

# AIR NAVIGATION SERVICES FINLAND OY

# Annual Report 2019





**Air Navigation Services Finland Ltd (ANS Finland) is responsible for managing the use of Finnish airspace as well as providing flight route and air navigation services at airports in Finland**

ANS Finland provides safe, accurate and competitive air navigation services in Finland, the most environmentally friendly airspace in the world. The aim is for air traffic to support Finland’s success in a comprehensive way.

Air navigation services include

- managing the use of Finnish airspace as well as providing en-route and air navigation services at 22 Finnish airports
- designing and maintaining the infrastructure and systems required for air navigation in compliance with international requirements
- special tasks relating to air rescue coordination and territorial surveillance
- training and consulting services

Air Navigation Services Finland Oy is part of the Traffic Management Finland Group.

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## CEO'S REVIEW

# ANS Finland guarantees the safety of Finnish air traffic

**ANS Finland ensures that air traffic is safe and has no delays and guarantees that Finland is accessible, which is strongly based on air traffic, 24/7/365. In addition, it has special tasks relating to air rescue coordination and territorial surveillance.**

At the beginning of 2019, the ownership of the company was transferred to the new Traffic Management Finland. After this, the air navigation strategy was updated for the next five-year period. In its operations, air navigation aims at customer orientation, smoothness and efficiency. Skilled employees are its biggest asset.

ANS Finland fulfilled its service promise with determination amidst the change: area control and network airports had no delays whatsoever during the year, and no flights were cancelled due to reasons attributable to air navigation. The safety targets were also met. In 2019, the company also renewed the collective agreement for air traffic controllers and improved its cost efficiency: air navigation service fees will decrease by approximately 12 per cent in area control and Helsinki Airport in 2020.

During the year, the company developed the Multi-ROT concept uniquely in Europe together with the airport operator Finavia, allowing a single air traffic controller to manage the air navigation of several airports via remote connections. Remote air traffic control towers aim to enhance the cost efficiency of air navigation services and maintain an adequate level of service at airports with low volumes as well. The concept was submitted to the Finnish Transport and Communications Agency Traficom for approval in 2019. In 2020, the company will make the final decision on both the technical system and airports where any operations will be started together with Finavia.

Unmanned remote-controlled aerial vehicles and drones are developing and quickly becoming more common. Therefore, it is important to find solutions to flexibly and safe-

**” In 2019, flights were not cancelled due to reasons attributable to air navigation. Also the safety goals were met.**



ly coordinate conventional and unmanned aviation. Regulations on drones are still developing, and it was not found out during 2019 how low-level (U-space) services will be provided to users, so the work will continue in 2020.

An air traffic controller training programme has begun at the company's own educational institution, Avia College, each autumn. Avia College also continuously trains foreign air traffic controllers for the international market. The aim is to also deliberately take part in competitive bids for air navigation services opening in Europe. The European Union wants to harmonise the European airspace and increase competition in service production, and the company will aim to ensure the competitiveness of its operations in the changing market in this way, among other means.

The European Union is requiring its Member States to reduce the costs of air traffic. One of the responses to this demand is the

FINEST project, unique in Europe, which is implemented by ANS Finland together with Estonian Air Navigation Services (EANS). The FINEST programme aims to create an environment in which air navigation services can be provided across national borders. The service allows service providers in either country to provide services to the other as necessary – meaning that a pilot can be served by Estonian or Finnish air traffic control in shared airspace. FINEST will increase the efficiency of operations and decrease emissions with the jointly managed airspace providing airlines with optimum flight routes that are as short as possible. The implementation of the project, one of ANS Finland's spearhead projects, began in 2019. The aim is to adopt the operating model pursuant to the FINEST project in three phases, the last of which will take place in 2022.

Raine Luojus  
CEO





# Highlights 2019

## ATCC - Finland's Air Traffic Control Centre

- 25 April Internal changes within the area of responsibility of regional air traffic control centre (sectorisation), updating the standard approach routes at Helsinki Airport to support a more environmentally friendly air traffic management, change of the ATC call sign of the regional air traffic control centre to Helsinki Control and the deployment of air traffic controller-pilot data connections (CPDLC).
- The testing and practising service contingency by providing operational Area Control Centre (ACC) and Approach Control (APP) services 24 hours at reserve premises.
- Testing and practising Helsinki Airport tower (EFHK TWR) services contingency by providing operational services at temporary tower on 18 November.
- Record number of IFR flights in Finland, 276,362 on 31 December.

## Network airports

- Regular scheduled traffic to and from Pori resumed on 09/2019 and will be provided with an air traffic control service
- Planning of the remote-operated air traffic control (MROT) continued with simulations in May in Germany, for which a report was received in August. A concept-level proposal with safety reviews was submitted to the authorities in November

## Safety

- The changes required by the new EU legislation in the Safety Management System were implemented as planned
- The degree of achievement of safety targets was good
- The refresher training of the entire company's personnel on the Safety Management System was successfully implemented

#### Marketing and customer relations

- The Gulf of Finland project (drone flights) and the associated tests, culminating in the Volocopter Drone taxi flight at the Helsinki Airport.
- A seminar on route optimisation in Beijing, China in cooperation with Traficom and Finnair
- Consulting with airlines on route optimisation issues and thereby increasing air traffic over Finland

#### Avia College

- One air traffic controller training course (LJK) qualified in March 2019, and the next course started in August 2019
- Students from Bosnia–Herzegovina continued in the regional air traffic control training throughout the year, one group of students graduated in summer 2019
- The students from the Latvian air navigation company LGS (Latvijas Gaisa Satiksme) and the Swedish air navigation company ACR (Aviation Capacity Resources AB) continued their studies and graduated in October 2019
- A new course of the Latvian LGS started in August 2019

#### Technical Air Navigation

- The renewal of the ILS precision approach system of Helsinki Airport in record time
- In data communications, the transition from the TDM based network to the use of an TDM over IP network
- The deployment of the TopMax phone system
- The deployment of the updates of the MSSR monopulse secondary surveillance radar system at Tampere-Pirkkala and Kuopio airports
- The first validations of the satellite-based SBAS LPV approach procedures in flight checking
- Tendering the VoIP VCS system and entering into a contract with the winning supplier
- 11 new employees recruited in the Technology unit, work begins in early 2020

# Year 2019 in numbers

## KEY FIGURES

Revenue

80.2

eur million

Operating profit

5.9

eur million

Operating profit/revenue (%)

7.3%

## PERSONNEL (31.12.2019)

Employees

438

Average age of employees (years)

45.5

Average duration of  
employment relationships

17.7

Absences due to sickness rate

2.6

## DISTRIBUTION OF LOCATIONS

Vantaa	301
Northern Finland	43
Enontekiö	1
Ivalo (Inari)	1
Kajaani	4
Kemi	2
Kittilä	3
Kuusamo	3
Oulu	13
Rovaniemi	16
Eastern Finland	37
Joensuu	5
Jyväskylä	12
Halli (Jämsä)	1
Kuopio (Siilinjärvi)	12
Lappeenranta	2
Savonlinna	2
Utti (Kouvola)	3
Western Finland	57
Kokkola (Kruunupyy)	4
Maarianhamina	5
Tampere-Pirkkala	19
Pori	6
Turku	15
Vaasa	8
<b>TOTAL</b>	<b>438</b>

# Strategy 2020–2024

- Our strategic customers include Finnair, Finavia, Finnish state aviation operations as well as overflights. The customers of ANS Finland expect the operations to stay safe and punctual.
- The competition on offering ATM services cross borders is increasing, and it's already a reality in some areas. Therefore, it is very important for ANS Finland to improve its performance with which the company can maintain its position and further improve its competitiveness compared to other service providers.
- From the beginning of 2019, ANS Finland was incorporated into the established Traffic Management Finland. The corporatisation of four traffic management functions, the harmonisation and integration of operations, the growing role of services and related development activities are made possible by digitalisation, automation and information sharing. It also lays the foundation for improving customer orientation.

Some of the support services of the subsidiaries will be centralised in the Group, and the Group will also build new business platforms utilising ecosystem thinking.

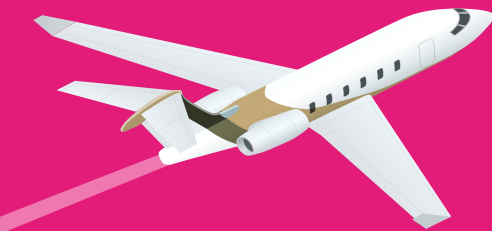
- New traffic management operations are being developed to improve the quality and cost-effectiveness of basic services. The key projects of the strategy period are cross-border air traffic control services (the so-called FINEST project) as well as enabling future air traffic control services of airports with a remote air traffic control model.
- Climate change is affecting society's attitudes, and air travel trends may fluctuate in Europe. States are considering the introduction of various air travel taxes (already in place in some countries). ANS Finland is continuously developing more environmentally efficient flight methods and air traffic control services to minimise the environmental impact of flying.

- The integration of low-flying airspace into traditional aviation is seen as a new challenge, while enabling the emergence of a completely new business area as, for example, drone activities develop.
- In order to continue as a successful player in the market and to increase its share of the Nordic air navigation market, ANS Finland has to adapt to the operating environment. ANS Finland aims to develop its turnover further and to remain profitable in the strategy period 2020-2024. This is achieved by improving cost-effectiveness, implementing key strategic projects alone or through partnerships, and leveraging new business innovations.



# The world's safest, smoothest and most environmentally friendly airspace

We have the world's environmentally friendly airspace. Our competent professionals are the key resources for new, traffic data services, that produce major benefits for our customers and the whole of society.



## Objectives

Safe and smooth  
air traffic

Cost-effective  
operations

Partnerships and  
new services

Good leadership  
and ability to renew  
our expertise

We are running our  
operations on the  
basis of social impact

## Major programs

- Multi Remote Tower Services Concept (MROT)
- Joint cross-border air navigation services with Estonia (FINEST)
- Start providing ATS services in new markets
- Designated U-Space service provider in Finland
- Sales activities in training services and consulting

# International co-operation

## EU objectives define operations

Air navigation services are strongly regulated, and the terms of ANS Finland's license come directly from the EU. This gives the company a chance to offer air navigation services anywhere in Europe. The sector is increasingly opening up to international competition, and ANS Finland is also preparing for this development.

Air navigation operations are getting prepared for the changes in the operating environment caused by, for example, unmanned aerial vehicles, short-range traffic and cybersecurity requirements. The EU leads the European ATM Master Plan.

Single European Sky (SES) is an EU project. SES seeks to harmonise practices in different countries. The SES is based on binding EU regulations and complementary rules on harmonised measures. For example, airlines and aviators benefit from the free routing airspace already in use in Finland, which allows them to choose their preferred route.

EU sets prices for air navigation services and performance targets for service providers in four main areas:

- the safety management systems must meet the set criteria
- the delays allowed for air traffic must stay within the set limits
- flight routes must be as short and unrestricted as possible
- costs must be below the set maximum level.

Single European Sky network performance plan (RP3 2020-2024) includes strict targets for service providers, and states are expected to improve their air navigation performance in all areas. For Finland, the targets concerning ANS Finland were drafted during 2019 by the Ministry of Transport and Communications and the Finnish Transport and Communications Agency Traficom.

## Functional airspace block NEFAB and FINEST

Finland is part of the North European Functional Airspace Block (NEFAB) together with Latvia, Norway and Estonia. NEFAB is one of the nine European Functional Airspace Blocks established in connection with the SES project. Within the Airspace Blocks, states and service providers, including ANS Finland, cooperate in developing operations.

ANS Finland has an ongoing FINEST project together with the Estonian air navigation service provider EANS. It aims to develop a common air traffic control system in 2020–2022, in which each operator could provide a service on behalf of the other.

## The management of the air traffic network

Eurocontrol acts as the Network Manager in Europe, appointed by the EU. The significance of the Network Manager operations is expected to increase in the future. With the increase in air traffic, the exchange of infor-

mation and coordination between the various parties is becoming increasingly important in order to ensure the smoothest possible traffic. ANS Finland participated in the activities of the Network Manager as a representative of NEFAB.

## Other operations

ANS Finland is part of the Borealis Alliance, a consortium of nine air navigation service providers. Together the members of the Alliance make use of, for example, the free routing airspace on the same principles as in Finland. ANS Finland is also an active member of the association of air navigation service providers, Civil Air Navigation Services Organisation CANSO. CANSO seeks to improve the operating conditions of air navigation service providers and to influence the regulations governing them. Raine Luojus, the CEO of ANS Finland, has acted as the Vice Chairman of Europe CANSO CEO Committee.



## SERVICES AND UNITS

# Finland's Air Traffic Control Centre and Helsinki Air Traffic Control

### Area control

Area control manages the entire Finland's Flight Information region (EFIN). Area control centre service is provided from 13 sectors, managed from 1–5 air traffic control work stations, depending on the traffic situation. The average number of flights managed per day is 730. In 2019, the area control centre processed 272 205 flights, of which 62 472 were overflights.

### Helsinki Airport air traffic control

Air traffic control at Helsinki Airport includes both aerodrome and approach control. The hourly maximum operation volumes at Helsinki Airport are 48 arriving and 42 departing aircraft per hour, however without exceeding the total hourly limit of 80 operations.

In 2019, Helsinki Airport had 190,220 operations. The average number of operations per day was 521.

### Aerodrome control (TWR)

Aerodrome control is also referred to as "Tower". It manages air traffic in the controlled traffic region (CTR) of the airport, extending approximately 15 kilometres from the airport. The Tower also manages aircraft taxiing on ground and using runways, as well as vehicles using the traffic area.

### Approach control service (APP)

The approach control service is responsible for the terminal manoeuvring area (TMA), extending approximately 50–70 kilometres from the airport. The most important tool of approach control is the radar. Most air traffic controllers work both in the Tower and in approach control.





**In 2019, 52,713  
ATS messages was  
processed and  
13,291 Finnish NOTAM  
messages prepared.**

### **Finland's Flight Planning Centre (FPC)**

The FPC provides pilots with pre-flight information service throughout Finland, participates in the process of airspace management and keeps the data of air traffic control system up-to-date.

The Flight Planning Centre includes the Air Traffic Services Reporting Office ARO, aviation weather service MET (subcontracted to the Finnish Meteorological Institute), aeronautical information services (AIS, NOTAM) and aeronautical telecommunication services (COM) as well as the operational tasks of Helsinki Airport air traffic control and regional air traffic control centre (and occasionally AMC).

Air Traffic Services Reporting Office ARO is a unit established to receive reports concerning air traffic services and flight plans submitted before departure.

The role of the aviation weather service (MET) is to provide aeronautical weather briefings and meteorological information to both operators and crew for flight planning. The Finnish Meteorological Institute is responsible for the aviation weather service in Finland, but the service is subcontracted to Finavia.

The tasks of the air traffic control operator include the operational functions of Hel-

sinki Airport air traffic control centre (APP/TWR) and regional air traffic control centre (ACC). FDA (Flight data assistant) and RASS (Radar Assistant) operationally maintain air traffic control systems and coordinate between different air traffic control bodies, the task of the AMC (Airspace Management Cell) is to coordinate the management of airspace reservations.

Aeronautical telecommunication services (COM): The Flight Planning Centre guides and monitors the use of the telecommunication service system and design solutions to communication problems.

The centre is known as the aeronautical fixed telecommunications network (AFTN) centre. The international NOTAM office (NOF) is located at the Flight Planning Centre unit. It is responsible for the drafting and publication of national and international NOTAMs concerning the territory of Finland.

In 2019, it processed 52,713 ATS messages and prepared 13,291 Finnish NOTAM messages.

### **Airspace Management Cell**

The Airspace Management Cell operating in conjunction with the area control centre coordinates daily airspace reservations.

### **Finland's Flow Management**

The task of Finland's Flow Management position is to regulate how much and where air traffic is permitted in case of military exercises, for example. Flow management is international co-operation.

### **Finland's Air Rescue Coordination Centre (ARCC)**

The Aviation Act prescribes Finland's Air Rescue Coordination Centre (ARCC Finland) to take care of aviation search and rescue services in Finland's Search and rescue region. This service refers to measures to assist aircraft in an emergency or accident and locate missing aircraft. In addition, the Air Rescue Coordination Centre provides contractual support services to safety authorities. The centre maintains 24-hour readiness for launching operations. Every year, there are approximately 400 aviation search and rescue alerts, of which on average 5% are emergencies, 35% alarms and 60% uncertainty situations.

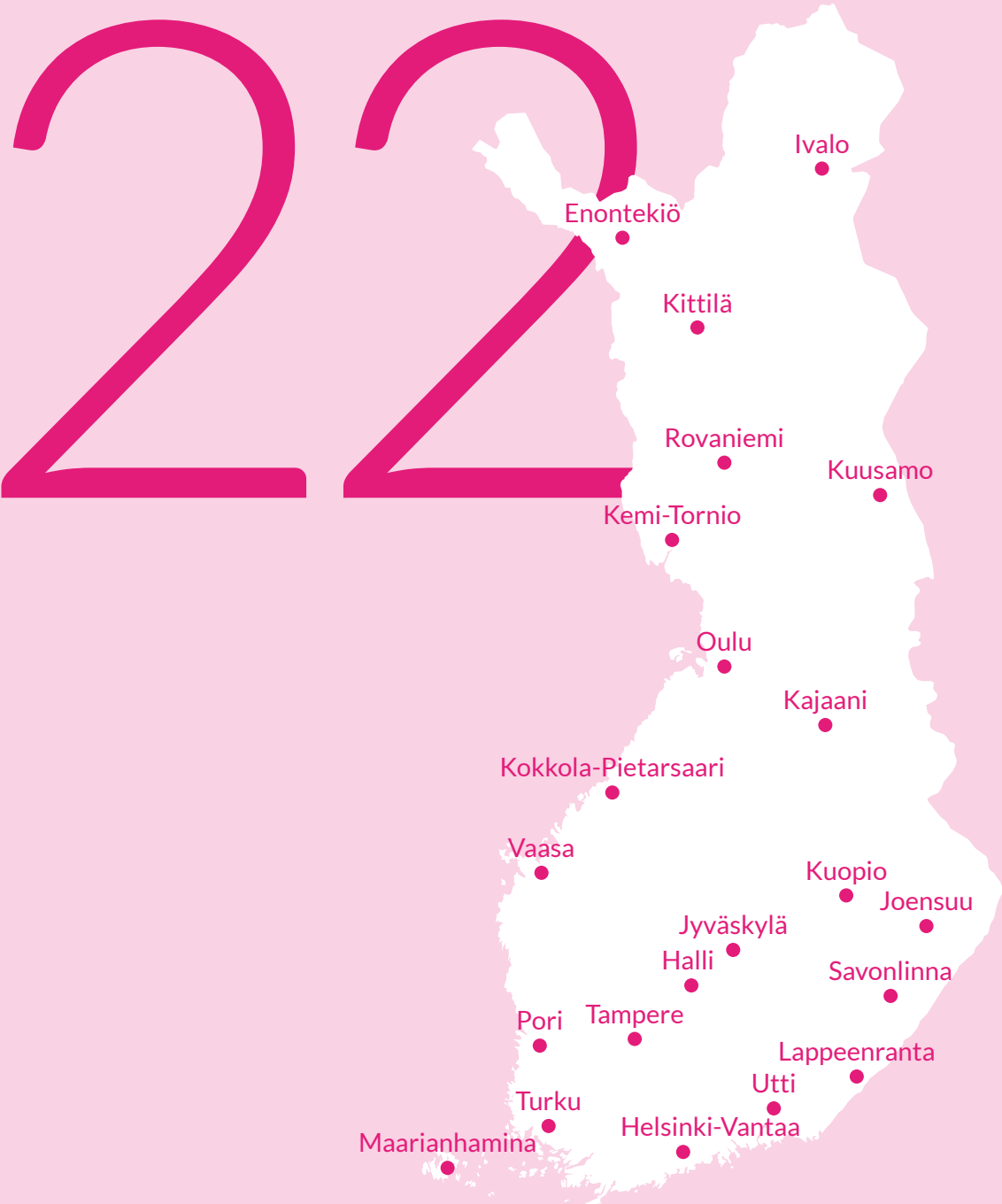


# The network's ATS services

ANS Finland provides aerodrome control and approach control services for 22 airports.

Northern Finland	43
Enontekiö	1
Ivalo (Inari)	1
Kajaani	4
Kemi	2
Kittilä	3
Kuusamo	3
Oulu	13
Rovaniemi	16
Eastern Finland	37
Joensuu	5
Jyväskylä	12
Halli (Jämsä)	1
Kuopio (Siilinjärvi)	12
Lappeenranta	2
Savonlinna	2
Utti (Kouvola)	3
Western Finland	57
Kokkola (Kruunupyy)	4
Maarianhamina	5
Tampere-Pirkkala	19
Pori	6
Turku	15
Vaasa	8

\* Network employees at the end of the year 2019



# Technical air navigation

**Technical air navigation comprises equipment, systems and tools used in air traffic service. These include information, radio and radar systems located across the country as well as equipment used by aircraft for navigation and landing.**

The most important task of technical air navigation is to maintain the equipment and systems so that operations are safe and efficient and comply with the agreed response times. In part, safety is ensured by requiring ATSEP (Air Traffic Safety electronics personnel) qualification from everyone entitled to the technical maintenance of the systems. Obtaining it requires passing specified courses. The validity of this qualification is supervised.

The maintenance of equipment and systems takes place as specified in advance, and safety is ensured in many ways. Safety assessments are made of intended changes

to air navigation systems, and they are approved by the authority (Traficom) before they can be implemented. Traficom also conducts its own safety assessment on the most significant changes. Annually, approximately 200 different technical amendments are made.

Technology develops continuously, and the employees' professional skills are kept up-to-date through training. Subcontractors are used in addition to ANS Finland's in-house personnel, and factory maintenance contracts have been concluded with the equipment suppliers for the most important systems.

In air navigation, safety is always our first priority. Therefore, the technology to be adopted must always be tried and tested in practice. According to the indicators in use, ANS Finland reached the 2019 safety targets. Traficom audits the operations of technical air navigation on an annual basis and tackles the possible shortcomings when needed.

ANS Finland is responsible, on a contractual basis, for civil aviation flight measurements in Finland as well as in Estonia.

Technical investments will replace outdated technology and they help in responding to the new requirements coming from regulation. Investment needs are also assessed from the business point of view.

 **Safety assessments are made of intended changes to air navigation systems, and they are approved by the authority (Traficom) before they can be implemented.**



# Avia College

**Avia College is a vocational special education institution owned and maintained by ANS Finland providing air navigation training services meeting international standards and recommendations.**

Avia College provides vocational air traffic controller training. In addition, it offers refresher, conversion, follow-up and specialisation training in various fields of air navigation.

The 1.5-year air traffic controller training is very pragmatic and focuses on learning the basic skills. As the training is not equipment-bound, the acquired knowledge gives the students the qualification to work in other countries as well. Students who have completed the training and the on-the-job-training thereof, are ready to work as ATCs and they receive the ATC licence at graduation.

Working as air traffic controller is attractive so there is a lot of interest towards the training. The selection is rigorous and includes several phases. The selection process includes, in addition to written tests, also interviews by the training provider and a psychologist. For the course that started in 2019, there were 1134 applicants of whom 10 passed the selective assessment and started the training.





GOVERNANCE

# Board of Directors



Chairman of the Board of Directors

**Pertti Korhonen**

Acting CEO, Traffic Management Finland  
Chairman of the Board of Directors since 10 October 2017

**Professional experience and key positions of trust:**

Outotec Oyj, CEO 2010–2016. Elektrobit Oyj, CEO 2006–2009. Nokia Corporation, member of the Board of Directors 2002–2006. Nokia Corporation, CTO 2004–2006. Nokia Mobile Software, SVP 2001–2003. Several executive positions at Nokia Mobile Phones 1990–2001. Member of the Board of Directors of several listed and growth companies, e.g.: Business Finland, Chairman of the Board 2017–.



**Teemu Penttilä**

Director of Department, Ministry of Defence  
Member of ANS Finland’s Board of Directors as of 17 March 2017

**Professional experience and key positions of trust:**

Ministry of Defence of Finland, Director of the Administration Policy Department 2007–. Finnish Defence Forces, Principal Legal Adviser, Head of Legal Division 2002–2007. Finnish Defence Forces, Deputy Head of Legal Division 2000–2002. Leijona Catering Oy, member of the Board of Directors. Air Navigation Services Finland Oy, member of the Board of Directors 2017–.



**Asta Sihvonen-Punkka**

Executive Vice President, Markets, Fingrid Oyj  
Member of ANS Finland’s Board of Directors as of 17 March 2017

**Professional experience and key positions of trust:**

Fingrid Oyj, Executive Vice President, Markets, 2019–. Fingrid Datahub Oy, Managing Director 2017–. Fingrid Oyj, Director, Electricity market 2016–. Finnish Communications Regulatory Authority, director general 2011–2015. The Energy Market Authority (Energy Authority), director general 2002–2011. The Energy Market Authority (Sähkömarkkinakeskus), director 1998–2002. Gasgrid Finland Oy, Member of the Board 2020–.



**Ilkka Virtanen**

CFO, Traffic Management Finland  
Member of ANS Finland’s Board of Directors as of 1 April 2019

**Professional experience and key positions of trust:**

Ministry of Transport and Communications, Senior Specialist, Steering Unit/Ministerial Governance Department 2017–2019. Entrepreneur, traffic engineer student, business consultant 2012–2017. VTI Technologies (Murata Electronics), CFO 2007–2010. Outokumpu Technology (Outotec), CFO 2002–2006. Outokumpu Pyrometallurgy, CFO 1999–2002. Outokumpu Technology, VP Project and Trade Finance 1995–1999.



The Board of Directors of ANS Finland sees to the administration of the company and the appropriate organisation of the company's operations. In addition, the Board of Directors ensures that the company's accounts and asset management are appropriately organised. The Board of Directors complies with the Articles of Association, governance policy, agreement on authorisations, Limited Liability Companies Act and other valid legislation.

The Board of directors has ratified a Board Charter, specifying the key tasks of the Board of Directors and the key procedures associated with Board work. In addition to the duties set forth in the Limited Liability Companies Act, the Board of Directors' duties include approving and monitoring the long-term strategy, confirming the annual objectives and budget and monitoring their realisation, approving the essential organisation structure, approving significant investments, establishing the investment policy, approving the principles of risk management and other similar key control systems, appointing the CEO and confirming the appointment of management team members, confirming the remuneration paid to the senior management and approving the company's performance bonus schemes.

The Board of Directors has no separate

committees. The Board of directors assesses its operations regularly itself and, if necessary, using an external auditor. The company's Board of Directors is elected by the general meeting of shareholders in accordance with the provisions of the Limited Liability Companies Act. The chairman of the Board of directors was **Pertti Korhonen** (29.1., 4.3., 11.10. and 22.11.) and **Juko Hakala** (22.5., 7.6. and 23.8.). The other members of the Board of directors have been **Asta Sihvonen-Punkka**, **Teemu Penttilä** and **Ilkka Virtanen** (as of 1.4.). The chairman of the Board of directors is paid eur 2,300 per month and members eur 1,500 per month. In addition, Board members are paid a meeting fee of eur 600 per meeting.

The Board of directors has convened 7 times. The members of the Board of directors have attended the meetings as follows: Pertti Korhonen 4/7, Juko Hakala 3/7, Asta Sihvonen-Punkka 7/7, Teemu Penttilä 7/7 and Ilkka Virtanen 5/7.

### CEO and management team

The CEO sees to the day-to-day management of the company in accordance with the instructions and orders issued by the Board of Directors. The CEO is appointed and the CEO's remuneration and other terms of employment are confirmed by the Board of Di-

rectors. The company's CEO has been **Raine Luojus**.

In addition to the CEO (chair), the strategic management team of ANS Finland comprises Chief Corporate Services Officer **Matts-Anders Nyberg**, Director of Network Airports **Tapio Nurmela**, Air Navigation Services Chief Technical Officer **Jukka Piilola (Jani Suomela)**, Director ATCC Finland **Karri Hannula**, Director of Development and Quality **Kari Kerke**, Director of Marketing and Customer Relations **Pasi Nikama**, VP Development and Quality **Stina Andersson-Jalkanen** and VP Network **Christer Björkman**. The strategic management team convened on a weekly basis.

In addition to the members of the strategic management team, the company's management team comprises Director of Safety **Tom Hätinén**, Business Controller **Jarkko Luoma** and, as representative of the personnel, air traffic controller **Vesa Tarvainen**. The management team convened once a quarter.

### Remuneration Schemes

The company's Board of directors confirmed a remuneration scheme for the company's management and experts in 2019. The employees covered by the remuneration scheme are annually confirmed by the company's Board of Directors. At the end of

2019, the performance bonus scheme covered the management team and other executives, managers and experts. The purpose of the performance bonus scheme is to encourage the executives and management to perform above average and commit them to the company. The CEO has a personal employment contract and remuneration scheme, while other members of the management have their own personal objectives and bonus schemes. The guidelines on remuneration in state-owned companies ratified by the government are complied with in terms of remuneration. The performance bonus scheme confirmed by the Board of Directors specifies its key provisions, such as the grounds of determination and measurement of objectives, possible maximum bonuses and the entry and exit rules of the scheme.

The company's Board of Directors decides on the payment of performance bonuses at the management team level after the adoption of the financial statements. The Board of directors can amend the rules of the system or decide not to pay performance bonuses. Challenging and measurable objectives are set for everyone in the performance bonus scheme. The objectives are based on the company's strategic themes: safety, improving operational efficiency, growth, customer satisfaction, management of personnel and

management of operations/implementation of projects. The weightings of the objectives vary by position and role. The annual combined total amount of remuneration variable based on objectives is a maximum of 15 per cent of the bonus earner's fixed annual salary. If the performance of the company and the bonus earner is exceptionally good, the total maximum amount of bonuses paid can be a maximum of 30 per cent of fixed salary. In addition to the management and specialists, all permanent employees are covered by a separate performance bonus scheme. It is not possible to be included in the scope of two different systems at the same time. ANS Finland also has a personnel fund.

### **Risk Management**

The company's risk management comprises two parts. In addition to Safety and Compliance, the company addresses risk management relating to financial, IT, investment, cash flow, income and insurance risks, for example. A risk management plan was prepared when the company began operations, and it is updated on a regular basis. Risk management is an integral part of the internal control system and safety and quality management. The company aims to analyse and identify predictively the impacts of di-

verse changes on en-route service and area traffic control operations.

Rapidly increased drone activity places new challenges on ANS Finland. The company has to consider ways for best managing the effects of drones on its own service. ANS Finland actively cooperates with the authorities, supporting the flow of information by reporting and considering technical and operational means for minimising the negative impacts together with the authorities.

During 2019, the air traffic control operations of Helsinki Airport were taken to a back-up location twice in exercises. It is located in the immediate vicinity of Helsinki Airport, and it features the technical resources required for operations. The Flight planning Centre has also conducted emergency exercises. They have proved that service provision can also be ensured in the back-up premises.

### **Auditing**

The company's auditor is Ernst & Young Oy.



# Strategic management



## Raine Luojus

b.1966

CEO

Professional experience and key positions of trust: Air Navigation Services Finland Oy, CEO 2017. Finavia Corporation, Director, air navigation business 2011–2017. Finavia Corporation, COO, Air Navigation Business 2008–2011. Finnish Civil Aviation Administration/Finavia, Deputy and operational manager for air traffic control at Helsinki Airport 2002–2008. Finnish Civil Aviation Administration, managerial positions and chief instructor of air traffic control at Helsinki Airport 1999–2002, air traffic controller 1991–.

Member of the Board in several projects and organisations, e.g. CANSO, Chairman of the Europe region management group (EC3) 2020– & Vice Chairman 2018–2020. Finnish Meteorological Institute, member of the Advisory Board 2018–. Chairman of the FINEST Management Board 2019–. North European Functional Airspace Block (NeFAB) CEO Board, Chairman 2015–2017. NEFAB CEO Board, member 2012–. Civil Air Navigation Services Organisation (CANSO) EC3, member 2011–. Borealis Alliance CEO Board, Chairman 2014–2015. Borealis Alliance CEO Board, member 2013–. NEFAB Management Board, member 2009–2011.



## Stina Andersson-Jalkanen

b. 1975

VP, Deputy Director, Development and Quality

Air Navigation Services Finland Oy, VP, Deputy Director Development 1.12.2018–. Air Navigation Services Finland Oy, Area Manager, ATS units in Western Finland 2017–2018. Finavia Oyj, Air Navigation business/ANS Finland, Quality Manager, 2016–2018. Finavia Oyj, Risk Management, Safety Analyst, 2008–2016 and Analyst Manager 2010–2011. CAA Finland/Finavia, Helsinki Airport, Air Traffic Controller 1998–2008.



## Christer Björkman

b. 1968

VP, Deputy Director, Network Airports

Air Navigation Services Finland Oy, VP, Deputy Director, Network 1.12.2018–. Finavia Oyj, Air Navigation Business, Manager, Enroute services, 2008–2018. CAA Finland/ Finavia, Air Navigation Business, Planning Manager, 2000–2008. Oy Propilots Ab Ltd, CEO, 1999–2000. CAA Finland, EFES, Chief Instructor, 1996–1998. CAA Finland, EFES, Operations, 1995–1999. CAA Finland, EFES, Air Traffic Controller 1990–1999.



**Karri Hannula**

b.1968  
SVP, ATCC Finland

Air Navigation Services Finland Oy, SVP, ATCC Finland 1 April 2017–. Finavia Oy, Director, ATCC Finland 2015–2017. Ilmailulaitos/Finavia, Helsinki Airport, Chief of ATC 2008–2015, chief of ATC training 2004–2008. CAA Finland/Finavia, Air Traffic Controller, Helsinki Airport 1995–2015. CAA Finland, Pori Airport, Air Traffic Controller, 1992–1995.



**Kari Kerke**

b. 1965  
SVP, Development and Quality

Air Navigation Services Finland Oy, SVP, Development and Quality 1.12.2018–. Air Navigation Services Finland Oy, PMO, Manager 2017–. Finavia Oy, Air Navigation Business, PMO, Manager 2016. Finavia Oy, Air Navigation Business, Specialist 2012–2016. CAA Finland/Finavia, Air Navigation Business, Project Manager/Systems Specialist 2005–2012. CAA Finland, EFES, Air Traffic Controller 1988–2005.



**Pasi Nikama**

b.1968  
SVP, marketing and customer relations

Air Navigation Services Finland Oy, SVP, Marketing and Customer Relations, 1 April 2017–. Finavia, Air Navigation Business, VP, Marketing and Customer Relations 2015–2017. Finavia, Chief of Area Control Centre Finland, Southern Finland Air Navigation Centre 2010–2015. Finavia, Oulu Airport, Traffic Manager, 2007–2010. Finavia, Avia College, Instructor and Chief Instructor, 2002–2007. CAA Finland, Southern Finland Air Navigation Centre, Air Traffic Controller, 1997–2002. CAA Finland, Ivalo and Halli airport, Air Traffic Controller, 1995–1997. CAA Finland, Tampere-Pirkkala Airport, Southern Finland Air Navigation Centre, Air Traffic Controller Assistant, summer 1994, 1991–1992.



**Tapio Nurmela**

b. 1975  
SVP, Network Airports

Air Navigation Services Finland Oy, SVP, Network Airports, 1.12.2019–. Finavia Oy/ANS Finland, Area Manager in Northern Finland 2013–4/2019. Finavia Oy/ANS Finland, Rovaniemi Airport, Chief of ATC 2010–2/2019. CAA Finland/Finavia, Air Traffic Controller, Rovaniemi 2001–2009.





**Matts-Anders Nyberg**

b. 1961  
SVP, Company Services

Air Navigation Services Finland Oy, Chief Administrative Officer, 1 April 2017–. Finavia, Air Navigation Business, Head of Business Innovations, 2012–2017. Finavia, NEAP Programme Office Manager, 2009–2012. CAA Finland/Finavia, Air Navigation Business, Planning Director, 2008. CAA Finland/Finavia, Deputy Department Manager 2001–2008. CAA Finland, Deputy Director 1994–2001. CAA Finland, Air Traffic Control Inspector 1992–1994. CAA Finland, Northern Finland Air Navigation Centre & Rovaniemi Airport, Air Traffic Controller 1983–1993.



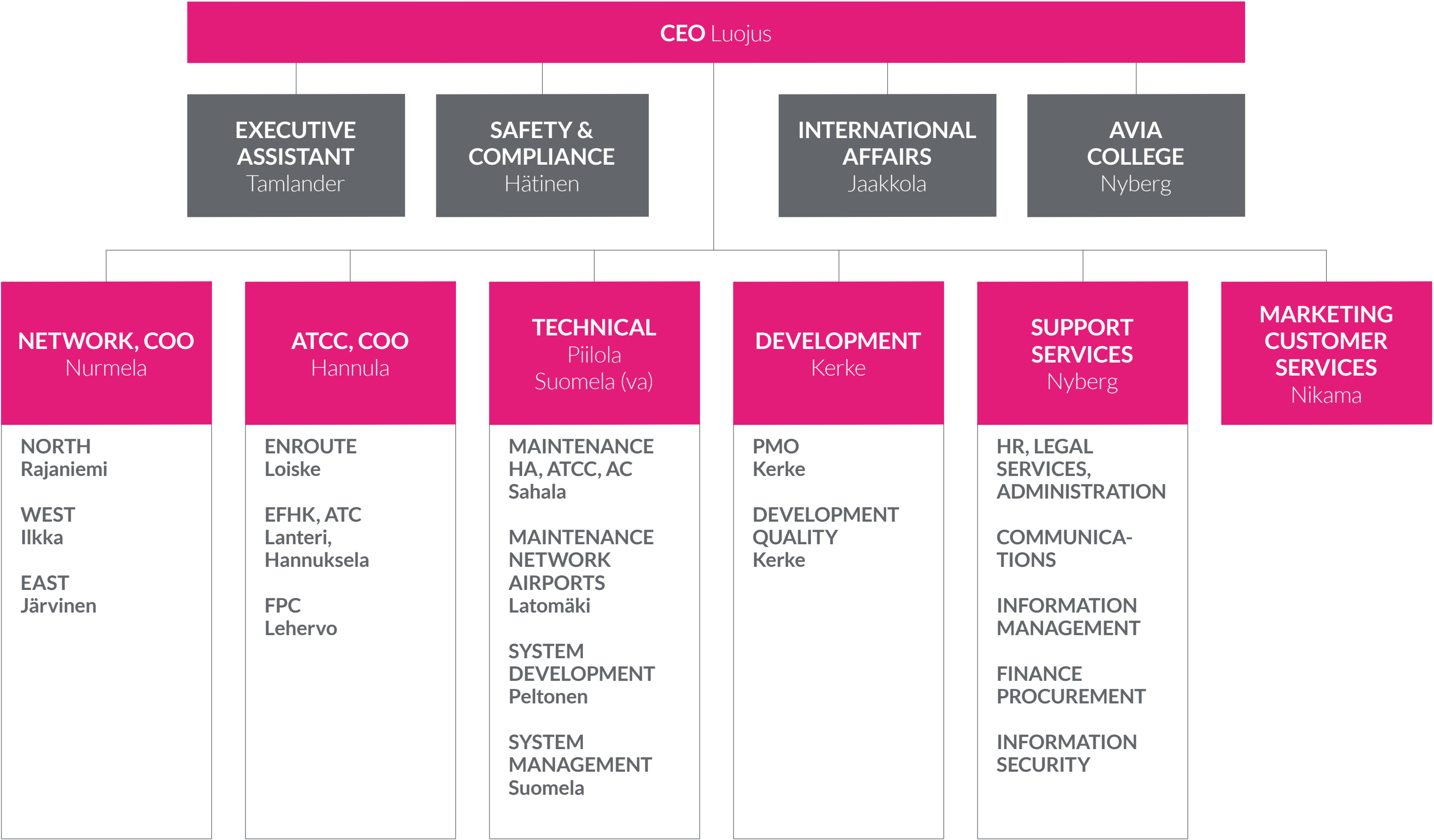
**Jukka Piilola**

b.1959  
SVP, Technical Air Navigation  
(act. Jani Suomela)

Air Navigation Services Finland Oy, SVP, Technical Air Navigation, 1 April 2017–. Finavia, Air Navigation Business, Chief Technical Officer 2016–2017. CAA Finland/Finavia, Technical Production Control Manager 2008–2016. CAA Finland, Air Navigation Technical Unit Manager 2005–2008. CAA Finland, Engineer 1999–2005. CAA Finland, Sector Manager, 1998–1999. CAA Finland, Navigation Engineer 1996–1998. CAA Finland, Service Manager and Message Engineer (NAV Team Supervisor) 1989–1996.



Organisation 31.12.2019



Air Navigation Services Finland is part of the Traffic Management Finland Group (TMF). TMF is a wholly state-owned Group with special assignment operating under the ownership steering of the Ministry of Transport and Communications.

The special assignment set for us safeguards the essential traffic control services required by society, the authorities and commerce. The special assignment also ensures reliability of operations in case of disturbances under normal conditions and in exceptional circumstances.

TMF’s other subsidiaries and their respective areas of responsibility:

- Finrail Oy is responsible for rail traffic control and management.
- Intelligent Traffic Management Finland Oy (ITM Finland) is responsible for road traffic control and management.
- Vessel Traffic Services Finland Oy (VTS Finland) is responsible for marine traffic control.

TMF Group employs over 1,000 professionals across Finland.

# Safety

**Safety is ANS Finland's first and foremost value which we will not compromise under any circumstances. ANS Finland continuously develops the safety of its operations and related quality assurance activities. Each employee also carries personal responsibility for safety.**

ANS Finland has a licence for providing air navigation service issued by the Finnish Transport Safety Agency. This means that the company continuously proves that it has a well-functioning and effective safety management system (SMS) meeting the common European requirements of the SES regulation. The system's compliance is controlled by inspections, information requests and audits, among others. The authority regularly controls our safety management operations. The

SMS is an integral part of ANS Finland's management system. This ensures the priority of safety also at the practical level.

The assessment of safety impacts is part of our daily processes. In 2019, the company conducted a total of 294 assessments of safety impacts related to changes which partly demonstrates the commitment of our entire personnel to safety assurance. Even the smallest changes are assessed so that the company can ensure that the changes are managed, and adequate safety can be ensured in conjunction with them. We also assess the safety impacts of changes that our cooperation partners make, for example in the airport environment, that may have an effect on air navigation.

Good safety and quality management also includes internal audits and an encouraging reporting culture. The number of internal audits in 2019 was 8. In accordance with the audit plan, we audit our own units at least

three times a year and larger units once a year. One of the indicators of an encouraging reporting culture and good safety culture is the number of observations and incident reports. The number of reports shows that our reporting culture is at an excellent level.

## Performance goals and safety

The performance Scheme set by the European Commission sets stringent goals for Finland regarding the punctuality, safety, environmental efficiency and charges collected in air traffic. The performance Scheme of air navigation prepared as part of European airspace development is binding on the state of Finland and the air navigation service provided by ANS Finland, and it steers the development of air navigation services. The obligations under the performance Scheme have been set by the Finnish Transport and Communications Agency Traficom. In addition, safety goals are set in the Finnish Aviation

Safety programme (FASP). It requires aviation organisations to conduct a survey of risk factors and set separate target levels for the risks and regularly monitor them.

## Airspace block NEFAB performance scheme

Finland is part of the functional airspace block comprising the NEFAB countries. The purpose of the NEFAB area is to lower the costs of European airspace and thereby improve Europe's competitiveness. In 2015, the European Commission approved the reference period 2 (rp 2) of the NEFAB area's performance Scheme for the reference period 2015–2019 among the first functional airspace blocks (FABs). The performance Scheme for the NEFAB area complies with the Europe-wide goals set by the European Commission.



# Responsibility

**The operations of ANS Finland affect the day-to-day lives of many Finns in one way or another. ANS Finland provides en-route service and aerodrome control and approach control services for airports. In practice, the company ensures smooth take-offs and landings at Finnish airports and that crossing the Finnish airspace is smooth and safe.**

Air traffic enables the global citizenship of Finns. It allows tourism and business to thrive and provides employment to tens of thousands of Finnish people. ANS Finland works to ensure that air traffic supports Finland's success in a comprehensive way. Air traffic allows Finland to stay active 24/7.

ANS Finland's most important customer promise is the safety of its services which also is the foundation for all its operations. Another key factor is to keep the Finnish airspace open in every day of the year, 24/7.

The third success factor is the smoothness of air traffic: there were no delays in 2019 due to ANS Finland's en-route services.

Corporate responsibility is a natural part of the operating culture and corporate identity of ANS Finland even by the nature of the company's operations. The concrete guidelines on corporate responsibility are derived from the company's values, strategy, risk management policy, government guidance and international regulation on the air navigation sector. The operations of ANS Finland are guided by several international regulations, such as the performance level requirements laid down by SES (Single European Sky) legislation for 2015–2019 and the subsequent five-year period. Finnish air traffic control is expected to operate more efficiently year by year. In practice, this means that flight routes must be as short and unrestricted as possible, delays minimised, safety level high and costs accurately defined.





# Stakeholders

**ANS Finland's key stakeholders include airlines, the country of Finland, state aviation, employees and shareholder. The responsibility for stakeholders is manifested in ANS Finland's goals and values.**

## Customer hearings

In 2018 ANS Finland has consulted its customers in several joint and customer-specific meetings. The official customer consultations of 2019 were:

- The Finnish Border Guard consultation on December 17.
- The Finnish Airforce consultation on November 5.
- Airlines consultation on September 11.
- Air and space for you - seminar for stakeholders on November 29.
- Consultation on Helsinki Airport traffic restrictions for airline operators on March 11.

ANS Finland is engaged in continuous and open dialogue with its stakeholders to devel-

op its operations and the entire industry in an increasingly sustainable direction. ANS Finland operates with an emphasis on safety, in a customer-oriented way and in accordance with the Code of Ethics.

Finavia, the company operating Finnish airports, is a significant customer for ANS Finland. ANS Finland provides both air traffic control services and technical services, such as system servicing, maintenance and flight measurements, for it.

## Airline customers

A customer satisfaction survey was carried out at the end of 2019. The respondents assessed the different functions on a scale of 1–5 (5=very good, 1=very poor). The company's operations were ranked competent, reliable, professional and safe. Cooperation with ANS Finland was ranked good (4,0). The customers were most satisfied with the route optimization (4,6) and achieved safety level (4.4). In customer service, the customers particularly appreciated the attitude of ANS Finland employees (4.4) and their expertise (4.4).

In all, 235 persons responded the survey. 185 of them were pilots, 33 represented airline operator, 15 represented the management and 2 persons other staff. The feedback received is used to constantly develop the quality of services.

## Military and state aviation

We support the mission of the Finnish defence Forces by providing the required airspace reservations and monitor the airspace of the Gulf of Finland in cooperation with the Finnish Air Force. We are obligated to serve the Finnish state aviation also by law. Contacts with the Finnish Air Force and the Border Guard are regular and aim at continuous improvement of operations.

## Personnel in a key role

In an area of special expertise such as air navigation, skilled and competent employees play a central role. ANS Finland is a responsible employer. The company takes care of the well-being, health, competence and safety of its employees by providing good managerial

work and training and by complying with collective labour agreements and labour legislation. Good management of personnel is a key element of ANS Finland's strategy. ANS Finland looks after the equal and fair treatment of its employees. An equality and fairness plan was drawn up together with the personnel in 2018, and it is updated whenever needed.

ANS Finland has signed a cooperation agreement with the healthcare service company Terveystalo to promote occupational health and well-being of employees according to a plan. Preventive campaigns were chosen as a means to influence employees' absence due to sickness and working capacity. In addition, preparations have been made for diverse corrective measures, such as restoring the working capacity of chronically ill employees.

In 2019, the absence due to sickness rate was 2.6.

Interaction with employees

ANS Finland uses a harmonised performance appraisal model. The development discussions pursuant to it are carried out with all employees on an annual basis. The personnel is kept up-to-date on company issues by monthly reviews via email and by communicating on the intranet. The company has a Cooperation Council and a Central Committee for occupational health and Safety. The organisation has prepared an occupational health and safety action plan for the company.

Responsibility for the environment

ANS Finland cooperates with international industry organisations and parties to reduce the negative environmental impacts of air traffic. The most important means of influence in this work include planning as short as possible flight routes, taking advantage of weather conditions, using efficient flight techniques, keeping delays to a minimum and using the entire European airspace as efficiently as possible.

Helsinki Airport adopted new standard arrival routes in April 2019, shortening flights. They also maximise the use of the continuous descent approach, thus reducing fuel con-

sumption and CO2 emissions as well as noise. Flights are thus annually shortened by a distance that equals 25 trips around the world.

New descent approach decreases CO2 emissions

ANS Finland aims to be the world’s most environmentally efficient air navigation company. Helsinki is already the best European metropolis in terms of the share of fuel-saving continuous descent approaches. Operations are developed in cooperation with airline customers and the airport operator, and the new approach methods were deployed in spring 2019. In 2019, there were 70,646 continuous descent approaches, accounting for 75 per cent of all approaches. Continuous descent operations decreased the CO2 emissions of air traffic by approximately 23,000 tonnes. The decrease in emissions were equal to the annual CO2 emissions from approximately 11,000 passenger cars.

Share on green landings (CDO) of all landings at Helsinki Airport

	07-22	22-07
2013	58%	61%
2014	64%	69%
2015	67%	70%
2016	68%	75%
2017	69%	76%
2018	72%	82%
2019	72%	82%

The environmental permit of Helsinki Airport includes target levels for CDO landings. During daytime, at 7-22, the target level is 70%, at night time at 22-7 it is 80% . In 2019, the target levels were reached.

Source: Finavia

# Financial statements 1 January–31 December 2019

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# Board of Directors' report 2019

## Mission and group relationship

Air Navigation Services Finland Oy (ANS Finland) is responsible for special tasks relating to air navigation, such as airspace management, area control, services for the state's aviation and aeronautical rescue services. In addition, the company is responsible for en-route services in the Finnish airspace and air navigation services at Finavia-owned airports and Lappeenranta Airport. ANS Finland is also responsible for the design and maintenance of the infrastructure and systems required for air navigation in compliance with international requirements.

ANS Finland's customers include commercial aviation operators, airports, the Finnish state aviation operations including military aviation, general aviation and pilot training schools.

ANS Finland is part of the Traffic Management Finland group of companies (TMF).

## Key events in the financial year

Underlying the establishment of the Traffic Management Finland Group is the reform launched by the Ministry of Transport and

Communications in spring 2017 and implemented as of the beginning of 2019, aiming to improve the capability of the administrative sector to respond to changes in customer needs and the operating environment and to strengthen the strategic guidance of the administrative sector as well as create synergy benefits. As part of the reform, the road and marine traffic control functions previously managed by the Finnish Transport Agency were incorporated as part of a wholly state-owned limited liability company by way of the Act on incorporating the traffic control and management services of the Finnish Transport Agency into a limited liability company (574/2018, government proposal 34/2018) as of 1 January 2019. The new incorporated companies Traffic Management Finland Oy, Intelligent Traffic Management Finland Oy and Vessel Traffic Services Finland Oy as well as the previously established state-owned traffic control companies Finrail Oy and Air Navigation Services Finland Oy formed the TMF Group as of the beginning of 2019, with the subsidiaries managing traffic control services for respective modes of transport. The

Finnish State is the sole owner of the Group.

The strategic FINEST project established jointly by ANS Finland and the Estonian air navigation services provider progressed significantly during 2019. The project surveys possibilities of offering air navigation services across national borders. On 12 March 2019, the Estonian company EANS, ANS Finland and air navigation service system provider Thales signed an agreement whereby the functionality of the air traffic control systems of both countries will be expanded to support cross-border air navigation service. The FINEST project will be completed in three phases. The first module will be commissioned in autumn 2020.

The new strategy of the Group's parent company TMF Oy was approved in autumn 2019. At the same time, the strategy of ANS Finland was specified further to match the key objectives of the parent company.

The company's operations have been stabilised further by ensuring the functioning of the company's key processes. Investments were made in implementing ANS Finland's strategy during the year. The strategic objectives

will be achieved by improving cost efficiency and quality of services, by e.g. developing new ways of controlling traffic (such as remote air traffic control concept) and engaging in closer collaboration with other air navigation service providers and developing new business through innovation.

## Revenue and profit

The revenue of ANS Finland for the financial year amounted to EUR 80.2 million and profit to EUR 5.9 million. Flight route reve-

Key indicators	2019	2018	2017*
Revenue (EUR million)	80.2	81.5	63.9
Operating profit (EUR million)	5.9	6.8	9.3
Operating profit/revenue (%)	7.3	8.4	14.5
Investments (EUR million)	5.3	2.1	4.0
Return on equity (%)	14.5	31.2	45.1**
Equity ratio (%)	36.2	37.0	40.8
Personnel on average (FTE)	405	408	402

\* operations began on 1 April 2017

\*\* calculated on the balance sheet values at the closing date

nue and revenue generated by the Helsinki Airport air navigation service developed favourably due to the strong development in traffic volumes. The revenue is decreased by regulatory adjustments of EUR 9.1 million due to SES legislation. The operating profit margin was 7.3 per cent.

## **Traffic**

The traffic volumes of the flight route service and Helsinki Airport air navigation service continued to develop favourably in 2019. The volume of the flight route service (service units) increased by a total of 6.4 per cent year-on-year. The biggest growth was seen in overflight traffic (+13.5%). There was also growth in international traffic (+3.2%), while domestic traffic decreased by 2.0 per cent. The traffic volume of the Helsinki Airport (tn-units) increased by a total of 3.5 per cent in 2019. International traffic (+3.8%) outgrew domestic traffic (+2.0%) at the Helsinki Airport.

## **Assessment of key operational risks and uncertainties**

The company's risk management is comprised of two parts. The risk management unit deals with cases involving the safety of air traffic, in addition to which the company manages other risks associated with financial, IT, investment, cash flow, revenue and insurance risks, among others. A risk man-

agement plan was prepared in conjunction with the incorporation of the company, and it is updated on a regular basis.

Air traffic is estimated to continue to grow in the next couple of years, but not as quickly as during the last couple of years. The most significant financial risk is associated with overflight traffic. Traffic between the Middle East and North America and traffic between Asia and Europe use the Finnish airspace every day, because the route flown over Finland is the shortest or otherwise most economic one. If changes take place in the airspace of a country along this route with regard to safety or availability (typically, a military crisis), it may significantly change the routes chosen by airlines and can also affect the volume of overflights operated by ANS Finland. During the second quarter of 2019, the airspaces of Pakistan and India were partly closed due to a military crisis. ANS Finland estimates this risk to amount to approximately EUR 4 million at an annual level.

## **Personnel, training and wages**

At the end of 2019, the company employed a total of 438 professionals of different fields, of whom 291 worked in air traffic control. In addition to administrative and air traffic control personnel, the company employs technical air navigation and safety and risk management professionals in 22 units across Finland.

Salaries and bonuses paid during the financial year amounted to EUR 37.1 million.

The average age of employees is 45.5 years and the average duration of employment relationships is 17.7 years. Of the employment relationships, 92 per cent are permanent and 8 per cent are fixed-term.

In 2019, ANS Finland complied with the collective labour agreement of Service Sector Employers Palta and Ilmailutietotekniset (ILTT). A collective agreement was reached with air traffic controllers in accordance with the proposal of the National Conciliator's Office on 27 February 2019 after long industrial action. During the dispute, PALTA also imposed several short lockouts. The industrial action did not have impacts on the safety or punctuality of traffic.

The results of an HR survey conducted in late 2018 provided valuable feedback for designing the new organisation. An organisational change of technology and development functions was realised in spring 2019. According to the HR survey conducted in late 2019 (people power index), job satisfaction is at a moderate level. The industrial action early in the year may have still been reflected in the results.

The activities of the statutory employer-employee advisory board and central occupational health and safety committee have been established through regular

meetings and preparations led by the OHS manager between the meetings. An action plan for occupational health, equality and fairness plan and substance abuse policy concerning the entire TMF Group were completed during 2019.

If the company accrues profit bonuses to be paid to the personnel, they will be paid to ANS Finland's personnel fund. There are three criteria for profit bonuses: finances, safety and customer satisfaction. In 2019, after administrative costs, the profit bonuses to be paid to the personnel fund totalled EUR 893,602.53.

Joining the TMF Group on 1 January 2019 did not require any personnel cuts or structural changes. Nevertheless, statutory employer-employee negotiations concerning the transfer of central services to Group functions took place in late 2019. A total of eight employees were transferred from finances, communications, occupational health and safety, HR and IT services to the parent company on 1 January 2020.

Refresher training to maintain the professional skills of operational personnel was carried out in accordance with the annual plan as either local training or as refresher or conversion training at Avia College. It included the training of the personnel of the Air Traffic Control Centre Finland and air traffic control units elsewhere in Finland. The



trainings were realised in accordance with international regulation.

In addition to its own work, the technical personnel completed the refresher or conversion training required by regulation. The refresher training of the personnel of the Flight Planning Centre has been realised at the workplace using an electronic training platform.

The Further Qualification in First-Line Management for supervisors, launched in 2018, will continue until March 2020.

Regarding occupational health and safety in the workplace, ANS Finland focused on measures that promote safe and healthy working environments and working conditions, as well as the maintaining the personnel’s physical and mental ability to work. To improve the working environments and conditions, the employer and the employees prevented or removed work-related hazards. The aim was to minimise occupational health and safety risks to ensure that no accidents at the workplace occur. Disability due to occupational disease or occupational accidents as well as close calls were also minimised.

In 2019, there was one occupational accident and one commuting accident in ANS Finland. It seems that the highest physical risk for occupational and commuting accidents of ANS Finland’s personnel is caused by slipping and tripping at work or on the

way to or from work. 15 occupational safety and health observations were made. The observations concerned, for example, air quality in the office building, workload and safety of premises.

In 2019, the absence due to sickness rate of ANS Finland’s personnel was 2.6% and accident rate 1.37 (annual number of accidents per million working hours).

**Air traffic safety**

Safety is ANS Finland’s first and foremost value that we will not compromise under any circumstances. ANS Finland continuously develops the safety of its operations and the related quality assurance. Each employee also carries personal responsibility for safety.

Assessment of safety impacts and risks is part of our day-to-day processes. In 2019, the company conducted a total of 294 assessments of safety impacts related to changes, which reflects the strong commitment of the employees to assurance of safety. The company assesses even the most minor changes to ensure that the changes are managed and safe. We also assess the safety impacts of changes that partners make in the airport environment, for example, that can affect air navigation.

New EU-level legislation entering into force at the beginning of 2020 requiring the specification and implementation of an ex-

tensive risk assessment process and changes relating to change management in accordance with the new requirements imposed a particular challenge. New change management procedures were submitted for official approval, which in turn ensured that the company remains compliant with pan-European legislation going forward. In addition, we co-operated closely in the safety sector with regard to the joint project of Finnish and Estonian air navigation service providers (FINEST).

Good safety and quality management also includes internal audits and an encouraging reporting culture. Eight internal audits were conducted during the year. In accordance with the audit plan, own units are audited at least once every three years and larger units once a year. One of the indicators of an encouraging reporting culture and good safety culture is the number of observations and incident reports. Even small errors and observations are reported com-

**Reporting activity, internal control and safety assurance of changes in 2019**

Incident and observation reports by the personnel	1,970
Technical notifications related to the operation of equipment or technical systems	3,419
Assessments of safety impacts	294
Internal audits	8

prehensively, also when they concern one’s own actions. The number of reports shows that our reporting culture is excellent.

**Performance goals and safety**

The Performance Scheme set by the European Commission sets stringent goals for Finland regarding the punctuality, safety, environmental efficiency and charges collected in air traffic.

The Performance Scheme of air navigation services prepared as part of European airspace development is binding on the state of Finland and the air navigation service provided by ANS Finland, and it steers the development of air navigation services. The obligations under the Performance Scheme have been set by the Finnish Transport Safety Agency (Finnish Transport and Communications Agency Traficom from 1 January 2019).

In addition, safety goals are set in the Finnish Aviation Safety Programme (FASP). It requires aviation organisations to conduct a survey of risk factors and set separate reaction and acceptability target levels for the risks and regularly monitor them.

**Airspace block  
NEFAB performance plan**

Together with Norway, Estonia and Latvia, Finland is part of the functional airspace block comprising the NEFAB countries. The

Performance targets set for ANS Finland

TARGET	IMPLEMENTATION IN 2019
Safety	
Efficiency of the safety management system	The target was achieved
Use of the risk analysis tool (RAT)	The target was achieved
Just Culture	The target was achieved

In addition to the Performance Scheme, ANS Finland has specified its own safety targets:

TARGET	IMPLEMENTATION IN 2019
1) No accidents attributable to ANS Finland	The target was achieved. No accidents.
2) No severe hazardous incidents attributable to ANS Finland	The target was not achieved due to one severe hazardous incident.
3) Targets pursuant to the Finnish Aviation Safety Programme (FASP) Measures/Reaction and acceptability levels in accordance with the Risk classification (a total of 16 indicators)	The target was achieved with regard to 13 of 16 indicators. One indicator exceeded the acceptable level and required measures (the same as the incident in item 2). Two incidents exceeded the reaction level and were carefully assessed.
4) Incidents related to airspace reservations Number of severe incidents decreased	The target was achieved. There were no severe airspace reservation incidents
5) Updating the safety review of the working methods of Helsinki air traffic control unit Updating the previous safety review	The target was achieved. The review was updated.
6) Naming the standard departure routes in Helsinki Renaming to reduce FMS errors	The target was achieved. The departure route reform has been implemented.
7) Runway incursions due to ANS Finland’s activities Target: A declining trend in the number incursions compared to previous years	The target was achieved. The declining trend took place.
8) Losses of minimum separation due to ANS Finland’s activities Target: A declining trend in the number of incidents	The target was not achieved. The trend was an ascending one.
9) Training the use of back-up locations or working methods in abnormal conditions and emergencies Target: Regular training in accordance with the plan	The target was achieved. The training took place.

purpose of the NEFAB area is to lower the costs of European airspace and thereby improve Europe’s competitiveness.

Deviation from the targets and related measures

The safety targets set by the company for itself play a significant role in the continuous improvement of operations. In order to ensure development, it is justified to also set targets that can be challenging to achieve and it is not always taken for granted that they are achieved. One severe hazardous incident took place in operations. This incident was carefully analysed and several boundary conditions were set for operations to ensure continued safety. The incident unit deployed fixed-term restrictions relating to work methods and traffic control until the implementation of the corrective actions and ensuring correct situation information could be verified. The restrictions were cancelled once the implementation of the measures had been verified.

With regard to the targets of the Finnish Aviation Safety Programme, three incidents in which the target was not achieved because the incidents exceeded the reaction level or acceptability level set for operations were identified. One of these incidents was the hazardous incident mentioned above. With regard to two incidents that exceed-

ed the reaction level, the investigations and analysis process are still underway, as a result of which the final corrective actions will be specified in accordance with the safety management system once the organisation has completed the required reports for decision-making.

With regard to losses of minimum separation, the trend did not match the targets because the total number of losses increased. The causes and incident types have been analysed and reviewed by the safety management organisation. Some of the new incidents took place because an individual separation regulation has been interpreted in a new way. The change in the interpretation may have caused incident reports that would not have been reported in accordance with the old regulation as they would not have been incidents. In order to assess the level of safety, the incidents were classified in accordance with the level of risk. Based on this, it could be stated that in spite of the increase in the number of incidents, their level of risk represented a low risk, incident management was at a good level in terms of safety and the corrective actions were, for the most part, appropriate. In conclusion, it could be stated that the numbers of incidents alone had not increased the level of risk because the number of high-risk incidents was low (except

for the above-mentioned severe hazardous incident whose correction actions have been separately specified). Communication and increasing awareness with regard to certain working methods and the impact of wind conditions, among other things, is the primary measure in the majority of the incidents. Trend monitoring will be continued and additional measures will be specified if found necessary.

## Environment

ANS Finland cooperates closely with Finavia in Finland and internationally with industry organisations and parties to reduce the negative environmental impacts of air traffic. In this work, significant means of influence include planning flight routes which are as short as possible and make use of weather conditions, using efficient flight methods around airports, keeping delays to a minimum and using the entire single European airspace as efficiently as possible.

## Significant events after the financial year

Cases of pneumonia identified as caused by a novel coronavirus (COVID-19) were diagnosed in the Chinese Wuhan and Hubei provinces in January 2020. At the end of February, approximately 100,000 cases

had been identified worldwide. More than 100 countries have already reported infections. Finnair and several other airlines are reducing their capacity in domestic and European traffic. The impacts on revenue and profit have been minor so far. However, the impacts can be severe if the epidemic continues.

Price negotiations of the service agreement for network airports between Finavia and ANS Finland are in progress.

## Estimate of probable future development

According to current estimates, flight cancellations caused by the coronavirus will have a significant impact on the revenue of ANS Finland, at least in the first half of the year. ANS Finland estimates that the company will lose revenue of approximately EUR 500,000–1,000,000 a month with the cancellations announced by airlines so far. The full-year flight volumes are now expected to fall short of the level of 2019. The company will commence statutory employer-employee negotiations due to production-related and financial reasons on 18 March.

ANS Finland's key development project with the Estonian air navigation company EANS (FINEST) to create a joint airspace and increase the efficiency of working meth-

ods will proceed on schedule. In the last deployment phase during the second quarter of 2022, the companies' regional air traffic control centres will operate as a single virtual operator and flight route services can be provided from Finland or Estonia in the airspaces of both countries.

## Management and auditing

Pertti Korhonen continued as the Chairman of the Board of Directors of ANS Finland until 1 April. The annual general meeting elected Juho Hakala as the new Chairman of the Board of Directors on 1 April 2019. Hakala held this position until 27 August, after which Pertti Korhonen continued as the Chairman. Asta Sihvonen-Punkka and Teemu Penttilä, who have been members of the Board of Directors since the incorporation of the company, continued as members. On 1 April, the annual general meeting decided to reinforce the Board of Directors with a fourth member. Ilkka Virtanen was elected for the position. The Board of Directors convened seven times during the financial year. The Board members were paid a total of EUR 52,500 in compensation.

The CEO of the company is Raine Luojus. The company's auditor was Ernst & Young Oy, with Mikko Ryttilähti as the auditor in charge.

## Shares and share capital

The State of Finland transferred the shares of ANS Finland to Traffic Management Finland Oy on 1 January 2019. Ministry of Transport and Communications is responsible for ownership steering.

The company's share capital is comprised of 330 shares of equal value. The share capital amounts to EUR 3,300. The company does not hold any treasury shares.

## Board of Directors' proposal for the distribution of profits

The company's distributable assets in the financial statements of 31 December 2019 amounted to EUR 21,608,500.84. The Board of Directors proposes that no dividends be distributed and that the profit for the financial year, EUR 2,853,075.94, be carried over in retained earnings.



## Income statement

euro	1.1.-31.12.2019		1.1.-31.12.2018	
<b>REVENUE</b>	80,178,759.95		81,470,565.86	
Other operating income	436,890.91		375,013.51	
<b>Materials and services</b>				
Materials and supplies				
Purchases during the financial year	565,408.24		778,314.90	
External services	7,098,865.96	7,664,274.20	8,261,314.62	9,039,629.52
<b>Staff expenses</b>				
Salaries and bonuses	36,965,883.80		35,820,903.51	
Indirect staff expenses				
Pension expenses	6,385,594.47		6,698,312.01	
Other indirect staff expenses	1,266,195.96	44,617,674.23	1,238,368.10	43,757,583.62
<b>Depreciation, amortisation and impairment</b>				
According to plan	3,697,145.43		3,615,406.94	
<b>Other operating expenses</b>	18,770,123.52		18,593,672.82	
<b>Operating profit</b>	<b>5,866,433.48</b>		<b>6,839,286.47</b>	
<b>Financial income and expenses</b>				
Other interest and financial income	13,150.08		9,397.55	
Interest expenses and other financial expenses	-19,616.90	-6,466.82	-72,727.71	-63,330.16
<b>Profit before appropriations and taxes</b>	<b>5,859,966.66</b>		<b>6,775,956.31</b>	
<b>Appropriations</b>				
Increase (-) or decrease (+) in depreciation difference	-75,301.31		-289,318.27	
Income taxes	2,931,589.41		2,832,784.61	
<b>Profit for the financial year</b>	<b>2,853,075.94</b>		<b>3,653,853.43</b>	

## Balance sheet

euro	31.12.2019		31.12.2018	
<b>ASSETS</b>				
<b>NON-CURRENT ASSETS</b>				
<b>Intangible assets</b>				
Intangible rights	6,048,789.12		8,608,964.93	
Other capitalised long-term expenditure	1,441,050.73	7,489,839.85	1,700,621.74	10,309,586.67
<b>Tangible assets</b>				
Machinery and equipment		3,607,446.78		3,950,943.42
<b>Advance payments and construction in progress</b>				
Purchases of machinery and equipment	4,231,870.51		4,047,798.38	
Purchases of licences and software	1,577,967.64	5,809,838.15	390,771.92	4,438,570.30
<b>CURRENT ASSETS</b>				
<b>Receivables</b>				
<b>Short-term receivables</b>				
Accounts receivable	7,729,971.71		7,796,415.53	
Receivables from Group companies	26,166,937.68		0.00	
Other receivables	71,392.28		51.67	
Accrued income	8,964,166.89	42,932,468.56	5,597,864.54	13,394,331.74
<b>Cash and cash equivalents</b>		0.00		18,572,305.65
<b>Total assets</b>		<b>59,839,593.34</b>		<b>50,665,737.78</b>

## Balance sheet

euro	31.12.2019		31.12.2018	
<b>EQUITY AND LIABILITIES</b>				
<b>EQUITY</b>				
Share capital	3,300.00		3,300.00	
Reserve for invested unrestricted equity	8,300,000.00		8,300,000.00	
Retained earnings	10,455,424.90		6,801,571.47	
Profit for the financial year	2,853,075.94	21,611,800.84	3,653,853.43	18,758,724.90
<b>Cumulative appropriations</b>				
Depreciation difference		1,122,929.62		1,047,628.34
<b>Statutory provisions</b>				
Other statutory provisions		130,390.99		268,392.14
<b>LIABILITIES</b>				
<b>Non-current liabilities</b>				
Loans from credit institutions	0.00		5,001,895.83	
Liabilities for regulatory over-recoveries	12,722,959.00	12,722,959.00	5,332,975.00	10,334,870.83
<b>Current liabilities</b>				
Accounts payable	2,107,460.56		3,647,044.81	
Liabilities to Group companies	1,855,897.43			
Other liabilities	2,040,324.23		1,703,019.60	
Accrued liabilities	18,247,830.67	24,251,512.89	14,906,057.16	20,256,121.57
<b>Total equity and liabilities</b>	<b>59,839,593.34</b>		<b>50,665,737.78</b>	



## Cash flow statement

euro	2019	2018
<b>CASH FLOW FROM OPERATING ACTIVITIES</b>		
Cash receipts from customers	89,588,243.43	80,674,130.05
Cash paid for operating expenses	-69,326,633.99	-63,928,414.61
Cash flow from operating activities before financial items and taxes	20,261,609.44	16,745,715.44
Interest and other financial expenses paid	-23,853.01	-74,672.16
Interest received	13,150.08	9,397.55
Transfer of the bank accounts into the cash pool of the Group 1 January	18,572,305.65	0.00
Other financing items from operating activities	-25,783,034.51	0.00
Income taxes paid	-2,707,639.53	-2,486,202.69
<b>Cash flow from operating activities</b>	<b>10,332,538.12</b>	<b>14,194,238.14</b>
<b>CASH FLOW FROM INVESTING ACTIVITIES</b>		
Investments in tangible and intangible assets	-5,349,092.71	-2,072,627.98
Proceeds from sale of tangible and intangible assets	18,450.42	0.00
<b>Cash flow from investing activities</b>	<b>-5,330,642.29</b>	<b>-2,072,627.98</b>
<b>CASH FLOW FROM FINANCING ACTIVITIES</b>		
Repayment of long-term loans	-5,001,895.83	0.00
<b>Cash flow from financing activities</b>	<b>-5,001,895.83</b>	<b>0.00</b>
<b>NET INCREASE (+)/DECREASE (-) IN CASH AND CASH EQUIVALENTS</b>	<b>0.00</b>	<b>12,121,610.16</b>
Cash and cash equivalents 1 January	18,572,305.65	6,450,695.49
Transfer of the bank accounts into the cash pool of the Group 1 January	-18,572,305.65	0.00
Cash and cash equivalents 31 December	0.00	18,572,305.65
	<b>0.00</b>	<b>12,121,610.16</b>

## Notes to the financial statements

Air Navigation Services Finland Oy is part of the Traffic Management Finland Group. The parent company is Traffic Management Finland Oy (business ID 2942108-7), domicile in Helsinki.

A copy of the consolidated financial statements of Traffic Management Finland is available at Palkkatilanportti 1, Helsinki.

### Valuation principles

#### VALUATION OF FIXED ASSETS

Fixed assets are measured at cost less depreciation according to plan.

Depreciation according to plan is calculated based on the economic useful life of the assets as follows:

Computer software	
straight-line depreciation	5 years
Other long-term expenditure	
straight-line depreciation	5–10 years
Machinery and equipment	
straight-line depreciation	5–15 years

#### REVENUE

During the financial year 2019, revenue was reduced by a provision of EUR 9,100,952.00 based on the requirements of SES legislation for the change of en-route charge and Helsinki-Vantaa air navigation fees in the future years. Among other things, traffic risk sharing, inflation adjustment, capacity incentives, EU-funding and costs exempted from cost risk sharing have been taken into account in the reduction.

#### CALCULATION PRINCIPLES OF THE CASH FLOW STATEMENT

The cash flow statement is based on the guidelines of the Accounting Board (KILA). The cash flow from operating activities is presented using the direct method. The company's balance in the cash pool accounts of the Group EUR 25,783,034.51 is presented in the cash flow from operating activities.

euro	2019	2018
<b>Staff expenses</b>		
Salaries and bonuses	36,965,883.80	35,820,903.51
Fringe benefits	152,637.04	126,256.05
<b>Total</b>	<b>37,118,520.84</b>	<b>35,947,159.56</b>
Indirect staff expenses		
Pension expenses	6,385,594.47	6,698,312.01
Other indirect staff expenses	1,266,195.96	1,238,365.10
<b>Total</b>	<b>7,651,790.43</b>	<b>7,936,677.11</b>
Average number of personnel during the financial year	405	408
Personnel at the end of the year		
Permanent	403	400
Temporary	35	47
<b>Total</b>	<b>438</b>	<b>447</b>
Salaries and bonuses of the CEO and Board of Directors		
Chief Executive Officer	288,912.48	287,936.50
Members of the Board of Directors	52,500.00	76,200.00
	<b>341,412.48</b>	<b>364,136.50</b>
<b>Depreciation, amortisation and impairment</b>		
According to plan		
Computer software	2,684,703.29	2,677,382.51
Other long-term expenditure	259,571.01	259,571.01
Machinery and equipment	752,871.13	678,453.42
	<b>3,697,145.43</b>	<b>3,615,406.94</b>
<b>Other operating expenses</b>		
Other staff expenses	1,289,930.96	1,250,402.71
Travel expenses	805,046.83	1,004,610.78
Rents	6,426,480.69	8,550,502.68
Supplies and fixtures	301,535.66	419,676.94
Other operating expenses	9,947,129.38	7,368,479.71
	<b>18,770,123.52</b>	<b>18,593,672.82</b>
<b>Auditor's fees</b>		
Audit fee	38,328.00	25,266.86

## Notes to the financial statements

euro	2019	2018
<b>Financial income and expenses</b>		
Interest income	13,150.08	9,397.55
Interest expenses	-19,616.90	-72,727.71
Total financial income and expenses	-6,466.82	-63,330.16
<b>Intangible assets</b>		
Computer software		
Acquisition cost 1 January	13,238,101.48	12,747,293.90
Increase during the financial year	124,527.48	490,807.58
Decrease during the financial year	0.00	0.00
Acquisition cost 31 December	13,362,628.96	13,238,101.48
Accumulated depreciation according to plan 1 January	-4,629,136.55	-1,951,754.04
Accumulated depreciation on decrease	0.00	0.00
Depreciation according to plan during the financial year	-2,684,703.29	-2,677,382.51
Book value 31 December	6,048,789.12	8,608,964.93
<b>Other long-term expenditure</b>		
Other capitalized long-term expenditure		
Acquisition cost 1 January	2,154,871.01	2,154,871.01
Increase during the financial year	0.00	0.00
Decrease during the financial year	0.00	0.00
Acquisition cost 31 December	2,154,871.01	2,154,871.01
Accumulated depreciation according to plan 1 January	-454,249.27	-194,678.26
Accumulated depreciation on decrease	0.00	0.00
Depreciation according to plan during the financial year	-259,571.01	-259,571.01
Book value 31 December	1,441,050.73	1,700,621.74

euro	2019	2018
<b>Tangible assets</b>		
Machinery and equipment		
Acquisition cost 1 January	5,072,918.82	4,837,655.93
Increase during the financial year	469,374.49	242,844.82
Decrease during the financial year	-60,000.00	-7,581.93
Acquisition cost 31 December	5,482,293.31	5,072,918.82
Accumulated depreciation according to plan 1 January	-1,121,975.40	-451,103.91
Accumulated depreciation on decrease	0.00	7,581.93
Depreciation according to plan during the financial year	-752,871.12	-678,453.42
Book value 31 December	3,607,446.79	3,950,943.42
<b>Advance payments and constuction in progress</b>		
Other work and purchases in progress		
Acquisition cost 1 January	4,438,570.30	3,324,251.07
Increase during the financial year	1,965,169.82	2,544,015.18
Decrease during the financial year	-593,901.97	-1,429,695.95
Acquisition cost 31 December	5,809,838.15	4,438,570.30
<b>Short-term receivables</b>		
Receivables from Group companies		
Accounts receivable	383,903.17	0.00
Other receivables	25,783,034.51	0.00
	26,166,937.68	0.00
The company's balance in the cash pool accounts of the Group EUR 25,780,034.51 is presented in Other receivables from Group companies.		
Receivables from others		
VAT receivables	71,392.28	
<b>Material items contained in accrued income</b>		
Accrued income from Eurocontrol	4,449,321.00	4,596,805.00
Accrued income from EU grants	3,631,844.73	0.00
Other accrued income	629,421.13	889,134.45
Receivables from occupational health care	253,520.03	111,925.09
Total	8,964,166.89	5,597,864.54



## Notes to the financial statements

euro	2019	2018
<b>Restricted equity</b>		
Share capital 1 January	3,300.00	3,300.00
Share capital 31 December	3,300.00	3,300.00
Restricted equity total	3,300.00	3,300.00
<b>Unrestricted equity</b>		
Reserve for invested unrestricted equity 1 January	8,300,000.00	8,300,000.00
Reserve for invested unrestricted equity 31 December	8,300,000.00	8,300,000.00
Retained earnings 1 January	10,455,424.90	6,801,571.47
Distribution of dividend	0.00	0.00
Retained earnings 31 December	10,455,424.90	6,801,571.47
Profit for the financial year	2,853,075.94	3,653,853.43
Unrestricted equity total	21,608,500.84	18,755,424.90
<b>Total equity</b>	21,611,800.84	18,758,724.90
<b>Distributable equity on 31 December</b>		
Retained earnings	10,455,424.90	6,801,571.47
Profit for the financial year	2,853,075.94	3,653,853.43
Reserve for invested unrestricted equity	8,300,000.00	8,300,000.00
	21,608,500.84	18,755,424.90
<b>Statutory provisions</b>		
Other statutory provisions	130,390.99	268,392.14

A provision amounting to EUR 1,099,727.75 was transferred to the company in the aquisition of business operations in April 2017 to fulfill the commitments relating to the transfer of the operations of Tampere Area Traffic Control Centre. In the beginning of the year the provision amounted to EUR 268,392,14. During the 2019 financial year, EUR 106,000.02 of the provision was used and EUR 32,001.13 was written down.

euro	2019	2018
<b>Non-current liabilities</b>		
<b>Loans from credit institutions</b>		
Balance in the beginning of the financial year	5,000,000.00	5,000,000.00
Increase during the financial year	0.00	0.00
Decrease during the financial year	-5,000,000.00	0.00
Balance at the end of the financial year	0.00	5,000,000.00
<b>Provisions for regulatory over-recoveries</b>		
Balance in the beginning of the financial year	8,605,225.00	0.00
Decrease during the financial year	-4,462,828.00	
Increase during the financial year	13,563,780.00	8,605,225.00
Transfer to current liabilities	-4,983,218.00	-3,272,250.00
Balance at the end of the financial year	12,722,959.00	5,332,975.00
<b>Loans maturing later than within five years</b>		
Bank loan	0.00	0.00
Provisions for regulatory over-recoveries	4,300,000.00	1,900,000.00

The regulatory adjustment includes liabilities of EUR EUR 26,600,385,00 and receivables of EUR 8,894,208.00.

The portion of the regulatory over-recoveries maturing after five years is related to customer refunds of EU grants for investments.

## Notes to the financial statements

euro	2019	2018
<b>Current liabilities</b>		
Liabilities to Group companies		
Accounts payable	21,847.43	0.00
Accrued expenses	1,834,050.00	0.00
	1,855,897.43	0.00
Payables to others		
VAT liability	0.00	3,674.81
Withholding tax liability	1,034,394.76	909,968.98
Social security contribution liability	22,374.75	23,805.81
Other	983,554.72	765,570.00
	2,040,324.23	1,703,019.60
<b>Material items included in accrued liabilities</b>		
Salary and social security expense accruals	1,756,597.45	1,160,999.02
Holiday pay liabilities including social security contributions	7,944,345.10	8,131,756.60
Tax liability	811,925.74	609,175.87
Regulation liability	4,983,218.00	3,272,250.00
Other accrued liabilities	2,751,744.38	1,731,875.67
	18,247,830.67	14,906,057.16
<b>Commitments and contingent liabilities</b>		
<b>Lease liabilities</b>		
Payable during the next financial year	795,435.62	373,906.88
Payable in later years	1,048,215.17	585,909.33
Total	1,843,650.79	959,816.21
Lease liabilities are presented at gross amounts (inclusive of VAT)		
<b>Other contingent liabilities</b>		
Due during the next financial year	6,196,252.87	2,425,901.00
Due in later years	3,541,455.83	0.00
Total	9,737,708.70	2,425,901.00
Total commitments and contingent liabilities	11,581,359.49	3,385,717.21

The company has long-term lease on its business premises expiring 30 June 2032.

In the financial statements dated 31 December 2019 the company's lease liability from this agreement totals EUR 10,214,716.94

The company is involved in a few minor disputes relating to the company's business operations, the outcomes of which will not have any material impact on the company's financial position.

### TRANSACTIONS WITH RELATED PARTIES

The operating expenses include several transactions between the company and its related parties that have similar terms than the transactions with other parties.

# Signatures of the financial statements and Board of Directors' report

Vantaa, March 12, 2020

Pertti Korhonen  
Chairman of the Board of Directors

Teemu Penttilä  
Member of the Board of Directors

Asta Sihvonen-Punkka  
Member of the Board of Directors

Ilkka Virtanen  
Member of the Board of Directors

Raine Luojus  
CEO

**Auditor's note**  
A statement on the audit performed has been issued today.

Helsinki, March 16, 2020

Ernst & Young Oy  
Authorised Public Accountants

Mikko Rytilahti  
APA, CPFA



# Auditor's report (Translation of the Finnish original)

TO THE ANNUAL GENERAL MEETING OF AIR NAVIGATION SERVICES FINLAND OY

## **Report on the Audit of the Financial Statements**

### **Opinion**

We have audited the financial statements of Air Navigation Services Finland Oy (business identity code 2767840-1) for the year ended 31 December, 2019. The financial statements comprise the balance sheet, income statement, cash flow statement and notes.

In our opinion, the financial statements give a true and fair view of the company's financial performance and financial position in accordance with the laws and regulations governing the preparation of financial statements in Finland and comply with statutory requirements.

### **Basis for Opinion**

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

independent of the company in accordance with the ethical requirements that are applicable in Finland and are relevant to our audit, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

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

The Board of Directors and the Managing Director are responsible for the preparation of financial statements that give a true and fair view in accordance with the laws and regulations governing the preparation of financial statements in Finland and comply with statutory requirements. The Board of Directors and the Managing Director are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are

free from material misstatement, whether due to fraud or error.

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

### **Auditor's Responsibilities for the Audit of the Financial Statements**

Our objectives are to obtain reasonable assurance on whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with good

auditing practice will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

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

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of the Board of Directors' and the Managing Director's use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the company to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events so that the financial statements give a true and fair view.

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

### **Other reporting requirements** **Other information**

The Board of Directors and the Managing Director are responsible for the other information. The other information that we have obtained prior to the date of this auditor's report is the report of the Board of Directors.

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

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is ma-

terially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. With respect to the report of the Board of Directors, our responsibility also includes considering whether the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations.

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

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

### **Other opinions**

We support that the financial statements should be adopted. The proposal by the Board of Directors regarding the use of the profit shown in the balance sheet is in compliance with the Limited Liability Companies

Act. We support that the members of the Board of Directors and the Managing Director should be discharged from liability for the financial period audited by us.

Vantaa 16.3.2020

Ernst & Young Oy  
Authorized Public Accountant Firm

Mikko Rytilahti  
Authorized Public Accountant,  
Chartered Public Finance Auditor



Air Navigation Services Finland Oy, Lentäjätie 1 B, 01530 Vantaa, Finland