Frequentis Group have a uniform knowledge base, and to provide individuals with opportunities to deepen their knowledge.

The programme is divided into two parts: the "basic" training is mandatory and includes legal and compliance modules. "Advanced" training is tailored to the precise requirements of the individual's functions and personal skills. A certificate is awarded when both parts have been completed. The programme is now provided increasingly or exclusively virtually or via distance learning.

Despite constant changes in the target group (employees move and take on different jobs) and the challenges of the pandemic, the participation rate was increased from 50% to 53% in 2020.

These activities will be continued in 2021 (for information on mandatory training in data protection and security ↗ *Safety & security*).

Equal treatment and equal opportunities

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

An optimum work-life balance should be possible for all employees, irrespective of their age, gender, culture, religion, or background. Frequentis established the conditions for this many years ago. This is reflected in the international composition of its teams – the Frequentis Group employs staff from 55 nations – and in long-term employment relationships, which support the aim of retaining knowledge in the Frequentis Group.

Since the Frequentis Group encourages long-term employment, the average age of the workforce is naturally increasing. This trend is also reflected in the figures for part-time employment for older employees and retirement. In the past five years, there has been a considerable rise in the number of employees retiring and this will continue in the coming years. To counter the ageing workforce, for many years now Frequentis has focused on a healthy mixture of experienced experts and graduates. Trainee programmes are run every year and early planning and development of successors is ensured for positions where staff are retiring.

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

The present low proportion of female specialists and managers is due to the fact that the proportion of women in technical professions is still comparatively low. For instance, only 28.1% of the over 3,000 job applications received by Frequentis AG in 2020 were submitted by women. The situation is different at Frequentis Romania. In view of the high number of qualified women with a technical background in Romania, the percentage of female employees at this development company is over 34% (which is well above the Frequentis average of 22%).

From the perspective of a high-tech company like Frequentis, a higher number of female staff in technical professions would be desirable. Mixed teams are generally more effective and enrich the company. Talented female colleagues are always highly respected. In addition, Frequentis strives to take such aspects into account in its cooperation with schools and universities.

Human Resources International

An in-house competence centre is responsible for the main tasks required to provide continuous support for international employees and to set up international assignments. The Human Resources International competence centre also provides valuable assistance for the rollout of HR processes and for knowledge sharing and knowledge transfer across the Group.

These services were expanded further in 2020, for example, in the area of learning & development and for international assignments.

To tailor training more specifically to the needs of each location, greater responsibility is being delegated to them and central management in Vienna is being scaled back. The aim of this rollout is to establish a learning & development role at selected locations as a first line of contact for local staff.

An important element to increase foreign assignments is the successful reintegration of returning staff. Discussions with (new) managers, tax advice for returning employees, and individual coaching pave the way for ongoing career success at the headquarters in Vienna. The International Assignment Programme gives staff an opportunity to gain experience of working at a subsidiary in a different country, which also helps to spread the Frequentis culture throughout the Group. All assignees took part in a global survey in 2020 and the insights gained were published as “Assignment Voices” in the form of articles or short videos. These contributions provide a valuable platform for staff interested in a foreign assignment, offering a mixture of information and experience by present and new assignees and those who have already returned.

Another goal is to establish local HR managers or HR support staff. In this context, considerable attention is paid to knowledge transfer and sharing know-how. To achieve these goals and network content and all international HR employees, an International Human Resources Community was established in 2020.

Knowledge transfer extends to recruitment activities. Throughout the Frequentis Group, selected recruiting platforms and events, such as job fairs, are used to position Frequentis as an attractive employer in the IT sector. Social media platforms are becoming increasingly important, especially in the area of active sourcing.

Impact of coronavirus

Generally, it should be noted that the exceptional forms of collaboration required in the coronavirus pandemic have brought staff in the entire Frequentis Group closer together. International collaboration was stepped up. For example, various locations were closely involved in all activities of the coronavirus crisis team. Worldwide, everyone worked under the same conditions, despite different time zones.

This increased sense of community was strengthened by regular video messages from members of the Frequentis Executive Board and various social elements such as a virtual coffee lounge. One particularly noteworthy initiative was a virtual advent calendar with a wide range of contributions from Frequentis Group companies and a variety of interactive elements.

KPIs

	2020	2019	2018
Average no. of employees in the Frequentis Group	1,907	1,849	1,763
thereof male	77.8%	78.5%	78.4%
thereof female	22.2%	21.5%	21.6%
Average no. of employees at Frequentis AG	984	993	971
thereof male	77.0%	77.1%	77.1%
thereof female	23.0%	22.9%	22.9%
New employees in the Frequentis Group	207	198	286
thereof male	75.8%	69.7%	78.0%
thereof female	24.2%	30.3%	22.0%
New employees at Frequentis AG	73	85	140
thereof male	56	64	119
thereof female	17	21	21
Employees leaving the Frequentis Group	177	190	184
Employees leaving Frequentis AG	78	87	80
Employees in the Frequentis Group			
Part-time	241	198	162
Parental leave	49	49	59
Special dispensation	60	60	58
Training leave	5	3	6
Part-time training	8	4	6
Employees at Frequentis AG			
Part-time	129	122	92
Parental leave	43	42	50
Special dispensation	38	36	37
Training leave	2	1	6
Part-time training	8	4	6

	2020	2019	2018
Average age – Frequentis Group	42	41	41
Average age of new employees – Frequentis AG	32	34	34
No. of appraisal interviews held – Frequentis Group	83%	n.a.	n.a.
No. of appraisal interviews held – Frequentis AG	89%	89%	87%
No. of courses offered Group-wide	420	386	311
thereof distance learning	311	165	83
No. of classroom training sessions – Frequentis Group	216	524	633
thereof with internal instructors	84.3%	84.7%	78.2%

In principle, all of these concepts are being continued in 2021. The aim is to maintain the already high rate of appraisal interviews. With regard to training, increased attention will be paid to distance learning because this is not tied to a particular time or location. Video-based training will also be extended.

Professional employer branding, purposeful recruiting, and frank and open treatment of job applicants are very important in the competition to attract the best brains and secure qualified staff.

Impact of coronavirus

The recruitment process also went digital due to the coronavirus pandemic. Video calls with candidates became the new norm. Since 16 March 2020, the recruitment team has held 300 interviews via Skype and this trend is continuing. A digital format was also used for job fairs such as TUday@HOME, organised by Vienna Technical University. The new format was well-received by both students and exhibitors.

In the "Best Recruiters" study 2020 / 21, Frequentis AG was awarded the silver seal in the IT / software / telecommunications sector for its open and professional HR activities.

The measures outlined above to strengthen Frequentis' position as an attractive employer and to retain staff will be continued in 2021.

Social responsibility

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

Impact of coronavirus

Disadvantaged social groups have been particularly badly affected by the coronavirus pandemic and its emotional consequences, for example isolation, job losses, and health worries. Moreover, many disabled people have been even less visible than usual during the crisis and have felt sidelined and less involved. Frequentis' Christmas donation in 2020 therefore went to the social projects organised by the Austrian initiative "Licht ins Dunkel" ("bringing light into the darkness").

Solidarity within the team at Frequentis' headquarters was also reflected in a spontaneous collection organised by the Workers' Council for the benefit of system-relevant workers (cleaners, kitchen staff, security staff, ...). A substantial sum was collected within a short time and distributed to the external service providers particularly affected by the coronavirus pandemic.

Frequentis also supports innovative projects such as the involvement of staff members in the development of an app for emergency calls by deaf people.

Sponsoring education

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

Therefore, Frequentis AG offers work-experience placements for students and co-supervises dissertations and theses for bachelor's and master's degrees. Other activities include sponsorship, workshops, and study trips for higher technical colleges in Vienna and Lower Austria. Various activities were planned for students from higher technical colleges at Frequentis' headquarters in 2020. Regrettably, these were only possible to a very restricted extent due to the coronavirus pandemic.

For many years, Frequentis has also been committed to helping various universities in Austria improve the quality of training. In cooperation with Vienna Technical University, it has held joint training events for a number of years where experts from Frequentis give students an insight into control centre know-how and examples of best practices. "Adventure in Computer Science", another cooperation with Vienna Technical University launched in 2019, targets a younger age group: this permanent exhibition is designed to encourage school children's enthusiasm for computer science.

Start-up activities

The Frequentis Start-Up Centre, which was established in 2001, helps entrepreneurs set up their own businesses. Support is provided for a few years. In addition to an inexpensive and flexible location with appropriate infrastructure, during this time the young entrepreneurs have opportunities to access direct business opportunities at Frequentis. In this way, Frequentis has already supported the establishment of more than 50 IT, hardware, software, and technology consulting enterprises with over 200 employees.

The concept has now been extended with an international focus, increased virtualisation, and a link to Frequentis' strategy playing an important role. Organisationally, support for these start-up activities is assigned to the New Business Development department at Frequentis. Attention is paid to integrating, fostering, and shaping relevant start-ups with a focus on key technologies or through collaborative development of new products, features, and services.

In this context, start-up activities can also grow within the Frequentis Group. The first New Business Development spin-off is skyzr GmbH, which is currently developing cloud-based services for commercial drone service providers and their customers.

Human rights & anti-corruption

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

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

Risks

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

Concepts

The principles of integrity and business ethics at Frequentis are set out in the Code of Conduct and internal anti-corruption policies and form the basis for internal and external collaboration.

To draw attention to the importance of this issue, Frequentis adopted a Group policy on "Anti-Corruption, Invitations, and Gifts" in September 2018. This is an operational instruction designed to avoid all forms of corruption and provides guidance on ensuring legally compliant conduct when dealing with the Frequentis Group's business partners.

The Code of Conduct was drawn up by the Executive Board of Frequentis AG and applies to all employees of the Frequentis Group. Alongside Frequentis AG, it covers all companies in which Frequentis AG has a direct or indirect stake of at least 50% or in which it exercises control in a different manner.

The Code of Conduct defines principles and guidelines for responsible conduct and integrity. It is a key element in Frequentis' corporate culture and shapes the Frequentis Group.

In addition to the written version, the basic principles of the Code of Conduct were presented to employees through an awareness video. The video is also used in compliance training and in the onboarding programme for new employees.

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

KPIs

In 2020, there were no cases of corruption, nor any disciplinary measures, court cases, or dismissals linked to corruption. Moreover, no contracts with suppliers had to be terminated as a result of violations of human rights (↗ *The Company*). The Frequentis Group did not receive any fines in the reporting period in connection with corruption or competition law.

	2020	2019	2018
Cases of corruption resulting in disciplinary action	0	0	0
Termination of contracts with suppliers due to violation of human rights	0	0	0
Fines in connection with corruption or competition law	0	0	0

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

A whistle-blower hotline will be set up in 2021 so that employees, customers, and suppliers can anonymously report suspected cases of corruption, breaches of the law, and failure to comply with internal regulations. Various systems are currently being evaluated. The system will first be implemented at Frequentis AG and the subsidiaries where such a system is mandatory in order to comply with the EU directive. It will then be rolled out to the entire Frequentis Group.

Compliance

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

Risks

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

Concepts

The compliance management system is based on the following principles:

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

Training

Impact of coronavirus

At the start of 2020, a face-to-face training session was held for sales staff in the Frequentis Group. Because of the coronavirus pandemic and the associated precautionary measures introduced within the Frequentis Group, training was switched to a virtual classroom format during the year. Two virtual training sessions were held in 2020.

The Compliance for Sales training course is a compulsory part of the Sales Excellence Programme for all sales staff. 53% of sales staff were trained in 2020 (↗ *Sales Excellence Programme*).

Advice

The Compliance Officer is also the first line of contact for staff on compliance issues. 12 enquiries were dealt with in 2020. These were submitted by email to a special email account, compliance@frequentis.com, or asked personally or over the phone.

Compliance audits

Since 2020, receipts and travel expense claims have been monitored for compliance with the limits set out in the Group policy on "Anti-corruption, Invitations, and Gifts". The focus is on receipts relating to gifts, invitations, and hospitality. An internal process has been implemented to automatically submit all receipts relating to gifts and invitations that exceed the defined limit set in the policy to the Compliance Officer for further checking and clarification.

Impact of coronavirus

Hospitality costs dropped sharply in 2020 due to the coronavirus pandemic and the restricted ability to visit customers and to receive visitors at headquarters in Vienna. As a result of this and the increased awareness of the internal limits, there was a noticeable drop in the number of expense claims that exceeded the limits.

Agent management

Frequentis AG has a network of 60 representatives and agents around the world. Agent management is responsible for supervising and managing them. To ensure optimum collaboration, they submit regular reports on their activities covering a defined period.

In 2020, continuous efforts were made to improve the quality of these reports (quality assurance of their content, digital workshops for partners / agents, monthly reporting to the regional sales managers at Frequentis) and increase the response ratio.

In view of the international structure of Frequentis' agents and the associated compliance risks, the agent management process includes a compliance questionnaire that has to be completed and submitted before an agent agreement can be signed. In addition, it has to be checked by the Vice President Sales.

KPIs

	2020	2019	2018
Processed enquiries from employees	12	14	9
Face-to-face training / virtual classroom sessions	3	4	n.a.
Checking invoices for compliance with the requirements of the Group policy on anti-corruption, invitations, and gifts – cases referred	5	40	n.a.

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

Greater use is continuing to be made of virtual classroom training sessions in 2021, partly due to the COVID-19 pandemic, and partly to achieve a steady increase in the training rate. This also gives international employees easier access to compliance training.

In 2020, an internal gap analysis was conducted to assess the present compliance management system versus ISO 19600. The findings were presented to the Audit Committee. Certification of the compliance management system was defined as a target.

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

Capital market compliance

To implement capital market-relevant laws and regulations within the Frequentis Group, a capital market compliance policy was drawn up following the IPO in 2019. It covers, in particular, the handling and publication of capital market-relevant information, the prohibition of trading in shares and other financial instruments of Frequentis AG, and the obligation to report transactions by members of the management ("Directors' Dealings"). In addition, the position of a Capital Market Compliance Officer was established. The Capital Market Compliance Officer is responsible for implementing the capital market compliance policy and reports directly to the Executive Board of Frequentis AG. This is designed to ensure that the Frequentis Group acts with integrity on the capital market and to enhance employees' understanding of what is meant by capital market compliance.

Risks

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

Concepts

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

KPIs

No further face-to-face training sessions were held in 2020.

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

Around 94% of employees successfully completed the module in 2020.

	2020	2019	2018
Classroom-based training in capital market compliance for specific target groups in 2019	n.a.	4	n.a.
Online training in capital market compliance for all employee groups (mandatory) from 2020			
Frequentis Group	85.1%	n.a.	n.a.
Frequentis AG	94.4%	n.a.	n.a.

Selection of suppliers

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

Operating in the safety-critical area requires reliable partners on the supply side and ongoing, long-term business relationships. A stable procurement base is vital for project execution.

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

Risks

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

Concepts

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

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

The Frequentis CSR code is an integral part of the master agreement with suppliers.

Supplier audits

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

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

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

Supplier audits are performed at subsidiaries as required.

Supplier assessments

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

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

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

Assessments are performed for the suppliers that account for the highest order volume (top 50) and those that play a key role in the supply of specific groups of products. The 2020 assessment is currently in progress. The 2019 assessment covered 60 suppliers accounting for procurement volume of EUR 22.7 million at Frequentis AG.

The top three suppliers received performance awards and certificates. A range of measures is agreed with suppliers whose performance needs to be improved and implementation is monitored.

As well as price, reliability, and service, responsible procurement emphasises the importance of respecting human rights, humane working conditions, and environment-related issues.

At Frequentis and its subsidiaries, whose business activities comprise production and integration, other key criteria are short supply lines and improving local value-added. Apart from intra-group procurement, 96% of Frequentis AG's procurement is from suppliers in Europe. Even when taking into account the subsidiaries that provide independent production and integration services, Europe still accounts for around 94% of procurement. This indicator was compiled for the first time for 2019 specifically for the Non-Financial Report.

KPIs

	2020	2019	2018
Supplier audits performed by Frequentis AG	4	7	7

Geographical structure of suppliers and service providers based on order volume by Frequentis AG	2020	2019	2018
Europe	95.6%	92.5%	n.a.
North America	1.5%	3.1%	n.a.
Asia	1.3%	2.4%	n.a.
Africa	1.1%	1.1%	n.a.
Middle East	0.1%	0.5%	n.a.
South America	0.3%	0.4%	n.a.
Australia	0.0%	0.1%	n.a.

Geographical structure of suppliers and service providers by order volume[1]	2020	2019	2018
Europe	93.5%	77.4%	n.a.
North America	2.7%	16.0%	n.a.
Australia	1.3%	2.7%	n.a.
Asia	2.0%	2.5%	n.a.
Africa	0.7%	0.8%	n.a.
Middle East	0.1%	0.3%	n.a.
South America	0.2%	0.3%	n.a.

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

Impact of coronavirus

The performance of supplier audits was greatly restricted by the COVID-19 pandemic in 2020. Two of the four audits were performed at the beginning of the year and the other two in periods when travel was possible. Seven further supplier audits had been planned but were not performed due to the pandemic. Virtual audits were not used because visiting the supplier's premises to check quality is a very important part of supplier audits.

The goal is a continuation and Group-wide rollout of supplier assessments in order to achieve a continuous improvement in supplier management. Further, supplier assessments include examining scope for improvement. However, meeting this target depends to a large extent on the future development of the coronavirus pandemic.

In addition to the criteria listed above, the procurement function aims to avoid long procurement distances to further reduce the Frequentis Group's carbon footprint.

Safety & security

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

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

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

Impact of coronavirus

Measures to prevent cybercrime have high priority at Frequentis. Special attention is paid to endpoint protection technologies to identify and ward off phishing attacks – a problem that has definitely increased – including the remote operation of devices. This was accompanied by an internal awareness campaign.

Risks

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

Safety awareness as an element in the Frequentis culture

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

To sharpen the awareness of employees and, especially, new colleagues for this important aspect of culture, an awareness-raising video on safety-critical behaviour was produced and published in mid-2020. In this video, the Executive Board explains the specific features and importance of safety-critical behaviour and how it can be implemented optimally in day-to-day working practices, for example through proactive risk management, high safety and security standards, and professional project management.

This introduction to safety-critical behaviour has been designed as a mandatory training module that has to be refreshed every two years. The penetration rate was 74% at year-end 2020. The goal is 100%.

Safety

Safety means avoiding unacceptable operating risks, while security refers to the ability to defend against external attacks. System safety is achieved by operating a system on top of the actual system to analyse the environment, users, or third parties. With reference to Frequentis, this means that the safe operation of Frequentis systems always has to be guaranteed. Frequentis has been a global leader in safety for many years. Since 1995 it has run its own competence centre for system safety management, which provides safety expertise for customer projects. Numerous awards, published papers, and international accolades testify to Frequentis' enormous expertise in this field.

Concepts

Safety management system

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

To perform the required system safety tasks in regulated areas of operation, Frequentis introduced an extensive safety management system back in 1999. An important element is the management's commitment to safety, which is set out in Frequentis' safety policy, together with the goal of upholding safety standards in all activities and improving them wherever possible.

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

The basic elements of the safety management system are consistent application of international safety standards after adaptation for the relevant business unit, an obligatory safety assessment for all product developments, a Group-wide hazard management system for preventive risk minimisation, and the in-house Safety Academy for staff training.

Safety certificate

In response to rising international requirements, in 2005 a Group-wide training concept was established through the Safety Academy, together with specialised safety training leading to the award of a certificate. So far, 150 employees have gained this safety certificate, including 17 employees from Frequentis subsidiaries. In this way, extensive safety know-how is disseminated within the Frequentis Group and corresponding Group-wide safety expertise is generated.

The training programme leading to the safety certificate is used to train safety peers in a wide range of organisational units. Safety competence is a key corporate characteristic in safety-critical activities.

Following initial collaboration with the FH Campus Vienna, since 2012 training has been carried out in cooperation with the International Safety System Society (ISSS). This has been made possible by the Regional Vice President Europe at the ISSS as Director of Safety Management at Frequentis.

This programme comprises fundamental, generic system safety training in modular form (ranging from hazard management through safety-critical project management and safety-critical system design to software safety). The three-week course ends with an assessment based on Frequentis-specific safety analyses.

KPIs

	2020	2019	2018
Total number of safety certificates issued – Frequentis Group	150	143	132
thereof newly issued "Basic" certificates	7	12	11
Additional "Upgrade" certificates	9	25	18
Total number of safety certificates issued – Frequentis AG	133	128	117
thereof newly issued "Basic" certificates	5	11	11
Additional "Upgrade" certificates	9	25	18

Training for this certificate – which has to be upgraded every two years – will be continued in the coming years. That will further strengthen Group-wide safety competence. In addition, the results of the analysis are used for continuous improvement of products and internal workflows.

Security

Within the context of safety, security has been an important area of focus at Frequentis for many years. High-tech security centres involve the integration of data from the Internet of Things (IoT), the use of software as a service (SaaS) to provide safety-critical applications, big data analyses, and, in particular, the networking of control centres and organisations. A Security Expert Community is responsible for systematic Group-wide bundling of activities and their ongoing development. Frequentis has a sophisticated security organisation that makes sure that everything possible is done at Frequentis to ensure the highest possible level of security.

Concepts

The Frequentis Security Organisation

The security organisation at Frequentis comprises three areas:

Governance and Support

This area of the organisation is authorised to issue policies. It is responsible for supporting the operational units in the implementation of these policies and for checking and reporting on their implementation. Support comprises training, providing tools, know-how, and experts and, in certain cases, taking on specific security tasks.

Governance and Support is structured as follows:

- **Chief Information Security Officer (CISO)**: responsible for security risk management at corporate level, the information security management system, and shaping the security organisation
- **Security Incident Response Team Manager (SIRT Manager)**: responsible for security notifications and security incident response
- **IT Information Security**: responsible for the security of the IT and communications infrastructure at Frequentis
- **System Security Team**: responsible for the security of systems delivered to customers (security of Frequentis products and solutions)

Business processes

Security has to be practised by all employees and integrated into their daily working processes. That applies, above all, to system security, which involves implementing specific security activities for Frequentis products along the entire value chain, from product design to delivery of a ready-to-use system to the customer and subsequent security cooperation during the operational phase. Explicit security roles have therefore been created. These are anchored in the operational units and work together with the governance and support units. They are:

- **Security engineers** in product and project teams: security engineers are responsible for correct implementation of security specifications at the technical level, e.g. design guidelines, coding guidelines, system hardening measures, and security tests. The principal target group for training comprises system engineers, integration engineers, test engineers, software engineers, and software architects. The training was focused on participants in Vienna.
- **Security agents** in the business units: the security agents support the management of their business unit in security-related aspects. These include the security offering, management of security-specific risks in products, offers, and projects, market presence, and communicating with customers on security notifications. Frequentis currently has eight security agents, each of which is allocated to a specific unit.

Virtual cross-functional teams

These teams support the implementation of security throughout the Group. They are:

- The **Security Incident Response Team (SIRT)**: this team is composed of selected experts from various operational units and is headed by the SIRT Manager. It is responsible for security notifications and incident response.

- The **Security Council**: the Security Council is a team of top managers from relevant units (Development, Maintenance, Communications, Legal, IT). Its role is to coordinate and monitor vulnerability and incident management processes at Frequentis. The Security Council meets regularly once a quarter and as required.
- The **Security Community**: this is a community of security-oriented employees. It is open to all employees and is moderated by the SIRT Manager. Topical security issues are analysed and discussed at monthly meetings. The community also provides a framework for informal exchange.

Networking with international communities

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

In 2020, Frequentis actively contributed to the following communities:

- Austrian CERT (Computer Emergency Response Team) network
- FIRST (global Forum of Incident Response and Security Teams)
- EUROCAE (European Organisation for Civil Aviation Equipment) Working Group 72
- Cyber Security Platform Austria
- CANSO (Civil Air Navigation Services Organisation) Cyber Safety Task Force
- CANSO Human Performance Working Group
- EASA (European Union Aviation Safety Agency) rule-making task analysis
- ISSS (International System Safety Society)

IT measures

Companies around the world have been a focus for hackers and cybercrime for many years. Identity theft and data theft are major areas of cybercrime. As a company operating in the safety-critical area, Frequentis takes special precautions to avoid cybercrime in the form of attacks on its in-house IT infrastructure. Protection of the Frequentis network, including all subsidiaries and external access, is therefore always state-of-the-art.

Employees are an important factor in this. To ensure the greatest possible awareness of this issue within the company, for around 10 years all new staff in Vienna have taken part in an Information Security Awareness Training course, a web-based version of which has been offered throughout the Frequentis Group since 2015. Information Security Awareness Training is a compulsory course that has to be repeated every two years.

To further sharpen employees' awareness, there are also regular Group-wide phishing campaigns. Here, a random sample of people at the company receive simulated phishing mails. Their response is automatically evaluated on an anonymous basis and feedback is published in the intranet and the employee magazine. This is supplemented by lectures held by experts across the year and by other opportunities for sharing information within the community. In 2020, IT services were not affected by any outages caused by cyberattacks.

Moreover, at the start of 2020, Frequentis ran a physical security awareness campaign to remind people of the mandatory requirement to wear their staff badge visibly. Further physical security measures are planned for the Frequentis headquarters in Vienna in 2021.

These activities are supported by a range of communication measures under the motto "You are the key to security".

Data protection

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

Data protection (employees, customers, suppliers) is very important to Frequentis. Frequentis appointed its own Data Protection Officer when the European Union's General Data Protection Regulation (GDPR) came into effect in May 2018. At the same time, Frequentis introduced mandatory e-learning modules on personal data protection, which have to be completed every two years. These give equal priority to protecting the data of employees, customers, and suppliers.

KPIs

	2020	2019	2018
Completed system security training sessions – Group			
System Security Overview for Engineers	44	46	n.a.
System Security Advanced for Engineers	26	42	n.a.
Completed system security training sessions – Frequentis AG			
System Security Overview for Engineers	33	42	
System Security Advanced for Engineers	16	36	
Successful completion of "Security Awareness Training" – Group	84%	79%	83%
Successful completion of "Security Awareness Training" – Frequentis AG	91%	92%	93%
Successful completion of "Personal Data Protection" training – Group	83%	99%	n.a.
Successful completion of "Personal Data Protection" training – Frequentis AG	91%	95%	n.a.
Training in safety-critical behaviour – Group	74%	n.a.	n.a.
Training in safety-critical behaviour – Frequentis AG	79%	n.a.	n.a.
No. of Group-wide events organised by the Security Community	13	12	4[1]
Average no. of participants	22	20	n.a.
Proven IT service outages due to cyberattacks	0	0	n.a.

[1] Meetings introduced in May 2018

These compulsory training modules still have a firm place in the training programme at Frequentis. The concepts for security awareness and the security organisation are subject to ongoing development and are revised to reflect the latest conditions.

Environmental matters

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

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

In addition, Frequentis solutions help optimise traffic flows and therefore reduce pollution.

Impact of coronavirus

The coronavirus pandemic had a major impact on environmental matters at Frequentis in 2020. For example, there was a massive drop in business trips, resulting in an extensive reduction in CO_2 emissions – one of the targets for 2020. In view of the altered conditions caused by the focus on dealing with the pandemic, the development of a Group-wide CSR & Sustainability concept with a focus on environmental aspects, which had been planned for 2020, has been postponed. There are now plans for it to be developed by a diverse team in 2021.

Risks

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

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

Concepts

Frequentis uses various concepts to reduce environmental impact in the production and use of its systems. In procurement processes, Frequentis looks for environmentally friendly materials and suppliers. Moreover, in development processes Frequentis strives to optimise the energy consumption of its systems and software to help customers optimise the energy consumption of their installations.

Long-standing partner in the EU's SESAR programme

SESAR – the Single European Sky ATM Research programme – is a key element in the creation of a uniform airspace as part of the European Commission's Single European Sky initiative. The aim is to do away with the present fragmented national flight management systems and processes, pool the expertise of the aviation sector, and establish a uniform flight management network in Europe. For the first time in history, the entire sector, including the armed forces, is working to meet commonly defined specifications and requirements, especially for capacity, safety, the environment, and cost-efficiency for the next 30 years. One focus is on improving environmental compatibility, for example, by cutting carbon emissions by 10% to improve air quality and reduce noise. Frequentis has been a major industrial partner in this initiative since it started.

Frequentis systems also provide direct support for environment-friendly solutions. Specific product examples are solutions provided by Frequentis' subsidiary ATRiCS to integrate and automate workflows for air traffic controllers to reduce their workloads and draw attention to potentially dangerous situations. These technologies can reduce runway taxi time by aircraft, which helps to decrease carbon emissions.

In addition, Frequentis is playing a key role in research projects that aim to reduce carbon emissions. One example is its involvement in LDACS (L-band Digital Aeronautical Communications System). This high-performance data link enables the realisation of modern air traffic management processes. As a satellite-supported communication system, it also has the potential to take on navigation and surveillance activities in order to make flying more environmentally friendly.

Re-use / refurbishment of products

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

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

Efficient use of energy

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

Since 1 January 2019, all electricity used by Frequentis AG has been sourced from KELAG Energie & Wärme GmbH, which supplies hydroelectric power, wind power, and electricity from other ecological sources. This contributes to reducing pollution by climate-damaging gases (e.g. carbon dioxide) and radioactive waste. It is also a clear signal for sustainability and efficient use of resources.

At Frequentis' headquarters in Vienna, there was an increase in the proportion of gas in the energy mix in 2020 despite the reduction in operating activity. At the same time, electricity consumption decreased (the corresponding figures contain the data for both gas and electricity.) Due to a reduction in the amount of waste heat generated, it was not possible to achieve the target temperature in the heat exchanger, resulting in additional use of the gas-fired boiler.

Efficient use of resources and waste separation

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

Environmental protection plays an important role throughout the value chain at Frequentis, from the selection of materials to processing and recyclability. Considerable attention is paid to reducing the use of hazardous materials in production. At the same time, Frequentis takes environmental relevance into consideration by using environmentally compatible production processes such as lead-free soldering and reducing power consumption in the production and operation of its systems. Attention is also paid to resource-saving packaging in the shipment of equipment, for example, by using reusable transport boxes.

Systematic sorting of different types of waste is compulsory. There are many waste collection points at the company's headquarters in Vienna. Each office has separate containers for recyclable paper (data protection regulations are observed in the disposal of paper) and other refuse. For all other types of waste, there are waste sorting points in every kitchenette and at the large copy centres. Used electrical appliances are collected centrally by Logistics (Material & Transport Department). At subsidiaries, waste is sorted in accordance with local regulations.

The print-run for the "Frequente" employee magazine, which is published three times a year, has been reduced considerably. The magazine is offered preferably for download from the intranet. Since the spring 2020 edition, PEFC-certified paper has been used for the remaining printed copies (e.g. for mailing to employees on leave and pensioners).

Careful use of food resources is also a focus of the catering firm at Frequentis' headquarters in Vienna: SV Österreich has taken a conscious approach to the environment and resources for many years. In particular, it endeavours to reduce its environmental impact along the entire value chain, from considering the origin of products in the procurement phase to their preparation and disposal.

It has also taken specific steps to reduce food waste. These include careful planning of supply and the related purchases, fresh preparation, regular preparation of the dishes on the lunch menu, and careful replenishment of the salad buffet. All this requires knowledge and conviction, therefore much value is placed on raising the awareness of the employees. To draw attention to the need to avoid food waste and ways of doing this, a special action week was organised in the staff restaurant from 28 September to 4 October 2020 in cooperation with the United Against Waste initiative.

Business trips / reducing CO_2 emissions

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

Business trips may only be undertaken for business reasons and if the tasks cannot be undertaken in another form (email, phone, online meetings, or video conferencing). Decisions on business travel are taken on the basis of cost-efficiency and sustainability. In 2021, these criteria will be supplemented by the lessons learnt during the pandemic.

In its efforts to reduce carbon emissions, Frequentis welcomes the rising interest shown by staff in switching to electric or hybrid vehicles when ordering new company cars. This is supported, for example, by subsidies for electric cars and the installation of charging stations in the company's car park. These source their power, among others, from in-house photovoltaic installations. At Frequentis in Germany, a fleet policy was introduced in 2020 which gives preference to electric and hybrid vehicles. Hybrids already make up 50% of the fleet of company cars at Frequentis Comsoft.

KPIs

	2020	2019	2018
No. of flight legs on business trips[1]	3,474	14,663	16,510
CO_2 in tonnes relating to these flights[1]	634	2,635	2,788
Environmentally friendly vehicles – Frequentis AG			
Electric cars	6	3	1
Hybrid cars	2	0	0
PCs and workstations equipped with Skype functionality	100%	100%	100%
Average no. of Skype meetings per month	17,095	5,446	4,627
Energy consumption[2] at head office in Vienna in kWh	6,513,575	6,258,770	6,346,070
Total consumption in kWh in % of operating performance	2.9%	2.7%	3.0%

1 Frequentis AG and subsidiaries served centrally by Frequentis Travel Management

2 Electricity and gas

Reference to GRI Standards

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

Title of the standard	No.	Title of the disclosure	Page
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	118
GRI 204: Procurement Practices 2016	204-1	Proportion of spending on local suppliers	28
GRI 205: Anti-corruption	205-1	Operations assessed for risks related to corruption	24
GRI 205: Anti-corruption	205-2	Communication and training about anti-corruption policies and procedures	22, 24
GRI 205: Anti-corruption	205-3	Confirmed incidents of corruption and actions taken	23
GRI 302: Energy 2016	302-1	Energy consumption within the organization	38
GRI 306: Waste 2020	306-1	Waste generation and significant waste-related impacts	36, 37
GRI 308: Supplier Environmental Assessment 2016	308-1	New suppliers that were screened using environmental criteria	27
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	19
GRI 401: Employment 2016	401-3	Parental leave	19
GRI 403: Occupational Health and Safety 2018	403-1	Occupational health and safety management system	7
GRI 403: Occupational Health and Safety 2018	403-3	Occupational health services	14
GRI 403: Occupational Health and Safety 2018	403-6	Promotion of worker health	14
GRI 404: Training and Education 2016	404-2	Programs for upgrading employee skills and transition assistance programs	16, 17, 18, 19
GRI 404: Training and Education 2016	404-3	Percentage of employees receiving regular performance and career development reviews	16
GRI 412: Human Rights Assessment 2016	412-2	Employee training on human rights policies or procedures	22
GRI 414: Supplier Social Assessment 2016	414-1	New suppliers that were screened using social criteria	27

Independent limited assurance report on the consolidated Non-Financial Report

We have performed an independent limited assurance engagement on the consolidated Non-Financial Report of Frequentis AG (referred to as "the Company"), Vienna.

Management's responsibility

The company's management is responsible for the proper preparation of the consolidated Non-Financial Report in accordance with the requirements of the Austrian Sustainability and Diversity Improvement Act and § 267a of the Austrian Commercial Code (UGB).

The company's management is responsible for the selection and application of appropriate methods for Non-Financial Reporting as well as the use of appropriate assumptions and estimates for individual non-financial disclosures given the circumstances. Furthermore, their responsibilities include the design, implementation and maintenance of systems, processes and internal controls that are relevant for the preparation of the Non-Financial Report within the meaning of § 267a UGB. It shall be free from material misrepresentation, intentional or unintentional. This includes the creation of adequate documentation and the establishment of internal controls.

Auditor's responsibility

We have been charged with providing a judgement, based on our audit procedures and on the evidence we have obtained, as to whether anything has come to our attention that would cause us to believe that the Non-Financial Report does not conform in any material respect to the requirements of the Austrian Sustainability and Diversity Improvement Act and § 267a of the Austrian Commercial Code (UGB).

We have performed our audit in accordance with the professional principles in force in Austria relating to general assurance engagements (KFS / PG 13) and International Standards on Assurance Engagements (ISEA 3000). In this respect, we have to comply with our professional obligations, including the provisions on independence, and are bound to plan and carry out our assignment with regard to the principle of materiality in such a manner as allows us to deliver our judgement with limited assurance.

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

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

- Inquiries of personnel at the Group level, who are responsible for the materiality analysis, to gain an understanding of the processes for determining material sustainability topics and corresponding reporting boundaries of Frequentis AG;
- A risk assessment, including a media analysis, on relevant information on the Company's sustainability performance in the reporting period;
- Inquiries of personnel who are responsible for providing, consolidating and implementing internal control procedures regarding data;
- Assessment of the design and implementation of systems and processes for identifying, processing and monitoring of disclosures and data on sustainability including the consolidation of this data;
- Inspection of selected internal and external documents, in order to determine whether qualitative and quantitative information is supported by sufficient evidence and presented in an accurate and balanced manner;

- Analytical evaluation of the data and trend of quantitative disclosures;
- Assessment of whether the requirements according to § 267a UGB have been adequately addressed;

Our assignment does not include
- the audit of prior year figures, forward-looking disclosures, or data from external studies
- the verification of references to GRI standards

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

Conclusion

On the basis of our audit procedures and the evidence we have obtained, nothing has come to our attention that would cause us to believe that the consolidated Non-Financial Report 2020 of the Company has in any material respect not been established in compliance with the Austrian Sustainability and Diversity Improvement Act and § 267a of the Austrian Commercial Code (UGB).

Restriction on Use

As our report is prepared exclusively at the Company's request and in the Company's interest, there exists no basis for third parties to place any reliance on its content. It therefore provides no grounds for third-party claims arising from it. Consequently, this report may not be disclosed to third parties either in whole or in part without our express agreement.

General Conditions of Contract

We make this report on the basis of the engagement concluded with the Company. Our responsibility and liability toward the Company and any third-party is subject to paragraph 7 of the General Conditions of Contract for the Public Accounting Professions in the version of April 18, 2018 (AAB 2018).

Vienna, 16 March 2021

BDO

BDO Austria GmbH

Wirtschaftsprüfungs- und Steuerberatungsgesellschaft

Mag. Gerhard Posautz	Mag. Gerhard Fremgen
Certified Auditor	Certified Auditor

Statement by all legal representatives

We confirm to the best of our knowledge that the consolidated Non-Financial Report contains the disclosures pursuant to Section 243b (2) and Section 267a (2) of the Austrian Commercial Code (UGB) that are necessary for an understanding of the business performance, results of operations, and situation of Frequentis AG and its subsidiaries, and the impact of their activities and which relate, at a minimum, to environmental, social, and employee aspects, respect for human rights, and combating bribery and corruption. The disclosures include a description of Frequentis' business model and the concepts used with regard to the above aspects, including the due diligence processes applied, the material risks, the probable negative impacts on these aspects, the results of the concepts and the key performance indicators.

Vienna, 15 March 2021

Norbert Haslacher
Chairman of the Executive Board

Sylvia Bardach

Hermann Mattanovich

Group Management Report

for the Consolidated Financial Statements as at 31 December 2020

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Economic environment

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 compared with other sectors of industry. 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 2021.[1] In light of the widespread COVID-19 pandemic, the IMF estimates that global economic output shrank by 3.5% in 2020. For 2021, it projects growth of 5.5%. Growth momentum is expected to vary significantly between countries and will be dependent on the following factors:

- Access to medical interventions
- Effectiveness of policy support
- The country's exposure to cross-border spillovers
- Structural characteristics at the start of the crisis

The report assumes that the US economy contracted by 3.4% in 2020 and that it will grow by 4.5% in 2021. For the euro-zone economies, the IMF anticipates a drop of 7.2% in 2020, followed by growth of 4.2% in 2021. Looking at the largest euro-zone economies, the report anticipates the lowest reduction in economic output in Germany, with a drop of 5.4%, and declines of more than 9% in France, Italy, and Spain. The growth rates predicted for 2021 are 3.0% for Italy, 3.5% for Germany, 5.5% for France, and 5.9% for Spain. The forecast for the UK is a drop of 10.0% in 2020 and growth of 4.5% in 2021.

Compared with the global development, a decline of just 1.1% is projected for the emerging markets and developing countries in Asia in 2020, and growth of 8.3% is anticipated for 2021. The IMF assumes a contraction of 7.4% in Latin America in 2020 (2021: growth of 4.1%). The projection for the Middle East and Central Asia for 2020 is -3.2% (2021: 3.0%).

[1] https://www.imf.org/en/Publications/WEO/Issues/2021/01/26/2021-world-economic-outlook-update

Business performance

In 2020, Frequentis' operating business was mainly influenced by the COVID-19 pandemic. Thanks to its stable business model as a supplier of communication and information systems for control centres in the safety-critical area, the measures introduced, and successful project acceptance processes, Frequentis was able to minimise the impact.

Significant events in 2020

COVID-19 pandemic

The COVID-19 pandemic triggered a global economic crisis. Frequentis cannot completely avoid general economic developments. However, it supplies safety-critical infrastructure, which has to be upheld and maintained even in periods of crisis.

With a few exceptions, it was possible to continue business unchanged despite the restrictions. Frequentis staff performed many activities on a mobile basis in the past, so switching to fully remote working (e.g. from home) was possible with little difficulty (with the exception of manual work performed on-site at some locations or on customers' premises). Since the ability to travel outside the countries in which the Frequentis Group has locations was very restricted, many customer acceptance procedures were performed using video conferencing, with additional technical and organisational support.

Impact on revenues and expenses
Where the project team was unable to complete work due to lockdowns or travel restrictions, postponement of the acceptance dates was agreed with some customers. In addition, longer payment terms were negotiated in some cases.

Despite the travel restrictions, it was possible to conduct a fair proportion of project acceptances remotely. Consequently, the travel expenses recognised in the financial statements were lower. Certain activities such as the installation and start-up of new systems were, and still are, only possible in those countries where Frequentis has its own locations or skilled technical partners or where Frequentis staff can and may travel or the work can be performed by the customer with remote support. This means that some systems could not yet be (fully) installed and accepted by customers, resulting in a temporary shift in revenues.

Measures taken
To evaluate and mitigate any impact on Frequentis, a special crisis team was set up under the chairmanship of the CEO. This team defined various measures to maintain operations without interruption wherever possible. Working from home and other measures to drive forward projects for customers and maintain supply chains were effective.

Acquisition of ATRiCS

In March 2020, Frequentis acquired a 51% stake in ATRiCS Advanced Traffic Solutions GmbH, which is based in Freiburg, Germany. ATRiCS was established in 2002 and is an owner-run company. It offers airport-specific software solutions for runway taxi operations management as well as consultancy services for airports and air navigation service providers – to improve safety and increase airport capacity. This acquisition enables the Frequentis Group to significantly extend the technology it offers. ATRiCS has been fully consolidated by the Frequentis Group since the start of April 2020.

Insolvency of Commerzialbank Mattersburg

Pursuant to the notification of the Austrian Financial Market Authority (FMA) dated 14 July 2020, Commerzialbank Mattersburg im Burgenland AG (Commerzialbank Mattersburg) was prohibited by decree, with immediate effect, from continuing its business operations and an auditor was appointed as government commissioner. Consequently, the bank is also prohibited from paying out any deposits.

At that time, Frequentis had deposits in the amount of EUR 30.9 million with Commerzialbank Mattersburg and declared the entire amount due against Commerzialbank Mattersburg on 16 July 2020. This declaration was also addressed to the government commissioner appointed by the FMA. As expected, Frequentis received a negative response thereto on 17 July 2020. On 24 July 2020, Frequentis received EUR 100,000 from Einlagensicherung AUSTRIA Ges.m.b.H., the protection entity for Austrian credit institutions, pursuant to the Austrian Deposit Protection and Investor Compensation Act.

On 27 July 2020, the Austrian Financial Market Authority filed an application with Eisenstadt regional court to open insolvency proceedings in respect of the assets of Commerzialbank Mattersburg. The opening of the insolvency proceedings in respect of the assets of Commerzialbank Mattersburg was announced on 28 July 2020. In an interim report dated 24 July, 2020, the government commissioner appointed by the Austrian Financial Market Authority stated that, according to an interim status report, Commerzialbank Mattersburg was mathematically over-indebted at the time when the Austrian Financial Market Authority prohibited its business operations. The entire amount of Frequentis' claim was filed in the insolvency proceedings on 29 July 2020.

Frequentis has engaged a team of lawyers, which is evaluating all legal options to protect the interests of Frequentis in the best possible manner. This evaluation includes the possible assertion and prosecution of potential claims against involved legal entities, organisations, and persons. Lawsuits have already been filed in this connection. From the present viewpoint, these lawsuits and the pursuit of further potential claims may take a significant period of time.

As a result of the insolvency, an impairment loss in the amount of EUR 30.9 million was recognised under impairment losses on financial assets for Frequentis' bank balances due on demand and its time deposits at Commerzialbank Mattersburg.

Order intake

Order intake in the Frequentis Group was EUR 314.6 million in 2020, a decline of 5.7% compared with 2019, when order intake was EUR 333.7 million. Unlike previous years, order intake was stronger in the first half of 2020 than in the second half of the year. In 2020, the ratio of orders placed in the first six months versus the second six months was 55%:45% (2019: 40%:60%).

The distribution of order intake between the two segments in 2020 was as follows: Air Traffic Management 64% (2019: 67%), Public Safety & Transport 36% (2019: 33%).

In response to the restrictions resulting from the COVID-19 pandemic, Frequentis introduced a range of measures such as digital marketing via webinars, online demonstration rooms, and the Sales Goes Digital initiative.

Highlights of order intake in the Air Traffic Management segment

The Air Traffic Management segment was able to gain further significant orders. These include supplying a voice communications solution for the Spanish air navigation service provider ENAIRE, which covers one of the widest areas in Europe, and an order from the Danish air navigation service provider NAVIAIR for a nationwide digital (remote) tower solution.

In Africa, Frequentis received an order from ASECNA, the air traffic control organisation for 17 countries in Africa, to deliver and install aeronautical message handling systems (AMHS, e.g. for flight plans and weather data) for eight countries.

In the new drone management market, a reference order was secured in Norway. Frequentis' cloud-based solution enables the Norwegian air navigation service provider AVINOR to integrate drones safely and efficiently into Norwegian airspace.

Installed base business in the Defence business domain is developing positively and follow-on orders were acquired, especially for programmes in Europe (for example, from customers in Germany, Switzerland, Poland, and Austria), as well as in Australia.

Highlights of order intake in the Public Safety & Transport segment

Within the Public Safety & Transport segment, the Public Safety business domain received an order to deliver a future-oriented communication system for the police and fire service control centres in Hamburg, extending its market leadership with the emergency services in Germany.

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 expansion and maintenance contracts.

In the Maritime business domain, an order placed in 2020 for renewal of the Swedish coastal radio system testifies to Frequentis' strong presence in northern Europe.

Orders on hand

Orders on hand amounted to EUR 427.6 million as at 31 December 2020, an increase of 9.2% or EUR 36.1 million compared with year-end 2019 (EUR 391.5 million). The Air Traffic Management segment accounted for around 58% of total orders on hand (December 2019: 60%) and the Public Safety & Transport segment for 42% (December 2019: 40%).

Revenues and operating performance

Despite the pandemic, revenues of EUR 299.4 million were generated in 2020 (2019: EUR 303.6 million). That was a decline of 1.4%. In the Air Traffic Management segment, revenues dropped to EUR 203.1 million (-3.8%), whereas revenues in the Public Safety & Transport segment increased by 4.1% to EUR 96.3 million.

In 2020, the Air Traffic Management segment accounted for 68% of Group revenues (2019: 70%) and the Public Safety & Transport segment accounted for 32% (2019: 30%). Looking at the regional revenue split in 2020, Europe accounted for 66% (2019: 61%), the Americas for 16% (2019: 19%), Asia for 11% (2019: 13%), Australia/Pacific for 5% (2019: 6%), and Africa for around 1% (2019: 1%). Approximately 1% (2019: <1%) of revenues were not allocated to a region.

The other operating income increased to EUR 8.6 million (2019: EUR 6.2 million). The biggest single items here are grants and subsidies for research and development costs and income from research subsidies. Operating performance declined by 0.8% to EUR 307.9 million in 2020.

Earnings

The cost of materials and purchased services decreased by 8.1% to EUR 75.0 million (2019: EUR 81.6 million) due to the lower material intensity of the projects undertaken. Personnel expenses increased by 2.0% to EUR 157.9 million (2019: EUR 154.8 million), principally due to the increase in the number of employees as a result of the new companies in the consolidated group. Taking the cost of materials and purchased services and personnel expenses together, there was a year-on-year decline of 1.5% in 2020. Frequentis therefore managed to minimise the impact of the pandemic through appropriate management of projects (e.g. through virtual project acceptances) and generated roughly the same level of revenues with the same absolute expenses.

The other operating expenses dropped by 24.4% to EUR 33.0 million (2019: EUR 43.7 million). Travel expenses, advertising costs, and a range of other items declined. Legal and consulting expenses increased, mainly due to expenses for legal steps relating to the insolvency of Commerzialbank Mattersburg, and M&A activities. For a detailed list of all items included in other operating expenses see ↗ consolidated financial statements, note 9.

The reduction in travel expenses is related to the travel restrictions due to the COVID-19 pandemic, the resulting widespread switch to project acceptance via video conferencing, and digital marketing and sales activities. The travel restrictions also led to a reduction in advertising expenses due to the cancellation of trade shows. It should be noted that savings on this scale will not be repeated in the future because complete digitisation of on-site acceptance procedures, training, trade shows, and sales activities is not possible. Much will depend on the extent to which projects and sales activities can be carried out virtually in the future or whether, when the pandemic is contained, customers, suppliers, and business partners will move back towards presence-based activities.

EBITDA (earnings before interest, taxes, depreciation, amortisation, and impairment losses) improved by EUR 11.7 million to EUR 41.9 million in 2020 (2019: EUR 30.2 million). The EBITDA margin (relative to revenues) was 14.0%, compared with 9.9% in 2019.

Depreciation and amortisation increased by EUR 1.1 million to EUR 14.0 million. The impairment loss on goodwill in respect of Systems Interface Ltd., UK, was EUR 1.1 million, see ↗ consolidated financial statements, note 18.

Despite the COVID-19 pandemic, as a result of all the above changes, EBIT increased by EUR 9.6 million to EUR 26.8 million in 2020 (2019: EUR 17.2 million). The EBIT margin (relative to revenues) was 9.0%, compared with 5.7% in 2019.

Financial income dropped to less than EUR 0.1 million (2019: EUR 0.4 million). Unlike previous years, in 2020 this item no longer included interest income from Commerzialbank Mattersburg. Financial expenses declined to EUR 0.6 million (2019: EUR 0.8 million). The impairment loss on financial assets in the amount of EUR 30.9 million is almost entirely due to the impairment loss on bank deposits recognised after the insolvency of Commerzialbank Mattersburg.

Income from investments accounted for at equity increased to over EUR 0.2 million in 2020 (2019: over EUR 0.1 million).

The profit/loss before tax was influenced, on the one hand, by the positive development of EBIT and, on the other, by the impairment loss due to the insolvency of Commerzialbank Mattersburg, resulting in a loss of EUR 4.4 million in 2020, compared with a profit of EUR 17.0 million in 2019.

Income tax income was EUR 1.0 million in 2020, whereas income tax expense of EUR 4.5 million was reported in 2019. The principal reason for the income tax income in 2020 was the recognition of deferred tax assets in connection with the impairment loss on the deposits at Commerzialbank Mattersburg.

In 2020, the Group reported a loss for the period of EUR 3.4 million, compared with a profit of EUR 12.5 million in 2019. The impact of the impairment loss on the deposits at Commerzialbank Mattersburg on the loss for the period was EUR 23.2 million (including the tax effect). Without this impairment loss, the Group would have reported a profit for the period of EUR 19.8 million.

Basic and diluted earnings per share were EUR -0.30 in 2020 (EUR 1.50 without the impairment loss following the insolvency of Commerzialbank Mattersburg), compared with EUR 0.93 in 2019.

Employees

The headcount increased by 3.1% to an average of 1,907 employees in 2020 (2019: 1,849 employees).

Asset and capital structure

Total assets increased by 2.0% to EUR 277.6 million as at end-December 2020 (year-end 2019: EUR 272.1 million). Despite the impairment loss on the deposits at Commerzialbank Mattersburg, the equity ratio was held at 40.7% (year-end 2019: 42.7%). Equity decreased by 2.8% or EUR 3.2 million to EUR 113.0 million (year-end 2019: EUR 116.2 million).

The net cash position (cash and cash equivalents and time deposits less liabilities to banks and other financial liabilities) was EUR 85.0 million as at end-December 2020, which was above the net cash position of EUR 77.8 million recorded at year-end 2019.

Non-current assets amounted to EUR 62.2 million at end-December 2020 (year-end 2019: EUR 71.5 million). The main items here are property, plant and equipment, which totalled EUR 46.6 million (year-end 2019: EUR 48.2 million), and intangible assets which amounted to EUR 9.0 million (year-end 2019: EUR 7.6 million).

Current assets amounted to EUR 215.4 million as at end-December 2020 (year-end 2019: EUR 200.6 million). The principal items here are cash and cash equivalents of EUR 91.3 million (year-end 2019: EUR 74.9 million, including short-term time deposits), trade accounts receivable of EUR 59.3 million (year-end 2019: EUR 58.5 million), and contract assets from contracts with customers of EUR 38.4 million (year-end 2019: EUR 38.4 million).

Around 80% of the cash and cash equivalents of EUR 91.3 million as at end-December 2020 were deposited with nine system-relevant major banks in Austria and Germany. The remaining amount (approximately 20%) was deposited at around 20 other banks in Europe, Australia, Asia, and the Americas.

On the liabilities side, the main item was equity of EUR 113.0 million as at end-December 2020 (year-end 2019: EUR 116.2 million). Non-current liabilities totalled EUR 57.5 million (year-end 2019: EUR 58.9 million). The biggest item here was non-current lease liabilities, which totalled EUR 31.8 million.

Current liabilities totalled EUR 107.2 million at end-December 2020 (year-end 2019: EUR 97.1 million). The principal item here is contract liabilities from contracts with customers totalling EUR 62.8 million (year-end 2019: EUR 48.7 million). The increase of EUR 14.2 million in this item was the largest increase on the liabilities side. Further major items are trade accounts payable totalling EUR 11.9 million (year-end 2019: EUR 13.7 million) and provisions, which amounted to EUR 13.6 million (year-end 2019: EUR 13.5 million).

Cash flow

The cash flow from operations improved to EUR 42.4 million in 2020 (2019: EUR 34.2 million). After factoring out the impact of the impairment loss for the deposits at Commerzialbank Mattersburg, in line with EBITDA and EBIT, there was an improvement in the pre-tax loss in 2020. This is also reflected to a large extent in the cash flow from operations.

The cash flow from operating activities increased to EUR 54.8 million in 2020 (2019: EUR 17.7 million). The principal positive factors affecting the cash flow, apart from the improvement in the cash flow from operations, were the only limited increase in trade accounts receivable and the rise in contract liabilities. This was countered by a change in other receivables and other liabilities.

The cash outflow for investing activities was EUR 7.0 million in 2020, compared with an outflow of EUR 4.6 million in 2019. Capital expenditures (cash outflows for the purchase of intangible assets, property, plant and equipment) were around the same level as in 2019 at EUR 4.5 million. A total of EUR 2.6 million was spent on the acquisition of ATRiCS and the shares in Nemergent.

The cash outflow for financing activities was EUR 10.1 million in 2020 (2019: cash inflow of EUR 8.0 million). The reduction was mainly due to the cash inflow from the capital increase. While the IPO in May 2019 resulted in an inflow of EUR 21.6 million, in 2020 the inflow from the capital increase for the employee participation programme in May 2020 was EUR 1.3 million (gross proceeds).

The total cash flow in 2020 was EUR 37.7 million (2019: EUR 21.2 million). Cash and cash equivalents were EUR 91.3 million as at end-December 2020 (year-end 2019: EUR 66.9 million). In the year-on-year comparison, it should be noted that at year-end 2019 the cash and cash equivalents included deposits of EUR 12.7 million at Commerzialbank Mattersburg that were due on demand. This item did not include the fixed-term deposits of EUR 18.0 million. Excluding the deposits due on demand at Commerzialbank Mattersburg, at year-end 2019 cash and cash equivalents would have amounted to EUR 54.2 million.

Business relations with related parties

For details see ↗ consolidated financial statements, note 38.

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 or 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.

Revenues in the Air Traffic Management segment fell by 3.8% year-on-year to EUR 203.1 million in 2020 (2019: EUR 211.2 million). EBIT was EUR 14.6 million (2019: EUR 10.4 million).

Highlights from the operating business

There were several highlights in the operating business. Examples are project acceptances in Vienna and Melbourne as part of the Australian OneSky project, by the German Armed Forces, and in Switzerland.

Two assignments of strategic importance are Frequentis' involvement in the AIRlabs Austria innovation lab research project and the declaration of intent on extending the cooperation with defence and security sensor specialist Hensoldt on the next generation of integrated drone defence systems; the two companies are currently working together on the FALKE research project.

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 emergency 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 operators.

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

Revenues in the Public Safety & Transport segment increased by 4.1% to EUR 96.3 million (2019: EUR 92.4 million). EBIT improved to EUR 12.3 million (2019: EUR 7.0 million).

Highlights from the operating business

A highlight in the Public Safety business domain was the remote acceptance of a major project for the Norwegian safety network Nødnett.

The Public Transport business domain achieved key milestones in rail projects in Central and Eastern Europe, including remote acceptance in some cases.

In the Maritime business domain, the important acceptance for the GMDSS (Global Maritime Distress and Safety System) for Greenland was conducted remotely.

Of strategic importance is the order received by the BroadPort consortium, led by Frequentis, for phase 2 of the innovative European investment procurement programme BroadWay for the use of LTE/5G for safety-critical broadband communication. An important milestone was achieved in November 2020 when the capability of this system was demonstrated at a Europe-wide interim presentation.

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 remote tasks, for example. 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 the New Business Development department. The present focus is on the ongoing development of the digital (remote) tower technology, drone management, and the use of 5G/LTE for safety-critical applications. Another focal area is developing 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 wide 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 www.frequentis.com/en > Investor Relations > Corporate Governance.

Opportunity and risk management

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

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

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 business units, which monitor operating performance and marginal income with a view to the Group's profit.

Evaluation of risk management

In July 2020, the Executive Board asked the auditor, BDO Austria GmbH Wirtschaftsprüfungs- und Steuerberatungsgesellschaft, to evaluate the risk management with respect to the C rule no. 83 of the Austrian Code of Corporate Governance.

In August 2020, and again in March 2021, as part of the audit of the financial statements, BDO Austria 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

The ongoing development of the pandemic 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.

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, which could have an adverse effect on the business, financial condition, and results of operations of 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, and 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 few or only one potential customer per country is available, 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, thus 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 programmes, component parts, sub-assemblies, or modules.
- Fluctuations in exchange rates and rising interest rates.
- 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 Involvement Program), prescribe minimum domestic content 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 (which might not be recoverable from the defaulting or non-performing subcontractor) 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.
- 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 several major 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 department 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 function is a staff department reporting to the CEO. The annual audit schedule is determined by the Supervisory Board's Audit Committee on the basis of a proposal by the internal audit function. 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. Audits are conducted locally and at headquarters. The results of audits are presented once a year to the Audit Committee.

Information pursuant to Section 243a (1) UGB

1. The share capital of Frequentis AG was EUR 13,280,000.00 as at 31 December 2020 and was divided into 13,279,999 no-par 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).

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 been concluded between Frequentis Group Holding GmbH and B&C Holding Österreich GmbH.

3. As at 31 December 2020, 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 2020.

4. As at 31 December 2020, 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 Extraordinary General Meeting of 20 September 2019, pursuant to Section 65 (1) No. 4 and No. 8, to purchase, via the stock exchange or off-market, bearer shares in the company in an amount of up to 10% of the company's share capital during a period of 30 months from the date of the resolution by the General Meeting, whereby the minimum consideration per share 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. There is currently no share purchase programme and the company does not have any treasury shares.

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

In 2020, which was dominated at all companies by the COVID-19 pandemic, Frequentis was able to utilise its strengths in digitisation. In this context, it benefited from customers' high confidence in the company, and the fact that installations and a considerable proportion of project acceptances could be performed remotely, despite the travel restrictions. The global presence with own locations in several countries was helpful.

Moreover, for many years Frequentis' corporate culture has permitted mobile working practices (working from home or on-site at customers' premises), so both employees and the existing IT infrastructure handled the shift to working from home very well. As a result of the measures taken in 2020 to maintain operations without interruption wherever possible and the reduction in the other operating expenses (predominantly travel expenses), revenues were EUR 299.4 million in 2020 and EBIT increased to EUR 26.8 million.

The business model proved resilient even in the pandemic conditions in 2020. 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. That has not changed.

Order situation

Order intake in the Frequentis Group was EUR 314.6 million in 2020 and orders on hand at year-end 2020 amounted to EUR 427.6 million. It is expected that the orders on hand will result in recognition of revenues of approximately EUR 241.6 million in 2021 and approximately EUR 186.0 million in 2022 and subsequent years.

Acquisitions

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

The acquisition of ATRiCS and the equity investment in Nemergent in 2020 as well as the planned acquisition of business units of the listed US company L3Harris Technologies announced in February 2021 broaden and diversify Frequentis' product portfolio. The proposed transaction with L3Harris comprises the full acquisition of the civil and military ATM voice and communications product lines, and software and cloud solutions for traffic optimisation (traffic synchronisation). The traffic optimisation solutions can help reduce air traffic emissions.

In addition to these acquisitions, L3Harris and Frequentis have entered into cooperation agreements. As an L3Harris technology partner, Frequentis will provide voice communication systems for use in L3Harris' large-scale solutions and service business. The acquisition is expected to be completed in the second half of the year and is subject to competition clearance and regulatory approvals. Since closing and thus the full consolidation of the various L3Harris units is expected to take place at different times in the second half of 2021 and will involve both transaction and post-merger integration costs, these units are not expected to make a significant contribution to revenues and earnings in the 2021 financial year. In 2022, the transaction is expected to contribute revenues of around EUR 30 million.

Forecast for 2021

The present financial year is characterised by rising demand from customers for software solutions. Commercial technologies, such as cloud-based solutions and 5G/LTE, are continuing their advance into safety-critical control centres operated by the public sector.

Important developments such as digital remote towers and flight information systems to integrate drones into commercial and military airspace are gradually becoming reality. Frequentis is positioned on the front line in all these topics and is therefore also involved in the related standard-setting bodies. Planned capital expenditure (capex) remains at EUR 5 million.

Despite global measures to contain the pandemic and the increasing availability of vaccines, Frequentis faces a number of uncertainties in 2021. It is not possible to make a reliable estimate of the exact effect of the ongoing pandemic on costs (e.g. travel expenses), revenues (e.g. due to the deferral of project acceptances), supply chains, the budgets available, and the potential postponement of investments.

Nevertheless, in 2021 Frequentis aims to maintain revenues and order intake at around the 2020 level, or even increase them. In view of the need to visit customer premises (e.g. for go-lives, maintenance, system upgrades, and marketing and sales activities), travel expenses, in particular, are expected to rise again. Frequentis expects to report an EBIT margin of around 5-7% in 2021 – depending on how the pandemic develops and on the transaction and post-merger integration costs for the planned integration of the L3Harris units.

Vienna, 15 March 2021

Consolidated Financial Statements

as at 31 December 2020

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Consolidated income statement

	Note	2020 EUR thousand	2019 EUR thousand
Revenues	(3) (4)	299,374	303,631
Change in inventories of finished goods and work in progress	(3)	-272	9
Own work capitalised	(3) (5)	216	372
Other operating income	(3) (6)	8,559	6,243
Total income (operating performance)		**307,877**	**310,255**
Cost of materials and purchased services	(7)	-75,012	-81,597
Personnel expenses	(8)	-157,932	-154,810
Other operating expenses	(9)	-33,016	-43,669
Earnings before interest, taxes, depreciation, amortisation, and impairment losses (EBITDA)		**41,917**	**30,179**
Depreciation of property, plant and equipment and amortisation of intangible assets	(10)	-14,037	-12,962
Impairment loss on goodwill	(18)	-1,072	0
Earnings before interest and taxes (EBIT)	**(3)**	**26,808**	**17,217**
Financial income	(11)	94	440
Financial expenses	(12)	-615	-819
Impairment loss on financial assets	(13)	-30,923	-2
Earnings from investments accounted for at equity	(19)	214	148
Profit/loss before tax		**-4,422**	**16,984**
Income taxes	(14)	1,033	-4,462
Profit/loss for the period		**-3,389**	**12,522**
Profit/loss attributable to:			
Equity holders of the company		**-4,036**	**11,818**
Non-controlling interests	**(30)**	**647**	**704**
		-3,389	**12,522**
Basic earnings per share	**(15)**	**-0.30**	**0.93**
Diluted earnings per share	**(15)**	**-0.30**	**0.93**

Consolidated statement of comprehensive income

	Note	2020 EUR thousand	2019 EUR thousand
Profit/loss for the period		**-3,389**	**12,522**
Items that may be reclassified to the income statement in subsequent periods			
Foreign currency translation	(28)	-784	302
Realised gains/losses from foreign currency translation	(28)	0	-17
Measurement of cash flow hedges	(28) (36)	736	-860
Income taxes relating to cash flow hedges	(28)	-184	215
Items that may not be reclassified to the income statement			
Remeasurement of post-employment benefits	(28) (31)	-703	-1,480
Investments accounted for at equity – amounts recognised in other comprehensive income	(28)	-1	-2
Income taxes relating to the remeasurement of defined benefit plans in other comprehensive income	(28)	176	370
Other comprehensive income, net of tax		**- 760**	**-1,472**
Total comprehensive income		**-4,149**	**11,050**
Total comprehensive income attributable to:			
Equity holders of the company		**-4,813**	**10,362**
Non-controlling interests		**664**	**688**
		-4,149	**11,050**

Consolidated statement of financial position

ASSETS	Note	31 Dec. 2020 EUR thousand	31 Dec. 2019 EUR thousand
Non-current assets			
Property, plant and equipment	(16)	46,605	48,244
Intangible assets	(17)	9,020	7,572
Goodwill	(18)	2,886	2,228
Investments accounted for at equity	(19)	1,509	733
Equity instruments	(20)	863	874
Other non-current financial assets		228	189
Time deposits	(21)	0	9,997
Deferred tax assets	(14)	1,092	1,705
		62,203	**71,542**
Current assets			
Inventories	(22)	12,628	13,805
Trade accounts receivable	(23)	59,318	58,550
Contract assets from contracts with customers	(24)	38,420	38,354
Contract costs	(25)	3,029	2,549
Other current financial assets	(26)	2,750	704
Other current non-financial assets	(26)	7,524	7,325
Income tax receivables		481	4,432
Time deposits	(21)	0	7,998
Cash and cash equivalents	(21)	91,265	66,882
		215,415	**200,599**
Total assets		**277,618**	**272,141**

LIABILITIES AND EQUITY	Note	31 Dec. 2020 EUR thousand	31 Dec. 2019 EUR thousand
Shareholders' equity			
Share capital	(27)	13,280	13,200
Capital reserves	(28)	21,138	19,976
Retained earnings	(28) (29)	75,863	81,691
Adjustments for foreign currency translation		-1,053	-249
Equity attributable to equity holders of the parent company		**109,228**	**114,618**
Non-controlling interests	(30)	3,751	1,568
Total shareholders' equity		**112,979**	**116,186**
Non-current liabilities			
Liabilities to banks and other financial liabilities		4,907	5,500
Provisions	(31)	17,212	16,066
Lease liabilities	(37)	31,811	32,788
Other non-current financial liabilities	(33)	1,722	663
Deferred tax liabilities	(14)	1,831	3,840
		57,483	**58,857**
Current liabilities			
Liabilities to banks and other financial liabilities		1,315	1,609
Contract liabilities from contracts with customers	(32)	62,849	48,682
Trade accounts payable		11,923	13,650
Lease liabilities	(37)	7,292	7,289
Other current financial liabilities	(33)	1,600	3,340
Other current non-financial liabilities	(33)	6,617	7,838
Current tax liabilities		1,981	1,151
Provisions	(34)	13,579	13,539
		107,156	**97,098**
Total shareholders' equity and liabilities		**277,618**	**272,141**

Consolidated cash flow statement

	Note	2020 EUR thousand	2019 EUR thousand
Profit/loss before tax		-4,422	16,984
Net interest income/expense		521	378
Foreign currency translation		-222	-33
Profit/loss from the disposal of non-current assets		34	18
Depreciation of property, plant and equipment, amortisation of intangible assets, and impairment loss on goodwill	(16) (17)	15,109	12,962
Earnings from investments accounted for at equity	(19)	-214	-148
Change in provisions	(31) (34)	483	4,001
Impairment loss on time deposits at Commerzialbank Mattersburg	(13)	17,995	0
Impairment loss on current account deposits (due on demand) at Commerzialbank Mattersburg	(13)	12,718	0
Impairment loss on interest receivables from Commerzialbank Mattersburg	(13)	205	0
Other non-cash income/expenses		170	65
Net cash flow from operations		**42,377**	**34,227**
Change in inventories	(22)	1,177	-690
Change in trade accounts receivable	(23)	879	-14,154
Change in contract assets	(24)	279	2,496
Change in contract costs	(25)	-479	-852
Change in other receivables	(26)	-2,448	2,463
Change in trade accounts payable		-1,258	-2,048
Change in contract liabilities	(32)	13,781	59
Change in other liabilities	(33)	-2,725	1,895
Change in net working capital		**9,206**	**-10,831**
Interest paid		-618	-799
Interest received		87	235
Dividends received		144	104
Income taxes paid/refunded	(14)	3,556	-5,208
Net cash flow from operating activities		**54,752**	**17,728**

	Note	2020 EUR thousand	2019 EUR thousand
Cash inflows from the sale of intangible assets		7	0
Cash inflows from the sale of property, plant and equipment		64	289
Cash inflows from the sale of securities and equity instruments		6	0
Cash outflows for the purchase of intangible assets		-1,564	-1,560
Cash outflows for the purchase of property, plant and equipment		-2,970	-2,981
Cash outflows for investment in securities, equity instruments, and time deposits		0	-294
Cash outflows for the acquisition of associated companies		-707	-27
Cash outflows for the acquisition of a subsidiary, less acquired cash and cash equivalents		-1,849	0
Net cash flow from investing activities		**-7,013**	**-4,573**
Dividends paid to owners	(27)	-1,992	-1,320
Dividends paid to non-controlling interests	(30)	-427	-540
Cash inflows from capital increase (IPO 2019)	(27)	1,324	21,600
Cash outflows for transaction costs for the capital increase	(27)	-109	-892
Cash inflows from non-controlling interests		122	79
Cash inflows from loans and other financing		455	82
Cash outflows for repayment of loans and other financing		-1,821	-3,744
Cash outflows for payments of principal on lease liabilities	(37)	-7,633	-7,238
Net cash flow from financing activities		**-10,081**	**8,027**
Change in cash and cash equivalents			
Net cash flow from operating activities		54,752	17,728
Net cash flow from investing activities		-7,013	-4,573
Net cash flow from financing activities		-10,081	8,027
Net change in cash and cash equivalents		**37,658**	**21,182**
Cash and cash equivalents at start of period		**66,882**	**45,543**
Cash-flow related change in cash and cash equivalents		37,658	21,182
Foreign currency translation		-556	163
Impairment loss on current account deposits (due on demand) at Commerzialbank Mattersburg		-12,718	0
Other loss allowances		-1	-6
Cash and cash equivalents at end of period		**91,265**	**66,882**

For further information on the consolidated cash flow statement, see Note 35.

Consolidated statement of changes in shareholders' equity

in EUR thousand	Share capital	Capital reserves	IAS 19 reserve (net of tax)	Option reserve (net of tax)	Cash flow hedge reserve (net of tax)	Retained earnings	Foreign currency translation	Equity attributable to equity holders of the parent company	Non-controlling interests	Total share-holders' equity
Note	(27)	(28)	(31)	(29)	(36)	(28)			(30)	
As at 1 January 2020	13,200	19,976	-5,608	63	-675	87,911	-249	114,618	1,568	116,186
Changes due to acquisitions									1,824	1,824
Capital increase	80	1,244						1,324		1,324
Costs of the capital increase		-109						-109		- 109
Related income taxes		27						27		27
Cash inflows from non-controlling interests									122	122
Profit/loss for the period						-4,036		-4,036	647	-3,389
Other comprehensive income			-525		552		-804	- 777	17	- 760
Total comprehensive income			-525		552	-4,036	-804	-4,813	664	-4,149
Dividends						-1,992		-1,992	-427	-2,419
Other changes				169		4		173		173
As at 31 December 2020	**13,280**	**21,138**	**-6,133**	**232**	**- 123**	**81,887**	**-1,053**	**109,228**	**3,751**	**112,979**

in EUR thousand	Share capital	Capital reserves	IAS 19 reserve (net of tax)	Option reserve (net of tax)	Cash flow hedge reserve (net of tax)	Retained earnings	Foreign currency translation	Equity attributable to equity holders of the parent company	Non-controlling interests	Total share-holders' equity
Note	(27)	(28)	(31)	(29)	(36)	(28)			(30)	
As at 31 December 2018	12,000	245	-4,512		-30	77,124	-534	84,293	1,340	85,633
Changes in accounting policies (IFRS 16)						290		290		290
As at 1 January 2019	12,000	245	-4,512		-30	77,414	-534	84,583	1,340	85,923
Capital increase	1,200	20,400						21,600		21,600
Costs of the capital increase		-892						-892		- 892
Related income taxes		223						223		223
Cash inflows from non-controlling interests									79	79
Profit/loss for the period						11,817		11,817	705	12,522
Other comprehensive income			-1,096		-645	0	285	-1,456	-17	-1,473
Total comprehensive income			-1,096		-645	11,817	285	10,362	688	11,050
Dividends						-1,320		-1,320	-539	-1,859
Other changes				63				63		63
As at 31 December 2019	**13,200**	**19,976**	**-5,608**	**63**	**- 675**	**87,911**	**- 249**	**114,618**	**1,568**	**116,186**

Notes to the consolidated financial statements

1. General information

Reporting

The consolidated financial statements of Frequentis AG for the 2020 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 2020 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 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 2020.

The financial year is 1 January to 31 December 2020.

In the reporting period, the Executive Board comprised:

- Norbert Haslacher, Chairman
- Sylvia Bardach
- Hermann Mattanovich

In the reporting period, the Supervisory Board comprised:

- Johannes Bardach, Chairman
- Dr. Karl Michael Millauer, Deputy Chairman
- Reinhold Daxecker, member
- Dr. Boris Nemsic, member
- Petra Preining, member
- Siegfried Meisel, member pursuant to Section 110 of the Austrian Labour Relations Act (ArbVG)
- Gabriele Schedl, member pursuant to Section 110 ArbVG
- Reinhard Steidl, member pursuant to Section 110 ArbVG

The consolidated financial statements were approved by the Executive Board on the date of signature, subject to approval by the Supervisory Board at its meeting on 31 March 2021.

Consolidated group

Besides Frequentis AG, which is the parent company of the consolidated group, the consolidated financial statements of Frequentis AG include 6 (2019: 5) domestic subsidiaries and 23 (2019: 21) 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.

Three foreign companies and two 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%)
- CNS-Solutions & Support GmbH, Vienna (100%)
- Frequentis DFS Aerosense GmbH, Vienna (70%)
- PDTS GmbH, Vienna (100%)
- skyzr GmbH, Vienna (100%)
- TEAM Communication 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 Romania S.R.L., Cluj-Napoca (100%)
- Frequentis Slovakia s.r.o., Bratislava (100%)*
- Frequentis Solutions s.r.o., Bratislava (100%)*
- Frequentis UK Ltd., Twickenham (100%)
- 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 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%)

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
- 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%)
- GroupEAD Europe S.L., Madrid (28%)
- Mission Embedded GmbH, Vienna (20%)
- Nemergent Solutions S.L., Bilbao (15%)

* As at 1 January 2021, Frequentis Slovakia s.r.o. was merged into Frequentis Solutions s.r.o., and Frequentis Solutions s.r.o. was renamed Frequentis Solutions & Services s.r.o.

All information on the consolidated group relates to the circumstances as at 31 December 2020.

Changes to the consolidated group

ATRiCS Advanced Traffic Solutions GmbH:

With effect from 1 April 2020, Frequentis acquired 51% of the shares in ATRiCS Advanced Traffic Solutions GmbH (registered office Freiburg im Breisgau, Germany). This has driven forward Frequentis' growth strategy and extended its product range in the area of tower automation. As an innovative provider of ATM tower automation products, ATRiCS offers software solutions and services for airport operators and air traffic control organisations. Its focus is on integrating and automating workflows for air traffic controllers to reduce workloads and draw attention to potential risk situations, as well as improving safety and increasing capacity at airports.

ATRiCS' portfolio of products and services offers a range of direct applications in specific Frequentis projects. It considerably expands Frequentis' products and know-how, especially for larger hubs. There is also great potential in flight data integration, where ATRiCS has established itself as the European market leader for optimising departure sequencing.

The purchase agreement was signed on 5 March 2020 and closing took place on 1 April 2020.

The contractually agreed purchase price comprises the following components:

	Fair value as at 1 April 2020 EUR thousand
Basic purchase price	**1,859**
Earn-out payment	1,227
Shareholder contribution	436
Receivable due to risk retention	106
Total consideration transferred	**3,628**

The basic purchase price and the shareholder contribution were not contingent upon any further conditions and payment has already been made. The remaining estimated purchase price liability amounting to EUR 1,345 thousand (including pro rata interest) is included in other liabilities.

The receivable due to risk retention contains a contingent consideration in the form of a non-proportionate dividend to be distributed to the sellers if an existing customer receivable is paid by 31 December 2021. Since the assessment of the outstanding customer receivable has altered, the receivable due to risk retention has been reduced compared with the amount presented in the half-year financial report as at 30 June 2020.

The earn-out payment is based on the relevant annual financial statements in accordance with the German Commercial Code and is defined as follows:

Element of the earn-out payment	Amount in EUR thousand
Target value	**3,570**
+/- Earnings-related adjustment (achievement of an EBIT target)	-3,570 to 3,570
+/- Net cash/debt as at 31 December 2024	Open
+/- Difference from target working capital as at 31 December 2024	Open
Earn-out claim	**Open**

For the purpose of the purchase price allocation, Frequentis analysed and revised ATRiCS' corporate plan to arrive at the most realistic measurement of the earn-out payment as at the acquisition date. On this basis, the fair value of the earn-out payment, which is allocated to level 3 of the fair value hierarchy, was measured as follows:

Earn-out	Amount in EUR thousand
Target value	**3,570**
+/- Earnings-related adjustment (achievement of an EBIT target)	-2,758
+/- Net cash/debt as at 31 December 2024	458
+/- Difference from target working capital as at 31 December 2024	-43
Earn-out claim	**1,227**

A change in the EBIT target, net cash/debt, and the target working capital would result in the following earn-out payments:

Earn-out	Amount in EUR thousand
EBIT target +10%	**1,575**
EBIT target -10%	893
Net cash/debt as at 31 December 2024 +10%	1,273
Net cash/debt as at 31 December 2024 -10%	1,181
Working capital as at 31 December 2024 +10%	1,313
Working capital as at 31 December 2024 -10%	1,142

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

	Fair value as at 1 April 2020 EUR thousand
Intangible assets	**3,208**
Property, plant and equipment	149
Trade accounts receivable	1,647
Contract assets	345
Cash and cash equivalents	10
Receivable from shareholder contribution	436
Other assets	44
Deferred tax liabilities	**-803**
Non-current lease liabilities	-1
Contract liabilities from contracts with customers	-387
Liabilities to banks and other financial liabilities	-472
Trade accounts payable	**-80**
Current lease liabilities	-3
Other liabilities	**-371**
Net assets	**3,722**
Attributable to non-controlling interests	1,824
Attributable to the Frequentis Group	1,898
Goodwill	1,730
Consideration paid	**3,628**

The goodwill from this acquisition can be allocated, in particular, to the expected synergies from the use of the Group's worldwide distribution network, new technologies, and the utilisation of the results of joint research activities.

The non-controlling interests were measured as 49% of the net assets acquired, excluding any proportionate goodwill.

Transaction costs incurred for the business combination were recognised in current expenses for the period. The receivables assumed do not contain any receivables that are expected to be uncollectable, so the carrying amount corresponds to the fair value.

Since the acquisition, ATRiCS has contributed revenues of EUR 2,998 thousand and EBIT of EUR 1,126 thousand to the consolidated figures of the Frequentis Group. Had ATRiCS been acquired at the beginning of the 2020 financial year, it would have contributed revenues of EUR 3,908 thousand and EBIT of EUR 1,107 thousand to the consolidated figures of the Frequentis Group.

Other changes to the consolidated group

In the reporting period, 15% of the shares in Nemergent Solutions S.L. were acquired. This equity investment was made via BlueCall Systems GmbH (a wholly owned subsidiary of Frequentis AG) and is recognised as an associated company because the Frequentis Group exercises significant influence by delegating a representative to Nemergent Solutions' Board of Directors. Further details are given in Note 19. Investments accounted for at equity (associated companies).

TEAM Technology Management GmbH, Germany (registered office Gräfelfing, Germany) was established in March 2020. TEAM Communication Technology Management GmbH (51% of equity held by Frequentis AG) has a 51% stake in this company. In December 2020, skyzr GmbH (registered office Vienna, Austria) was established. BlueCall Systems GmbH holds all shares in this company.

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 personnel-related provisions, 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 for at equity compared to the policies 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 average 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 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. 2020	Closing rate 31 Dec. 2019	Average rate 31 Dec. 2020	Average rate 31 Dec. 2019
AED	Emirati dirham	4.51	4.02	4.21	4.11
AUD	Australian dollar	1.59	1.60	1.66	1.61
BRL	Brazilian real	6.37	4.52	6.00	4.42
CAD	Canadian dollar	1.56	1.46	1.54	1.48
CNY	Chinese renminbi yuan	8.02	7.82	7.90	7.72
CZK	Czech koruna	26.24	25.41	26.50	25.66
GBP	British pound	0.90	0.85	0.89	0.88
NOK	Norwegian krone	10.47	9.86	10.78	9.84
SGD	Singapore dollar	1.62	1.51	1.58	1.53
RON	Romanian leu	4.87	4.78	4.84	4.75
USD	US dollar	1.23	1.12	1.15	1.12

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 2020 and were effective at that date:

- Definition of a Business (amendments to IFRS 3)
- Definition of Material (amendments to IAS 1 and 8)
- References to the Conceptual Framework (amendments conceptual framework)
- Interest Rate Benchmark Reform (amendments to IFRS 9, IAS 39, and IFRS 7)

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 2020 financial year. The Frequentis Group did not adopt these standards early on a voluntary basis, even if they had already been endorsed by the EU.

	Newly amended IFRSs	Endorsement by the EU	Effective date	Significant effects
IFRS 16	COVID-19-Related Rent Concessions	9 Oct. 2020	1 June 2020*)	* None
IFRS 4	Extension of the Temporary Exemption from Applying IFRS 9	15 Dec. 2020	2021	None
IFRS 9, IAS 39, IFRS 7, IFRS 4, IFRS 16	Interest-rate Benchmark Reform (amendments)	13 Jan. 2021	2021	None
IAS 16	Property, Plant and Equipment – Proceeds before Intended Use	Planned for 2021	2022	None
IAS 37	Onerous Contracts – Cost of Fulfilling a Contract	Planned for 2021	2022	None
IFRS 3	Reference to the Conceptual Framework	Planned for 2021	2022	None
IAS 1	Classification of Liabilities as Current or Non-Current	Open	2023	None
IFRS 17	Insurance Contracts	Open	2023	None
IAS 1	Disclosure of Accounting Policies	Open	2023	None
IAS 8	Accounting Policies; Changes in Accounting Estimates and Errors	Open	2023	None
	Annual Improvements to IFRS Standards (2018– 2020 Cycle)	Open	2022	None

*) Companies must apply the amendments to IFRS 16 at the latest from 1 June 2020 for accounting periods starting on or after 1 January 2020.

Changes in accounting policies

In the reporting period, the presentation of receivables from/payables to affiliated and associated companies and of other assets and other liabilities was changed.

	31 Dec. 2019 EUR thousand	Adjustments EUR thousand	1 Jan. 2020 EUR thousand
Trade accounts receivable	58,527	23	58,550
Receivables from affiliated and associated companies	23	-23	0
Other current assets	8,029	-8,029	0
Other current financial assets		704	704
Other current non-financial assets		7,325	7,325
Trade accounts payable	13,468	182	13,650
Payables to affiliated and associated companies	182	-182	0
Other liabilities	11,178	-11,178	0
Other current financial liabilities		3,340	3,340
Other current non-financial liabilities		7,838	7,838

Impact of the COVID-19 pandemic

The COVID-19 pandemic triggered a global economic crisis. The Frequentis Group cannot completely avoid general economic developments. However, it supplies safety-critical infrastructure, which has to be upheld and maintained even in periods of crisis.

With a few exceptions, it was possible to continue business unchanged despite the restrictions. Frequentis Group staff had performed many activities on a mobile basis in the past, so switching to fully remote working (e.g. from home) was possible without major difficulties (with the exception of manual work performed on-site at some locations or on customers' premises). Since the ability to travel outside the countries in which the Frequentis Group has locations was very restricted, many customer acceptance procedures were performed using video conferencing, with additional technical and organisational support.

Where the project team was unable to complete work due to lockdowns or travel restrictions, postponement of the acceptance dates was agreed with some customers. In addition, longer payment terms were negotiated in some cases.

Despite the travel restrictions, it was possible to conduct a fair proportion of project acceptances remotely. Consequently, travel expenses were lower in the reporting period. Certain activities such as the installation and go-live of new systems were, and still are, only possible in those countries where Frequentis has its own sites or skilled technical partners, where travel by its staff is still possible, or the work can be performed by the customer with remote support. This means that some systems could not yet be (fully) installed and accepted by customers, resulting in a temporary shift in revenues.

To evaluate and mitigate any impact on the Group, a special crisis team was set up. This team defined various measures to keep operations running as best possible. Working from home and other measures to drive forward customers' projects and maintain supply chains were successful. In view of the lockdowns, the duration of the coronavirus crisis cannot be estimated reliably at present. It cannot be precluded that further lockdowns may be necessary in individual countries in 2021, so there is a certain degree of uncertainty in respect of the future performance of the Frequentis Group. However, since the Group has sufficient resources to continue its business operations, there is no uncertainty regarding its ability to continue as a going concern. The consolidated financial statements have therefore been prepared on a going concern basis. The impact of the COVID-19 pandemic on earnings is as follows:

- In view of the travel restrictions, many business trips could not be undertaken, resulting in a reduction in travel expenses (see Note 9. Other operating expenses).
- All trade shows were cancelled in the reporting period, leading to a reduction in advertising expenses (see Note 9. Other operating expenses).
- In the reporting period, there were no defaults on receivables due to the COVID-19 pandemic because most customers are in the public sector. Although the Frequentis Group considers that, due to its customer structure, there is no increased risk of credit losses, the loss allowance in accordance with IFRS 9 was calculated using a scale factor of 1.5. This increased the loss allowance by EUR 91 thousand (see Note 23. Trade accounts receivable).
- Due to the COVID-19 pandemic, the Frequentis Group assessed whether there is an indication that an asset is impaired. No indications of a pandemic-related impairment were identified but impairment losses were recognised for other reasons in the reporting period. These are outlined in more detail in Note 18. Goodwill.
- In certain cases, postponement of project milestones was negotiated at the request of customers as a result of the COVID-19 pandemic. This resulted in a shift in revenues and rescheduling of payment milestones to a later date.

In the reporting period, the Frequentis Group received various types of government grants totalling EUR 815 thousand. EUR 13 thousand is attributable to an investment subsidy granted to Frequentis AG.

Total government grants comprise the following:

Type of support	Category	Amount in EUR thousand
Support for personnel expenses (short-time working, government grant for personnel costs)	**Personnel expenses**	**762**
Reimbursement of wage tax from previous periods	Other operating income	25
Investment grant	Property, plant, and equipment	13
Reduction in corporation tax	Income taxes	8
Reduction in operating costs	Other operating expenses	7
Total government grants		**815**

The breakdown by region is as follows:

	2020 EUR thousand
Australia/Pacific	**472**
Americas	160
Europe (excluding Austria)	73
Asia	57
Austria	53
	815

A large proportion of the government grants comprises a job retention subsidy of EUR 401 thousand from the Australian government.

In addition, a Group company in the UK obtained a loan of EUR 56 thousand with a state guarantee, 0% interest in the first year, and no repayment of the principal in the first 18 months.

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 appropriate direct overhead costs.

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 recognised as current expenses in the year in which the expense is incurred; replacement costs and investments to increase value 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 and intangible assets with an indefinite useful life acquired in business combinations 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. Therefore, 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

Since the Frequentis Group has only concluded insignificant contracts as a lessor, only the regulations applicable for lessees are outlined below.

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

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, the carrying amount of the right-of-use asset is adjusted by the same amount or the adjustment is recognised in profit or loss if the carrying amount of the right-of-use asset 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.

Financial instruments

A financial asset or financial liability is initially measured at fair value plus transaction costs. Financial assets classified at fair value through profit or loss form an exception to this rule. 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: financial derivatives, 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, currency 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 2020 or 2019.

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 selected 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. At the date of initial recognition, the Group can irrevocably elect to designate financial assets at FVTPL, even though they meet the criteria for measurement at amortised cost or at FVOCI, if this avoids or significantly reduces an accounting mismatch.

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, is a derivative, or if the derivative is designated as a hedging instrument at the date of initial recognition.

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 expenses and foreign currency translation differences are recognised in profit or loss. 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.

At initial recognition and subsequently at each reporting date, derivatives are measured at fair value. 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 the income statement (revenues, other operating income or other operating expenses) in the period in which the hedged item affects the income statement.

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 the income statement. 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, changes in its fair value were recognised in profit or loss.

Receivables are measured at cost. Foreign currency receivables are measured using the average exchange rate on the reporting date.

Provided that an asset is not a purchased or originated credit-impaired asset, 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 net realisable value. 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 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. 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 adaption 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 report 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 report. 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 severance 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 – 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 2020 or 2019.

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, may be recognised either as deferred income or 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.

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 to the extent that, within an independent Group company, they relate to the same tax authority.

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 exercise of discretion

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). Invoicing of orders completed 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 are to be combined or whether a contract with a customer has to be split into a series of performance obligations involves estimates that may affect the recognition of revenue or profit. Variable consideration is estimated at the highest probable 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 are forecast on the basis of 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 31. 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. If changes in the assessment are probable, a corresponding provision is recorded.

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 earning 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 2020, assumptions were made on the development of these items. 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) Impairment loss on the deposits at Commerzialbank Mattersburg im Burgenland AG: As at 31 December 2020, all claims against Commerzialbank Mattersburg were 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. The lawsuits filed by Frequentis Group are still at an early stage and currently do not result in any claim that can be recognised 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 legal proceedings are successful.

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, digital (remote) 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 (coast guard, port operators, and organisations that monitor shipping on inland waterways). The Frequentis Group's PST segment delivers emergency management solutions for police, ambulance, and fire service organisations, search and rescue, coastal surveillance, operations communications, and incident and crisis management.

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 2020 EUR thousand	Public Safety & Transport 2020 EUR thousand	Reconciliation/ consolidation 2020 EUR thousand	Total 2020 EUR thousand
Revenues	203,138	96,265	-29	299,374
Change in inventories of finished goods and work in progress	-1	-271	0	-272
Own work capitalised	142	0	74	216
Other operating income	6,040	1,597	922	8,559
Total income (operating performance)	**209,319**	**97,591**	**967**	**307,877**
EBIT	**14,634**	**12,255**	**-81**	**26,808**
Impairment loss on goodwill	**-1,072**	**0**	**0**	**-1,072**

	Air Traffic Management 2019 EUR thousand	Public Safety & Transport 2019 EUR thousand	Reconciliation/ consolidation 2019 EUR thousand	Total 2019 EUR thousand
Revenues	211,164	92,440	27	303,631
Change in inventories of finished goods and work in progress	14	-5	0	9
Own work capitalised	10	0	362	372
Other operating income	4,250	878	1,115	6,243
Total income (operating performance)	**215,438**	**93,313**	**1,504**	**310,255**
EBIT	**10,414**	**6,958**	**-155**	**17,217**
Impairment loss on goodwill	**0**	**0**	**0**	**0**

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 2020, nor in 2019, did the Frequentis Group generate more than 10% of its total revenues with any single customer.

In terms of revenue categories, 41% (2019: 52%) of the Group's revenues were generated principally with new products for established customers and existing products sold to new customers, 56% (2019: 46%) comprised IBB (installed base business, i.e. follow-on business for installed systems and solutions), and 2% (2019: 2%) came from other sources (mainly consulting). Around half of the installed base business comprised maintenance contracts.

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

	2020	2019
Europe	73.7%	63.8%
Americas	11.0%	19.4%
Asia	10.2%	11.6%
Australia/Pacific	2.8%	3.7%
Africa	2.3%	1.5%

Orders on hand as at 31 December 2020 totalled EUR 427,609 thousand (2019: EUR 391,460 thousand). The ATM segment accounted for EUR 247,243 thousand (2019: EUR 233,779 thousand) of this amount and the PST segment for EUR 180,366 thousand (2019: EUR 157,681 thousand).

Regional breakdown of non-current assets

	2020 EUR thousand	2019 EUR thousand
Austria	38,401	39,550
Europe (excluding Austria)	16,885	14,219
Americas	3,444	4,483
Australia/Pacific	700	437
Asia	589	88
	60,019	**58,777**

Non-current assets comprise property, plant and equipment, intangible assets, goodwill, and investments in associated companies.

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 from contracts with customers increased by EUR 66 thousand (2019: EUR 755 thousand), which is the net result of a large number of newly commenced projects 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. 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 11,185 thousand in the reporting period (2019: EUR 13,376 thousand).

In accordance with IFRIC 22, the Frequentis Group measures advance payments made and received in foreign currencies at the transaction exchange rate rather than the closing rate.

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:

	2020 EUR thousand	2019 EUR thousand
New products and/or new customer business	123,716	157,565
IBB (installed base business)	168,208	138,678
Other revenues	7,450	7,388
	299,374	**303,631**

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

	2020 EUR thousand	2019 EUR thousand
Europe	197,900	184,157
Americas	48,935	56,303
Asia	33,947	39,879
Australia/Pacific	13,964	18,399
Africa	2,669	3,459
Small orders (not allocated)	1,959	1,434
	299,374	**303,631**

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 427.6 million (31 December 2019: EUR 391.5 million) and corresponds to the orders on hand in the Frequentis Group at the reporting date. It is expected that revenues of approximately EUR 241.6 million will be recognised in 2021 and revenues of EUR 186.0 million will be recognised in 2022 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 2020 comprise EUR 216 thousand (2019: EUR 372 thousand) including, among other things, expenses for self-produced internal demonstration and test systems.

6. Other operating income

	2020 EUR thousand	2019 EUR thousand
Grants and subsidies for research and development costs	3,341	3,282
Income from research incentives	1,965	1,177
Exchange rate gains and currency differences	240	207
Changes in the fair value of forward exchange contracts	1,625	289
Subsidies related to the COVID-19 pandemic	25	0
Gain from the sale of intangible assets, property, plant and equipment	3	13
Miscellaneous other operating income	1,360	1,275
	8,559	**6,243**

Grants and subsidies, including research incentives, are recognised in income when the conditions for their granting are fulfilled and they have either already been paid or it is reasonably sure that they will be paid.

The subsidies related to the COVID-19 pandemic comprise a subsidy received for wage taxes for the previous year.

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

7. Cost of materials and purchased services

	2020 EUR thousand	2019 EUR thousand
Cost of materials	32,621	40,403
Cost of purchased services	42,391	41,194
	75,012	**81,597**

The reduction of EUR 7,782 thousand in the cost of materials is due to a reduction in the material intensity of the projects invoiced.

8. Personnel expenses

	2020 EUR thousand	2019 EUR thousand
Salaries	125,563	122,474
Expenses for severance payments	1,823	1,845
Expenses for pensions	1,162	992
Social security contributions	26,362	26,151
Other voluntary social welfare expenses	3,022	3,348
	157,932	**154,810**

The headcount at the end of the financial year was 1,923 (2019: 1,850). The average number of employees was 1,907 (2019: 1,849).

EUR 1,800 thousand of the increase in personnel expenses relates to the new companies included in the consolidated group.

The personnel expenses for the reporting period contain receivables of EUR 762 thousand relating to the COVID-19 pandemic. The largest part of these receivables (EUR 401 thousand) comprises government grants for personnel expenses from the Australian government to retain jobs. At three Group companies, short-time working was introduced for part of the workforce for a short period. The government grant received for this was EUR 85 thousand. The remainder of receivables due to the COVID-19 pandemic related either to additional subsidies from local governments for the retention of jobs (EUR 170 thousand) or the reduction in payroll taxes or social security contributions (EUR 106 thousand).

9. Other operating expenses

	2020 EUR thousand	2019 EUR thousand
Legal and consulting expenses	8,771	5,522
Travel expenses	4,076	11,861
External personnel	3,021	3,700
Insurance expenses	2,121	2,561
Maintenance	1,835	1,834
Advertising	1,538	2,824
Operating expenses (buildings)	1,157	1,161
Exchange rate differences	1,103	857
Energy	1,088	1,167
Telephone and communications expenses	1,042	1,157
Transport	980	1,236
Licenses (terms of up to 1 year)	903	934
Vehicles	894	940
Cleaning	829	1,065
Other taxes and levies	653	754
Staff recruitment	651	760
Bank charges and bank guarantee fees	633	661
Short-term leases and leases for low-value assets	552	930
Loss allowances for receivables and contract assets	378	250
Losses from the disposal of intangible assets, property, plant and equipment	32	32
Claims for damages	2	663
Miscellaneous	757	2,800
	33,016	**43,669**

In some expense categories, e.g. travel expenses and advertising, there was an unusual reduction due to the COVID-19 pandemic.

The increase in legal and consulting expenses is mainly due to the lawsuits filed in connection with Commerzialbank Mattersburg (see Note 13. Impairment loss on financial assets) and M&A activities.

The loss allowances contain EUR 382 thousand (2019: EUR 224 thousand) for receivables and EUR -4 thousand (2019: EUR 26 thousand) for contract assets. These are not presented separately in the income statement as the amount is insignificant.

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

	2020 EUR thousand	2019 EUR thousand
Depreciation of right-of-use assets	7,690	7,093
Depreciation of property, plant and equipment and amortisation of intangible assets	5,953	5,452
Depreciation and amortisation of low-value assets	394	417
	14,037	**12,962**

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

	2020 EUR thousand	2019 EUR thousand
Interest and similar income	94	440
	94	**440**

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

	2020 EUR thousand	2019 EUR thousand
Interest and similar expenses	615	819
	615	**819**

EUR 242 thousand (2019: EUR 438 thousand) of the interest and similar expenses is attributable to IFRS 16. Interest expenses are recognised using the effective interest method.

13. Impairment loss on financial assets

Pursuant to the notification of the Austrian Financial Market Authority (FMA) dated 14 July 2020, Commerzialbank Mattersburg im Burgenland AG (Commerzialbank Mattersburg) was prohibited by decree, with immediate effect, from continuing its business operations and an auditor was appointed as government commissioner. Consequently, the bank was also prohibited from paying out any deposits.

At that time, Frequentis AG had deposits in the amount of EUR 30.9 million with Commerzialbank Mattersburg and declared the entire amount due against Commerzialbank Mattersburg on 16 July 2020. This declaration was also addressed to the government commissioner appointed by the FMA. As expected, Frequentis received a negative response thereto on 17 July 2020. On 24 July 2020, Frequentis AG received EUR 100,000 from Einlagensicherung AUSTRIA Ges.m.b.H., the protection entity for Austrian credit institutions, pursuant to the Austrian Deposit Protection and Investor Compensation Act.

On 27 July 2020, the Austrian Financial Market Authority filed an application with Eisenstadt regional court to open insolvency proceedings in respect of the assets of Commerzialbank Mattersburg. The opening of the insolvency proceedings in respect of the assets of Commerzialbank Mattersburg was announced on 28 July 2020. In an interim report dated 24 July 2020, the government commissioner appointed by the Austrian Financial Market Authority stated that, according to an interim status report, Commerzialbank Mattersburg was mathematically over-indebted on 14 July 2020 when the Austrian Financial Market Authority prohibited its business operations. The entire amount of Frequentis AG's claim was filed in the insolvency proceedings on 29 July 2020.

Frequentis AG has engaged a team of lawyers, which is examining all legal options to protect the interests of Frequentis in the best possible manner. This examination includes the possible assertion and prosecution of potential claims against involved legal entities, organisations, and persons. Lawsuits have already been filed in this connection. From the present viewpoint, these lawsuits and the pursuit of further potential claims may take a significant period of time.

As a result of the insolvency, an impairment loss in the amount of EUR 30,918 thousand was recognised on the deposits due on demand and time deposits of Frequentis AG at Commerzialbank Mattersburg and reported in the line item impairment loss of financial assets.

This impairment loss takes into account the fact that, based on the information on the insolvency proceedings and considering the ranking of Frequentis AG's claims (especially those of the deposit insurance) as at the reporting date, it cannot be expected that Frequentis AG will receive an economically relevant quota of the insolvency estate. The lawsuits filed by Frequentis AG are still at an early stage and do not currently give rise to a claim that can be recognised in the financial statements.

The impairment loss on financial assets comprises the following:

	Amount in EUR thousand
Impairment loss on long-term time deposits at Commerzialbank Mattersburg	**9,997**
Impairment loss on short-term time deposits at Commerzialbank Mattersburg	7,998
Impairment loss on current account deposits (due on demand) at Commerzialbank Mattersburg	12,718
Impairment loss on interest receivables from Commerzialbank Mattersburg	205
Other	5
Total	**30,923**

14. Income taxes

	2020 EUR thousand	2019 EUR thousand
Current income taxes	1,628	4,125
Taxes relating to other periods	-514	7
Non-deductible withholding tax	76	148
Change in deferred tax assets/liabilities	-2,222	182
	-1,032	**4,462**

The taxes relating to other periods mainly comprise tax credits from the tax assessment of a US subsidiary in 2019, which resulted in retrospective adjustments.

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

	2020 EUR thousand	2019 EUR thousand
Profit/loss before tax	-4,422	16,984
Theoretical tax income/expense based on a tax rate of 25%	-1,106	4,246
Tax additions	168	272
Tax deductions	-503	-322
Changes in tax rates	29	-34
Impairment of goodwill	268	0
Tax losses for which no deferred tax assets are recognised	275	0
Differences in tax rates in foreign tax systems	274	145
Taxes relating to other periods	-514	7
Non-deductible withholding tax	76	148
Actual tax income/expense	**-1,033**	**4,462**
Effective tax rate	**-23.4%**	**26.3%**

The tax additions comprise non-tax-deductible expenses such as representational expenses. The tax deductions mainly comprise the research subsidy.

Deferred tax assets and liabilities are netted if there is a corresponding legally enforceable claim to netting and the deferred tax assets and liabilities refer to income taxes that are levied by the same tax authority for the same taxable entity.

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

	Assets 2020 EUR thousand	Liabilities 2020 EUR thousand	Assets 2019 EUR thousand	Liabilities 2019 EUR thousand
Property, plant, and equipment	147	-9,446	164	-9,358
Intangible assets	88	-1,047	105	-128
Goodwill	106		143	
Financial assets	50		65	-2
Inventories	21	-87	41	-14
Contract assets from contracts with customers	416	-4,796	163	-4,566
Contract costs		-772		-654
Trade accounts receivable and other assets	94	-2,183	90	-1,383
Cash and cash equivalents and time deposits	0		4	
Option reserve	0		16	
Capital reserve	27		0	
Provisions	2,540	-1,192	2,767	-1,254
Liabilities	9,331	-83	9,491	-123
Contract liabilities from contracts with customers	2,679	-427	3,475	-1,300
Deferred taxes on currency differences, debt consolidation	108	-107	15	-20
Tax loss carryforwards	3,794		128	
Total	**19,401**	**-20,140**	**16,667**	**-18,802**
Netting	-18,309	18,309	-14,962	14,962
Deferred taxes	**1,092**	**-1,831**	**1,705**	**-3,840**

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 4,151 thousand (2019: EUR 2,175 thousand).

As at the reporting date, the Frequentis Group had loss carryforwards totalling EUR 16,603 thousand (2019: EUR 656 thousand). Deferred taxes were recognised for loss carryforwards of EUR 15,154 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 no time limit on the use of the loss carryforwards.

In the reporting period, tax income of EUR 601 thousand was received for Austrian corporation tax due to the utilisation of a loss carryback (COVID-19 reserve).

The amount of tax-deductible impairments on equity instruments that is spread over seven years under Austrian tax law is EUR 94 thousand (2019: EUR 140 thousand). Deferred tax assets of EUR 23 thousand (2019: EUR 35 thousand) are recognised for this amount.

There were no material income tax uncertainties as at 31 December 2020.

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 13,252,240 (2019: 12,772,603).

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 shares issued in the reporting period, adjusted in each case by the dilutive effect of the share-based payment of 27,919 shares. The average weighted number of shares and options was 13,273,701 (2019: 12,775,244).

Notes to the consolidated statement of financial position

16. Property, plant, and equipment

in EUR thousand	Buildings on leased land	Technical plant and machinery	Other plant, factory and office equipment	Advances and plants under construction	Total
Carrying amount as at 31 Dec. 2018	**2,717**	**579**	**5,792**	**43**	**9,131**
Adjustments for IFRS 16	38,299	0	808	0	39,107
Foreign currency translation difference	142	0	13	0	155
Reclassification	0	0	43	-43	0
Additions from business combinations	0	0	0	0	0
Addition	6,914	55	3,791	86	10,846
Disposal	-237	-1	-59	0	-297
Depreciation	-6,955	-132	-3,611	0	-10,698
Carrying amount as at 31 Dec. 2019	**40,880**	**501**	**6,777**	**86**	**48,244**
Cost of acquisition/production	50,297	3,913	25,976	86	80,272
Accumulated depreciation	-9,417	-3,412	-19,199	0	-32,028
Carrying amount as at 31 Dec. 2019	**40,880**	**501**	**6,777**	**86**	**48,244**
Carrying amount as at 31 Dec. 2019	**40,880**	**501**	**6,777**	**86**	**48,244**
Foreign currency translation difference	-321	0	-53	0	-374
Reclassification	0	-54	132	-78	0
Additions from business combinations	83	0	66	0	149
Addition	5,691	596	3,443	219	9,949
Disposal	-38	-1	-55	0	-94
Depreciation	-7,319	-138	-3,812	0	-11,269
Carrying amount as at 31 Dec. 2020	**38,976**	**904**	**6,498**	**227**	**46,605**
Cost of acquisition/production	54,953	4,225	27,708	227	87,113
Accumulated depreciation	-15,977	-3,321	-21,210	0	-40,508
Carrying amount as at 31 Dec. 2020	**38,976**	**904**	**6,498**	**227**	**46,605**

During 2020, the Frequentis Group concluded agreements for the acquisition of property, plant and equipment totalling EUR 251 thousand, which will be delivered and invoiced in 2021.

An investment subsidy of EUR 13 thousand was granted in the reporting period. The cost of acquisition of the related property, plant and equipment was reduced by this amount.

For information on the recognised right-of-use assets resulting from the application of IFRS 16, see Note 37.

17. Intangible assets

in EUR thousand	Software and licences	Advances	Total
Carrying amount as at 31 December 2018	**6,416**	**83**	**6,499**
Foreign currency translation difference	0	0	0
Reclassification of advances	8	-8	0
Additions from business combinations	0	0	0
Addition	3,160	186	3,346
Disposal	-10	0	-10
Amortisation	-2,263	0	-2,263
Carrying amount as at 31 December 2019	**7,311**	**261**	**7,572**
Cost of acquisition/production	19,175	261	19,436
Accumulated amortisation	-11,864	0	-11,864
Carrying amount as at 31 December 2019	**7,311**	**261**	**7,572**
Carrying amount as at 31 December 2019	**7,311**	**261**	**7,572**
Foreign currency translation difference	0	0	0
Reclassification of advances	273	-273	0
Additions from business combinations	3,208	0	3,208
Addition	991	23	1,014
Disposal	-6	0	-6
Amortisation	-2,768	0	-2,768
Carrying amount as at 31 December 2020	**9,009**	**11**	**9,020**
Cost of acquisition/production	23,176	11	23,187
Accumulated amortisation	-14,167	0	-14,167
Carrying amount as at 31 December 2020	**9,009**	**11**	**9,020**

In the reporting period, Frequentis spent EUR 12.8 million (2019: EUR 22.1 million) on research and development work that was not ordered by customers which was expensed as incurred. The decrease was due to the COVID-19 pandemic and the consequent focus on software development for customer orders in the Public Safety & Transport segment and temporary savings on development projects.

During 2020, the Frequentis Group concluded agreements for the purchase of intangible assets totalling EUR 221 thousand, which will be received and invoiced in 2021.

18. Goodwill

in EUR thousand	Goodwill
Carrying amount as at 31 December 2018	**2,228**
Foreign currency translation difference	0
Additions from business combinations	0
Addition	0
Disposal	0
Impairment losses	0
Carrying amount as at 31 December 2019	**2,228**
Cost of acquisition/production	2,228
Accumulated impairment losses	0
Carrying amount as at 31 December 2019	**2,228**
Carrying amount as at 31 December 2019	**2,228**
Foreign currency translation difference	0
Additions from business combinations	0
Addition	1,730
Disposal	0
Impairment losses	-1,072
Carrying amount as at 31 December 2020	**2,886**
Cost of acquisition/production	3,958
Accumulated impairment losses	-1,072
Carrying amount as at 31 December 2020	**2,886**

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

	31 Dec. 2020 EUR thousand	31 Dec. 2019 EUR thousand
Systems Interface Ltd.	194	1,266
Frequentis Comsoft GmbH	909	909
TEAM Communication Technology Management GmbH	53	53
ATRiCS Advanced Traffic Solutions GmbH	1,730	0
	2,886	**2,228**

Goodwill was tested for impairment when preparing the consolidated financial statements by estimating the recoverable amount of the relevant companies 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% (2019: 2%) was determined and used to forecast future cash flows.

Forecast future cash flows were discounted using discount rates based on normal market and country-specific risks.

Impairment test 2020	Systems Interface Ltd.	Frequentis Comsoft GmbH	TEAM Communication Technology Management GmbH	ATRiCS Advanced Traffic Solutions GmbH
Interest rate (WACC before taxes)	9.98%	10.75%	9.01%	9.52%
Recoverable amount in EUR thousand	812	30,466	14,518	9,029
Carrying amount of the CGU including goodwill in EUR thousand	2,914	8,554	236	8,537

Impairment test 2019	Systems Interface Ltd.	Frequentis Comsoft GmbH	TEAM Communication Technology Management GmbH
Interest rate (WACC before taxes)	11.05%	10.31%	10.34%
Recoverable amount in EUR thousand	4,670	47,471	10,956
Carrying amount of the CGU including goodwill in EUR thousand	4,287	7,910	518

In the sensitivity analyses for the groups of cash-generating units to which significant goodwill has been allocated, a 10% reduction in future cash flows or an increase of one percentage point in discount rates was assumed.

As at the reporting date, the Executive Board did not identify any realistic scenarios for Frequentis Comsoft GmbH and TEAM Communication Technology Management GmbH that would result in impairment of goodwill.

At ATRiCS Advanced Traffic Solutions GmbH, the carrying amount of this CGU, including goodwill, would correspond to the recoverable amount if there was a reduction of 4.8% in cash flows or a slight increase of 0.4% in the discount rate.

For the impairment test on Systems Interface Ltd. in 2020, several risk-weighted cash flow scenarios were taken into consideration when determining the recoverable amount. The change in measurement was necessary due to the considerable uncertainty in the estimation of future cash flows. The uncertainty at Systems Interface Ltd. results in part from the difficult order situation in recent years, which was further intensified by the COVID-19 pandemic. The impairment test on Systems Interface Ltd. resulted in an impairment loss of EUR 1,072 thousand on goodwill.

Probability weight	Alternative scenario 1	Base scenario	Alternative scenario 2
Systems Interface Ltd.	40%	50%	10%

Probability weights: The management has subjectively assigned probability weights to each scenario on the basis of its experience during periods of recession and its expectations for the economy during and after the COVID-19 pandemic. The management believes that the assignment of probability weights presents a reasonable assessment of the likelihood of the scenarios, taking into account the potential for a more robust recovery on the upside and the risk of a considerably weaker recovery on the downside.

The **base scenario** represents the management's best estimate of the future development of the company's order situation. The growth rate for operating performance is estimated conservatively at 3%.

Alternative scenario 1 assumes that the impact of the COVID-19 pandemic will reduce the operating performance by 20%, with only a gradual recovery in the future.

Alternative scenario 2, which was only given a weight of 10% in the impairment test, assumes a stronger increase in operating performance compared to the base scenario, mainly due to the increase in the number of sales employees.

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 normal market and country-specific risks. This is converted into WACC before taxes.

19. Investments accounted for at equity (associated companies)

	31 Dec. 2020 EUR thousand	31 Dec. 2019 EUR thousand
Investments in associated companies	1,509	733

Name of associated company	Registered office	Voting rights and shareholding as at 31 Dec. 2020	Voting rights and shareholding as at 31 Dec. 2019
GroupEAD Europe S.L.	Madrid	28%	28%
Mission Embedded GmbH	Vienna	20%	20%
AIRNAV Technology Services Inc.	Iloilo	40%	40%
AIRlabs Austria GmbH	Graz	18%	18%
Nemergent Solutions S.L.	Bilbao	15%	

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.

The Frequentis Group has a 28% interest in **GroupEAD Europe S.L.**, Madrid. The carrying amount of this investment developed as follows (based on the most recent available financial statements for 2019 and the dividends already received for 2020):

		2020 EUR thousand	2019 EUR thousand
31 Dec. prior year	**Equity interest in GroupEAD Europe S.L.**	**491**	**491**
	Attributable profit in prior year	88	48
	Less dividend paid for the prior year	-88	-48
	Provisional attributable profit in the reporting period	56	56
	Less dividend paid in the reporting period	-56	-56
31 Dec. reporting period	**Equity interest 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 2019):

GroupEAD Europe S.L.	31 Dec. 2019 EUR thousand	31 Dec. 2018 EUR thousand
Non-current assets	285	218
Current assets	3,043	2,678
Non-current liabilities	0	0
Current liabilities	1,260	970
Net assets (100%)	**2,068**	**1,926**
Frequentis Group's share of net assets (28%)	579	539
Dividend paid in the following year	-88	-48
Carrying amount of the stake in the associated company	**491**	**491**
Revenues	7,546	7,211
Profit from continuing operations (100%)	516	373
Other comprehensive income (100%)	0	0
Total comprehensive income (100%)	**516**	**373**
Total comprehensive income (28%)	144	104
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	**144**	**104**

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

		2020 EUR thousand	2019 EUR thousand
31 Dec. prior year	**Equity investment in Mission Embedded GmbH**	**178**	**148**
	Attributable profit in the reporting period	68	32
	Actuarial losses in in accordance with IAS 19	-1	-2
31 Dec. reporting period	**Equity investment in Mission Embedded GmbH**	**245**	**178**

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 2020):

Mission Embedded GmbH	31 Dec. 2020 EUR thousand	31 Dec. 2019 EUR thousand
Non-current assets	230	213
Current assets	2,167	1,555
Non-current liabilities	172	158
Current liabilities	994	718
Net assets (100%)	**1,231**	**892**
Frequentis Group's share of net assets (20%)	246	178
Carrying amount of the stake in the associated company	**246**	**178**
Revenues	4,975	4,073
Profit from continuing operations (100%)	342	163
Other comprehensive income (100%)	-4	-10
Total comprehensive income (100%)	**338**	**153**
Frequentis Group's share of the profit from continuing operations (20%)	**68**	**32**
Frequentis Group's share of other comprehensive income (20%)	**-1**	**-2**
Frequentis Group's share of total comprehensive income (20%)	**67**	**30**

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

		2020 EUR thousand	2019 EUR thousand
31 Dec. prior year	**Equity investment in AIRNAV Technology Services Inc.**	**37**	**26**
	Attributable profit in the reporting period	3	11
31 Dec. reporting period	**Equity investment in AIRNAV Technology Services Inc.**	**40**	**37**

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

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 associate.

The table shows the development of this investment:

		2020 EUR thousand	2019 EUR thousand
31 Dec. prior year	**Investment in AIRlabs Austria GmbH**	**27**	
	Attributable profit/loss in the reporting period	-1	
	Pro rata contribution to share capital	0	27
31 Dec. reporting period	**Investment in AIRlabs Austria GmbH**	**26**	**27**

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 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. The purpose of this company is to build and operate 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. 2020 EUR thousand	31 Dec. 2019 EUR thousand
Non-current assets	48	32
Current assets	1,405	256
Non-current liabilities	18	0
Current liabilities	1,194	41
Net assets (100%)	**241**	**247**
Frequentis Group's share of net assets	**65**	**66**
Revenues	925	379
Profit/loss for the period	-2	27
Frequentis Group's share of profit/loss for the period	1	11
Frequentis Group's share of other comprehensive income	**0**	**0**
Frequentis Group's share of total comprehensive income	**1**	**11**

In the reporting period, the Frequentis Group acquired a 15% interest in Nemergent Solutions S.L., which has its registered office in Bilbao. This investment was made through Frequentis' wholly owned subsidiary BlueCall GmbH. A binding Investment Agreement was signed on 7 August 2020. Due to the necessary capital increase, the acquisition of the interest was only effected in November 2020.

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 end devices, i.e. mobile terminals for emergency services. This collaboration will now be strategically expanded and deepened because the LTE mobile communications standard offers new opportunities in safety-critical broadband communication.

The Group has classified its influence as significant, despite the 15% shareholding, due to the significant level of management involvement in the associate.

The table shows the development of this investment:

		2020 EUR thousand
November 2020	Purchase price payment	707
31 Dec. reporting period	**Equity investment in Nemergent Solutions S.L.**	**707**

Due to materiality considerations Nemergent Solutions was initially accounted for at equity at 31 December 2020, so no profit/loss for the period is presented. Initial recognition resulted in goodwill of EUR 507 thousand, which is presented in investments accounted for at equity. The next table contains summarised financial information on this company as at the last reporting date (31 December 2020):

Nemergent Solutions S.L.	31 Dec. 2020 EUR thousand
Non-current assets	253
Current assets	1,489
Non-current liabilities	252
Current liabilities	157
Net assets (100%)	**1,333**
Frequentis Group's share of net assets (15%)	200
Goodwill	**507**
Carrying amount of the stake in the associated company	**707**
Revenues	723
Profit from continuing operations (100%)	143
Other comprehensive income (100%)	0
Total comprehensive income (100%)	**143**
Frequentis Group's share of the profit from continuing operations (15%)	**0**
Frequentis Group's share of other comprehensive income (15%)	**0**
Frequentis Group's share of total comprehensive income (15%)	**0**

From the annual profit of all associated companies accounted for at equity, a proportionate share of EUR 214 thousand (2019: EUR 148 thousand) is recognised. There were no unrecognised losses in the reporting period or the prior year.

20. Equity instruments

The equity instruments held in the reporting period were as follows:

	31 Dec. 2020 EUR thousand	31 Dec. 2019 EUR thousand
Altitude Angel Ltd.	863	863
Viennasys Software Entwicklung GmbH	0	11
	863	**874**

In the reporting period, the 10.29% equity investment in Viennasys Software Development GmbH, with its registered office in Vienna, was sold for EUR 6 thousand.

In November 2020 there was a further financing round for the 6.88% interest in the start-up company Altitude Angel Ltd., Reading, UK, with the same valuation of the company. The Frequentis Group decided not to participate in this financing round, which also included new investors. As a result, its interest has decreased to 4.56%. The fair value as at 31 December 2020 was still EUR 863 thousand.

21. Time deposits, cash and cash equivalents

	31 Dec. 2020 EUR thousand	31. Dec. 2019 EUR thousand
Long-term time deposits	10,000	10,000
Loss allowance	-10,000	-3
	0	**9,997**

	31 Dec. 2020 EUR thousand	31 Dec. 2019 EUR thousand
Short-term time deposits	18,000	8,000
Loss allowance	-18,000	-2
	0	**7,998**

	31 Dec. 2020 EUR thousand	31 Dec. 2019 EUR thousand
Cash and cash equivalents	103,989	66,892
Loss allowance	-12,724	-10
	91,265	**66,882**

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.

As at 31 December 2019, the short and long-term time deposits consisted entirely of time deposits at Commerzialbank Mattersburg. In 2020, an impairment loss had to be recognised for the full amount. As at 31 December 2019, the cash and cash equivalents also included deposits of EUR 12,818 thousand at Commerzialbank Mattersburg, which were due on demand. In 2020, an impairment loss was recognised for the full amount less the amount of EUR 100 thousand covered by statutory deposit insurance. For information on the impact of the insolvency of Commerzialbank Mattersburg im Burgenland AG, see the disclosures on the financial result (Note 13. Impairment loss on financial assets).

In accordance with IFRS 9, based on the expected credit losses (ECL) model, loss allowances were established at the date of recognition of 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 2020 and a loss allowance of EUR 6 thousand was recognised.

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).

About 80% of the cash and cash equivalents of EUR 91,265 thousand as at 31 December 2020 was deposited with nine system-relevant major banks in Austria and Germany. The remaining amount (approximately 20%) was deposited with approximately 20 other banks in Europe, Australia, Asia, and the Americas.

22. Inventories

	31 Dec. 2020 EUR thousand	31 Dec. 2019 EUR thousand
Raw materials and supplies	6,567	6,672
Work in progress	411	804
Finished goods	2,081	1,990
Merchandise	2,213	3,120
Advance payments made	1,356	1,219
	12,628	**13,805**

Work in progress 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, the management of a safety stock for maintenance obligations, and inventories for a major contract with a customer, where delivery and, in this case, invoicing at a point in time, will take place in 2021.

Merchandise comprises tangible assets, mainly future components of customer projects.

The impairment loss on inventories was EUR 509 thousand in 2020 (2019: EUR 1,122 thousand). Reversals of EUR 54 thousand were made in 2020 (2019: EUR 6 thousand). In 2019, there was an increase in impairment losses due to a reduction in long-term requirements.

23. Trade accounts receivable

	2020 EUR thousand	2019 EUR thousand
Trade accounts receivable, gross	60,039	59,188
Individual loss allowances	-443	-438
Loss allowance pursuant to IFRS 9	-295	-223
Receivables from affiliated and associated companies	17	23
Total trade accounts receivable, net	**59,318**	**58,550**

Trade accounts receivable contain non-current items totalling EUR 915 thousand (31 December 2019: EUR 576 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 quotation 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 carrying amounts of financial assets represent the maximum credit risk.

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:

	2020 EUR thousand	2019 EUR thousand
As at 31 December of the previous year	**661**	**855**
Net impairment pursuant to IFRS 9	72	90
Additions	312	133
Utilisation	-94	-294
Reversal	-213	-123
As at 31 December of the financial year	**738**	**661**

The overdue structure of trade accounts receivable as at 31 December 2020 was as follows:

	Weighted average loss rate 2020	Weighted average loss rate 2019	2020 EUR thousand	2019 EUR thousand
Trade accounts receivable, net			**59,301**	**58,527**
of which: neither overdue nor impaired	**0.06%**	**0.05%**	**48,860**	**43,764**
of which, overdue but not impaired				
Up to 30 days	0.26%	0.12%	6,346	8,883
30-60 days	0.56%	0.72%	870	1,707
60-90 days	1.61%	0.93%	913	482
90-180 days	2.63%	1.48%	1,065	2,902
180-210 days	11.12%	7.68%	248	13
> 210 days	16.35%	16.66%	1,000	776

Due to their insignificance, receivables from affiliated and associated companies in the amount of EUR 17 thousand (2019: EUR 23 thousand) are not taken into account in the calculation of the overdue structure.

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 the turn of the year). 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 did not result in any defaults on receivables in 2020. 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 2021 and subsequent years, the Frequentis Group has defined a scale factor of 1.5, which is taken into account when calculating loss allowances pursuant to IFRS 9. This reflects the actual and forecast insolvency rates due to the COVID-19 pandemic. If a customer has been granted a temporary extension of a payment deadline (which may be up to 60 days) due to the COVID-19 pandemic, the payment is still classified as overdue on the basis of the original due date.

24. Contract assets from contracts with customers

	31 Dec. 2020 EUR thousand	31 Dec. 2019 EUR thousand
Contract assets from contracts with customers	53,591	54,924
Advances from customers	-15,171	-16,570
	38,420	**38,354**

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 38,354 thousand recognised as at 1 January (2019: EUR 40,850 thousand) include EUR 26,784 thousand (2019: EUR 31,773 thousand) that were invoiced in the reporting period.

Based on expected project progress and contractual clauses, EUR 38,420 thousand (2019: EUR 38,354 thousand) of the total contract assets of EUR 33,004 thousand recognised as at 31 December 2020 (2019: EUR 30,970 thousand) are scheduled for invoicing in the following year. Contract assets with a carrying amount of EUR 5,416 thousand (2019: EUR 7,384 thousand) are not expected to be invoiced until after 2021. Since realisation of the contract assets is expected to take place within a normal business cycle, all contract assets are classified as current.

It is assumed that there are no relevant default risks for contract assets from contracts with customers. The impairment of contract assets recognised in the reporting period amounted to EUR 23 thousand (2019: EUR 26 thousand). The creditworthiness of customers is carefully checked, particularly in the case of orders for which the Group makes advance payments. 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 5,239 thousand, while a 10% increase in contract costs not yet incurred would reduce contract assets by EUR 4,770 thousand.

25. 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:

	2020 EUR thousand	2019 EUR thousand
As at 1 January	**2,549**	**1,697**
Contract costs capitalised in the reporting period	2,770	2,718
Amortisation in the reporting period	-2,291	-1,616
Impairment losses	0	-250
As at 31 December	**3,028**	**2,549**

The amortisation expense for contract costs in the next 12 months is expected to amount to EUR 1,831 thousand (2019: EUR 1,301 thousand). Since the contract costs are expected to be incurred within a normal business 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.

The impairment losses recognised in 2019 related to loss-making projects. As a result, the related contract costs were impaired.

26. Other current assets

	31 Dec. 2020 EUR thousand	31 Dec. 2019 EUR thousand
Prepaid expenses and deferred charges	3,666	3,879
Receivables from research grants and subsidies	2,788	2,185
Receivables from grants and subsidies	1,297	259
Receivables from fiscal authorities (excluding income taxes)	943	1,204
Interest receivables from time deposits	0	205
Positive fair value of cash flow hedges and MTM valuation	1,305	92
Other assets	275	205
	10,274	**8,029**
of which other current financial assets	2,750	704
of which other current non-financial assets	7,524	7,325

27. 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).

IPO in 2019

Following the initial public offering (IPO), 13,199,999 bearer shares were admitted to trading on the Vienna Stock Exchange with the admission notification of 6 May 2019 and on the Frankfurt Stock Exchange (regulated market) with the admission decision of 13 May 2019. In the IPO, a total of 2,873,975 shares were placed on the capital market at a price of EUR 18.00 per share. 1,200,000 of these were newly issued shares, while 1,673,975 were shares previously held by Mr. Johannes Bardach and sold by him. In addition to the bearer shares, there is still one registered share with restricted transferability, which is held by Mr. Johannes Bardach. The total number of issued shares as at 31 December 2019 was 13,200,000.

The issue price was EUR 18.00 per share. Since they are no-par value shares, an arithmetical amount of EUR 1,200 thousand of the total proceeds of EUR 21,600 thousand received by Frequentis AG was allocated to the share capital, and the remaining amount of EUR 20,400 thousand was allocated to the capital reserves.

The total cost of the IPO was EUR 2,322 thousand, of which EUR 892 thousand was allocated directly to equity after deduction of the related income taxes of EUR 223 thousand. These were the costs relating to the new shares from the capital increase. Costs of EUR 859 thousand were charged to Mr. Johannes Bardach as they related to the sale of the existing shares. The resulting receivable was settled in full in 2019.

Capital increase in 2020

The capital increase for cash excluding existing shareholders' subscription rights for the employee participation programme, as resolved by the Executive Board on 2 March 2020 and approved by the Supervisory Board on 27 March 2020, was successfully completed in May 2020. 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 subscription price for employees was defined on the basis of the closing price of Frequentis shares on the Vienna Stock Exchange on 4 May 2020 (EUR 16.55) less a discount of 20%, resulting in a share price of EUR 13.24.

Since they are no-par value shares, an arithmetical amount of EUR 80 thousand of the total proceeds of EUR 1,324 thousand received by Frequentis AG was allocated to the share capital, and the remaining amount of EUR 1,244 thousand was allocated to the capital reserves. The 20% discount for employees amounted to EUR 265 thousand and was recognised in personnel expenses.

The total cost of the capital increase was EUR 109 thousand and was recognised directly in equity after deduction of the related income taxes of EUR 27 thousand.

The following table shows the change in the number of shares:

	2020	2019
As at 1 January	**13,200,000**	**12,000,000**
Newly issued shares due to the capital increase	80,000	1,200,000
As at 31 December	**13,280,000**	**13,200,000**

The 80,000 new shares issued in May 2020 are included in the free float. This resulted in a corresponding slight reduction in the percentage of shares held by other shareholders compared with the situation following the IPO in May 2019. Johannes Bardach still 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 about 22%.

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) No. 4 and Section 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.

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 programs, 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.

No treasury shares were purchased in the reporting period and Frequentis AG did not hold any treasury shares as at December 31, 2020.

The change in shareholders' equity is presented in the consolidated statement of changes in shareholders' equity.

Dividend

The net loss of Frequentis AG stated in the individual financial statements as at 31 December 2020 is EUR -10,542 thousand (31 December 2019: net profit EUR 6,969 thousand) and the accumulated profit is EUR 34,808 thousand (31 December 2019: EUR 47,341 thousand).

The Annual General Meeting of Frequentis AG on 14 May 2020 passed a resolution to pay a dividend of EUR 0.15 per no-par share entitled to the dividend for the 2019 financial year. The payment was contingent upon the legal permissibility on the payment date. Since there were no legal restrictions on distribution of a dividend, the dividend was paid in November 2020 after deduction of 27.5% statutory capital gains tax.

In 2020, the issued shares received a dividend distribution of EUR 1,992 thousand for 2019 (2019 for 2018: EUR 1,320 thousand). That corresponds to a dividend per share of EUR 0.15 in 2020 (2019: EUR 0.10 per share).

28. Reserves

	31 Dec. 2020 EUR thousand	31 Dec. 2019 EUR thousand
Capital reserves	**21,138**	**19,976**
IAS 19 reserve	-6,133	-5,608
IFRS 2 option reserve	232	63
Cash flow hedge reserve	-123	-675
Retained earnings and other reserves	81,887	87,911
Retained earnings	**75,863**	**81,691**

The capital reserves result from transactions with owners. For information on the changes in 2019 and 2020, see the explanation on the capital increase in Note 27. Share capital.

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

Item	Amount before income taxes 2020 EUR thousand	Income taxes 2020 EUR thousand	Amount after income taxes 2020 EUR thousand	Amount before income taxes 2019 EUR thousand	Income taxes 2019 EUR thousand	Amount after income taxes 2019 EUR thousand
Foreign currency translation	-784	0	-784	302	0	302
Realised gains/losses from foreign currency translation	0	0	0	-17	0	-17
Measurement of cash flow hedges	736	-184	552	-860	215	-645
Remeasurement of post-employment benefits	-703	176	-527	-1,480	370	-1,110
Investments accounted for at equity – amounts recognised in other comprehensive income	-1	0	-1	-2	0	-2
			- 760			**-1,472**

29. Share-based payment

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

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 programmes 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 LTIP 2019 and the LTIP 2020. In any case, the beneficiary may only sell the number of shares awarded under the LTIP 2019 and the LTIP 2020 or any subsequent long-term incentive plans 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), assuming 100% target achievement, a maximum of 14,000 shares (LTIP 2019) or 17,000 shares (LTIP 2020) – in both cases gross, i.e., before deduction of taxes and fees – but no more than 200% of the beneficiary's annual gross base salary for the 2019 or 2020 financial year, as applicable, will be granted. Settlement is effected by transferring the number of shares corresponding to the net amount of the award to the respective securities account. Subject to the approval of the Supervisory Board, the settlement date is 30 April 2022 for the LTIP 2019 and 20 April 2023 for the LTIP 2020.

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%.

The LTIP 2019 was approved by the General Meeting on 20 September 2019 and the agreement with the Chairman of the Executive Board was signed on 30 September 2019. The agreed targets are based on the total shareholder return (TSR), organic growth of the operating performance, the EBIT margin, the profit margin, and the development of key accounts, employee satisfaction, and customer satisfaction.

The LTIP 2020 was approved by the General Meeting on 14 May 2020 and the agreement with the Chairman of the Executive Board was signed on 15 May 2020. The agreed targets are based on the total shareholder return (TSR), orders on hand, growth in the regions, and growth via acquisitions. Apart from the achievement of the targets, the Executive Board member does not have to provide any consideration for the shares awarded.

In order to qualify for the allocation of shares in Frequentis AG, the targets must be achieved. The achievement of each target 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:

	LTIP 2020	LTIP 2019
Start of programme	1 Jan. 2020	1 Jan. 2019
Grant date	14 May 2020	30 Sep. 2019
End of service period	31 Dec. 2022	31 Dec. 2021
Vesting date	30 Apr. 2023	30 Apr. 2022
Expected target achievement	103%	74%
Expected number of shares	17,510	10,409
Maximum number of shares	17,000	14,000
Bonus shares allocated	None	None

Of the expected total future expense relating to the LTIP, 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 as at the date of the agreement multiplied by the number of shares granted and the expected target achievement. In the reporting period, EUR 184 thousand (2019: EUR 67 thousand) including payroll-related costs was recognised in personnel expenses in the consolidated statement of comprehensive income for the LTIP 2019 and the LTIP 2020.

For the LTIP 2019 and the LTIP 2020, it is assumed that both the market-oriented target and the non-market-oriented targets will be achieved so the effect of the market-oriented targets must be reflected in the expected level of target achievement and not in the fair value of the shares.

30. Non-controlling interests

The non-controlling interests relate to the following subsidiaries:

	31 Dec. 2020 EUR thousand	31 Dec. 2019 EUR thousand
TEAM Communication Technology Management GmbH, Vienna	1,263	1,096
ELARA Leitstellentechnik GmbH, Aachen	369	168
Systems Interface Ltd., Bordon	-615	-89
Secure Service Provision GmbH, Leipzig	346	322
Frequentis DFS Aerosense GmbH, Vienna	90	71
ATRiCS Advanced Traffic Solutions GmbH	2,191	
TEAM Technology Management GmbH	107	
	3,751	**1,568**

Due to the acquisition of the shares in ATRiCS Advanced Traffic Solutions GmbH (for details, see Note 1. General Information – Changes to the consolidated group), a carrying amount of EUR 3,722 thousand is presented for the net assets as at the acquisition date. The carrying amount of the acquired non-controlling interests was EUR 1,824 thousand as at the acquisition date.

In the reporting period, TEAM Technology Management GmbH was established as a subsidiary of TEAM Communication Technology Management GmbH. This company, in which Wolfgang Hammerschmidt GmbH holds a 49% stake, acts as a consultant to private and public sector organisations in the planning, procurement, operation, and maintenance of information and communication installations.

TEAM Communication Technology Management GmbH distributed a proportionate dividend of EUR 343 thousand to non-controlling shareholders in the reporting period and Secure Service Provision GmbH distributed a proportionate dividend of EUR 84 thousand.

In the reporting period, two shareholder contributions totalling EUR 24 thousand were received by Frequentis DFS Aerosense GmbH from non-controlling shareholders.

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 2020	Non-current assets*	Current assets	Non-current liabilities	Current liabilities	Net assets	Carrying amount of non-controlling interests
TEAM Communication Technology Management GmbH	235	4,281	259	1,579	2,679	1,263
ELARA Leitstellentechnik GmbH	581	947	331	444	752	369
Systems Interface Ltd.	45	2,304	1,485	2,119	-1,256	-615
Secure Service Provision GmbH	171	1,699	26	113	1,731	346
Frequentis DFS Aerosense GmbH	43	1,145	0	889	299	90
ATRiCS Advanced Traffic Solutions GmbH	3,347	3,104	1,041	938	4,472	2,191
TEAM Technology Management GmbH	75	102	14	18	145	107
						3,751

Statement of financial position as at 31 December 2019	Non-current assets	Current assets	Non-current liabilities	Current liabilities	Net assets	Carrying amount of non-controlling interests
TEAM Communication Technology Management GmbH	142	3,689	209	1,386	2,236	1,096
ELARA Leitstellentechnik GmbH	352	312	124	198	342	168
Systems Interface Ltd.	188	2,332	565	2,116	-161	-89
Secure Service Provision GmbH	227	1,596	65	145	1,613	322
Frequentis DFS Aerosense GmbH	44	235	0	43	236	71
						1,568

* 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):

2020	Amounts before intragroup elimination				Earnings attributable to non-controlling interests		
	Operating performance	Profit for the period	Other comprehensive income	Total comprehensive income	Profit for the period	Other comprehensive income	Total comprehensive income
TEAM Communication Technology Management GmbH	8,542	1,149	-6	1,143	563	-3	560
ELARA Leitstellentechnik GmbH	2,788	410	0	410	201	0	201
Systems Interface Ltd.	3,116	-1,116	0	-1,116	-547	20	-527
Secure Service Provision GmbH	2,971	540	0	540	108	0	108
Frequentis DFS Aerosense GmbH	1,533	-16	0	-16	-5	0	-5
ATRiCS Advanced Traffic Solutions GmbH	4,518	720	0	720	368	0	368
TEAM Technology Management GmbH	53	-55	0	-55	-41	0	-41
Total					**647**	**17**	**664**

2019	Amounts before intragroup elimination				Earnings attributable to non-controlling interests		
	Operating performance	Profit for the period	Other comprehensive income	Total comprehensive income	Profit for the period	Other comprehensive income	Total comprehensive income
TEAM Communication Technology Management GmbH	8,120	1,282	-34	1,248	628	-17	611
ELARA Leitstellentechnik GmbH	2,231	226	0	226	111	0	111
Systems Interface Ltd.	3,364	-280	0	-280	-137	0	-137
Secure Service Provision GmbH	2,990	603	0	603	121	0	121
Frequentis DFS Aerosense GmbH	3	-59	0	-59	-18	0	-18
Total					**705**	**-17**	**688**

31. Non-current provisions

	31 Dec. 2020 EUR thousand	31 Dec. 2019 EUR thousand
Provisions for severance payments	15,395	14,475
Provisions for pensions	3,260	3,035
Less pension insurance scheme	-2,696	-2,573
	564	**462**
Provisions for anniversary bonuses	369	343
Other provisions	884	786
Total non-current provisions	**17,212**	**16,066**

Since the life insurance policies are pledged to cover pension obligations, the corresponding amount accumulated in the pension insurance scheme is offset against the pension provisions.

Provisions for severance payments

This item mainly comprises claims by employees in Austria to one-off severance payments on the basis of statutory regulations and collective agreements. These payments may arise due to dismissal by the employer, termination of the employment contract by mutual consent, retirement or death of the employee. The level of the severance payment depends on the number of years of service with the Frequentis Group and the remuneration applicable when the employee leaves the Group.

The corresponding severance payments will result in outflows between 2021 and 2047.

Obligations for severance payments were measured using the following parameters:

	2020	2019
Interest rate	1.0%	1.3%
Wage and salary trend	3.0%	3.0%
Average term of the defined benefit obligation	11.6 years	12.1 years

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

	2020 EUR thousand	2019 EUR thousand
Present value of severance payment obligations (DBO) as at 1 January = provisions as at 1 January	**14,475**	**12,869**
Current service cost (CSC)	691	629
Interest cost (IC)	186	252
Actual payments made	-521	-491
Recognised actuarial loss (+)/gain(-)	564	1,216
Present value of severance payment obligations (DBO) as at 31 December = provisions as at 31 December	**15,395**	**14,475**

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 902 thousand in the reporting period (2019: EUR 875 thousand).

Presentation of the recognised actuarial gains/losses for severance payment obligations:

	2020 EUR thousand	2019 EUR thousand
Changes in demographic assumptions	0	0
Changes in financial assumptions	507	1,130
Other changes	57	86
Total	**564**	**1,216**

The main risk relating to severance payment obligations is the development of inflation and salary increases.

The following sensitivity analysis for severance payment obligations (amounts in EUR thousand) shows the effect of changes in the key actuarial parameters, while the remaining assumptions remained unchanged.

Interest rate	Salary increases	DBO 31 Dec. 2020
1.0%	3.5%	16,269
0.85%	3.0%	15,658
1.0%	3.0%	15,395
1.15%	3.0%	15,139
1.0%	2.5%	14,579

Interest rate	Salary increases	DBO 31 Dec. 2019
1.3%	3.5%	15,340
1.15%	3.0%	14,734
1.3%	3.0%	14,475
1.45%	3.0%	14,222
1.3%	2.5%	13,669

Provisions for pensions

In principle, 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 one former member of the Executive Board. The beneficiaries receive a lifelong monthly retirement pension or pension benefits for surviving dependants, resulting from reinsurance contributions.

The plan assets comprise funded insurance which is pledged to the entitled beneficiaries.

The pension benefit obligations were measured using the following parameters:

	2020	2019
Interest rate	1.0%	1.3%
Retirement age	60/65 years	60/65 years
Average term of the defined benefit obligation	14.73 years	14.18 years

Development of pension provisions and plan assets:

	2020 EUR thousand	2019 EUR thousand
Present value of the defined benefit obligation (DBO) as at 1 January	3,035	2,647
Fair value of plan assets	-2,573	-2,434
+ Provisions/- surplus plan assets as at 1 January	**462**	**213**
Present value of the defined benefit obligation (DBO) as at 1 January	3,035	2,647
Service cost	109	131
Interest cost	39	52
Pension payments	-89	-89
Recognised actuarial losses (+)/gains (-)	166	294
Present value of the pension benefit obligations (DBO) as at 31 December	**3,260**	**3,035**
Fair value of plan assets as at 1 January	2,573	2,434
Return on plan assets	34	49
Payments made	150	150
Payments received from plan assets	-89	-89
Recognised actuarial losses (-)/gains (+)	28	29
Fair value of plan assets as at 31 December	**2,696**	**2,573**
Provisions as at 31 December		
Present value of the pension benefit obligation (DBO)	3,260	3,035
Fair value of plan assets	-2,696	-2,573
+ Provisions/- surplus plan assets as at 31 December	**564**	**462**

It is expected that EUR 150 thousand will be paid into the pension insurance in 2021.

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

	2020 EUR thousand	2019 EUR thousand
Changes in demographic assumptions	0	0
Changes in financial assumptions	138	276
Other changes	28	18
Other changes to plan assets	-28	-29
Total	**138**	**265**

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 (amounts in EUR thousand) shows the effect of changes in the key actuarial assumptions parameters, while the remaining assumptions remained unchanged.

Interest rate	DBO 31 Dec. 2020
0.85%	3,333
1.0%	3,260
1.15%	3,190

Interest rate	DBO 31 Dec. 2019
1.15%	3,100
1.3%	3,035
1.45%	2,973

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 1.0% (2019: 1.3%) and an average term of 7.4 years (2019: 7.7 years).

	2020 EUR thousand	2019 EUR thousand
Present value of the defined benefit anniversary bonus obligations (DBO) as at 1 January = provisions as at 1 January	**343**	**301**
Current service cost (CSC)	38	34
Interest cost (IC)	4	6
Actual payments made	-18	-17
Recognised actuarial loss (+)/gain(-)	2	19
Present value of the defined benefit anniversary bonus obligations (DBO) as at 31 December = provisions as at 31 December	**369**	**343**

The main risk relating to anniversary bonus obligations is the development of inflation.

The following sensitivity analysis for anniversary bonus obligations (amounts in EUR thousand) shows the effect of changes in the key actuarial assumptions, while the remaining assumptions remained unchanged.

Interest rate	DBO 31 Dec. 2020
0.85%	373
1.0%	369
1.15%	365

Interest rate	DBO 31 Dec. 2019
1.15%	347
1.3%	343
1.45%	339

Other non-current provisions

The other non-current provisions comprise:

	As at 31 Dec. 2019 EUR thousand	Foreign exchange difference EUR thousand	Interest EUR thousand	Used EUR thousand	Reversed EUR thousand	Added EUR thousand	Reclassified liabilities EUR thousand	As at 31 Dec. 2020 EUR thousand
Provisions for leave based on period of service	84	1	0	0	0	36	-62	59
Provisions for projects	669	0	3	0	0	92	0	764
Other	33	0	0	0	0	28	0	61
	786	**1**	**3**	**0**	**0**	**156**	**-62**	**884**

A long-term holiday provision is recognised for a foreign subsidiary 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 contain project costs for which provisions have to be recognised due to the excess of expected future expenses over 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 for the provisions for projects is recognised in interest expense.

32. Contract liabilities from contracts with customers

Contract liabilities from contracts with customers comprise obligations to transfer goods and 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 from contracts with customers:

	31 Dec. 2020 EUR thousand	31 Dec. 2019 EUR thousand
Advances for customer projects	62,490	44,728
Advances offset against contract assets from contracts with customers	-12,249	-14,157
	50,241	**30,571**
Other contract liabilities	6,546	5,461
Other contract liabilities offset against contract assets from contracts with customers	-2,922	-2,413
	3,624	**3,048**
Accrued revenue for maintenance contracts	8,828	10,867
Liabilities for outstanding performance obligations for customer orders after final invoicing (current)	142	3,408
Liabilities for outstanding performance obligations for customer orders after final invoicing (non-current)	13	788
Total contract liabilities from contracts with customers	**62,848**	**48,682**

Other contract liabilities contain contractual claims to advance payments.

EUR 836 thousand (2019: EUR 3,347 thousand) of the contract liabilities have a term of more than 12 months. Since the contract costs are expected to be incurred within a normal business cycle, all contract costs are classified as current.

33. Other liabilities

The other liabilities comprise:

	31 Dec. 2020 EUR thousand	31 Dec. 2019 EUR thousand
Earn-out payment liability	1,238	0
Loans from non-controlling interests	480	530
Other liabilities	4	133
Total non-current financial liabilities	**1,722**	**663**
Accrual for holidays not yet taken	2,282	3,483
Liabilities to the Austrian fiscal authorities (excluding income taxes)	1,614	1,931
Accrual for consultancy costs	656	370
Advances received in connection with grants and subsidies	619	466
Accrual for overtime	466	435
Negative fair values of cash flow hedges and MTM valuation	398	2,181
Other liabilities	2,182	2,312
Total, current	**8,217**	**11,178**
of which financial liabilities	**1,600**	**3,340**
of which non-financial liabilities	**6,617**	**7,838**

The current other liabilities mainly comprise liabilities to local social security institutions and liabilities to employees.

34. Other current provisions

The other current provisions comprise:

	As at 31 Dec. 2019 EUR thousand	Foreign exchange difference EUR thousand	Utilisation EUR thousand	Reversal EUR thousand	Added EUR thousand	As at 31 Dec. 2019 EUR thousand
Bonuses	7,683	-113	-7,566	-4	7,525	7,525
Provisions for projects	4,150	-211	-3,939	0	2,919	2,919
Litigation costs	0	0	0	0	1,686	1,686
Other	1,706	-6	-1,112	-588	1,449	1,449
	13,539	**- 330**	**-12,617**	**- 592**	**13,579**	**13,579**

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 mainly relate to the lawsuits filed in connection with Commerzialbank Mattersburg (see Note 13. Impairment loss on financial assets).

It is expected that the current provisions will result in actual outflows in the 2021 financial year.

On the basis of the sensitivity analysis, a change in excess costs of +/-10% would change the provisions for projects by +/- EUR 1,414 thousand.

Other information

35. Consolidated cash flow statement

In the consolidated cash flow statement, cash inflows and outflows for operating, investing, and financing activities are reported separately. The operating cash flow is reported using the indirect method. Non-cash expenses (mainly depreciation and amortisation) and income are therefore added to or deducted from the profit/loss before tax. Taking into consideration changes in net working capital, this gives the cash flow from operating activities. Cash flows from forward exchange contracts are recognised in the cash flow from operating activities.

The increase in the cash flow from operating activities from EUR 17,728 thousand to EUR 54,752 thousand results, inter alia, from the increase of EUR 8,150 thousand in the net cash flow from operations, the change in trade accounts receivable (EUR 15,033 thousand), and the change in contract liabilities (EUR 13,722 thousand).

Investing activities mainly comprise cash inflows from and outflows for intangible assets, property, plant and equipment, and equity instruments, as well as additions of investments in associated and affiliated companies.

Financing activities comprise dividend payments, cash outflows for repayment of loans, payments of principal on lease liabilities, and cash inflows from loans.

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. 2020 EUR thousand	Addition to consolidated group EUR thousand	Exchange rate differences EUR thousand	Cash flow EUR thousand	Addition IFRS 16 EUR thousand	Reclassification of maturities EUR thousand	Carrying amount as at 31 Dec. 2020 EUR thousand
Non-current liabilities	6,030	0	-28	434	0	-1,049	5,387
Non-current lease liabilities	32,788	1	-257	0	6,980	-7,701	31,811
Current liabilities	1,609	472	-15	-1,800	0	1,049	1,315
Current lease liabilities	7,289	3	-67	-7,634	0	7,701	7,292
Total liabilities for financing activities	**47,716**	**476**	**-367**	**-9,000**	**6,980**	**0**	**45,805**

	Carrying amount as at 1 Jan. 2019 EUR thousand	Change in accounting methods (IFRS 16) as at 1 Jan. 2019 EUR thousand	Exchange rate differences EUR thousand	Cash flow EUR thousand	Addition IFRS 16 EUR thousand	Reclassification of maturities EUR thousand	Carrying amount as at 31 Dec. 2019 EUR thousand
Non-current liabilities	9,568	0	23	-2,561	0	-1,000	6,030
Non-current lease liabilities	0	32,608	112	0	8,034	-7,966	32,788
Current liabilities	1,651	0	12	-1,054	0	1,000	1,609
Current lease liabilities	0	6,539	22	-7,238	0	7,966	7,289
Total liabilities for financing activities	**11,219**	**39,147**	**169**	**-10,853**	**8,034**	**0**	**47,716**

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.

36. 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 derivatives 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 requirements. 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 derivatives 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 necessary liquidity. 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 insolvency of Commerzialbank Mattersburg in 2020 resulted in a sharp short-term reduction in liquid funds and time deposits, but it did not place the Frequentis Group in a position where it was unable to meet its financial obligations as due or was unable to undertake investments.

The steps taken by the Group to address possible liquidity shortfalls as a result of the COVID-19 pandemic and their impact on the consolidated financial statements are outlined below.

In the reporting period, Frequentis secured access to COVID-related corporate financing under the Austrian COVID KRR scheme. This comprises a revolving export credit facility in the amount of EUR 21,400 thousand with bills of exchange guaranteed by the Austrian government and refinancing commitments by Österreichische Kontrollbank AG. The government-guaranteed bills of exchange run until 31 March 2022. As at 31 December 2020, the Frequentis Group had not utilised this facility and it assumes that it will probably not be utilised.

The following table shows the contractually agreed (undiscounted) payments of interest and principal for non-derivative financial liabilities. The variable interest payments for financial instruments were derived from the last applicable interest rates prior to 31 December 2020 and 31 December 2019. 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.

2020 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	6,222	1,391	4,515	511	**6,417**
Lease liabilities	39,103	7,751	22,051	10,124	39,926
Trade accounts payable	11,923	11,410	513	0	11,923
Other liabilities	2,924	1,202	1,782	0	2,984
Non-derivative liabilities	**60,172**	**21,754**	**28,861**	**10,635**	**61,250**
Financial derivatives	398	42,671	0	0	42,670
Derivative financial liabilities	**398**	**42,671**	**0**	**0**	**42,670**
Total	**60,570**	**64,425**	**28,861**	**10,635**	**103,920**

2019 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	7,109	1,684	4,142	1,511	7,337
Lease liabilities	40,077	7,555	23,169	10,160	40,884
Trade accounts payable	13,650	12,479	1,171	0	13,650
Other liabilities	1,822	1,158	664	0	1,822
Non-derivative liabilities	**62,658**	**22,876**	**29,146**	**11,671**	**63,693**
Financial derivatives	2,181	49,715	0	0	49,715
Derivative financial liabilities	**2,181**	**49,715**	**0**	**0**	**49,715**
Total	**64,839**	**72,591**	**29,146**	**11,671**	**113,408**

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 (2020: EUR 59,318 thousand; 2019: EUR 58,550 thousand), contract assets (2020: EUR 38,420 thousand; 2019: EUR 38,354 thousand), other financial assets (2020: EUR 2,750 thousand; 2019: EUR 704 thousand), and cash and cash equivalents (2020: EUR 91,265 thousand; 2019: EUR 66,882 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 determination of any impairments based on the expected credit losses model, see Note 23. Trade accounts receivable.

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 it uses, 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 12,741 thousand (2019: EUR 45,639 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, 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 91,265 thousand (31 December 2019: EUR 66,882 thousand) and bear interest at variable rates or are not interest-bearing. A reduction in interest rates would increase negative interest. This is not, however, material as the cash and cash equivalents are divided among several banks. Negative interest totalling EUR 14 thousand was paid in the reporting period. An increase in interest rates from 0% to 1% would increase interest income by EUR 913 thousand (2019: EUR 669 thousand).

Within financial liabilities, non-current liabilities to banks and other non-current financial liabilities bear interest at fixed rates, while some (EUR 266 thousand) of the current liabilities to banks and other current financial liabilities bear variable interest rates. Interest rates for all lease liabilities are fixed.

Since the interest rate risk is insignificant, it is not presented in tabular form.

Exchange rate risk

The operating business of the companies in the Frequentis Group results in cash inflows and outflows in foreign currencies, which are not always matched by payments of the same amount in the same currency and with the same maturity. Therefore, the companies in the Frequentis Group are exposed to exchange rate risks.

For information on the hedging of exchange rate risks, see the “Financial derivatives” 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).

2020	Measured at fair value			Measured at amortised cost		Total carrying amount
	Hedge accounting	Mandatory recognition at fair value through profit or loss	Equity instruments – at fair value through profit or loss	Financial assets	Other financial liabilities	
Financial assets						
Equity instruments			863			863
Trade accounts receivable				59,318		59,318
Financial derivatives	12	1,293				1,305
Other current and non-current assets				1,673		1,673
Cash and cash equivalents				91,265		91,265
Total	**12**	**1,293**	**863**	**152,256**		**154,424**
Financial liabilities						
Liabilities to banks and other financial liabilities					6,222	6,222
Trade accounts payable					11,923	11,923
Lease liabilities					39,103	39,103
Financial derivatives	267	131				398
Other liabilities		1,345			1,579	2,924
Total	**267**	**1,476**			**58,827**	**60,570**

2019	Measured at fair value			Measured at amortised cost		Total carrying amount
	Hedge accounting	Mandatory recognition at fair value through profit or loss	Equity instruments – at fair value through profit or loss	Financial assets	Other financial liabilities	
Financial assets						
Equity instruments			874			874
Time deposits				17,995		17,995
Trade accounts receivable				58,550		58,550
Financial derivatives	92					92
Other current and non-current assets				801		801
Cash and cash equivalents				66,882		66,882
Total	**92**		**874**	**144,228**		**145,194**
Financial liabilities						
Liabilities to banks and other financial liabilities					7,109	7,109
Trade accounts payable					13,650	13,650
Lease liabilities					40,077	40,077
Financial derivatives	1,764	417				2,181
Other liabilities					1,822	1,822
Total	**1,764**	**417**			**62,658**	**64,839**

Fair value

Trade accounts receivable, contract assets, other receivables, 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, 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 liability relating to the acquisition of ATRiCS is 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.

Derivative financial assets and liabilities are carried at fair value. 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 programmes (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	Financial derivatives
Level 3: Measurement based on models with significant valuation parameters that are unobservable on the market	Equity instruments, earn-out liability

A further financing round for the 6.88% interest in the start-up company Altitude Angel Ltd., Reading, UK, took place in November. Since there were no indications of a material change in the value of the company since the initial investment, this was once again based on the initial valuation. The Frequentis Group decided not to participate in this financing round, in which new investors participated. Consequently, its interest has decreased to 4.56%.

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):

2020	Financial derivatives	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				94	-615
Valuation	1,625			-30,918	
Impairment loss pursuant to IFRS 9				-72	
Currency gains/losses				-1,524	22
Disposal gains/losses		-5			
Net gains/losses recognised in profit or loss	**1,625**	**-5**	**0**	**-32,420**	**-593**
Net gains/losses recognised in other comprehensive income	736				
Net gains/losses	**2,361**	**-5**	**0**	**-32,420**	**-593**

2019	Financial derivatives	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				440	-819
Valuation	201	4		-6	
Impairment loss pursuant to IFRS 9				-90	
Currency gains/losses				405	-110
Disposal gains/losses		0			
Net gains/losses recognised in profit or loss	**201**	**4**	**0**	**749**	**-929**
Net gains/losses recognised in other comprehensive income	-860				
Net gains/losses	**-659**	**4**	**0**	**749**	**-929**

Financial derivatives

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 financial derivatives, 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, CZK, GBP, HKD, JPY, NOK, PLN, SGD, and USD.

Forward exchange contracts were concluded to hedge the risk of exchange rate fluctuations. Financial derivatives 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 2021 to 2025.

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.

There were no reductions in forecast underlying transactions due to the COVID-19 pandemic.

The carrying amount of financial derivatives 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 2020, verified by corresponding bank confirmations.

The following table shows the development of financial derivatives:

2020	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
CZK	3,700	-344	10.76	0	0	3,700	6	6
GBP	-5,377	6,114	0.88	-26	0	-5,351	168	168
HKD	-2,000	222	9.01	0	0	-2,000	14	14
SGD	-4,183	2,628	1.59	0	0	-4,183	66	66
USD	-21,677	18,591	1.17	-1,329	11	20,348	1,040	1,051
		27,211			**11**		**1,294**	**1,305**
AUD	-6,355	3,900	1.63	-397	-7	-5,958	-68	-75
CHF	-627	577	1.09	0	0	-627	-5	-5
GBP	-8,733	9,482	0.92	-7,828	-173	-906	-4	-177
JPY	-7,092	55	128.95	0	0	-7,092	-1	-1
NOK	-3,500	324	10.80	0	0	-3,500	-8	-8
SGD	427	-268	1.59	0	0	427	-7	-7
USD	-1,874	1,390	1.35	-2,071	-88	197	-38	-126
		15,460			**- 268**		**- 131**	**- 399**

2019	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
JPY	7,092	-55	128.95	0	0	7,092	3	3
SGD	427	-270	1.58	0	0	427	8	8
USD	-2,826	2,557	1.11	0	0	-2,826	81	81
		2,232			**0**		**92**	**92**
AUD	-4,749	2,901	1.64	-3,739	-18	-1,010	-9	-27
CAD	-54	35	1.54	-54	-1	0	0	-1
CHF	-1,413	1,294	1.09	-29	-1	-1,384	-10	-11
GBP	-16,264	18,208	0.89	-9,478	-648	-6,786	-28	-676
JPY	-14,184	110	128.95	0	0	-14,184	-6	-6
PLN	-16,058	3,552	4.52	-9,918	-128	-6,140	-14	-142
SGD	-7,178	4,555	1.58	0	0	-7,178	-112	-112
USD	-20,688	16,828	1.23	-11,169	-968	-9,518	-238	-1,206
		47,483			**-1,764**		**- 417**	**-2,181**

For the carrying amount of the cash flow hedge and the carrying amount of the MTM valuation, a positive fair value of EUR 1,305 thousand was recognised in other receivables in 2020 (2019: EUR 92 thousand), while a negative fair value of EUR 399 thousand was recognised in other liabilities (2019: EUR 2,181 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 table below.

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 2020 or 2019.

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

	2020 EUR thousand	2019 EUR thousand
As at 31 December of the previous year	**-675**	**-30**
Result from changes in fair value	256	-829
Deferred taxes on this amount	-64	207
Reclassification to the income statement	480	-31
Deferred taxes on this amount	**-120**	**8**
As at 31 December of the financial year	**-123**	**-675**

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 1,062 thousand and the fair value of the MTM valuation by EUR 2,754 thousand, while a 10% reduction in exchange rates would have reduced the fair value of the cash flow hedge by EUR 1,298 thousand and the fair value of the MTM valuation by EUR 3,365 thousand.

37. Leases

Leases 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 the leases are for office premises for small companies, 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 2019, it was assumed that the lease would be extended to 2027. This was reviewed as at 31 December 2020 and the period was adjusted to 2028. As a result, the right-of-use asset increased by EUR 3,673 thousand.

In the reporting period, 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:

2020	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 2020	**44,777**	**0**	**2,058**	**46,835**
Foreign currency translation	-374	0	-10	- 384
Changes in reporting entities	0	0	9	9
Addition	5,582	587	811	6,980
Disposal	-622	0	-161	- 783
As at 31 December 2020	**49,363**	**587**	**2,707**	**52,657**
Accumulated depreciation				
As at 1 January 2020	-6,535	0	-502	-7,037
Foreign currency translation	96	0	2	98
Changes in reporting entities	0	0	-4	-4
Addition	-6,925	-19	-746	-7,690
Disposal	589	0	138	727
As at 31 December 2020	**-12,775**	**-19**	**-1,112**	**-13,906**
Carrying amount				
As at 31 December 2020	36,588	568	1,595	**38,751**

2019	Right-of-use assets for land and buildings EUR thousand	Right-of-use assets for other plant, factory and office equipment EUR thousand	Total EUR thousand
Acquisition cost			
As at 1 January 2019	38,299	808	**39,107**
Addition	6,573	1,249	7,822
Disposal	-226	0	- 226
Foreign currency translation	131	1	132
As at 31 December 2019	**44,777**	**2,058**	**46,835**
Accumulated depreciation			
As at 1 January 2019	0	0	0
Addition	-6,591	-502	-7,093
Disposal	56	0	56
As at 31 December 2019	**-6,535**	**- 502**	**-7,037**
Carrying amount			
As at 31 December 2019	38,242	1,556	**39,798**

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 40,077 thousand (comprising EUR 32,788 thousand non-current and EUR 7,289 thousand current) as at 1 January 2020 to EUR 39,103 thousand (comprising EUR 31,811 thousand non-current and EUR 7,292 thousand current) as at 31 December 2020.

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

	2020 EUR thousand	2019 EUR thousand
Depreciation of right-of-use assets	7,690	7,093
Interest expense for lease obligations	242	438
Lease payments for short-term leases	527	912
Lease payments for low-value assets	25	18
Total	**8,484**	**8,461**

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

	2020 EUR thousand	2019 EUR thousand
Payments of principal on lease liabilities	7,633	7,238
Interest paid on lease liabilities	242	438
Lease payments for short-term leases and low-value assets	552	930
	8,427	**8,606**

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 2020, the Frequentis Group concluded several leases that start in 2021. However, these are insignificant leases for vehicles and the rental of buildings.

Leases as lessor

Revenues from leases where the Frequentis Group is the lessor amounted to EUR 42 thousand in the reporting period (2019: EUR 73 thousand). These lease revenues will be EUR 44 million in 2021 and EUR 33 thousand in the following two years. These leases are classified as operating leases.

38. 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:

	2020 EUR thousand	2019 EUR thousand
Goods and services supplied and other income	31	90
Goods and services received and other expenses	549	507
Receivables outstanding as at 31 December	5	15
Liabilities outstanding as at 31 December	0	3

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:

	2020 EUR thousand	2019 EUR thousand
Goods and services supplied and other income	167	122
Goods and services received and other expenses	2,308	2,077
Receivables outstanding as at 31 December	12	8
Liabilities outstanding as at 31 December	71	180

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:

	2020 EUR thousand	2019 EUR thousand
Expenses for consulting services	303	315
Expenses for project support services	223	335
Expenses for software development and engineering	613	650
Rental payments (principal and interest) and operating costs	3,776	3,773
Revenues	162	211
Receivables as at December 31	0	62
Payables as at December 31	31	187

The rental payments mainly comprise rent for the office premises at the company's headquarters in Vienna.

Austrian Research Promotion Agency (Österreichische Forschungsförderungsgesellschaft/FFG): Mr. 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 122 thousand (2019: EUR 23 thousand) were disbursed by FFG. Funding received from FFG in the reporting period totalled EUR 893 thousand (2019: EUR 573 thousand).

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
- Sylvia Bardach
- Hermann Mattanovich

The total remuneration paid to the Executive Board (excluding payroll-related costs) was EUR 1,271 thousand in the reporting period (2019: EUR 2,074 thousand). The remuneration of the Executive Board comprises fixed components (annual base salary, premiums for pension reinsurance, benefits in kind) and variable components (including the LTIP). The variable components are performance-related and are based on the achievement of short-term financial targets for the company. In 2019, a one-off bonus was paid for the successful listing of Frequentis AG on the stock market.

In 2019 and 2020, Frequentis AG agreed long-term incentive programmes (LTIP) with the Chairman of the Executive Board, Mr. Norbert Haslacher. These do not require any personal investment in Frequentis AG shares. From the grant date, a maximum of one third of the shares acquired under the LTIP 2019 and 2020 may be sold in any financial year. In any case, the beneficiary may only sell the number of shares awarded under the LTIP if, at all times, he holds at least 7,000 of the shares awarded under a long-term incentive plan ("minimum shareholding"). In the reporting period, EUR 184 thousand (2019: EUR 67 thousand), including payroll-related costs, was recognised in personnel expenses in the consolidated statement of comprehensive income for the LTIP 2019 and the LTIP 2020.

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 298 thousand were incurred in the reporting period (2019: EUR 333 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 109 thousand (2019: EUR 131 thousand), interest cost of EUR 39 thousand (2019: EUR 52 thousand), and pension insurance expense of EUR 150 thousand (2019: EUR 150 thousand).

In the event of termination of employment, severance payments are due in accordance with the legal regulations in Austria. Additions to the corresponding provisions for severance payments amounted to EUR 33 thousand in 2020 (2019: EUR 25 thousand).

No advances or loans were granted to members of the Executive Board.

Supervisory Board

The Supervisory Board of Frequentis AG comprises five representatives of the shareholders and three representatives of the workforce.

The remuneration of the Supervisory Board amounted to EUR 145 thousand in the reporting period (2019: EUR 103 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.

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

39. Significant events after the reporting date

On 23 February 2021, Frequentis AG signed an agreement to acquire the ATM voice communications and arrival management product business from the US company L3Harris Technologies for a purchase price of USD 20.1 million (about EUR 16.58 million) subject to customary net debt and working capital-based purchase price adjustments at closing. It is expected that the transaction will be closed during 2021. The transaction, which is subject to competition clearance and regulatory approvals, comprises the acquisition of

- the ATM voice communication systems product line of L3Harris, USA
- the Harris ATC Solutions business unit of Harris Canada Systems Inc., Gatineau, Canada
- 100% of the shares in Harris C4i pty. Ltd., Melbourne, Australia, and
- 100% of the shares in Harris Orthogon GmbH, Bremen, Germany.

In addition to these acquisitions, L3Harris and the Frequentis Group have entered into cooperation agreements. As an L3Harris technology partner, Frequentis will provide voice communication systems for use in L3Harris' large-scale solutions and service business.

This transaction marks a significant step in the Frequentis Group's growth strategy and will complement its portfolio for the civil and military ATM sector. Moreover, Frequentis will add the leading arrival and departure management solutions from L3Harris Orthogon to its offering.

Since closing is only possible when the competition clearance and regulatory approvals have been obtained, no figures as at the acquisition date are yet available. The company will be fully consolidated after closing of the transaction.

40. Additional information

The Frequentis Group had an average of 1,907 employees in 2020 (2019: 1,849 employees).

Audit fees

In the reporting period, audit expenses of EUR 122 thousand (2019: EUR 120 thousand) were incurred for the audit of the consolidated financial statements and the annual financial statements of Frequentis AG, expenses of EUR 49 thousand (2019: EUR 70 thousand) were incurred for other consulting services, and expenses of EUR 16 thousand (2019: EUR 18 thousand) were incurred for other services.

41. 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:

	2020	2019
EBIT margin (based on revenues)	9.0%	5.7%
Equity ratio	40.7%	42.7%
Net cash in EUR thousand	85,043	77,768

The Frequentis Group calculates EBIT as follows:

	2020 EUR thousand	2019 EUR thousand
Profit/loss before tax	-4,422	16,984
Financial income	-94	-440
Financial expenses	615	819
Impairment loss on financial assets	30,923	2
Earnings from investments accounted for at equity	-214	-148
Total	**26,808**	**17,217**

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.

42. 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, 15 March 2021

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, 2020, 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, 2020, 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.

- 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 arise due to COVID-19 constraints, in particular travel restrictions, on projects acceptances and therefore 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 "Impact of the COVID-19 pandemic", "IFRS 15 Revenue from Contracts with Customers" as well as "Significant estimates and exercise of discretion". Further information can be found in chapter 4 "Revenues" within the notes to the consolidated income statement and in chapter 24 "Contract assets from contracts with customers" and chapter 32 "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 indepth 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 COVID-19. 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 informationen

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 supervisory board/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 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 May 14, 2020. We were appointed by the Supervisory Board on September 20, 2020. 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.

We provided no services, in addition to the statutory audit, to the audited company and its controlled undertakings, which have not been disclosed in the Group's management report or in the consolidated financial statements.

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, 16 March 2021

BDO

BDO Austria GmbH

Wirtschaftsprüfungs- und Steuerberatungsgesellschaft

Mag. Gerhard Posautz Auditor	Mag. Gerhard Fremgen Auditor

Statement by all legal representatives

We confirm to the best of our knowledge that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and profit or loss of the group as required by the applicable accounting standards and that the group management report gives a true and fair view of the development and performance of the business and the position of the group, together with a description of the principal risks and uncertainties the group faces.

Vienna, 15 March 2021

Norbert Haslacher
Chairman of the Executive Board

Sylvia Bardach

Hermann Mattanovich

Glossary

This glossary explains technical terms and abbreviations relating to Frequentis' business as well as financial and commercial terminology.

Glossary of technical terms relating to Frequentis' business

Term	Explanation
3GPP	3rd Generation Partnership Project Worldwide cooperation of standards organisations which develop protocols for mobile telecommunications
5G	5th Generation technology standard for broadband cellular networks
AMHS; MHS	(Aeronautical) Message Handling Services MHS: System for processing and transmitting aeronautical messages, based on an ICAO standard for air-ground-ground communication; e.g. for the transmission of NOTAM (notice to airmen), flight plans, or meteorological data
ATC	Air Traffic Control
ATM	Air Traffic Management • Air traffic management (ATM) ensures the safe and efficient movement of aircraft during all phases of their operation • Name of a Frequentis business segment that comprises the Air Traffic Management Civil, Aeronautical Information Management, and Defence business domains
BCHÖ	B&C Holding Österreich GmbH
CANSO	Civil Air Navigation Services Organisation International organisation which represents the interests of air navigation service providers
CERT	Computer Emergency Response Team A group of IT security experts that issues warnings about information security vulnerabilities and offers recommendations for mitigating the associated risks, also in the event of specific IT security incidents
CISO	Chief Information Security Office Senior-level executive responsible for information security
EAD	European AIS (Aeronautical Information Services) Database The European AIS Database has been successfully operating since 2003. The EAD system was developed by Frequentis and is operated by GroupEAD. It ensures standardisation and harmonisation of the relevant aviation data and therefore greater safety, while reducing maintenance costs. It therefore represents an initial milestone for the concept of a "Single European Sky"
EASA	European Union Aviation Safety Agency
ESD	Electrostatic discharge A sudden flow of electricity between two electrically charged objects
ETSI	European Telecommunications Standards Institute An independent, not-for-profit, standardisation organisation in the field of information and communications, which supports the development and testing of global technical standards for systems, applications, and services

EUROCAE	European Organisation for Civil Aviation Equipment EUROCAE is a non-profit organisation that deals with the standardisation of electronics for aviation
FESE	Federation of European Security Exchanges
FIRST	Forum of Incident Response and Security Teams Global association of CERTs and IT security professionals
GMDSS	Global Maritime Distress and Safety System Global system for distress and safety radio communication; a set of technical equipment, service centres, and rules to support global rescue efforts in cases of distress at sea and for the protection of shipping
GSM-R	GSM for Railways A mobile radio system which is based on the dominant global mobile radio standard GSM, which has been specifically adapted for use in the railway sector
IBB	Installed Base Business Follow-up business to installed systems and solutions
ICAO	International Civil Aviation Organization ICAO is a UN specialised agency based in Montreal, Canada. Its aim is to foster sustained growth in the global civil aviation system
IoT	Internet of Things
IP networks	IP stands for "Internet Protocol" IP networks work with the internet protocol and packet switching; They consist of subnetworks that use routers or switches to connect to the actual backbone network, which constitutes the communication infrastructure
ISSS	International System Safety Society A non-profit organisation that supports safety professionals worldwide,; the focus is on the application of systems engineering and systems management in hazard, safety, and risk analysis
LDACS	L-band Digital Aeronautical Communication System Wideband terrestrial system with line-of-sight coverage, for future aeronautical communications
LTE	Long Term Evolution A broadband standard for mobile communications
MCPTT	Mission Critical Push-To-Talk Push-to-talk functionality that meets the requirements of secure, mission-critical voice communication, based on a arbitrated method where two or more users can communicate with each other
PEFC	Programme for the Endorsement of Forest Certification Schemes Seal for sustainable forest management for the recognition of forest certification programmes
PST	Public Safety & Transport Name of the Frequentis business segment comprising the Public Safety, Public Transport (i.e. railways) and Maritime business domains
SaaS	Software as a Service A software licensing and delivery model – considered to be part of cloud computing – in which software is licensed on a subscription basis and is hosted centrally
SESAR	Single European Sky ATM Research A pan-European initiative for the unification, harmonisation, and synchronisation of services within the framework of European air traffic management, which was initiated by the European Commission and the European Organisation for the Safety of Air Navigation, EUROCONTROL

SIRT	Security Incident Response Team Coordinating entity for the assessment of information security vulnerabilities, risk mitigation, and information security incident management
TETRA	TErrestrial Trunked Radio Open standard for digital trunked radio which enables the setup of universal networks
UTM	Unmanned aircraft system Traffic Management An air traffic management system for remotely and autonomously controlled operations of unmanned aerial systems

Glossary of financial and commercial terms

Term	Explanation
AktG	Aktiengesetz Austrian Companies Act
ArbVG	Arbeitsverfassungsgesetz Austrian Labour Relations Act
C rules	Principles of the Austrian Code of Corporate Governance ("comply or explain"), which have to be followed; any deviation has to be explained and the reasons stated to be in compliance with the Code
CAGR	Compound Annual Growth Rate
CAPEX	Capital expenditure Funds that are used by a company for the purchase, improvement, or maintenance of long-term assets
CGU	Cash Generating Unit
CoC	Code of Conduct
CPI	Corruption Perception Index
CSR	Corporate Social Responsibility
EBIT	Earnings before interest and taxes
EBIT margin	EBIT as a percentage of operating performance
EBITDA	Earnings Before Interest, Taxes, Depreciation, Amortisation, and impairment losses
ECL	Expected credit losses
Equity ratio	Equity/total equity and liabilities
ERP	Enterprise Resource Planning Software solution
FFG	Österreichische Forschungsförderungsgesellschaft mbH Austrian Research Promotion Agency; national funding agency for industrial research and development in Austria
FN	Commercial register number, unique identifier of a legal entity in Austria
FQT	Ticker symbol of the shares of Frequentis AG
FVOCI	Fair Value through Other Comprehensive Income Classification and measurement category for financial assets; changes in the fair value are recognised in other comprehensive income (i.e., outside of profit and loss)

FVTPL	Fair Value Through Profit and Loss Classification and measurement category for financial assets; changes in the fair value are recognised in profit or loss
GRI	Global Reporting Initiative An international independent standards organisation that helps communicate impacts on issues such as climate change, human rights and corruption; GRI's framework for sustainability reporting helps companies identify, gather, and report this information in a clear and comparable manner
IAS	International Accounting Standards
ICS	Internal control system
IFRIC	International Financial Reporting Interpretations Committee
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
IoT	Internet of Things
IPO	Initial Public Offering
ISIN	International Securities Identification Number, Frequentis' ISIN: ATFREQUENT09
KRR	Kontrollbank-Refinanzierungsrahmen Programme to support the export industry by mitigating the economic impact of COVID-19
L rules	Legal requirements of the Austrian Code of Corporate Governance
LTIP	Long Term Incentive Plan/Programme
M&A	Mergers & Acquisitions
MTM	Mark-To-Market Accounting method where the value of an asset or liability is based on the current market price
NaDiVeG	Nachhaltigkeits- und Diversitätsverbesserungsgesetz Austrian Sustainability and Diversity Improvement Act
ÖCGK	Österreichischer Corporate Governance Kodex Austrian Code of Corporate Governance
OCI	Other comprehensive income
R rules	Recommendations of the Austrian Code of Corporate Governance
SDGs	Sustainable Development Goals United Nations (UN) objectives for sustainable economic, social, and environmental development
Shareholders' equity	Funds made available to the company by its owners through cash or contributions in kind, plus retained earnings
STEM	Abbreviation for studies and professions in the fields of science, technology, engineering, mathematics
TSR	Total Shareholder Return
UGB	Austrian Commercial Code
WACC	Weighted Average Cost of Capital
XETRA	A share trading platform operated by the Frankfurt Stock Exchange

Financial Calendar 2021

07.04.2021	Annual financial statements 2020
10.05.2021	Record date for General Meeting
20.05.2021	Annual General Meeting, Vienna
26.05.2021	Ex-dividend day
27.05.2021	Record date for dividend
28.05.2021	Dividend payment day
17.08.2021	Half-year financial report 2021

http://www.frequentis.com/ir > Financial Calendar

Notes / Disclaimer

The terms "Frequentis" and "Frequentis Group" in this publication refer to the Group; "Frequentis AG" is used to refer to the parent company.
Minimal arithmetical differences may arise from the application of commercial rounding to individual items and percentages.
The forecasts, plans, and forward-looking statements contained in this publication are based on the knowledge and information available and the assessments made at the time that this publication was prepared. As is true of all forward-looking statements, these statements are subject to risk and uncertainties. As a result, actual events may deviate significantly from these expectations. No liability whatsoever is assumed for the accuracy of projections or for the achievement of planned targets or for any other forward-looking statements.
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Concept: Frequentis Corporate Communications

Printer: Donau Forum Druck, 1230 Vienna

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