2017

RESPONSIBILITY REPORT

FINAVIA

Sustainable development and safety are at the core of our responsibility and all our operations.

Year 2017

The brochure contains an overview of Finavia's business operations in 2017, sets out the company's goals and achievements, and presents the CEO's review.

PDF

Responsibility report

The report covers the priorities of Finavia's responsibility work, its aims and the results already achieved.

PDF

Corporate governance and remuneration statement

The publication contains a description of Finavia's governance and steering system, as well as the salary and compensation report.

PDF

Financial statements

The financial statements contain the Board of Directors' report and the main details of Finavia's finances.

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RESPONSIBILITY AT FINAVIA

Finavia in short

Finavia is an airport company with a comprehensive network of 21 airports providing frequent connections to and from Finland as well as to different parts of Finland. The air passengers and the airlines operating from our airports are our customers.

Helsinki Airport is the leading transit airport in northern Europe for travel between Europe and Asia. Having an internationally competitive airport is important for Finland as a whole. It ensures that Finland can be reached by air from all parts of the world.

We strengthen Finland's competitiveness and internationalisation and promote mobility by ensuring smooth, safe and cost-efficient aviation services in cooperation with the companies and organisations operating at the airports. Sustainable development and safety are at the core of our responsibility and all our operations.

Key events in 2017

We do a successful work in developing the accessibility of Finland.

Helsinki Airport achieved carbon neutrality. We started using renewable diesel and solar power.

T2

The development of Helsinki Airport progressed as planned and provided work to thousands of people.

We started a close security cooperation between Finavia and Air Navigation Service Finland, which is responsible for air navigation.

Our employees are even happier at work. The PeoplePower index rose to a good level.

67.5

PeoplePower index (66.4).

Our excellent financial results enable investments for the future.

Responsibility themes

In our responsibility work, we focus on themses that are essential to Finavia's stakeholders and business operations. The most important responsibility themes also determine the focus areas of this report.

Safety lies at the core of our responsibility work and it is the basis of all our operations. High service standards, efficiency, profitability and environmental and climate issues are also important to us. At the same time, we must keep our operations and practices up to date so that our airports will remain among the best transit airports in the world.

The most essential responsibility themes were last analysed systematically in January 2015, when we stressed the stakeholder perspective in particular. Determining the essential nature of the matters in question was based on ten stakeholder interviews, in which we discussed the responsibility themes that our stakeholders consider particularly important, stakeholders' hopes and their assessment of stakeholder cooperation at Finavia. Based on the interview results, the members of Finavia's Executive Group and experts managing corporate responsibility updated the responsibility themes and determined how essential they are. In 2017, we implemented a more extensive stakeholder survey where the essential themes of responsibility were discussed as part of the package.

Safety

Ensuring the safety of air traffic is at the centre of all Finavia's operations and this requires seamless cooperation between the different actors in the air traffic service chain and the public authorities. The safety is based on Finavia's strong safety culture and its safety management system. In addition to flight safety, overall safety includes safety for civil aviation, safety of the apron, and cyber security, which includes securing the functioning of different systems. The Finnish Transport Safety Agency Trafi monitors Finavia's operations regarding flight safety.

Service level in accordance with customer expectations

At our airports, we provide passengers with pleasant service experiences tailored to the needs of different users. We constantly introduce new services and work to ensure smooth processes. Excellent customer satisfaction is a major competitive advantage to Finavia. We want to ensure that our customers find our airports refreshing places where they can enjoy travelling free

MOST MATERIAL RESPONSIBILITY THEMES	
Safety management organisation	Service level in accordance with customer expectations
Efficiency and profitability	Ability to renewal
Environmental protection and climate	Good HR management and well-being at work
Transparent stakeholder engagement	Legislation and regulation
Transparency and good governance	

of stress and that we offer them a broad range of high quality services. The ability to provide short turnaround times for airlines is one of our strengths. Airline customers also expect Finavia to be proactive and to provide customer-oriented services in such areas as routing.

Efficiency and profitability

The efficiency and cost-efficiency of Finavia's operations are the prerequisites for profitable and competitive airport operations. They allow us to keep the prices of air traffic services internationally competitive and help us to ensure comprehensive air traffic services in Finland. Efficiency is also crucial to our ability to invest in our operations. The income generated by the busy Helsinki Airport allows us to maintain and develop other airports.

Ability to develop

Competition between transit airports is tough. Finavia and its airports must keep their operations up to date so that we can guarantee good connections in Finland, from Finland and to Finland. In addition to possessing high professional skills, Finavia's personnel are also expected to have strong service competence and to engage in continuous self-development. The ability to improve also means the extensive use and development of automation and new technologies in airport services, for example.

Environmental protection and environmental matters

The most significant environmental impacts of Finavia's operations result from aircraft noise, anti-icing treatments applied to runways, and aircraft anti-icing and de-icing treatments used by ground handling companies. We cooperate with local residents, businesses located in areas adjacent to airports, municipalities, environmental authorities and air traffic actors. Airport operations are subject to strict environmental permits and compliance with them is supervised by regional ELY Centres. We are working to reduce the environmental impact of our operations, even though they are only part of the overall air transport chain. We can contribute to the environmental efficiency of air traffic e.g. by reducing the taxiing of planes with the smoothness of airport operations and by looking after the energy efficiency of our own activities.

Good HR management and wellbeing at work

Transparent management and healthy personnel are the basic requirements for safety, good service and cost-efficiency. Finavia promotes good governance and the wellbeing of its personnel by various means, including initiatives for wellbeing at work, transparent communications and manager training. We train our personnel on a continuous basis and encourage every staff member to develop their own competence. We conduct regular personnel surveys on the basis of which we also develop our operations.

Open stakeholder work

Our main stakeholders are airline and passenger customers, Finavia's personnel and partners at airports, decision-makers and public authorities, as well as people living near the airports. Stakeholders also include our partners, subcontractors, suppliers of services and goods, financiers, and the media. Finavia promotes good stakeholder relations through open and active dialogue.

Legislation and regulation

Airport operations are guided by legislation and other regulation at EU and national level. We make every effort to foresee the impact of legislation and regulations on our business and work to influence regulatory trends by engaging in an active dialogue with decision-makers, influential parties and public authorities.

Openness and good governance

Finavia operates in a predictable and transparent manner. We communicate about our operations, management systems and remuneration practices in an open manner. Finavia observes the Corporate Governance Code of Finnish listed companies to the extent that it is appropriate, given state ownership and the nature of our operations. We also abide by the opinion of the Cabinet Committee on Economic Policy regarding the remuneration of management and key personnel in state-owned companies.

Managing corporate responsibility

The purpose of Finavia is to strengthen Finland's competitiveness and internationalisation, and to promote mobility by ensuring smooth and safe aviation services. Safety is key to all our operations, and it is at the core of our corporate responsibility.

In its responsibility work, Finavia is guided by its values, operating principles, policies and guidelines, which must be observed by all Finavia staff members and persons working in the company administration. In practice, every Finavia employee must participate in responsible operations and promote them.

The decisions ensuring the responsibility of Finavia's operations are made by the CEO and the Executive Group. Finavia's Board actively monitors the management of corporate responsibility issues and regularly discusses matters pertaining to the company's financial standing, efficiency, safety, environmental matters and social responsibility. The corporate responsibility indicators set out in the Group's scorecard include economic and operational efficiency, safety and job satisfaction.

In terms of environmental work, we have set ourselves high standards. The environmental unit and the director responsible for sustainable development coordinate the practical environmental responsibility work in cooperation with business areas and airports, which function as profit centres in the business areas.

The Financial Unit and CFO implement economic responsibility at a practical level. The consideration and promotion of social responsibility is the task of a number of different parties at Finavia. For example, the group's HR matters are managed by the HR director and the HR Unit. The group's Risk Management Unit coordinates the management and development of flight safety.

Finavia is engaged in active dialogue with its stakeholders. The work is coordinated by our Communications Unit and the feedback we receive is an important consideration in our responsibility work. Our aim is to ensure that our operations are predictable and transparent, and that we communicate our operations in an open manner.

Finavia is committed to good governance in all its operations. Efficient internal control and risk management promote Finavia's performance and constitute an essential element of the good corporate governance observed by the Group. Finavia ensures the transparency of its corporate governance by observing the Corporate Governance Code of Finnish listed companies, to the extent that this is appropriate for a company wholly owned by the Finnish state.

We monitor the results of our corporate responsibility work and report on them in our corporate responsibility report using the GRI G4 indicators. Corporate responsibility reporting is coordinated by the communications unit.

On a practical level, every Finavia employee must participate in responsible operations and promote them.

Stakeholder cooperation

Our stakeholders include a broad range of different actors in Finnish society as well as individual passengers. Maintaining a continuous dialogue with our stakeholders is important to us.

We serve more than 50 major airline customers every day and more than 22 million passengers every year. We interact particularly closely with our airport partners, the authorities, decision-makers and airport neighbours.

We cooperate with our stakeholders on a continuous basis. We meet with them, listen to them, discuss with them and jointly draw up plans to improve airport operations. In the cooperation, we focus on our main stakeholders, among them the communities and operators with the biggest impact on Finavia's business, and whose operations are affected by what we do.

Each of the main stakeholders has a designated representative at Finavia, who coordinates the cooperation and makes the stakeholder's message more widely known in the company.

In 2017, we conducted an open web-based survey on responsibility matters. We received a total of 455 responses to the survey from our stakeholders. This feedback is highly valuable and we will use it in the development of our responsibility work.

Memberships in aviation associations

We contribute to the development of the airport and air traffic sector in several organisations and working groups. We are also members of various Finnish and international travel development forums.

Finavia is a member of the Airports Council International (ACI Europe) and takes part in the work of its working groups. Finland is also a member of the International Civil Aviation Organization (ICAO) and a founding member of the Nordic Initiative for Sustainable Aviation (NISA) cooperation network, the goal of which is to supply biofuels to the aviation industry.

As a member of the World Travel & Tourism Council, the Nordic Travel Retail Group and the Nordic Council of Shopping Centres, we are also a partner in the international development of tourism and work to develop the commercial potential of airports.

Finavia is also a member of PALTA, the Finnish Association of Service Sector Employers.

FINAVIA'S MOST IMPORTANT STAKEHOLDERS

- Airline customers
- Passengers
- Personnel
- Public authorities
- Financiers and owners
- State and munincipalities
- Residents in the proximity of airports
- Partners, subcontractors and suppliers
- Media
- Military and state aviation
- General aviation

Our different stakeholders have different priorities. The following table lists a few highlights and examples of cooperation from 2017:

Stakeholder	Issues brought up by the stakeholders	Examples of Finavia's actions in 2017	Forms of cooperation
Airline customers	• Digital services and developing the customer experience • Efficient and punctual airport services and competitive pricing • Regulation as a cost factor • Continuous development of operations and Finavia's initiative • Close and open cooperation and communication • Improving awareness of Helsinki and Finland to create demand for routes	• Increasing the level of automation in passenger and luggage processes • Retaining airport charges at a low level through effective operations • Helsinki Airport is still the sixth least expensive main airport in Europe • Successful development of flights to Lapland, in cooperation with regional tourist operators and Visit Finland • Marketing Finland to target groups together with different regions	• Regular customer-specific meetings, continuous dialogue and cooperation • Quarterly briefing and consultancy meetings regarding the development programme of Helsinki Airport • Preparation and joint assessment of route development analyses • International visibility of Finavia's airports • Route development and joint marketing with airlines • Visibility of Helsinki Airport in target markets • Customer surveys
Passengers	• Flight safety • Purposeful airport network and diverse domestic and international connections • Smooth service at airports, high standard of customer service • Diverse shopping and service opportunities	• Day-to-day work to ensure flight safety • Boosted operations to maintain airports • Improving experiences at airports and providing more shopping opportunities • Smoother passenger processes by means of automation • Continuous development of websites and mobile applications • Joint service and cultural training for airport operators • Targeted services for Chinese passengers	• Personal service situations • Customer feedback channels and customer satisfaction surveys • Internet, social media and mobile applications • Events • Cooperation with other service providers at airports to create a standard customer experience
Personnel	• Wellbeing at work • Encouraging and fair remuneration • Continuous, close cooperation and engagement • Continuous development of competence • Operational efficiency issues • Good management and supervisory work • Ethical operating methods	• Wellbeing projects • Exercise and culture benefits, personnel fund • Personnel survey • Change support package • Clearer goal-setting, performance management and assessment • Development of a performance-based bonus scheme • Training and coaching for supervisors	• Performance appraisals and development discussions • Intranet and information screens • Staff briefings • Training sessions • Expanded occupational healthcare • Cooperation with shop stewards and monthly meetings with personnel organisations • Presentations at shop steward events of personnel organisations
Public authorities	• Compliance with regulations and Finavia's own guidelines • Helpful and active approach in official matters • Changing threat assessments of security authorities • Quick response to environmental damage and customer queries • Up-to-date environmental reporting	• Continuous compliance with regulations and Finavia's own guidelines and principles • Influencing the development of regulation in the industry • Preparations for the implementation of future aviation regulations by the European Aviation Safety Agency (EASA) • Reviewing airport safety and security plans and testing them in cooperation with the police • Well-organised material in applications for environmental permits and replies regarding appeal • Reporting to the authorities on environmental issues raised by local residents • Developing the environmental reporting process	• Continuous dialogue, meetings, working groups with authorities • Preparation and joint reaction to changes in the operating environment (e.g. with Customs, the police and the Finnish Border Guard) • Joint overview and communication • Transparent and reliable reporting
Financiers and owners	• Efficiency and profitability • Financially sustainable business • Transparency of operations and reporting • Responsibility • Ability to pay dividends	• Achieving financial targets • Business operations compliant with Finavia's operating principles and guidelines	• Meetings and communication • Financial reporting and communication • Contact with state ownership steering • General Meeting of Shareholders

Stakeholder	Issues brought up by the stakeholders	Examples of Finavia's actions in 2017	Forms of cooperation
State and municipalities	• Provision of cost-efficient air traffic services • Good accessibility of Finland and its different regions • Promotion of business and competitiveness by means of well-functioning air traffic • Land use planning around airports to prevent new noise issues • Seeking synergy benefits between airports and municipal functions • Local employment effect	• Enhancement of operations as part of the air traffic service chain • Competitive pricing • Helsinki Airport development programme • Closer cooperation with the EU • Well-organised material in applications for environmental permits and replies regarding appeal • Cooperation with regional councils in the preparation of regional plans and the implementation of national land use goals • Cooperation with the City of Vantaa on issues concerning land use, runoff water and noise control • Issuing statements on land use plans • Employment effects of the development programme of Helsinki Airport and investments made at network airports	• Continuous dialogue • Meetings, working groups
Residents in the proximity of airports	• Mitigation of aircraft noise and other environmental impacts • Open line of communication, hearing and having an impact • Local employment effect	• Reducing emissions into the air and soil, e.g. centralised de-icing locations • Promoting the continuous descent approach of aircraft • Employment effects of the development programme of Helsinki Airport and the investment programme for network airports • Participation in events in Vantaa and Espoo (e.g. Kivistö, Leppävaara) and air shows	• Environmental feedback channel and responding to queries • Regular reporting also available to residents • Internet, social media • Local events • Model of participatory planning • WebTrak flight tracking and noise measurement service
Partners, subcontractors and suppliers	• Business relations benefiting both parties • Open dialogue and good personal relationships • Good project management and Finavia's ability to fulfil agreed obligations • Creating a fair competitive situation for operators at the airport • Good operational infrastructure and working conditions • Equal treatment • Finavia's responsibility and good reputation as a partner	• Expansion and internationalisation of the partner network • Closer cooperation with suppliers • Implementing the investment programme of Helsinki Airport through joint contracting • Customer service training for commercial operators at Helsinki Airport • Action plan for responsible purchases • Assessing environmental impacts of purchases	• Briefing events for potential tenderers regarding each project • Agreement negotiations • Daily contact, follow-up meetings and safety meetings • Development projects • Training sessions
Media	• Reliable, transparent and up-to-date information • Media access to management and corporate communications	• Active communication in different channels	• Bulletins and briefings • Interviews • Meetings providing background information • Events and visits • MediaDesk service
Military and state aviation	• Safety • Level and smoothness of services (e.g. operating hours at the airports) • Efficiency	• Cooperation and agreements related to drills by the Finnish military • Negotiations on more effective airspace control over the Gulf of Finland with the Finnish Air Force • Tripartite cooperation between the Finnish Defence Forces, ANS Finland and Finavia	• Local dialogue and customer service at airports • Regular cooperation meetings and appointments • Membership in the airspace control advisory group of the Ministry of Transport and Communications • Working groups
General aviation	• Support and services at airports • Listening and discussion • Pricing policy for season tickets • Safety • Smooth access at airports	• The price of a season ticket for recreational aviation remained at the previous year's level • Enabling air shows and other aviation events at network airports • Standard methods for moving around at airports and developing access systems	• Local discussion • Meetings of the cooperation body of Finavia and the Finnish Aeronautical Association • Relationships to interest groups and aviation schools

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FINAVIA AS A PART OF SOCIETY

Financial targets and operational prerequisites in 2017

Further improvements were made in Finavia's operational efficiency. Fees charged from airlines still remained among the lowest in Europe.

Financial targets have been set for Finavia's operations, so that we are able to maintain our competitive position, develop our operations and make investments. In 2017, our financial targets were the same as in the year before.

We set our earnings, balance sheet and financing targets so that we are able to ensure the continuity and development of our operations in the manner required by aviation safety and customers' expectations.

The operations of Finavia are not subsidised by tax revenue. We cover costs arising from loss-producing network airports with income from commercial services at Helsinki Airport.

Our financial targets

Target	Realisation in 2017
Efficiency: Competitive prices in European comparison	Helsinki Airport is the sixth least expensive airport among the 23 main airports in Europe. Helsinki Airport remains an inexpensive hub in Europe for airlines, with airport charges as much as 50 per cent below average.
Earnings level: Sufficient cash flow financing to secure operational development and financing	The Group's cash flow from operations amounted to EUR 105.7 (97.7) million, which was sufficient to secure financing for the running and development of operations.
Equity ratio: At least 40%	58.4% (58.9%)
Dividends: Finavia pays dividends to the State of Finland within the constraints of its financial results and distributable funds.	The Group made a profit of EUR 37.7 (28.3) million for the financial period. The Board of Directors proposed that EUR 7,992,000 be distributed as dividends for the financial year 2017.

Efficiency and profitability

Further improvements in Finavia's operational efficiency in 2017. Fees charged from airlines still remained among the lowest in Europe.

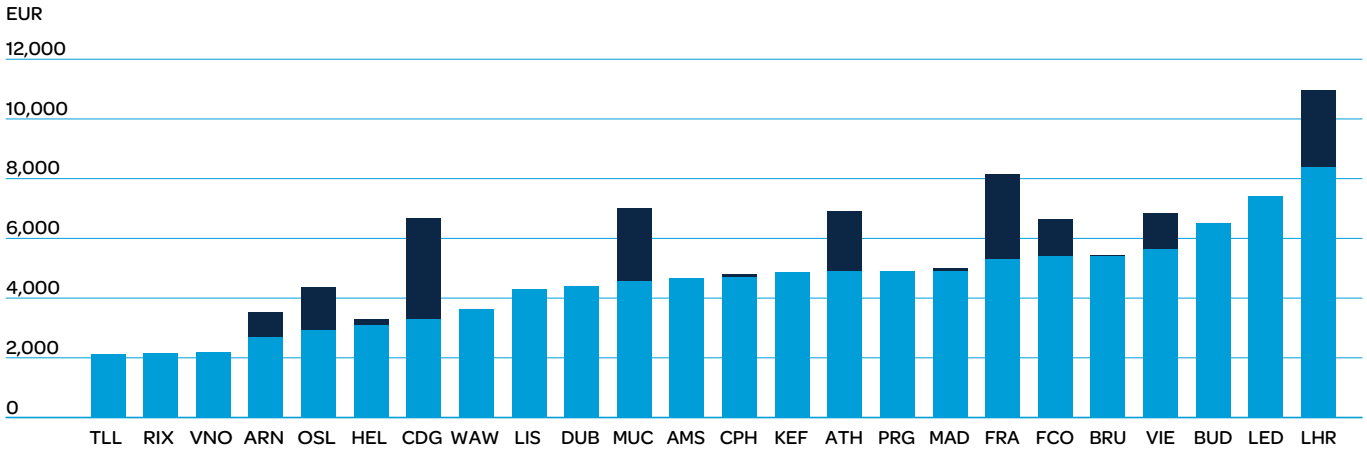
Finavia's goal is to address its operational efficiency. For passengers, this means a smooth passenger path, and short transit times and aircraft turnaround times. Cost efficiency means that we cut our unit costs per passenger and per landing. Cost efficiency provides us with a competitive edge, as it allows us to keep our airport charges at reasonable levels.

Finavia's pricing

In a price comparison of European main airports, Helsinki Airport's air traffic charges were the sixth lowest among 23 main airports in 2017. We support the expansion of flight connections by providing airlines with low air traffic charges and discounts on new routes.

The prices of Finavia's services have decreased in the long term. In real terms, the prices decreased by 10.5 per cent between 2004 and 2017, or 0.8 per cent each year.

Helsinki Airport's international competitiveness: air traffic charges 2017 – Airbus A320



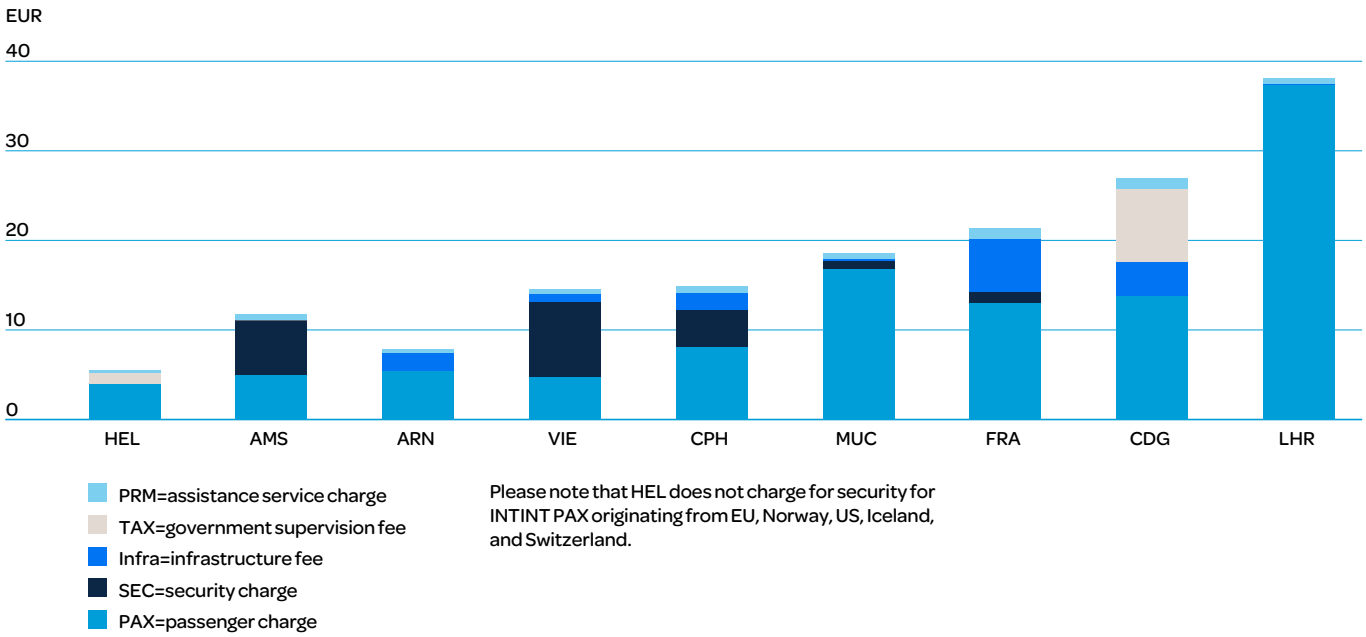
TLL=Tallinn, RIX=Riga, VNO=Vilnius, ARN=Arlanda,OSL=Oslo, HEL= Helsinki, CDG=Charles De Gaulle, WAW=Warsaw, LIS=Lisbon, DUB=Dublin, MUC=Münich, AMS=Amsterdam, CPH=Copenhagen, KEF=Keflavik, ATH=Athens, PRG=Prague, MAD=Madrid, FRA=Frankfurt, FCO=Fiumicino, BRU=Brussels, VIE=Vienna, BUD=Budapest, LED=Pulkovo, LHR=Heathrow

Source: Airportcharges.com

Airport charges remained at moderate levels

The European Commission aims to standardise air traffic charges imposed by airports for domestic and international flights. As a result, changes were made to passenger charges on 1 January 2017 that increase the prices in domestic traffic and reduce the prices in international traffic. Passenger charges in domestic and international traffic will be balanced in 2017–2018 in accordance with the standardised pricing scheme. Finavia increased the 2017 prices by 1.2 per cent, i.e. by the estimated rate of inflation.

Transit traffic charges, 2017–2018



Please note that HEL does not charge for security for INTINT PAX originating from EU, Norway, US, Iceland, and Switzerland.

Performance of network airports

In 2017, tourism boosted domestic traffic, especially at airports in Lapland, which also increased the overall passenger volume of the airport network. In relation to the extent and service capacity of our network, the passenger volumes remain fairly low at many of the airports, and the network posted negative results.

Airport operations are a highly capital-intensive business, and a significant proportion of Finavia's costs are fixed and determined by regulations. The proportion of personnel costs is considerable, approximately 40 per cent on average.

Structure of the financial result of the airport

The financial results of individual airports are mainly affected by the following factors:

- Passenger volume
- Air traffic structure
- Customer structure
- Airport opening hours

The profit level of certain network airports has improved considerably in recent years as a result of higher operational efficiency and passenger volumes.

The structure of the financial result of a fairly large airport in 2017 is shown as an example in the figure. The airport's international traffic volume increased and it had several hundred thousand passengers, in total. Despite the growth, losses amounted to EUR 1.3 (-1.8) million.

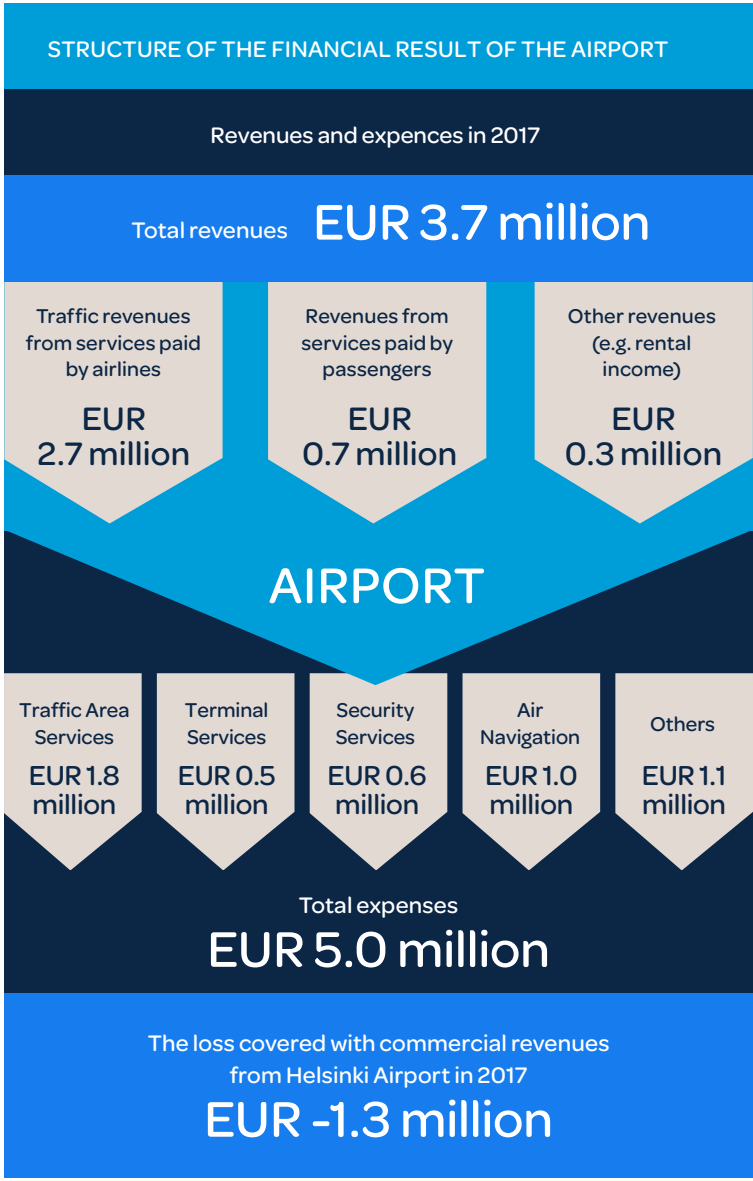
The airport network's losses are covered with the commercial revenues of Helsinki Airport. Finavia does not report the financial results of individual airports.

Uniform pricing at different airports

In Finland, a single service level-based charge is payable for identical services at all airports, irrespective of the profitability of individual airports. This is the network principle. Uniform pricing at different airports would not be possible without the network principle.

According to EU regulations, each individual airport should be profitable, but the network principle allows loss-making airports to be supported using the commercial income of Helsinki Airport. Without the network principle and the subsidies from the income of Helsinki Airport, Finavia would have to substantially increase the price level of its network airports to make their operations economically viable. Due to low traffic volumes, the possibilities for increasing commercial income at airports other than Helsinki Airport and the larger airports in the network are limited.

In the long term, the decrease in domestic air traffic is likely to continue at several airports. This is caused by urbanisation and the improved competitiveness of other modes of transport. Finavia estimates that the need to internally subsidise the airport network, including investment expenditure, will increase to EUR 35–40 million per year by the end of the decade.



Financial added value generated by Finavia for its stakeholders

Our financial responsibility revolves around the profitability of our business and the development of our competitiveness. Enabling effective air traffic brings about the most vital financial impact of our operations on Finnish society.

Our financially profitable business is based on fulfilling the needs of our customers in a functionally efficient and cost-efficient manner. We can only take care of our personnel and assets in a responsible manner if our operations are on a financially sustainable basis. It also makes our airports more attractive to new airlines and passengers, which, in turn, helps to make Finland more competitive.

We are committed to developing our business in a manner that ensures the operating prerequisites of air traffic in Finland. By ensuring our competitiveness, we also create jobs in Finland. By developing Helsinki Airport, we are creating 5,000 permanent jobs in conjunction with the airport. So far, the development programme has had an employment impact of 4,937 person-years. We report transparently on our operations and their financial impact, as well as on our financial development.

We created financial added value of EUR 381.9 million

To be able to develop our business in a financially sustainable manner, Finavia must meet the expectations of a number of stakeholder groups. Our services must meet the changing needs of our passengers and our airline customers. Finavia must offer good working conditions for its personnel, a competitive salary and opportunities to develop. Financially sustainable operations also require functional cooperation relationships with suppliers of goods and services and other partners.

In 2017, we created EUR 381.9 (384.8) million of added value for our stakeholder groups.

The expenses related to purchased goods, materials and services amounted to EUR 304.2 (293.3) million, primarily as a result of higher investments. Investments totalled EUR 181.8 (182.8) million. Financial expenses amounted to EUR 7.0 (9.9) million.

Added value generated for our stakeholders, MEUR		2017	2016	2015	2014	2013
Creation of added value						
Customers	Revenues, other operating income and financial income (including excise duty)	381.9	384.8	369.6	353.1	355
Added value created		**381.9**	**384.8**	**369.6**	**353.1**	**355**
Distribution of added value						
Service providers and suppliers	Goods, materials and services purchased, other operating expenses (less Trafi's charges, real estate taxes and voluntary staff costs)*	304.2	293.3	270.7	191.6	165.1
Personnel	Salaries and wages, pension expenses, voluntary staff costs	125.7	153.7	148.8	144.4	145
Public sector	Employer's social security contributions, income taxes, value-added tax, real estate taxes, charges paid to Trafi (excluding the monitoring charge payable by the airlines)	-15.4	-15.7	-0.1	17.8	20.2
Financiers	Interest and other financial expenses	7	9.9	6.8	38.4	12.2
Owners	Dividens	8.3	4.6	0.7	1.7	0.0
Entities	Donations	0.0	0.0	0.0	0.0	0.0
Distributed added value		**428.9**	**445.8**	**426.9**	**394.0**	**342.6**
Retained for business development		**-47.9**	**-61.0**	**-57.4**	**-40.9**	**12.4**

*Includes investments

Direct and indirect financial impacts

The most significant financial impact of Finavia's operations arises from the enabling of effective air traffic. This is good for passengers and good for society at large.

Air traffic is a growing industry and produces a significant impact on society by offering jobs and enabling business throughout Finland. In 2014, Finavia launched a development programme to expand Helsinki Airport which will stretch into 2020 and which will have significant economic impacts, both directly and indirectly.

	Direct impacts	Indirect impacts
Finnish society	Functional air traffic is a key support factor for Finland's national competitiveness. Finavia is responsible for the competitiveness of airports so that comprehensive flight connections can be maintained. In its competitiveness report (2017–2018), the World Economic Forum (WEF) ranked Finland's airport network as the fifth best in the world and the best in the Nordic region. The total employment effect of the development programme of Helsinki Airport is an estimated 14,000 person-years during the entire construction period. In addition, an increase in the airport's passenger volume will generate an estimated 5,000 permanent jobs. In 2017, the employment effect was about 1,662 person-years. Aviation accounts for 3.2 per cent of the Finnish GDP and provides employment to about 100,000 people in Finland, either directly or indirectly.	
Customers	• Finavia enables comprehensive flight connections for Finnish society. • Finavia provides its airline customers with cost-effective, punctual airport services. • Finavia makes flying as a hobby and as a small business possible by inexpensive season charges for aviation.	• Finavia is committed to developing its business in a sustainable fashion that ensures the operating prerequisites of air traffic in Finland. • Finavia endeavours to constantly improve the efficiency of its operations, which supports competitive pricing. The fees charged from airlines are the sixth least expensive among European main airports. • Finavia promotes aviation culture in Finland and supports Finnish general aviation with several hundred thousand euros every year by keeping the price level of season tickets for general aviators low.
Personnel	• At the end of 2017, Finavia Group had 2,696 (2,997) employees. • Finavia provides jobs at all of its airports in different parts of Finland. • Finavia wants to provide young people with employment opportunities and is recruiting dozens of seasonal workers for its airports for the summer months.	• The salaries and rewards paid affect private consumption, while the taxes paid by the personnel contribute to the welfare of the society. • Finavia invests resources in the competence of its personnel by way of different training sessions, encourages employees at airports to learn multiple skills and supports the wellbeing of its personnel in various ways.
Suppliers of goods and services	• The services purchased by Finavia include real estate, repair, maintenance, security patrol, security check, construction, and contracting and expert services, such as planning and weather services. • The most significant investments are related to the development and maintenance of airports. Finavia has launched a EUR 900 million development programme for Helsinki Airport, which will continue until 2020.	• Finavia seeks long-term cooperation with its partners. Operations are developed in close cooperation with partners; this also supports the business opportunities of suppliers. • Finavia makes purchases in a centralised manner and at a local level.
State of Finland	• Finavia pays income tax, real estate tax and value added tax. • Finavia collects air traffic monitoring charges on behalf of the Finnish Transport Safety Agency (Trafi). In 2017, the charges amounted to EUR 12.1 (11.7) million. The money is forwarded to Trafi. • Finavia pays dividends to the State of Finland within the constraints of its financial results and distributable funds. The Board of Directors proposed that EUR 7,992,000 be distributed as dividends for the financial year 2017.	• Finavia supports the development and welfare of society by paying taxes and by providing jobs in Finland. • Finavia strives to operate in a financially sustainable way by looking after the efficiency of its own operations when compared to other European airports. Thus, Finavia can support the competitiveness of Finnish companies and the welfare of Finnish people.
Financiers	• Finavia seeks to finance its maintenance investments through cash flow financing. Expansion investments required for growth can be financed through long-term borrowing. The European Investment Bank granted a loan of EUR 230 million in February 2016. In December 2015, the Nordic Investment Bank granted Finavia a loan of EUR 150 million for the extension of Helsinki Airport.	• Finavia aims to retain the equity ratio at a level that enables obtaining financing cost-effectively. The equity ratio was 58.4% (58.9%) on 31 December 2017.

Finavia as a taxpayer

Every year, Finavia's business operations accumulate revenues for the taxation authorities in the form of various taxes and tax-like levies. In 2017, we paid and accounted for a total of EUR 77 million (85.8) in taxes and tax-like levies.

Finavia only has business operations in Finland, and it pays taxes and tax-like levies for its result to Finland in accordance with Finnish legislation. Finavia has not defined a separate tax strategy.

At Finavia, the CFO is responsible for tax-related matters. If necessary, the CFO reports to the Audit Committee of the Board of Directors on tax-related matters. If necessary, Finavia may purchase taxation-related expert services and ask the tax authorities for a preliminary ruling in matters subject to interpretation.

Finavia's tax-related reporting does not include any estimates.

Taxes and tax-like levies paid and accounted for in 2017

Finavia Group's revenues amounted to EUR 373.6 million (380.9) and the profit before taxes to EUR 47.6 million (32.6).

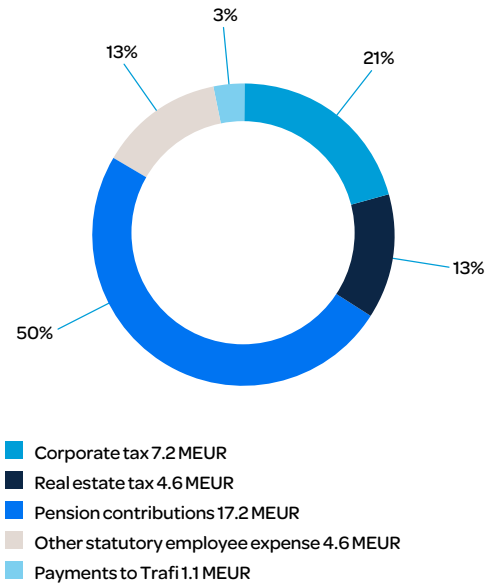
Finavia Group has operations in Finland only. The Group paid all its taxes to Finland, as in the previous year. In 2017, Finavia's taxes and tax-like levies payable totalled EUR 34.7 million (34.1). Finavia does not pay or account for taxes to tax haven countries defined by the OECD and has not received support from the countries in question.

Finavia did not receive any investment aid from the EU in 2017 (EUR 1.3 million in 2016).

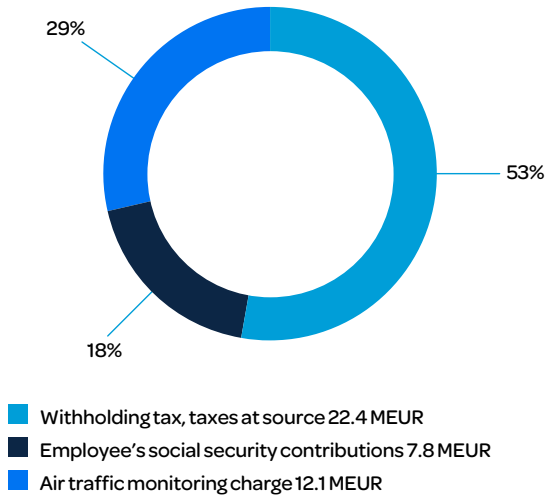
The corporate tax includes the taxes recorded in the financial result for the period and the taxes recorded for the previous period (does not include deferred taxes). The payments to Trafi include the infrastructure monitoring charges and other aviation-related charges.

Finavia collected and accounted for a total of EUR 42.3 million (51.7) in taxes and tax-like levies. The taxes and tax-like levies collected do not affect Finavia's result, as the company acts as an intermediary for the charges.

Paid taxes



Taxes collected



The air traffic monitoring charge is a statutory monitoring charge levied by the Finnish Transport Safety Agency Trafi, collected by Finavia and paid further to Trafi. The charge is not related to the airport services produced by Finavia; instead, it is an official charge, collected from all airlines and ratified by Parliament.

The taxes collected and accounted for 2017 and 2016 do not include value-added tax. In 2017, Finavia reclaimed more value-added tax than it collected and accounted for.

Unique customer experience at the core of our business

Finavia works in a target-oriented way to ensure smooth travel and a unique customer experience. Customer experience and services for passengers are a strategic development priority for Finavia. We are determined to ensure stress-free and smooth travelling through our airports.

Offering a highly positive customer experience helps airports to stand out in international competition. The attractiveness of an airport is based on smooth and efficient services, a relaxed atmosphere and a positive passenger experience.

We conduct regular surveys to monitor the level of customer satisfaction at our airports and use the results to analyse changing customer needs and to respond to the changes. To ensure a uniform service culture, Finavia has laid out pillars for its customer experience. These four pillars guide our service and customer experience development work. They are freedom from stress, reliability, a stimulating atmosphere, and Finnishness. It is also important to integrate the customer experience pillars into development projects and to familiarise all staff members with them so that each Finavia employee can identify with the pillars.

Automation an important instrument in service development

In addition to ensuring a uniform service culture, we also use new technologies that provide a basis for smooth processes and new services at our airports. In 2017, our focus was on automation and improvements in self-service and digital services.

As part of this process, Finavia expanded the range of automation-based self-service options. We introduced self-service gates at gate areas for speedier boarding, and tested remote check-in in Kittilä and Hämeenlinna. Automation plays a key role in the process of ensuring smooth check-in, security control and boarding for the increasing number of passengers using our airports.

The better use of analytics was also a priority area during 2017. This will help us to focus on the right areas in our development work. Analytics were used in such areas as queue measuring systems and dynamic pricing of parking services.

In digitalisation, the focus was on the introduction of new commercial services. We launched the Reserve & Collect pre-ordering service and the To Go mobile service that speed up shopping at airports. We also introduced services providing for easier digital payment of parking-related services, such as car washing. We also updated Finavia's website during the year.

Helsinki Airport's customer satisfaction

4.13

Network airport's customer satisfaction

4.29

(on a scale of 1–5)

When developing the customer experience, we consider the needs of a broad range of different target groups

To develop the customer experience, we examine the expectations and needs of different target groups. After identifying the needs, we develop services tailored for each target group.

Improving the services for Chinese passengers were also a focus area in 2017.

Additional Chinese-language signs were installed and Chinese-speaking service advisors were employed at Helsinki Airport. We also introduced a virtual translation service for the Chinese travelling through the airport. We installed hot water dispensers in the Helsinki Airport south pier, as these are popular with Chinese passengers.

The new south pier of Helsinki Airport was built with stress-free travel in mind but a relaxed atmosphere and a Finnish design ambience were also important considerations. The aim is to ensure that the Finnish design will also provide transit passengers at Helsinki Airport with a feeling of Finnishness.

Development of Helsinki Airport

Passenger traffic volumes at Helsinki Airport are growing rapidly, and the biggest expansion project in the airport's history is in progress. Taking the different aspects of responsibility into account during the construction and modification work is essential. We want all construction work carried out at the airport to be safe, ecological and financially responsible.

Finavia's goal is to strengthen the position of Helsinki Airport among international airports and as an important hub between Europe and Asia. Developing Helsinki Airport and increasing its passenger volumes are at the core of our strategy. To improve our competitiveness, in 2014 we began an ambitious EUR 900 million investment programme for developing and expanding the airport by the early 2020s. In 2017, the programme was actively accelerated both with ongoing construction projects and investment decisions.

Our development programme is also a key national investment, because an internationally competitive airport is important for Finnish industry and commerce, and for efficient flight connections. Air traffic is also a major employer and a significant taxpayer. At the moment, Helsinki Airport employs a total of about 15,000 people, either directly or indirectly. This figure will increase as our development programme advances.

In 2017, the development programme of Helsinki Airport continued on schedule and on budget. We advanced construction projects and made major investment decisions for the years to come. The investment decisions included the expansion of border controls and Terminal 1, construction of the west pier and further planning of the Terminal 2 alliance.

The new south pier adds to comfort and speed

Helsinki Airport has become one of Europe's most important air traffic hubs. That is why the development of wide-bodied aircraft traffic and its operational requirements is one of the key focal points of the development programme. Our aim is to significantly increase the parking capacity of wide-bodied aircraft over the next three years.

The most significant milestone of the development programme so far was reached in June 2017, when the new south pier furnished with Finnish design classics was opened for passenger traffic. The south pier, built as an extension to Gate 53, has 7,850 square metres of new space for passengers on two floors. One floor is for arriving passengers and the other for departing passengers.

We also commissioned the first travelator, or moving walkway, ever in Finnish airports for the south pier, together with three new passenger bridges for wide-bodied aircraft, implemented as double bridges. The new bridges will allow faster boarding and increase passenger comfort.

We extended the apron with a total area of 157,000 square metres, where two new bridge locations and two new outdoor parking spots for wide-bodied aircraft are located. The first part of the solar power plant to be placed on the rooftop of the terminal extension started operating in July 2017. The solar power plant supports the responsible energy production of Helsinki Airport, and is part of Finavia's programme of sustainable development aimed at carbon neutral airport operations by 2020.

Safety guides all development work

Safety is vital to all development and construction work at our airports. The important areas of safety when developing Helsinki Airport are occupational safety, airport security and aviation safety. In construction and modification work, a safety analysis is performed for each project, on the basis of which we then find the best way to ensure occupational safety and airport security during the project.

Aviation safety is ensured with safety reviews compliant with the SMS manual, which is used for assessing and eliminating any risks to aircraft caused by the construction work. In addition, safety indicators are constantly monitored at work sites. Major contracts carry certain sanctions to contractors if construction work poses any threats to aircraft.

The aim is to maximise the circulation of materials

There are major civil engineering projects associated with the development of Helsinki Airport, during which we monitor the soil findings and sort the soil and demolition waste suitable for recycling. We require all our contractors to sort materials in connection with civil engineering works.

We seek to recycle materials as much as possible. If the soil cannot be used for constructing aprons or for ballast, it is taken to licensed landfill sites.

Soil concentrations of harmful substances are monitored in all development projects. If the soil is known to contain a certain harmful substance, there are clear processes for treating the waste. The regulations concerning waste are taken into account in every project, and a plan regarding harmful substances in the soil is produced. Soil loads are accurately reported, and each load is traceable.

RESPONSIBILITY INDICATORS OF THE HELSINKI AIRPORT DEVELOPMENT PROGRAMME IN 2017

Employment impact in person-years **1,662**

Accident frequency **22.5**

Occupational safety level **96.1%**

Procurements worth **EUR 107.5 million**

Demolition waste **26,584** tonnes of which 97% recycled

Excavated soil **524,781** tonnes of which 75% recycled

Cooperation with suppliers and partners

We are a major buyer of goods and services – both locally and nationally. Our procurement in 2017 totalled about EUR 338 million. Of this procurement, the proportion of investment has grown significantly as a result of the Helsinki Airport expansion project.

Finland is where we buy most of the goods, services and investment goods that we use. We had a total of 3,256 suppliers of goods and services in 2017.

Our procurement is divided into eight categories. We also purchase contracting services, especially in the development projects of network airports and Helsinki Airport.

Investments totalled EUR 181.8 million (182.8), which was 0.5 per cent less than in the previous year. A total of EUR 107.5 million was spent on the Helsinki Airport development programme. The completion of the southern pier of the non-Schengen terminal, with 7,850 square metres of new passenger and apron facilities, and the start of the construction of the terminal central square and western pier were the most important milestones of the development programme during the year.

A total of EUR 21.4 million was invested in regional airports. The single largest investment (EUR 11.4 million) was the overhaul of the traffic areas of Oulu Airport.

The figures above do not include costs classified as other operating expenses, such as rental, insurance and official payments, incidental HR expenses, or the amounts included in environmental provisions.

Procurement principles

Responsibility is the guiding principle in Finavia's cooperation with its suppliers and partners. We aim for open and efficient cooperation, which is beneficial to both parties.

The network of suppliers and partners is crucial for us to attain our business objectives. Procurement responsibilities and procedures are specified in the procurement policy. We expect our suppliers to abide by applicable laws, regulations and good trading practices, as well as sustainable development principles and responsibility.

All Finavia's procurement is subject to tendering and it complies with the Act on Procurements and Concession Contracts of Entities Operating in the Water and Energy Supply, Transport and Postal Services Sector (1398/2016). Contracting and service procurement is also in accordance with the Act on the Contractor's Obligations and Liability when Work is Contracted Out. One of the

PROCUREMENT CATEGORIES

Machinery and equipment, maintenance, and chemicals	Property and energy
ICT	HR services
Terminal services	Marketing and communication
Risk management	Commercial operations

Act's goals is to combat the black economy. In its procurement, Finavia also observes good trading practices, the EU Regulation provisions regarding the 'Known Supplier' status and the Finavia code of conduct.

Quality monitored throughout contract period

We address the technical or service level requirements with the supplier during tendering. Price and quality are often graded separately, and we underline one of them, depending on the type of procurement. In line with Finavia's strategy, the emphasis in procurement has been on purchases of materials and services connected with the customer path. The focus is on service quality, definition of service levels, cost-efficiency and responsibility in purchases along the customer path.

In 2017, there was a great deal of emphasis on environmental responsibility criteria applied to purchases. We completed the preparation of environmental responsibility criteria for such areas as information technology purchases and applied them to the purchases of the new signs and displays in the new Helsinki Airport terminals. The equipment that we purchase must meet the emission requirements laid down in the most recent EU standards.

Central and local procurement

Our airport network covers a large geographical area, and procurement is both central and local. Tendering is coordinated by the Procurement Department: it defines the procurement procedure with the businesses and implements tendering to find the best and most suitable contract suppliers. In its procurement, Finavia also considers local suppliers with whom a lighter version of the supplier contract is signed in purchases of minor monetary value.

We require our suppliers to abide by applicable laws, regulations and good trading practices, as well as sustainable development principles and responsibility.

Environmental impacts of Finavia's purchases

Finavia is constantly working to expand the scope of responsible purchases and to apply more specific responsibility criteria to its purchases.

Purchases and the management of the supply chain are central to responsibility at Finavia. With the aim of developing the sector of responsible purchases, Finavia has prepared an action plan for the year 2020, which covers all areas of responsibility: economic responsibility, environmental responsibility and social responsibility.

In 2017, Finavia applied more detailed criteria for environmentally responsible purchases as part of a more comprehensive action plan. During the year, the criteria were applied in the purchases of the new terminal signs, protective clothing and IM equipment.

Starting in 2018, we will consider the life-cycle costs of each purchase. We will also support Finavia's targets in such areas as the reduction in the amount of waste, we will require that our suppliers have environmental programmes and we will be engaged in a closer dialogue with our suppliers on environmental targets.

Charity and sponsorship policy

Every year, we donate money to charities that we consider to be socially important. Over the past few years, the focus in our support has been on the wellbeing of children and young people. In our sponsorship work, we also support causes that help to promote our business operations.

In accordance with our charity and sponsorship policy, we do not donate money to political parties, politicians or political institutions.

In 2017, Finavia spent a total of about EUR 41,700 (41,000) on charity and sponsorships.

In 2017, we donated a total of EUR 6,500 (4,500) to charity. In Finland, Finavia supported families with children by taking part in the Good Christmas Cheer campaign organised by the Mannerheim League for Child Welfare.

Finavia and the Plan Finland Foundation started cooperating in 2009 and by the end of 2017, more than EUR 400,000 had been collected for children in developing countries through a joint fundraising effort at airports. Passengers can take part in the fundraising effort by putting money into the Pastille collection boxes or by dropping off empty bottles and cans in the collection receptacles at the airport security control. A total of EUR 259,000 (47,000) was raised this way during 2017.

The selection of projects for sponsorship is based on the principle of reciprocity. In other words, we expect to be able to use the cooperation in other stakeholder relations and the sponsorship should also create media visibility.

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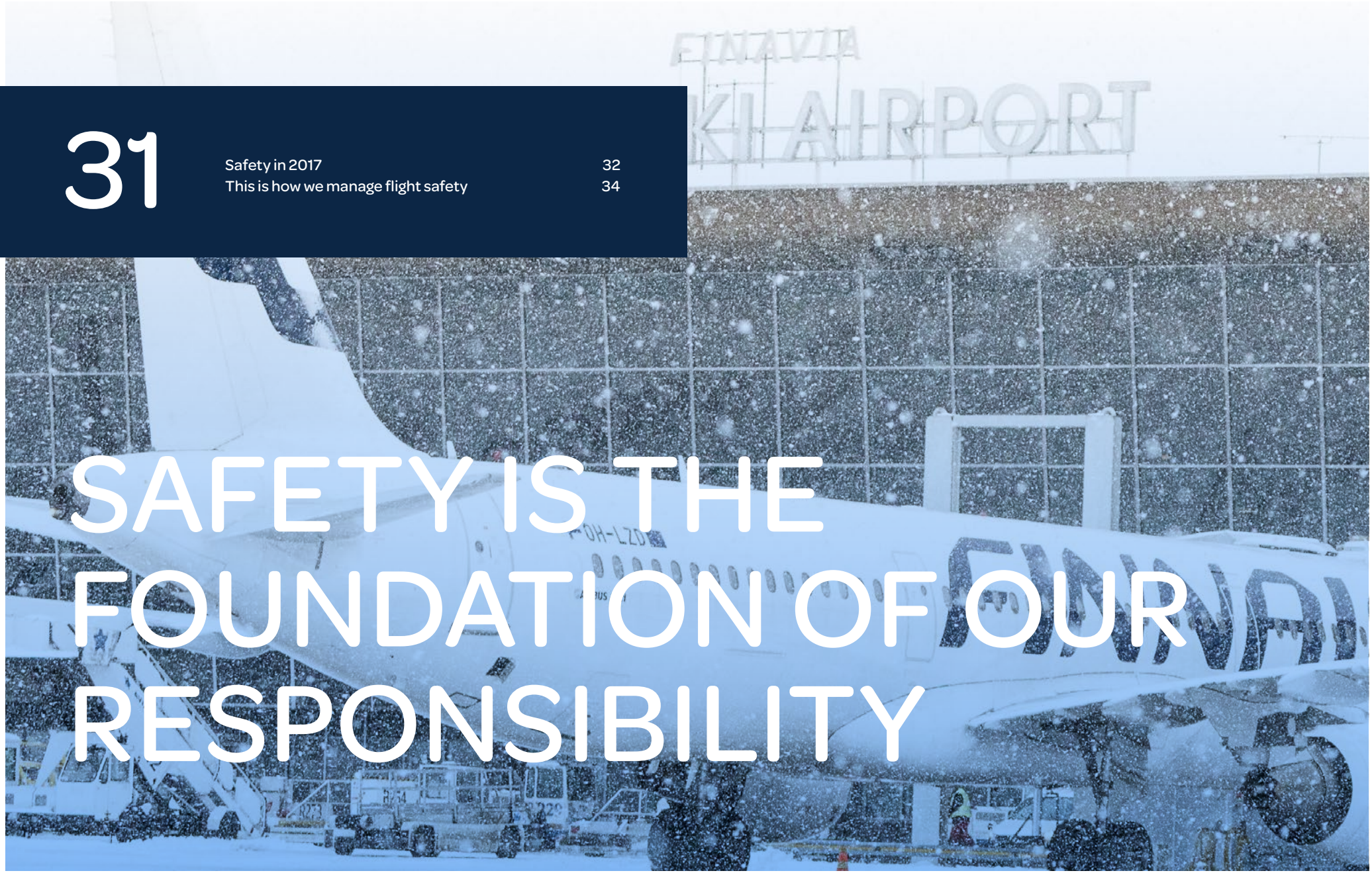


SAFETY IS THE FOUNDATION OF OUR RESPONSIBILITY

Safety in 2017

Safety lies at the core of Finavia's approach to responsibility, and it is the basis of all our operations. In 2017, the focal areas for development of safety were information security and the establishment of close cooperation between Finavia and ANS Finland, the company responsible for air navigation services.

Safety management at Finavia is part of more extensive risk management work carried out throughout the company. Finavia's safety work is characterised by its considerable scope. At Finavia, safety refers to flight safety, work for securing the safety of civil aviation, occupational safety, cyber security and information security. All these elements make up corporate safety, intended for ensuring the continuity of Finavia's business, safety and compliance in all situations.

Safety forms the basis for all of Finavia's operations. Our organisation has clearly defined safety and security responsibilities, and proactive safety work covers all activities of the company. Sufficient self-monitoring supports our safety and security work.

Systematic development of safety management

Flight safety and the safety systems associated with it are largely based on national and international regulation. Finavia has effective standard procedures for ensuring safety in all situations. Our safety processes include an analysis of procedures and continuous observation of activities. We are systematically developing our safety management practices and monitor both national and international developments, so that we can apply the best and safest operating practices. We are also actively seeking to influence regulation in matters creating and improving safety.

Ensuring the safety of civil aviation includes the security checks of passengers, luggage and personnel as well as safety of the apron. Safety work of high quality for ensuring the safety of civil aviation is compliant with the requirements of national and international authorities, and allows smooth travelling when security checks do not become over-busy and getting around the airport is pleasant.

In 2017, Finavia spent approximately EUR 44 million on maintaining safety. Most of the costs arise from arranging security checks compliant with safety regulations and investments in safety technology.

ELEMENTS OF SAFETY AND SECURITY AT FINAVIA

Corporate safety	Flight safety
Securing the safety of civil aviation	Occupational safety
Cyber security	Information security

Risk management during modification work

We are also engaged in continuous risk management regarding modification work, for example during the construction work associated with the Helsinki Airport development programme and when designing new infrastructure to ensure that the level of safety and security remains high when traffic volumes grow, for example. Proactive traffic planning is particularly highlighted in single runway airports such as Kittilä, where passenger traffic has recently been rapidly increasing.

Open and fair safety culture

Finavia's strong safety culture is a key element in preventing hazardous situations. The safety culture focusing on flight safety includes risk prevention methods and active reporting of deviations. We are encouraging our personnel to openly report deviations and seek to ensure that the threshold for filing reports is as low as possible. Finavia's safety cooperation and flow of safety-related information are supported by the company's Just culture policy with fairness and openness as its basic pillars. All Finavia employees can report any deviations they detect. The information collected from deviation reports is efficiently used in the work aimed at preventing new deviations.

The safety index is the most important flight safety indicator at Finavia. In the index, each incident is scored on the basis of a risk assessment. The scores are totalled for each month.

Development of safety in 2017

We are constantly investing resources in the development of our safety work. In 2017, Finavia reformed its safety organisation and intensified its cooperation with public authorities. We developed the safety of runways and aprons particularly in the airports in Lapland.

At the end of 2017, European airports started observing the aviation regulations issued by the European Aviation Safety Agency (EASA). The purpose of EU-level aviation regulations is to ensure that the safety of air traffic is of the same standard in all European airports. In 2017, all 21 Finavia airports received a certificate issued by EASA for their compliance and started observing the EU's new set of aviation regulations by the end of the year.

The safety of aviation is created through close cooperation

In April 2017, Finavia's air navigation business was separated to a dedicated company, Air Navigation Services Finland Oy (ANS Finland). At the same time, the entire personnel of Finavia's air navigation services, approximately 400 persons, became ANS Finland employees.

When air navigation services were separated, close safety cooperation between Finavia and ANS Finland became a key issue in Finavia's safety priorities. We want to build and maintain good safety together with our new partner company. To ensure this, the cooperation must be close, open and unambiguous. Consequently, the cooperation between Finavia and ANS Finland is evidenced by the almost daily dialogue with the exchange of safety information at its core.

Preparing for EU's General Data Protection Regulation

During 2017, Finavia was actively making preparations for the EU's General Data Protection Regulation that will be applied from 25 May 2018 in all EU Member States. This work included a survey of the current status of data protection and initiation of the required actions for responding to the regulations compliant with the GDPR, as well as training and cooperation with authorities. Among other things, we established new types of reporting and data protection channels for managing information security risks and appointed a person responsible for data protection at Finavia. This person will also handle the contacts with authorities.

This is how we manage flight safety

Finavia's flight safety management is based on the strong commitment of its management. We ensure that safety is a consideration in all decision-making.

Finavia's safety organisation is divided into Group, business and function unit levels. In this way, we ensure that the executives have sufficient knowledge of safety matters and that safety is accounted for in all decision-making and management.

Our safety organisation systematically addresses the achieving of safety goals, as well as potential safety hazards and deficiencies. The observations are recorded in an action plan, the implementation of which is regularly monitored. Independent of business operations, the Risk Management Unit prepares a report of safety-related information. This report is presented to Finavia's Executive Group and Board of Directors.

Safety management system

At Finavia, the management of flight safety is based on the seven principles of the safety management system.

Compliance with official standards

- The safety management system must comply with a significant number of international and national regulations. Compliance is monitored by the Finnish Transport Safety Agency (Trafi).
- Trafi implements its monitoring using advanced approval procedures and regular audits. In 2017, Trafi carried out 8 (5) audits in the Airport Network business, one at Helsinki Airport and one desktop audit on the Risk Management Unit.
- If deviations are observed in the audits, Finavia provides Trafi with a response regarding them

Commitment of the management

- Priority of safety: the attainment of appropriate safety is given priority in Finavia's operations over commercial, operational, environmental, and societal aspects.
- Safety targets have been set for different functions, and their attainment is regularly monitored.
- Finavia's management is committed to the principles of the safety management system and to using the information it produces in the process of decision-making.

Proactive approach on safety

- The safety impacts of safety-critical changes, new systems and methods are assessed in advance.

- The objective is to identify and manage the risks associated with the changes and to reduce them to an acceptable level through various actions and back-up procedures.
- A total of 90 (395) risk assessments were carried out in 2017. The significant decrease in the number of risk assessments carried out is explained by the fact that most of the earlier risk assessments were related to air navigation services which were transferred to ANS Finland from 1 April 2017.

Encouraging reporting of deviations and investigation without apportioning blame

- The deviations reported by personnel are classified and analysed. An independent internal investigation is initiated for more significant deviations without apportioning blame.
- In 2017, the reports totalled 1,705 (2,578), while the five-year average was 2,577. The significant drop from the previous year's figures is explained by the fact that the deviations related to air navigation services were transferred for processing by ANS Finland from 1 April 2017.

Sufficient self-monitoring

- In addition to the self-monitoring of the operational units, independent internal audits are performed so that the safety impacts of the activity are taken into account when deciding on the contents, extent and focal areas of the audit.
- The observed deviations are analysed and investigated, and the required corrective actions are implemented systematically.
- In 2017, 9 (15) internal audits were carried out at Finavia.

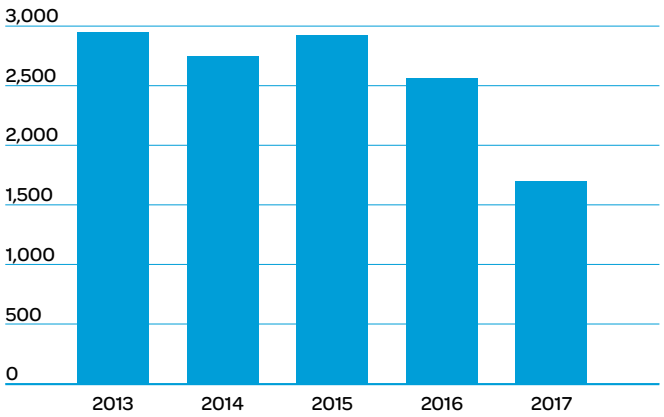
Competent staff

- Personnel have the appropriate qualifications based on training, professional competence and experience.
- A training record is maintained of the personnel where the details of special training, experience and level inspections required for the position are recorded.
- Familiarisation with safety matters is a part of the training programme of our every employee.

Dissemination of useful information

- The information derived from investigations, audits, analyses of deviation reports, efficiency of corrective actions, and international cooperation is extensively used for training personnel, for developing instructions, and for internal communications.
- Safety information is distributed to personnel through presentations, safety campaigns and regular safety summaries.
- Active feedback promotes the commitment of the personnel to joint safety work.

Number of reported deviations



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WE CARE ABOUT OUR PERSONNEL

Information on Finavia's personnel

At the end of 2017, Finavia Corporation had 1,181 employees (1,570). Finavia Group employed 2,696 persons (2,995). The number of staff members decreased because the entire personnel of Finavia's air navigation services (about 400 people) were transferred to Air Navigation Services Finland Oy (ANS Finland) in April 2017.

Person-years

Full-time equivalent, FTE, refers to the work contribution of an employee calculated as full-time employment. All compensable hours of Finavia employees, excluding overtime, are divided by the computational hours of full-time employees per year, as laid out for the task in question.

In 2017, Finavia Corporation employees worked a total of 910 (1,405) person-years. The average number of personnel in terms of person-years in the Group was 2,042 (2,394).

A person can work a maximum of one person-year per year. Absences without pay reduce the number of person-years.

Person-years by function	
Headquarters and Group Services	276
Air Navigation Services *	95
Helsinki Airport development programme	13
Helsinki Airport	333
Avia College *	14
Network airports	377
Enontekiö Airport	1
Ivalo Airport	26
Kajaani Airport	18
Kemi-Tornio Airport	15
Kittilä Airport	20
Kuusamo Airport	11
Oulu Airport	33
Rovaniemi Airport	36
Northern Finland and Lapland	159
Kuopio	35
Joensuu	16
Savonlinna	8
Eastern Finland	58
Turku	27
Pori	13
Vaasa	28
Maarianhamina	12
Kokkola-Pietarsaari	13
Western Finland	94
Tampere-Pirkkala	32
Jyväskylä	21
Halli	5
Utti	4
Central Finland	62
Total	**1,108**

* Only January–March

Personnel by type of contract

In 2017, Finavia Corporation had 1,010 permanent employees (1,334) and 186 fixed-term employees (203). A total of 1,066 employees (1,253) worked full-time and 130 employees (174) worked part-time.

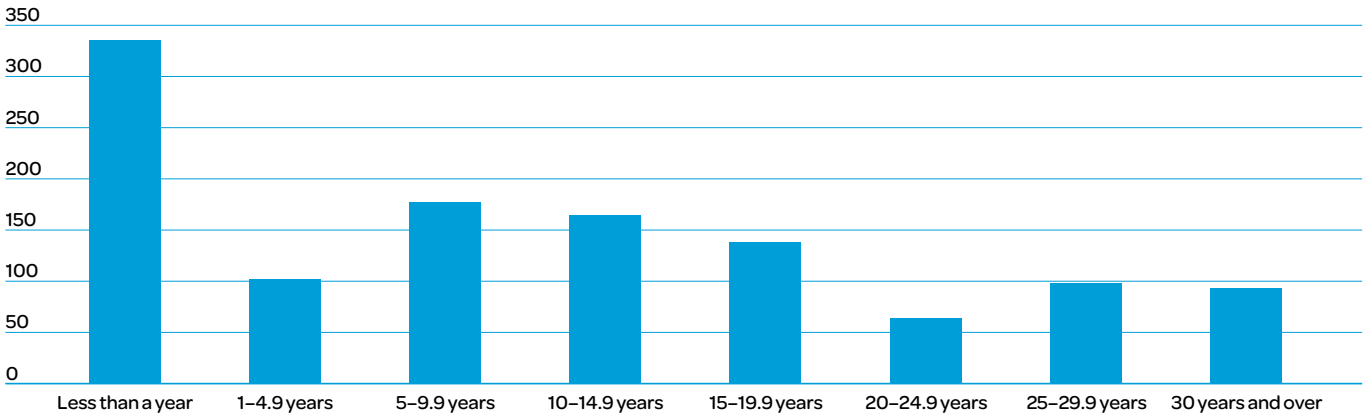
Finavia Group had 1,957 permanent employees (2,371) in 2017.

A total of 1,066 (1,538) Finavia employees, or 89.1 per cent (87.6) of the personnel, were subject to a collective bargaining agreement.

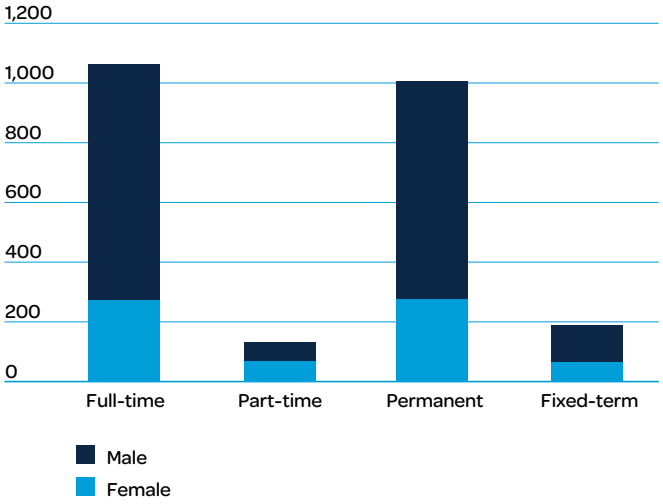
Distribution of personnel by age and gender

In 2017, the average age of Finavia Corporation's permanent employees was 44 (44). At the end of 2017, 72 (73) per cent of the personnel of Finavia Corporation were men and 28 (27) per cent were women.

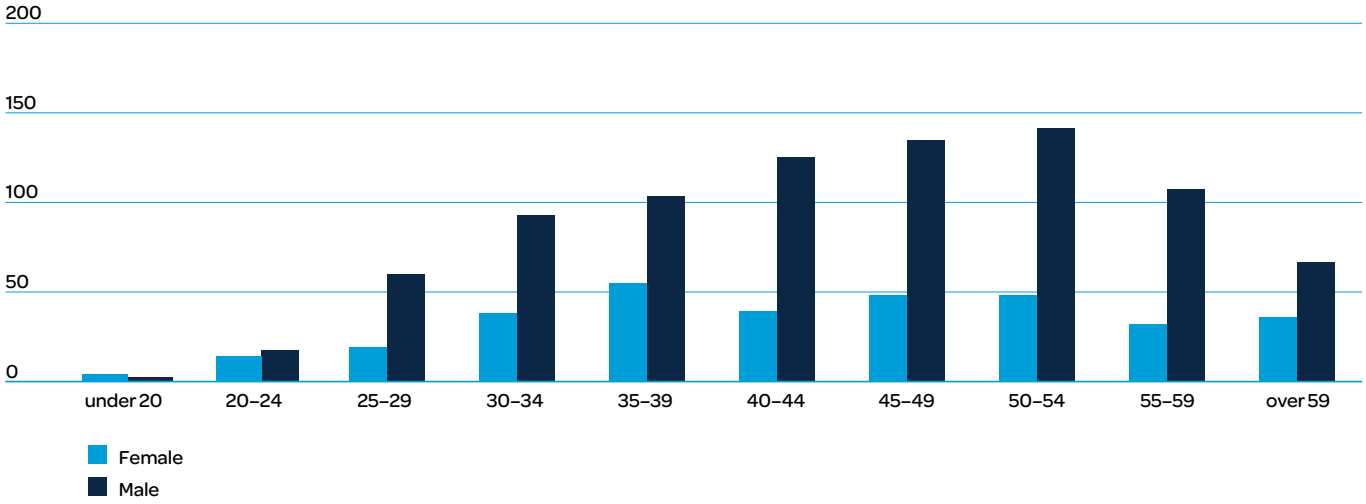
Years of service



Personnel per type of contract and gender



Age and gender structure of personnel



Duration of contracts of employment

In 2017, a total of 9 per cent (13) of all Finavia staff members had worked in Finavia for between 1 and 4.9 years. The percentage of employees that had been employed for 5–9.9 years was 16 per cent (19) and the percentage of those employed for 10–14.9 years was 14 per cent (14). A total 35 per cent (41) of employees had been employed for more than 15 years.

Personnel turnover

The indicator of personnel turnover is calculated by adding the numbers of incoming and departing employees and by comparing the sum with the average number of permanent employees during the year.

The total personnel turnover at Finavia Corporation stood at 15 (8.3) per cent in 2017. Incoming employee turnover was 6 (3.4) per cent, and departure turnover was 9 (5.5) per cent.

Personnel turnover	Overall personnel turnover, %	Departure turnover, %	Incoming turnover, %
Group Services	19.9	13.5	6.4
Air Navigation Services*	0.3	0.3	0.0
Helsinki Airport	8.7	5.8	2.9
Helsinki Airport development programme	16.7	8.3	8.3
Airport Network	16.2	7.9	8.2
Total	**15**	**9**	**6**

* Only January–March

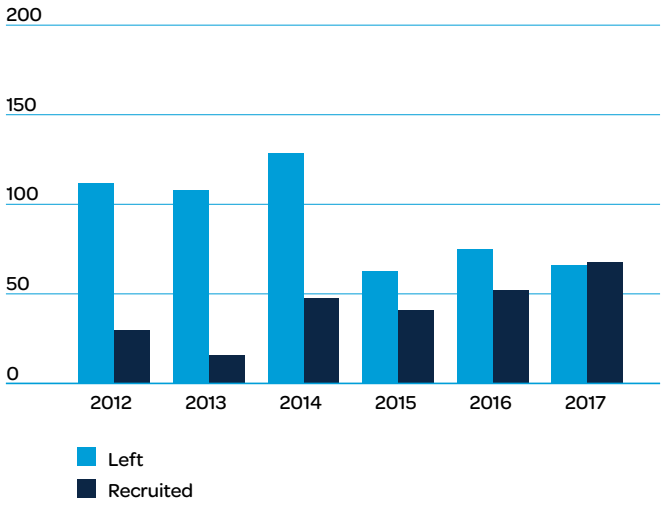
Training of staff

In 2017, each Finavia employee spent on average 2.8 (3.0) days in training. Air navigation staff was transferred to another company, which affected the overall number of trainings.

Staff expenses

In 2017, Finavia's staff expenses totalled EUR 72,313,621 (105,156,802).

Number of permanent staff recruited and left



Equality and non-discrimination

We work to ensure non-discriminatory treatment and equal pay of our employees. We aim to remain a good place to work for people of all ages and genders. We seek to promote equality by focusing on gender distribution, enabling work-life balance and helping our ageing employees cope with their work.

The company's personnel policy, ethical principles and equality plan, which is updated each year, are the documents that guide workplace equality at Finavia. In the equality plan, the company and the personnel representatives jointly set out the goals for an equality policy.

Continuous equality work is an essential part of the promotion of wellbeing at work at Finavia and the implementation of the company's values. We actively monitor our pay policyand gender distribution to ensure that they are on a fair and equal basis, and work to ensure non-discriminatory treatment of all job applicants.

Aiming for a more balanced gender distribution

We work to promote a more balanced gender distribution in individual units by taking into account the non-discriminatory aspect in the recruitment process. To ensure this, the recruitment process at Finavia always involves a company official whose task is to review the procedure from the perspective of non-discrimination.

Gender distribution at Finavia has remained more or less the same for many years. In 2017, a total of 72 per cent of the staff members were men and 28 per cent women. Compared with 2016, the situation remained more or less unchanged; the proportion of women increased by one percentage point.

Many of the work tasks at Finavia are male-dominated and physically demanding, and for this reason, most of the applicants have also been men. For example, women account for only two per cent of maintenance workers, whereas 73 per cent of all service personnel and 56 per cent of experts are women. The nature of the work and the fact that most of the persons with technical training are men are the reasons why there are so few women in technical tasks at Finavia.

The aim of Finavia is also to attract more women to fill managerial positions. In fact, there has been a slight increase in the proportion of women in the company's senior management: in 2017, one additional woman was appointed to the Executive Group.

It was noticed in 2017 that there were fewer women applying for jobs at Finavia. The fact that most of the vacancies at Finavia have been for technical tasks has been the main reason for this trend.

The transfer of the company's air navigation services to ANS Finland (Air Navigation Services Finland) resulted in a slight change in the gender distribution at Finavia. The establishment of a separate company with a staff of about 400 in a male-dominated sector slightly increased the proportion of women among Finavia's personnel.

The pay gap between women and men at Finavia is narrower than in Finland on average

We monitor the gap between the average pay of women and men by comparing the regular earnings of our full-time staff members.

In Finland, women's average earnings are 84 per cent of the pay received by men. The 2017 pay survey showed that in terms of monthly pay, the figure at Finavia is 96 per cent. This is because women do less shift work, which means that they also receive fewer shift work bonuses.

Finavia has conducted surveys on the proportion of women in different working hour arrangements as well as the impact of shift work on overtime and, consequently, on pay. The findings show

that the proportion of men is higher in those working hour arrangements that involve a large amount of overtime. This partly explains why men have higher overall pay. There have been few changes in the amount of overtime and the proportion of women and men in different working hour arrangements, compared with 2016.

Helping to combine work and family life

Our aim is to ensure that work and family life can be combined easily and flexibly. Finavia offers flexitime and telework for employees in tasks where such arrangements are possible as well as flexible working hours for various situations. Parents of small children on partial child care leave and ageing employees on part-time pension may work part-time, and this option is also open to other employees if their life situation requires it. Finavia also provides its staff members with longer holidays than many other employers, which allows employees to spend more time with their families.

We encourage women and men to use family leaves equally. According to the latest equality survey, women make more use of family leaves than men and the proportion has increased slightly from recent years, and now stands at 90 per cent. In maternity, paternity and parental leaves, the proportion of women has also increased and currently amounts to 73 per cent.

In the annual personnel survey, Finavia staff members were asked to share views on how the needs concerning the reconciliation of work and leisure time are taken into account in the company. Women gave Finavia better marks than men. The average rating given by women was 2.97 (on a scale of 1-4), while the average for men was 2.83. The Finavia average was 2.87.

The age programme helps staff members close to retirement

The average age of Finavia staff members is fairly high (44.3 years). Most of the employees are in the age group 50-54 years (15.9%). They are followed by the age group 45-49 years (15.2%) and 40-44 years (13.8%).

In its age programme, Finavia has created models to support employees close to retirement to cope with their work. Senior discussions are conducted with each staff member about five years before retirement as part of the personal development discussion At the same time, the "best working years" group coaching introduced in 2016 provides ageing employees with personal tools for coping with their work.

Inappropriate behaviour is dealt with

Finavia has guidelines for the prevention of inappropriate treatment. Under these guidelines, staff members are encouraged to report any inappropriate behaviour to their supervisors, the HR Unit or the occupational safety delegate. As an employer, Finavia has made a pledge to investigate all incidents involving inappropriate behaviour and to plan the necessary corrective measures. Experiences of our staff members are also monitored in the annual personnel survey in which the employees are asked whether they have experienced harassment during the preceding year that has not led to any action despite requests. The guidelines for dealing with these problems are specified at the meetings in which the survey results are discussed.

Our aim is to ensure that work and family life can be combined easily and flexibly.

Wellbeing at work

Developing wellbeing at work and extending working careers are ongoing goals for Finavia. We monitor wellbeing at work at Finavia by conducting personnel surveys and we promote all aspects of wellbeing at work in cooperation with occupational health care and our expert partners. In 2017, our focus was on encouraging staff members to adopt lifestyles that help to maintain work capacity.

Finavia monitors job satisfaction at work among its employees by conducting a group-wide personnel survey each year. The most recent personnel survey was conducted in January 2017. The results indicate that job satisfaction among Finavia staff members has improved. The People Power Index of job satisfaction was 67.5 (66.4).

Improving unit-internal communications was one of the focus areas in the development of job satisfaction in 2017. The priority was on shift work units where information displays aimed at improving daily communications were piloted. To encourage open discussion and participation, Finavia management members took part in the analysis of the results of the personnel survey in different units, at Helsinki Airport and at network airports.

Supporting all aspects of wellbeing at work

Close cooperation with occupational health care and health surveys conducted among staff members help Finavia to pay attention to issues impacting work capacity and wellbeing at work. In the field of work capacity, our focus in 2017 was on providing staff members with encouragement and guidance so that more of them would adopt lifestyles that maintain work capacity.

During the year, supervisors at Finavia started using the Sirius HR work capacity management system developed by the healthcare services provider Terveystalo. The system supplies supervisors, occupational health care and HR with information essential for monitoring and managing work capacity. Sirius automatically notifies supervisors if the sickness absence limits laid out in the early intervention model are exceeded. The system helps supervisors in their daily work and improves communications in matters concerning work capacity maintenance.

Finavia also adopted the Parempi Vire mobile service of the Ilmarinen Mutual Pension Insurance Company. Using the service, Finavia can support and guide its personnel in matters concerning lifestyles, mobility, rest and diet. Employees taking part in the programme can monitor and improve their own recovery rates, dietary habits, rest patterns and physical exercise habits. With the Parempi Vire service, Finavia employees are also able to use change programmes prepared by professionals.

According to the personnel survey, Finavia employees now feel happier at work.

Work capacity is actively monitored

Musculoskeletal diseases are still the main cause of sickness absences at Finavia even though there has been a substantial reduction in the absenteeism arising from them. We take workload seriously so that we can reduce sickness absenteeism and support our personnel to cope with their work. To prevent musculoskeletal diseases, Finavia employees (such as those working in maintenance duties) are provided with opportunities for physical exercise during working hours provided that this does not clash with their work tasks. In cooperation with its occupational health care, Finavia has used targeted operating models in the treatment and prevention of musculoskeletal diseases.

In 2017, Finavia carried out an extensive health survey at Helsinki Airport for the first time. The results were published in early 2018 and they help us to focus on specific themes when taking measures to improve wellbeing at work. Stress and recovery rates among customer service personnel were also measured during the year. We are also planning to introduce new projects, such as sleep groups.

In our cooperation with occupational health care, the focus is increasingly on a preventive approach. The aim in all measures is to support the work capacity of our personnel, to reduce sickness absenteeism and to prevent excessive workload.

There was a reduction in overall sickness absenteeism, compared with 2016. The sickness absence rate at Finavia was 3.44 (3.49) percent.

Accident frequency rate declined

There was an improvement in Finavia's accident statistics in 2017, compared with the previous year. The number of workplace accidents and the accident frequency in relation to hours worked decreased.

There were 49 (76) accidents at Finavia workplaces during 2017. The accident frequency rate (number of accidents resulting in sickness absence of more than three days per million hours worked) was 8.16 (6.92).

The positive trend is the result of continuous improvements in danger and risk assessment, as well as better reporting and analysis of safety observations.

The aim in all preventive measures is to support the work capacity of our personnel, to reduce sickness absenteeism and to prevent excessive work-related stress.

Personnel development

We are comprehensively developing the service, professional and management competence of our personnel. One of the important focal points for 2017 was inducting our staff on the foundation of the customer experience.

During 2017, we worked to harmonise our operating practices by providing supervisors with coaching and by making the talent management model an established part of the grooming of top experts. Reviewing customer experience pillars as an instrument in the construction of a unified service culture was also an important focus area.

A positive customer experience is at the core of our strategy

Ensuring a positive customer experience is a strategic goal for Finavia, and for this reason we are continuously developing the skills and competence of our personnel so that they can provide the best possible service. Emphasising customer satisfaction is essential for ensuring personnel commitment to Finavia's strategy.

A positive customer experience is an important factor helping airports to distinguish themselves in international competition. To improve the customer experience, we reviewed the customer experience pillars guiding the service culture with our personnel. Our aim is to ensure that our customers can feel relaxed, secure and refreshed, as well as to get an idea of Finnishness. Customer experience pillars were reviewed at the personnel survey analysis sessions, which involved the entire Finavia personnel (including seasonal workers). Staff members were actively involved in the review process. At the analysis sessions, personnel and management representatives discussed what can be done to ensure that the passenger customers using our airports can have an easy and stress-free travel experience. This is after all part of our customer promise, 'For Smooth Travelling'.

There were a number of good suggestions concerning such issues as how Finavia could offer a Finnish experience to different types of passengers using different airports, and how we can ensure that the customer experience pillars also apply when we deal with our airline customers and partners as well in company-internal communications between staff members.

CUSTOMER EXPERIENCE PILLARS

Gift of time	Confidence
Refreshed	Finnish experience

Towards joint operating models through better management practices

During 2017, management and supervisory practices at Finavia were developed with the help of supervisory training and coaching projects. The project involving the development of supervisory work and management systems at network airports continued in spring 2017. Eight airports were involved and the work was carried out using the coaching method. In the project, airport managers with identical roles visited each of the eight airports to learn about the practices applied at them.

The observations were made using the Gemba walk that has already been applied in the Lean model. It helps in the identification of good practices and practices where improvements are required, in the use of the observations and the selection of further measures. The focus was on themes involving supervisory work and management and operational improvements. The project will continue during 2018 at six airports.

More effective use of career planning and job rotation

One of our focus areas during 2017 was the making of the talent management model an established part of our personnel development practices. The purpose of the operating model is to manage and groom top experts. During the year, business units selected key experts and staff members with potential from among their employees. Most of them could also be offered more challenging work tasks.

Job rotation is now a well-established part of the professional development of our personnel. In job rotation, staff members can familiarise themselves with the work of different units, learn new skills and share their expertise with other employees. Job rotation was popular with staff members during 2017 and the company's management was also actively involved. Each member of the Executive Group worked at least one day in ordinary operational duties at airports during the year.

Internationalisation training with staff exchange

International staff exchange was one part of personnel development during 2017. Chinese tourists account for a growing proportion of airport users and understanding of cultures is key to ensuring the best possible customer experience. The expectations of Chinese passengers concerning the service culture differ from those of European airport users.

Cooperation between Finavia and Beijing Airport and the staff exchange programme between airports was launched at the end of 2016 and it continued during 2017. The purpose of the exchange programme is to familiarise Finavia employees with Chinese service culture and to apply the knowledge at all Finavia airports.

A total of 21 Beijing Airport employees took part in the exchange programme during 2017. The Chinese employees visiting Helsinki Airport as part of the programme met with staff members at all units. During a period of two weeks, Finavia personnel learned about the service expectations of Chinese customers and what is important to them.

The Beijing Airport employees also visited Rovaniemi Airport.

More efficient recruitment with video interviews

Finavia is continuously recruiting new employees and efficient recruitment practices are important in the process.

In 2017, we introduced video interviews in all recruitments. The new procedure has allowed supervisors to save time during the pre-selection stage. Video interviews also allow more applicants to be interviewed, which helps to make the recruitment process more equal.

Task-specific assessment methods as well as work personality and work ability tests are also used in the recruitments. Supervisors are also provided with more focused training so that supervisors extensively involved in the recruitment process can get more support and guidance for their work.

We will continue to develop our recruitment practices. The next pilot project, to be launched in 2018, will involve the use of automation in the recruitment process.

New professionals in cooperation with education institutions

During 2017, Finavia was engaged in close cooperation with such education institutions as the Haaga-Helia University of Applied Sciences and the Lapland University of Applied Sciences. In the cooperation, students in Bachelor of Hospitality Management programmes are able to practice their skills at Finavia units and complete study units in real customer service situations at Finavia airports.

From the perspective of Finavia, the cooperation has been a success and a number of trainees have been offered permanent jobs at Finavia. In fact, the trainee programme will be expanded in the coming years.

In addition to the cooperation with education institutions, we have also had recruitment cooperation with other actors in the Aviapolis area, at such events as Aviapolis fairs.

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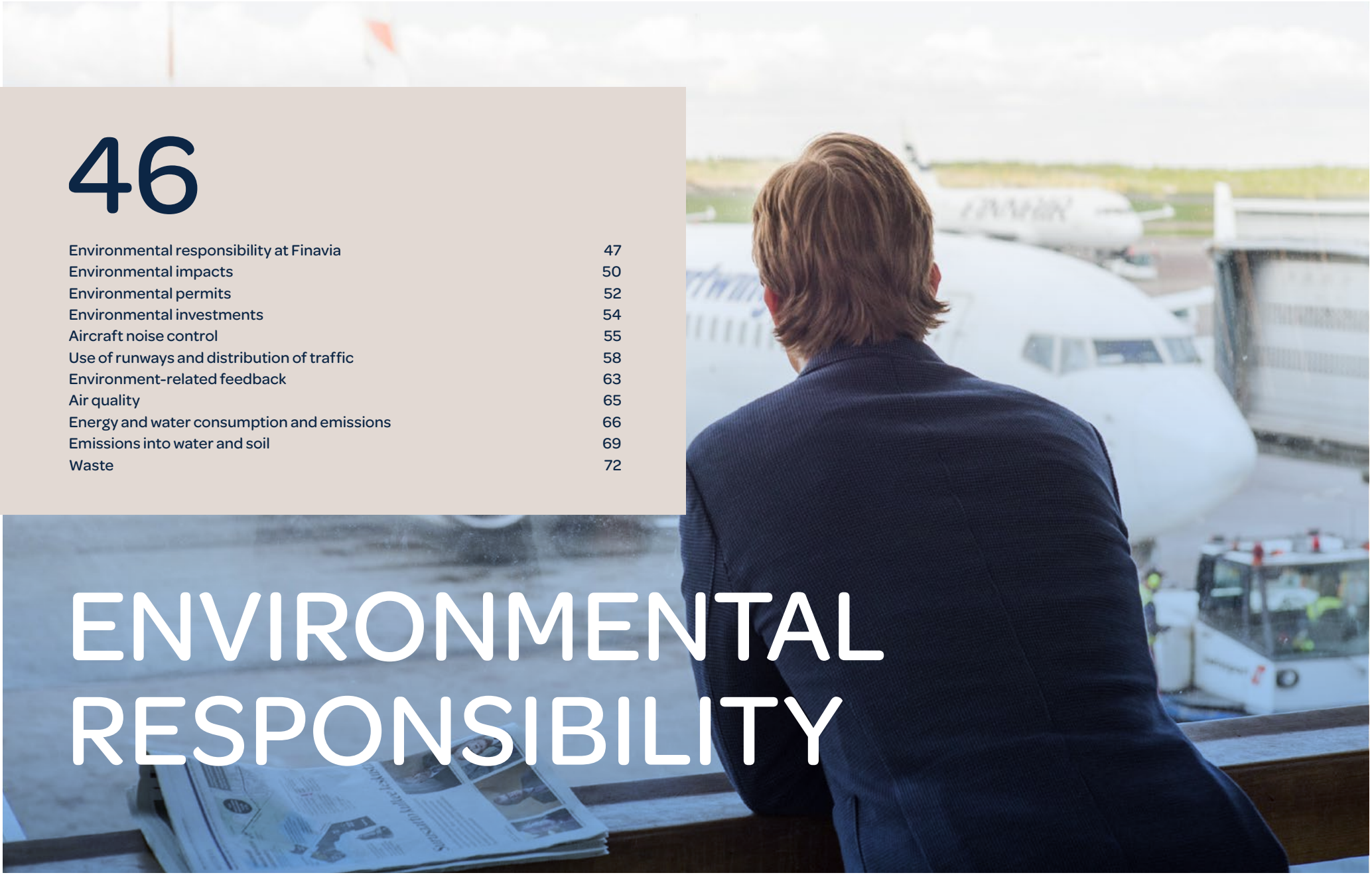


ENVIRONMENTAL RESPONSIBILITY

Environmental responsibility at Finavia

Our environmental work is based on legislation and international regulations as well as on stakeholder expectations. The ownership policy of the Finnish Government is also a major factor. The requirements of air traffic safety are always taken into account in our work.

On an annual basis, we are guided by the provisions set out in environmental permits and the goals laid out in accordance with our environmental system.

Finavia has an environmental management system in accordance with the ISO 14001 standard. Accordingly, Finavia has prepared environmental action programmes covering eight different environmental area. On the basis of these programmes, environmental goals were set for 2017.

Management of environmental responsibility

The Group's Technology and Environment Service and the director responsible for sustainable development coordinate Finavia's environmental work. Our aim is to constantly mitigate the environmental impact of our operations, as well as to develop stakeholder cooperation and communication related to environmental issues.

The main areas of responsibility of Finavia's Environmental Unit are:

- Sustainable development of operations
- Environmental permits and reporting to public authorities
- Investigations and operating plans required by environmental legislation and permits
- Supervising Finavia's interests in order to secure the operational prerequisites of airports

Examples of continuous themes of environmental responsibility:

- Developing noise control at Helsinki Airport
- Developing water pollution control at the airports
- Investigation and reconditioning tasks related to contaminated soil
- Supporting air navigation in matters related to the environmental efficiency of Finnish airspace
- Development of environmental reporting and environmental communication

airport carbon accredited NEUTRALITY

Making Finavia's operations in Helsinki Airport carbon-neutral was one of the greatest achievements of the year.

FINAVIA'S ENVIRONMENTAL MANAGEMENT SYSTEM

Finavia develops its environmental responsibility on the basis of permit regulations and continuous and gradual improvement in accordance with the ISO 14001 standard, taking the financial framework into account.

- Environmental management manual (ISO 14001)
- Environmental policy and goals
- Environmental programmes for eight issues for 2016–2020
- Environmental goals for 2018
- Monitoring and reporting
- (Environmental) provisions made for the investments required by permits and other regulations

Goals and achievements of environmental responsibility

	Goals for 2017	Results	Goals for 2018
Development of water pollution control at Helsinki Airport	1. Design, construction and commissioning of the Kylmäoja ditch arrangements and the first biofiltration area. 2. Plan for more effective use of the embanked basins close to runway 3. 3. Report on more effective recovery of propylene glycol. 4. Widening the Kirkonkylänoja brook so that it can better cope with floods.	1. Building plans were submitted to the ELY Centre of Uusimaa on 5 April 2017. 2. The report was completed in January 2018. 3. The report was completed in February 2018. 4. An external party lodged an appeal of the decision at the Administrative Court of Vaasa.	1. Completion of the Kylmäoja ditch arrangements and reconditioning regarding the fishing industry (to be continued in 2019). 2. Planning a pilot for the wetland area to be built in Veromiehenkylänpuro. 3. Reconstruction of the 120 de-icing locations in Apron 1 (continuing in 2019).
Development of aircraft noise control at Helsinki Airport	1. Report on the noise reduction potential of take-off methods at different runways. 2. Report on the noise reduction potential of approach methods at different runways.	1. In progress. 2. In progress.	1. Stabilising the operations of the CEM cooperation forum (Finavia, ANS Finland, operators). 2. Report on the use of runways in the future, considering capacity and noise control.
Helsinki Green Hub	1. Corporate responsibility research and development plan for commercial services.	1. Completed as a master's thesis at the University of Jyväskylä in December.	
Development of de-icing and water pollution control at network airports	1. Implementing the new pavement maintenance instructions for de-icing and chemicals storage areas at all airports. 2. Plan for the technical management of glycol emissions at Oulu Airport.	1. Revised guidelines were issued on 12 April 2017. Repairs of cracks in aircraft ramps were carried out at certain airports. The monitoring of aircraft ramps in the paved apron was enhanced. 2. The schedule for the general plan changed.	1. Equipping the apron at Tampere-Pirkkala Airport with ground de-icing locations. 2. Development of de-icing activities at airports in Lapland and general planning of the de-icing infrastructure and glycol handling in Rovaniemi, Ivalo and Kittilä as part of expansion projects. 3. General plan for the technical management of glycol emissions at Oulu Airport.
Surveying the level of contamination of fire drill areas at airports and the required reconditioning measures	1. Participation in the Finnish environmental administration's PFARA project to investigate PFAS compounds. 2. Individual monitoring at Helsinki and Tampere-Pirkkala Airports.	1. PFARA project in progress, to be completed in spring 2018. 2. Individual monitoring in progress.	1. Participation in the Finnish environmental administration's PFARA research project to investigate PFAS compounds. Planning maintenance activities for fire drill areas in Joensuu and Varkaus on the basis of project results. 2. Monitoring PHAS compounds at Helsinki and Tampere-Pirkkala Airports.
Improving energy efficiency and reducing atmospheric emissions	1. Helsinki Airport obtains an ACI/ACA Level 3+ certification for carbon neutrality. Parts of the certification: 1. Apron buses start to use 100% renewable diesel. 2. A solar energy production unit of more than 100 kWp commissioned.	1. The ACA 3+ certificate was obtained on 19 July 2017. 2. The distribution of renewable diesel to all Finavia buses started in July. 3. A solar energy system of 127 kWp started production in July.	1. ACI/ACA Level 3 certification for the Lapland Airports group. Parts of the certification: 2. Renewable diesel is started to be used in Rovaniemi, Ivalo and Kittilä. 3. ACI/ACA Level 3+ certification maintained at Helsinki Airport. Parts of the certification: 4. Fire trucks start to use renewable fuels. 5. Runway 3 lights replaced with LEDs.
Developing Finavia's environmental responsibility communication and communication with people living in areas adjacent to the airport Helsinki Green Hub	1. Presenting Finavia's environmental responsibility work to at least ten non-official stakeholder groups during the year. 2. Production of two new environmental responsibility videos.	1. Environmental responsibility was presented during four non-official events. 2. Videos of the reconditioning of trout streams in Vantaa, the carbon neutrality of Helsinki Airport and the use of renewable diesel.	1. Launching educational cooperation with Vantaa that deals with the significance and impact of air traffic and Helsinki Airport. 2. Preparing a conceptual plan for the Helsinki Airport visitor centre. 3. Defining and implementing sustainability development activities for commercial services.
Environmental responsibility criteria for Finavia's purchases	1. Preparation of environmental responsibility criteria for IT procurement, applying them particularly to the procurement of new video walls and screens at Helsinki Airport. Extending the criteria to cover IM service providers.	1. Criteria are in place for all applicable procurement. The procurement unit is responsible for the application of the criteria to bidding processes.	1. Developing the procurement process to ensure different parts of social responsibility. Developing an operating method to monitor the fulfilment of social responsibility in service production to the extent required.

Environmental impacts

The most significant environmental impacts of airports and air traffic result from anti-icing treatments for runways, anti-icing and de-icing operations for aircraft, and flight operations.

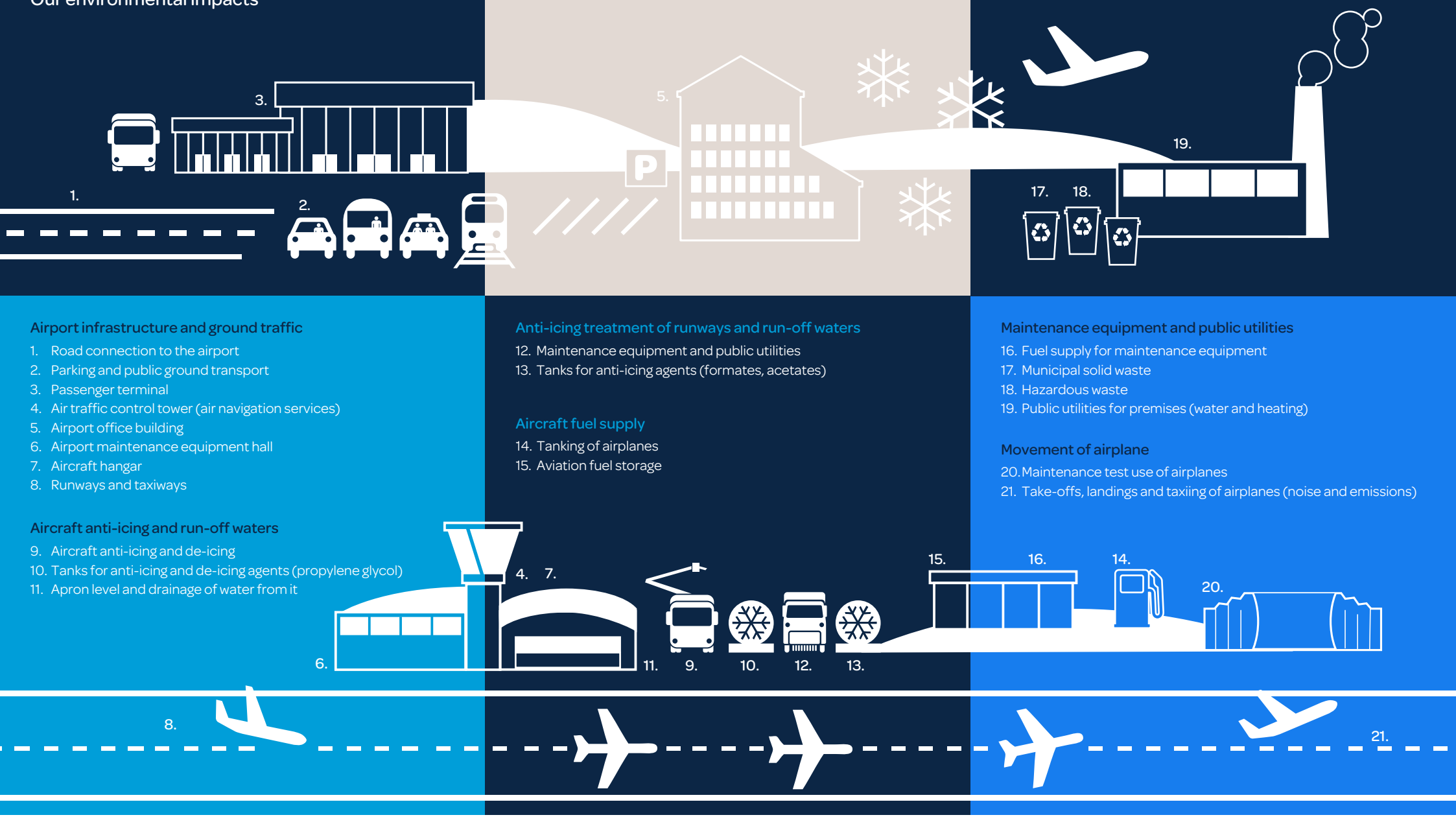
We bear the responsibility for the environmental impacts of our operations. As an airport operator, we are also partly responsible for the environmental impacts of our partners operating at the airport areas.

The main environmental aspects of Finavia's own operations are winter maintenance of airfield areas (aquatic and soil emissions), waste management (including landmasses created in construction work), the maintenance of the built infrastructure (energy consumption, emissions), and the de-icing and anti-icing treatments of airplanes conducted by ground handling companies (aquatic and soil emissions). Significant environmental impacts of airport operations are caused by air traffic (aircraft noise, emissions and energy consumption) which Finavia controls through the activities of ANS Finland, a company responsible for air navigation services.

The figures and table on the right provide information on airport-related activities and their environmental impacts. Finavia is responsible for part of these activities.

Action causing environmental impact	Operation	Substances deployed	Environmental impact	Responsibility for the action
Anti-icing treatment of runways	Mechanical methods primarily used for anti-icing treatment: sweeping and ploughing	-	-	Finavia
	Chemical de-icing agents are utilised for removing frost and ice from the runway surface and for proactive skid prevention	Sodium acetate, potassium acetate, sodium formate and potassium formate in granular and liquid form	Consume oxygen in waterways, but only have a minimal negative impact on the environment considering all anti-icing agents	Finavia
Anti-icing and de-icing treatments of aircraft for ensuring their manoeuvrability and performance	Spraying anti-icing and de-icing agents on the aircraft	Propylene glycol	Not classified as hazardous, but upon disintegration, it consumes oxygen and emits an odour	Ground forwarding agents (operations), Finavia (management of run-off water)
Aviation by airlines, private planes, the authorities and the Finnish Defence Forces	Aviation, taxiing, test operation for maintenance purposes	-	Noise, atmospheric emissions	Aviation operators (equipment), municipalities (land use planning), Finavia through ANS Finland (flight methods, actions by air traffic control)
Maintenance of airport premises	Heating, waste water management and waste management	-	Direct or indirect atmospheric emissions	Finavia

Our environmental impacts



Airport infrastructure and ground traffic

1. Road connection to the airport
2. Parking and public ground transport
3. Passenger terminal
4. Air traffic control tower (air navigation services)
5. Airport office building
6. Airport maintenance equipment hall
7. Aircraft hangar
8. Runways and taxiways

Aircraft anti-icing and run-off waters

9. Aircraft anti-icing and de-icing
10. Tanks for anti-icing and de-icing agents (propylene glycol)
11. Apron level and drainage of water from it

Anti-icing treatment of runways and run-off waters

12. Maintenance equipment and public utilities
13. Tanks for anti-icing agents (formates, acetates)

Aircraft fuel supply

14. Tanking of airplanes
15. Aviation fuel storage

Maintenance equipment and public utilities

16. Fuel supply for maintenance equipment
17. Municipal solid waste
18. Hazardous waste
19. Public utilities for premises (water and heating)

Movement of airplane

20. Maintenance test use of airplanes
21. Take-offs, landings and taxiing of airplanes (noise and emissions)

Environmental permits

The proper management of environmental issues is a prerequisite for the existence of airports. As a result, airports obtain the permits required and earn social acceptance.

The environmental permit includes provisions on airport operations and related environmental impacts. The need to review the provisions is assessed every 7–10 years. Airport operations are also governed by many international and national aviation regulations.

Eighteen of Finavia's airports have an environmental permit compliant with the Environmental Protection Act that entered into force in 2000. A small number of airports do not need an environmental permit, unless the scope of their operations substantially changes. In 2017, a new permit was granted for Kokkola-Pietarsaari Airport. In addition, Utti Airport obtained a decision on an application to revise permit regulations, but an appeal was lodged to the Administrative Court of Vaasa regarding the decision. At the end of 2017, the permit application for Kajaani Airport and the application to revise the permit regulations for Mariehamn Airport were being processed by the permit authorities.

The preparation of reports and plans will continue after the environmental permit has been granted

The provisions of environmental permits include numerous reporting and planning obligations concerning such issues as water pollution and noise control. A decision on a survey regarding the collection of glycol-containing water at Rovaniemi Airport was obtained from the Regional State Administrative Agency of Northern Finland. In August, the Regional State Administrative Agency of Southern Finland issued its decision on a survey to investigate need to recondition urban runoff discharge channels at Helsinki Airport. Appeals issued regarding the survey of Kylmäoja and other discharge channels are being processed at the Administrative Court of Vaasa. A survey of the impact of flooding on the activities of Vaasa Airport is being processed by the Regional State Administrative Agency of Western and Inland Finland.

Surveys of the management of glycol-containing waters were prepared for Kuusamo, Joensuu and Turku Airports during 2017. A survey of a more effective recovery of glycol was prepared for Helsinki Airport. Furthermore, a survey of the treatment capaci-

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of Finavia's airports have an environmental permit compliant with the Environmental Protection Act that entered into force in 2000.

ty of the embanked basins close to runway 3 at Helsinki Airport, started in 2016, was completed. Noise management plans were completed at Helsinki, Kittilä and Vaasa Airports, and similar plans will be prepared in 2018 for Ivalo, Kemi, Turku, Pori, Tampere-Pirkkala and Kuusamo Airports. In 2017, noise surveys were conducted at Helsinki and Joensuu Airports, and noise measurements were carried out at Jyväskylä Airport in cooperation with the Finnish Air Force. At Helsinki Airport, noise measurements were completed regarding the new run-up area, and a separate noise survey will be conducted for the run-up area in 2018. In 2018, noise surveys will be conducted at Savonlinna and Helsinki Airports.

The permit process concerning night-time traffic restrictions at Helsinki Airport is continuing

In 2015, the Finnish Transport Safety Agency (Trafi) issued a decision, whereby it did not impose any restrictions on night-time traffic at Helsinki Airport, as the noise control target will be fulfilled without any night-time restrictions if flight operations develop as predicted. An appeal against the decision was lodged at the Helsinki Administrative Court which, in its decision issued in December 2016, rejected all appeals. The Supreme Administrative Court issued its decision on further appeals in January 2018. According to the decision, appellants have the right to lodge an appeal, and the case was returned for processing at the Helsinki Administrative Court. Under the permit, which took effect in 2015, Finavia will continue its existing noise control measures and an updated noise control plan was finalised in February 2017.

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NEUTRALITY

Environmental investments

Our most important environmental investments during 2017 concerned improvements in the de-icing infrastructure at Helsinki Airport.

In 2017, Finavia's environmental investments amounted to about EUR 7.85 (14.1) million. The most significant environmental investments were directed to reducing the load on the aquatic environment from the de-icing and anti-icing treatments at Helsinki Airport.

As part of the Helsinki Airport development programme, we will construct foundation structures in aircraft ramps for soil protection purposes. The construction of extensive protective structures is a challenging operation in an airport environment, as it is subject to strict load-bearing requirements. The work began in 2016 and will be completed in 2020.

Our total investments in the environment in 2017 amounted to approximately

7.85

million euros.

MAIN ENVIRONMENTAL INVESTMENTS IN 2017

- Soil protection structures in de-icing locations at Helsinki Airport, EUR 4.0 million
- Storage for anti-icing and de-icing agents at Helsinki Airport, EUR 2.5 million
- Development of automated control of glycol-containing water at Helsinki Airport, EUR 0.1 million
- Management of runoff water in the Kylmäoja catchment area at Helsinki Airport, EUR 0.5 million
- Water treatment equipment for a side ditch of Veromiehenkylänpuro at Helsinki Airport, EUR 0.25 million
- Renovation of refuelling stations: Tampere-Pirkkala, Kittilä and Jyväskylä Airports, EUR 0.33 million
- Development of waste management at network airports, EUR 0.17 million

Aircraft noise control

We are mitigating aircraft noise, among other things, by developing the use of runways and flight routes, as well as take-off and landing methods.

Examples of noise control measures in 2017

- Airlines carry out approximately 500 maintenance run-ups every year at Helsinki Airport. A new run-up area was be taken into use in December 2016. On the basis of experiences obtained during one year of use, the availability of the noise control solution for run-ups met the requirements set out in the commercial agreement.
- The local noise control methods planned for the activities of the Finnish Border Guard transferred to Helsinki Airport were issued in March 2017. The helicopter activities of the Finnish Border Guard take nearby residential areas closely into account, and only a few queries have been received regarding the activities.
- The Helsinki Airport aircraft noise control plan was printed in February 2017. It was widely distributed to the authorities and libraries of surrounding municipalities. Noise control measures were also demonstrated at a national noise control event. In addition, a comprehensive article about noise control was published in issue 2/2017 of the Ympäristö ja terveys publication.
- The take-off method defined for runway 1 (22L) at Helsinki Airport in 2016 was developed further in cooperation between Finavia, ANS Finland and Estonian air navigation services so that increasing traffic volumes in Estonian airspace can be controlled both geographically and quantitatively. Noise measurements along the take-off route will continue in 2018.

Continuous descent is used in 71 per cent of all approaches

In continuous descents, the aircraft approaches the runway without the horizontal flight phase which, in the previous flight method, required flying at an altitude of a few hundred metres using high engine power. Using the continuous descent method, noise is controlled by flying for longer at a higher altitude, by adjusting the speed steadily, and by extending flaps and landing gear as late as possible.

In 2017, a total of 71 (70) per cent of planes landing at Helsinki Airport used the continuous descent approach. Even though Finavia is approaching the target values laid out in its environmen-

71%

of planes landing at Helsinki Airport used the continuous descent approach.

tal permit, they have not yet been achieved. The trend has been upwards as a result of cooperation with the air traffic control of ANS Finland and airlines. At other airports, there is more scope for using the method as their airspace has less traffic.

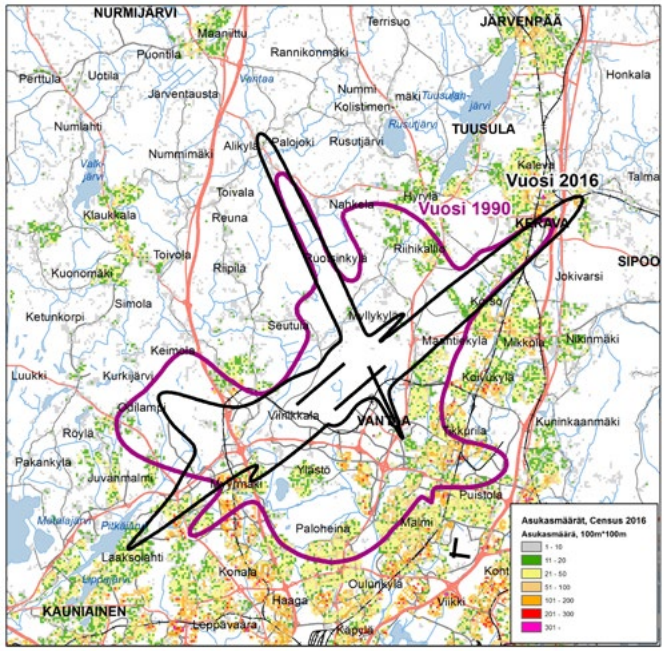
The noise area at Helsinki Airport has decreased by two thirds in the long term

There are ten measurement stations in the noise monitoring system (ANOMS) at Helsinki Airport. Finavia uses the system to monitor the noise situation and to produce reports. The Web-Trak service publicly displays data collected by ANOMS online. The measurement results of different measurement points can be viewed in real time for different aircraft routes during a chosen period.

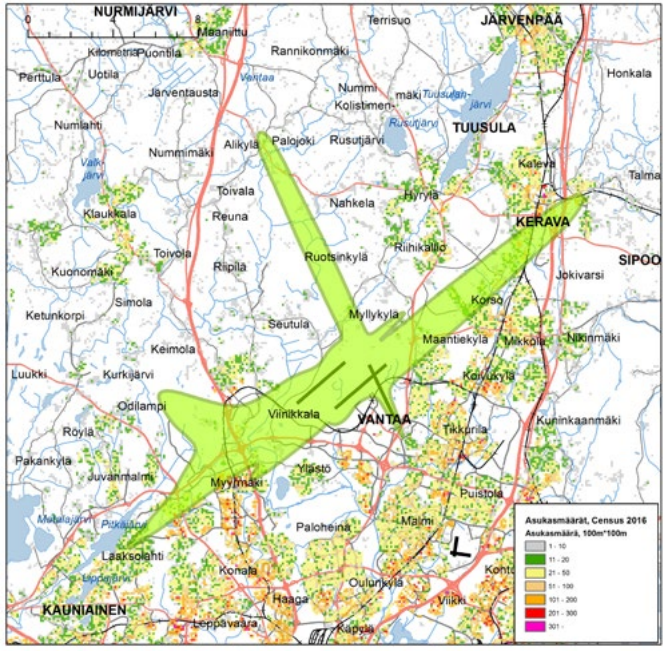
Over a long period, the noise area has reduced to one-third thanks to developments in aircraft technology and air traffic control methods. In 1990, a total of 97,000 people lived in the aircraft noise area. In 2016, the corresponding number was 23,000 (19,000). The shape of the noise area and the number of people living in it vary every year due to wind conditions and runway renovation operations. In 2016, the calculated number of people living in the noise area was affected by the minor change in the noise area (less than 200 m) next to densely populated residential areas in western Vantaa. The extensive terminal and apron development programme at Helsinki Airport will not affect the use of runways and, therefore, will not change the spread of aircraft noise.

The L_{den} (day, evening, night) indicator is used in Finland to calculate aircraft noise in accordance with the EU's Environmental Noise Directive. The indicator describes the annual weighted average noise energy recorded over a 24-hour period, where aircraft noise readings taken in the evening (between 7 pm and 10 pm) are increased by 5 dB, and aircraft noise readings taken at night (between 10 pm and 7 am) are increased by 10 dB.

Development of aircraft noise area (L_{den} 55 dB) at Helsinki Airport (1990 versus 2016)

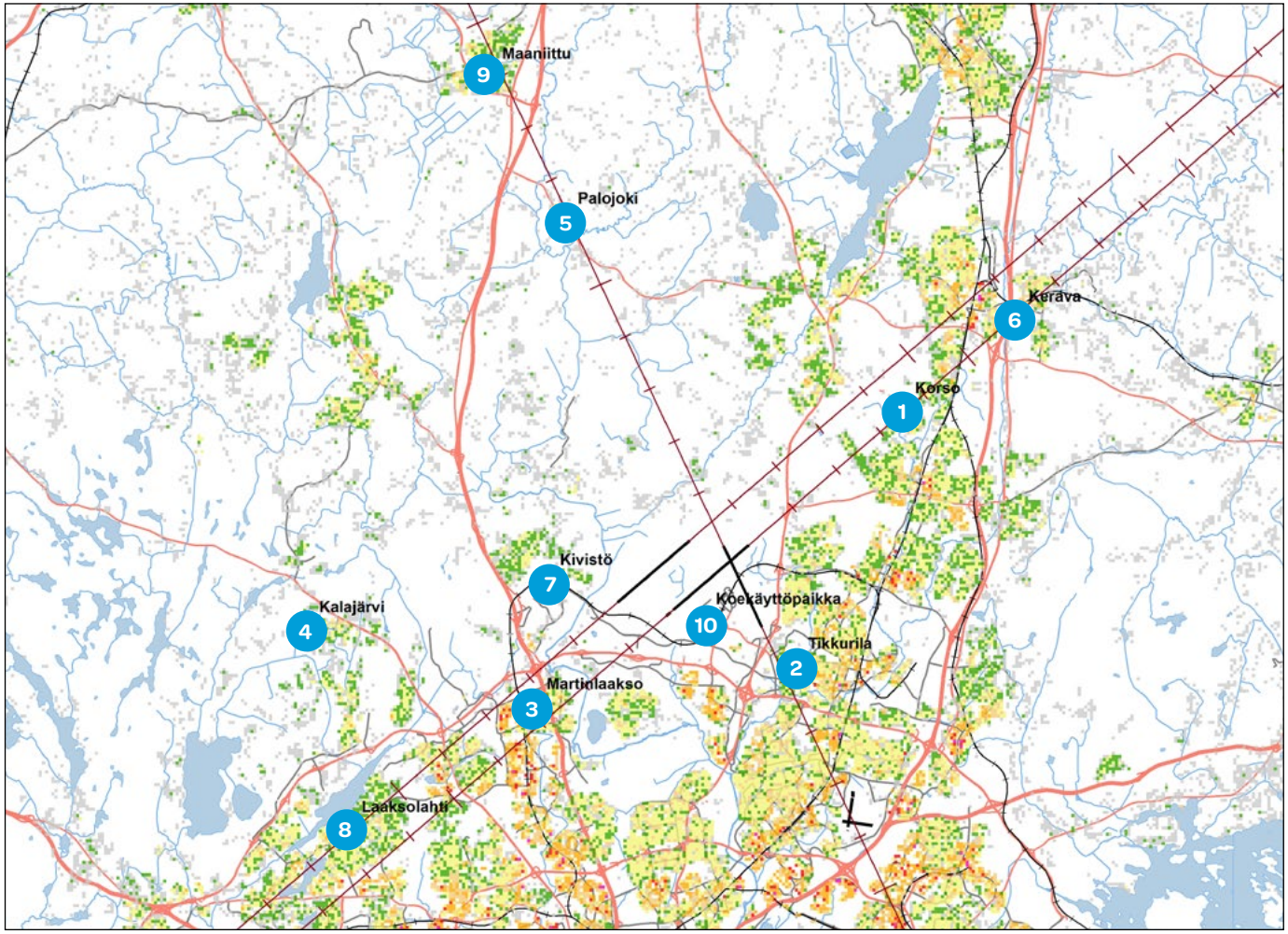


Aircraft noise area (L_{den} 55 dB) at Helsinki Airport 2016



1 Korso
2 Tikkurila
3 Martinlaakso
4 Kalajärvi
5 Palojoki
6 Kerava
7 Kivistö
8 Laaksolahti
9 Maaniittu
10 Koekäyttöpaikka

Measurement stations of aircraft noise



Use of runways and distribution of traffic

Helsinki Airport has three runways, which are used as required by weather conditions, traffic and environmental considerations. Safety is always the number one priority when the runway is selected.

Taking off and landing into a headwind is the safest option for aircraft. The runway to be used is chosen by applying the principle of primacy: in addition to the direction and speed of the wind, noise control and the volume of traffic are taken into account. Runways sometimes need to be closed for repair and construction work. In summer 2017, runway 2 was closed for several months due to renovation. The development programme of Helsinki Airport, started in 2014, does not affect the use of runways or change the direction of noise.

About 20 different runway combinations in use

The runways for landings and take-offs are always chosen taking traffic and prevailing conditions into account. The choices are interdependent. There are about 20 different runway combinations.

- For southerly and westerly winds, the primary runway for landings is runway 2 (15) from the northwest, from the direction of Nurmijärvi, or runway 1 (22L) from northeast, from the direction of Kerava. The primary runway for take-offs is runway 3 (22R) towards the southwest, in the direction of western Vantaa and Espoo. Low-noise aircraft can take off from runway 1 (22L) towards the south at the same time. During peak hours in the afternoon, airplanes also land from the direction of Kerava on runway 3 (22R).
- When the wind is from the north or east, runway 3 (04L) and runway 1 (04R) are usually used for landings, i.e. for approaches from the southwest, the direction of western Vantaa and Espoo, while runway 1 (04R), towards the northeast in the direction of Kerava, is used for take-offs.

Choice of runway minimises noise pollution

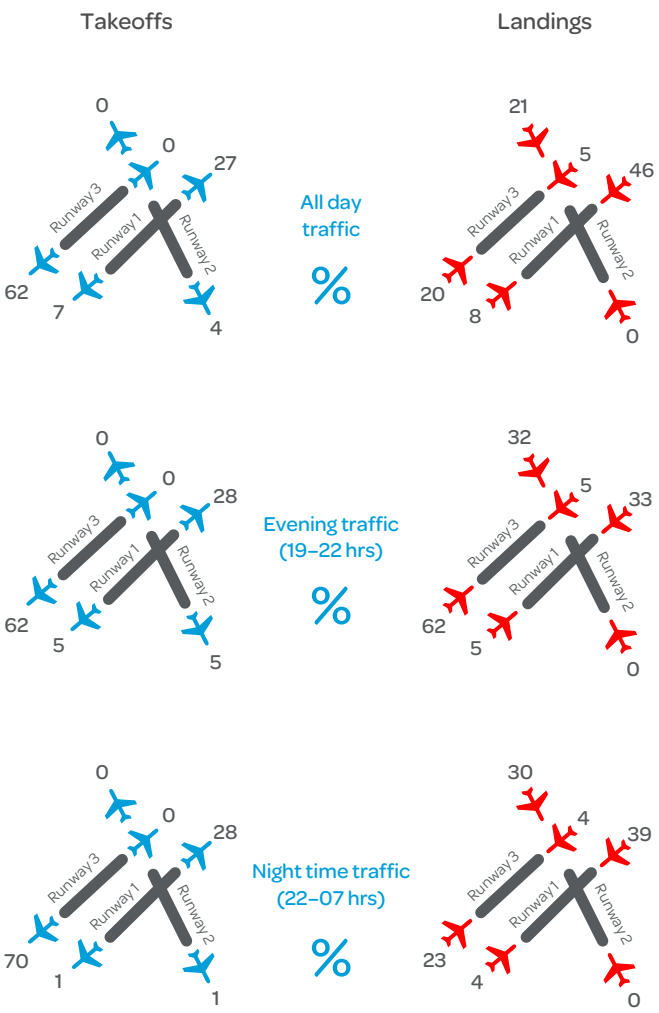
The aim is to handle traffic so that as few people as possible are living in the area affected by aircraft noise. At night-time, landings are primarily made using runway 2 (15) from the northwest, i.e. from the direction of Nurmijärvi, and take-offs using runway 3 (22R) towards the southwest, in the direction of Western Vantaa and Espoo. Jet plane landings on runway 2 (33) from the southeast and take-offs from runway 2 (15) towards the southeast are

When choosing take-off and landing runways, traffic and weather are always taken into account.

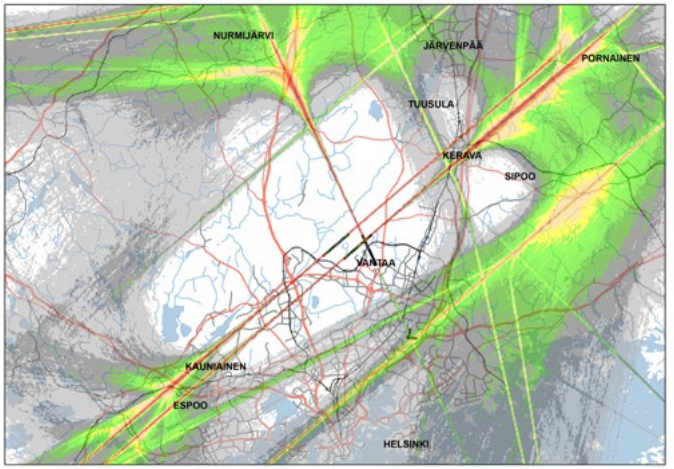
only carried out on a few days in a year due to the dense population, apart from a few exceptions. At night-time, operations towards the southeast are also prohibited, unless otherwise dictated by air traffic safety. Air traffic safety is the main reason for not always being able to choose the optimal runway for noise control.

In 2017, 21 (22) per cent of all landings and 30 (42) per cent of night-time (between 10 pm and 7 am) landings used the primary landing direction, i.e. runway 2 (15). Its use decreased from the year before mainly due to the extended unavailability of runway 2 resulting from its renovation. A total of 62 (62) per cent of all take-offs and 70 (73) per cent of night-time take-offs used the primary take-off direction, i.e. runway 3 (22R). Only 4 (5) per cent of take-offs were towards the southeast.

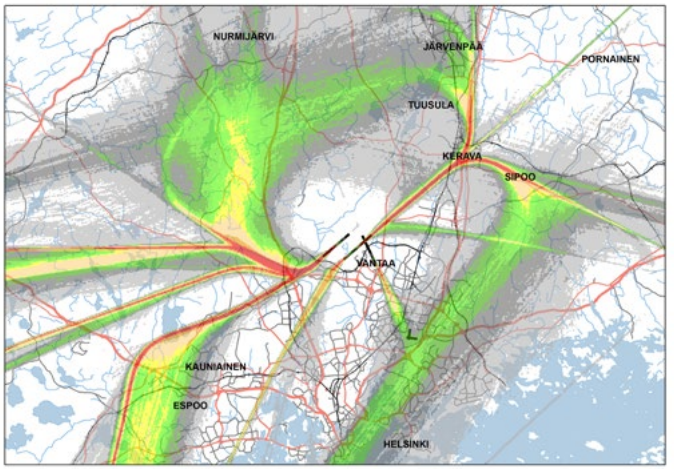
Runaway use thorought the day



Landing flight paths (all directions)



Takeoff flight paths (all directions)



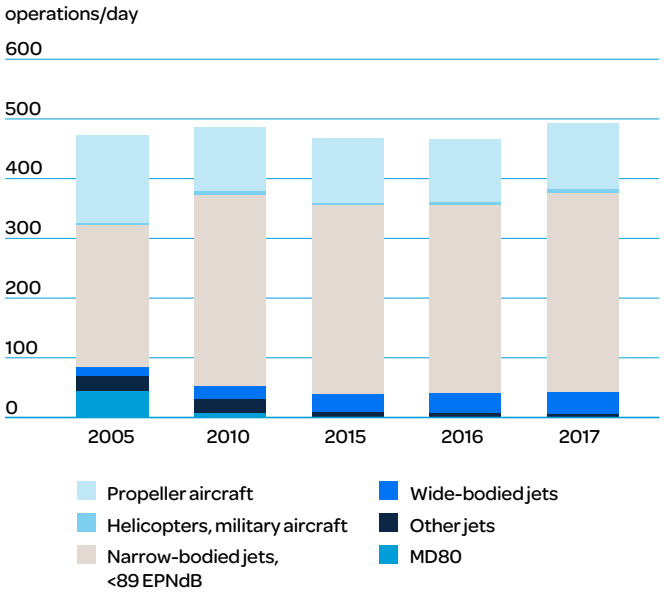
Runway usage comparison – 24-hour traffic

Every year, runway closure due to renovation has an impact on the distribution of runway usage. In 2017, runway 2 was closed for more than four months due to runway renovation.

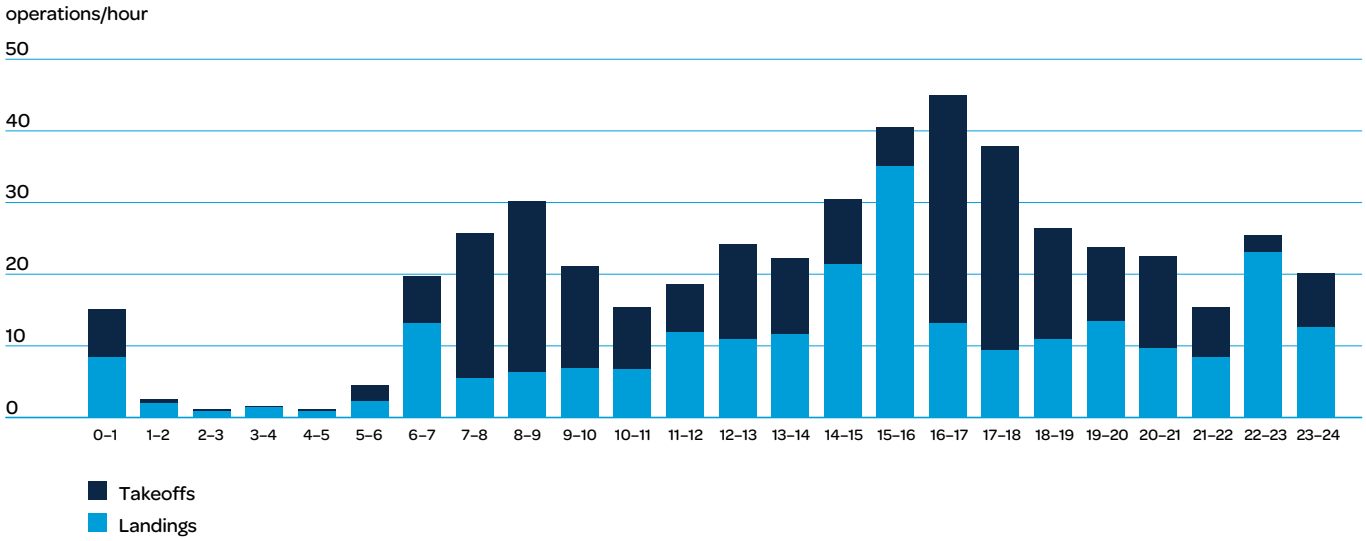
Runway usage comparison

24-hour traffic	2009	2010	2011	2012	2013	2014	2015	2016	2017
04L take-offs (Runway 3 towards northeast)	0 %	0 %	0 %	0 %	0 %	0 %	1 %	0 %	0 %
04R take-offs (Runway 1 towards northeast)	32 %	31 %	17 %	25 %	26 %	27 %	16 %	28 %	27 %
22L take-offs (Runway 1 towards southwest)	7 %	9 %	7 %	23 %	8 %	8 %	7 %	5 %	7 %
22R take-offs (Runway 3 towards southwest)	59 %	57 %	72 %	49 %	64 %	63 %	67 %	62 %	62 %
15 take-offs (Runway 2 towards southeast)	2 %	2 %	3 %	3 %	2 %	2 %	9 %	5 %	4 %
33 take-offs (Runway 2 towards northwest)	0 %	0 %	1 %	0 %	0 %	0 %	0 %	0 %	0 %
04L landings (Runway 3 from southwest)	23 %	23 %	13 %	15 %	18 %	18 %	11 %	20 %	20 %
04R landings (Runway 1 from southwest)	9 %	8 %	5 %	10 %	8 %	10 %	6 %	9 %	8 %
22L landings (Runway 1 from northeast)	26 %	25 %	34 %	39 %	37 %	37 %	33 %	44 %	46 %
22R landings (Runway 3 from northeast)	2 %	2 %	4 %	3 %	4 %	4 %	20 %	5 %	5 %
15 landings (Runway 2 from northwest)	40 %	42 %	42 %	33 %	32 %	37 %	29 %	22 %	21 %
33 landings (Runway 2 from southeast)	0 %	0 %	2 %	1 %	1 %	0 %	1 %	0 %	0 %

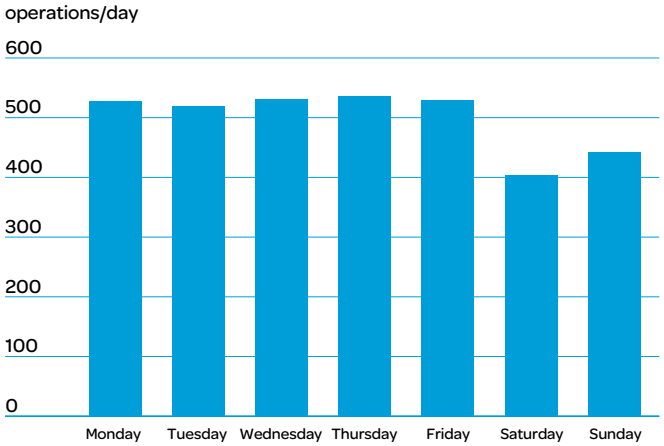
Types of aircraft in service in Helsinki Airport



Hourly traffic at Helsinki Airport



Daily traffic at Helsinki Airport



Distribution of traffic at Helsinki Airport

Helsinki Airport received 18,892,386 passengers (17,184,681). The volume of international passengers increased by 11.4 per cent and while that of domestic travel went up by 1.9 per cent.

Weekdays are the busiest days in air traffic. In 2017, an average of 391 jet planes (372) and 126 propeller planes (124) arrived at Helsinki Airport or departed from it during weekdays. About 23 per cent of all passenger flights are operated with propeller planes.

Air traffic at Helsinki Airport is at its peak in the afternoon and in the morning from 8 a.m. to 9 a.m.. There are a large number of arrivals from 2 p.m. to 4 p.m., while the peak hours for departing traffic are from 4 p.m. to 6 p.m. There is little traffic at night from 1 a.m. to 6 a.m., and landings account for most of the operations during those hours. In terms of the number of operations, the busiest month in 2017 was September. The traffic was at its lowest point in February.

In 2017, a total of 69 per cent (68) of all passenger aircraft using the airport were low-noise jet planes. Wide-bodied aircraft accounted for 7 per cent (7). Propeller planes accounted for 23 per cent (23) of all flights. The noisier MD80 planes are no longer used.

Distribution of traffic at Finavia airports

The total number of passengers at our airports reached record levels in 2017. International travel and growing demand at airports in Lapland pushed the number of passengers to a new high.

A total of 22,699,881 passengers (20,786,846) travelled through Finavia's airports in 2017, an increase of 9.2 per cent compared to the previous year. Of all passengers, 24 per cent (26) took domestic flights and 76 per cent (74) international flights.

There was a further increase in the number of commercial aviation landings last year; they totalled 116,895 (110,952), which was 5.3 per cent more than in 2016. There was an increase in the number of passengers and operations.

Landings at Finavia airports

Airport	Year 2017				Change (%)			
	Commercial aviation	Military aviation	General aviation	Total	Commercial aviation	Military aviation	General aviation	Total
Enontekiö	80	3	3	86	7%	0%	50%	8%
Halli	1	1,140	172	1,313	-67%	7%	77%	12%
Helsinki-Vantaa	86,297	845	2,317	89,459	5%	8%	53%	6%
Ivalo	1,026	100	113	1,239	19%	-9%	7%	15%
Joensuu	1,374	23	540	1,937	0%	77%	-31%	-11%
Jyväskylä	1,054	10,758	1,685	13,497	9%	8%	20%	9%
Kajaani	1,092	49	91	1,232	1%	-66%	15%	-6%
Kemi-Tornio*	965	0	743	1,708	56%		155%	88%
Kittilä	1,598	4	92	1,694	25%	100%	-1%	24%
Kokkola-Pietarsaari	1,605	104	1,382	3,091	-1%	37%	-8%	-3%
Kuopio	2,023	5,676	3,528	11,227	-1%	2%	-15%	-4%
Kuusamo	530	4	23	557	15%	-76%	35%	13%
Maarianhamina	1,424	0	562	1,986	-1%	-100%	-21%	-8%
Oulu*	4,600	865	2,559	8,024	-10%	-37%	-41%	-26%
Pori	902	58	9,427	10,387	360%	18%	33%	41%
Rovaniemi	2,437	4,506	2,373	9,316	15%	12%	48%	20%
Savonlinna	459	24	77	560	1%	-8%	17%	3%
Tampere-Pirkkala	2,725	3,506	16,839	23,070	5%	9%	133%	77%
Turku	3,773	190	6,065	10,028	6%	11%	-3%	1%
Utti	1	2,030	494	2,525	-50%	-6%	-14%	-8%
Vaasa	2,894	95	1,933	4,922	-2%	171%	-9%	-4%
Total	**116,860**	**29,980**	**51,018**	**197,858**	**5%**	**4%**	**27%**	**10%**

*Oulu Airport was closed due to maintenance work and traffic was transferred to Kemi-Tornio Airport during this time.

Environment-related feedback

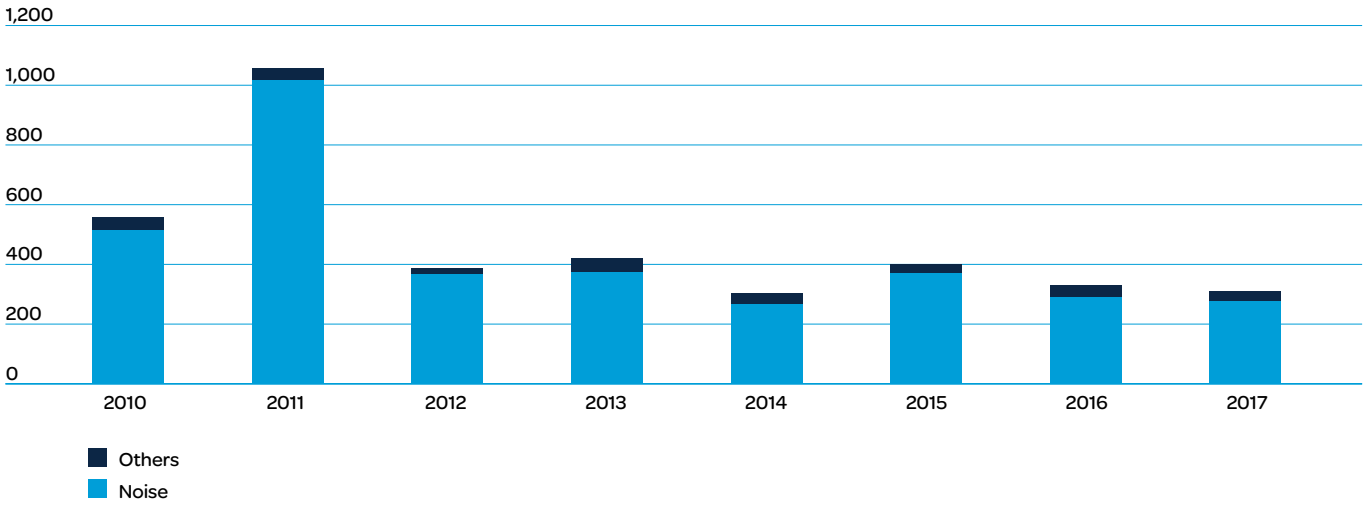
Aircraft noise affects the neighbours of our airports, in particular. It is subsequently not surprising that most of the environmental feedback we receive is noise-related.

In 2017, we received 308 (329) queries regarding environmental issues at Helsinki Airport. One-third of these were recurring. Noise was the subject of 90 (88) per cent of the feedback. Runway 2 was closed for more than four months due to runway renovation. During this time, runways 1 and 3 were used more frequently, which increased the number of queries received from the eastern side of the airport. Other feedback concerned atmospheric emissions, water and soil issues, and permit matters. The total number of all environment-related queries in the network was 337 (412). This decrease is mainly attributable to Finavia no longer handling environmental feedback concerning Helsinki-Malmi Airport.

We respond to all environment-related queries and report the amount of feedback to environmental authorities on an annual and quarterly basis. The reports are available on Finavia's website.

The environmental feedback system was updated and a module built as part of a more extensive customer service system was deployed in June 2017.

Environment-related contacts by year at Helsinki Airport



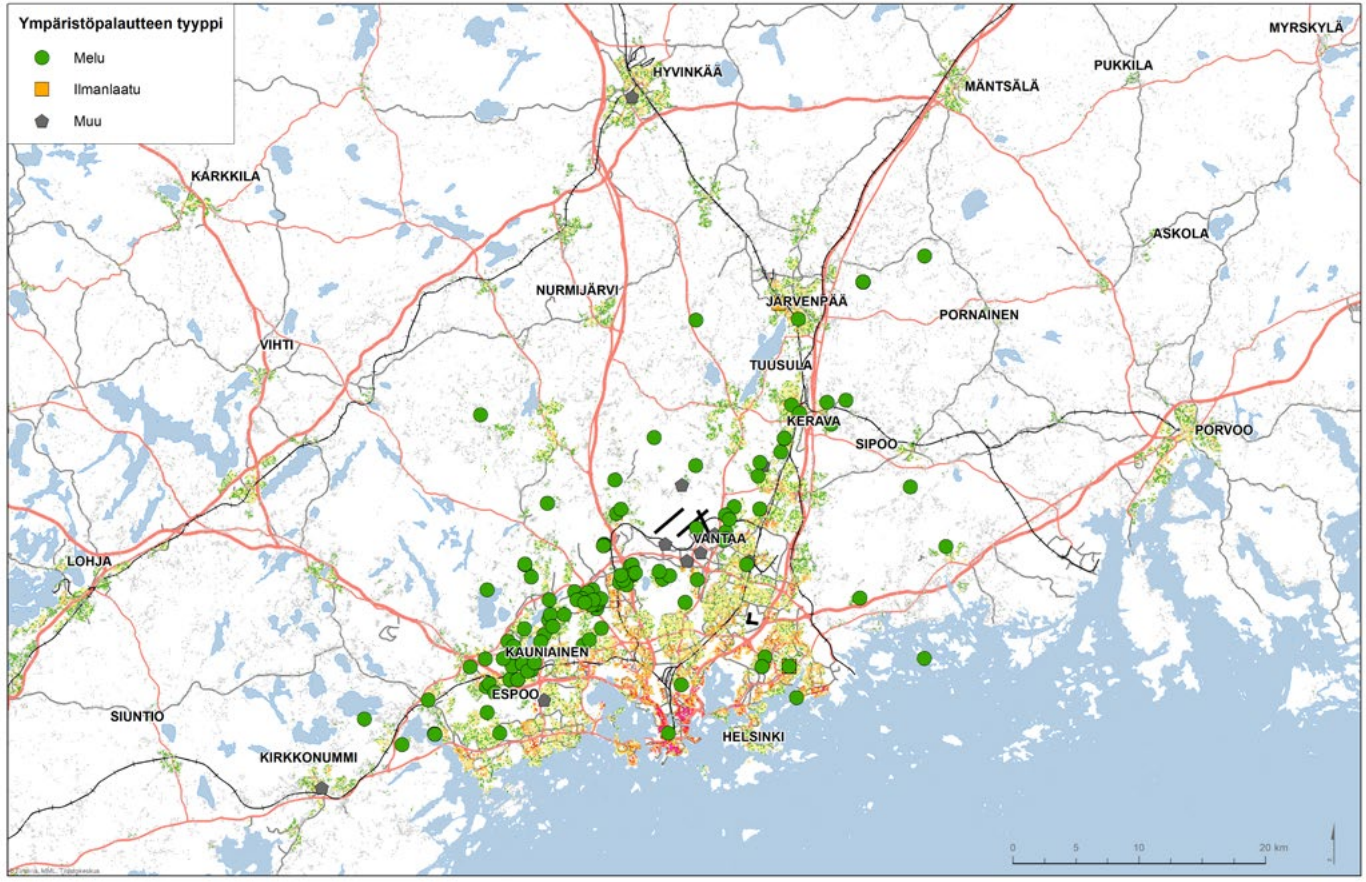
Environment-related contacts by municipality in 2017, Helsinki Airport

	Different persons	Total contacts
Espoo	59	69
Helsinki	15	27
Järvenpää	4	4
Kauniainen	7	11
Kerava	9	18
Nurmijärvi	1	1
Sipoo	16	64
Tuusula	3	3
Vantaa	72	84
Other	21	27
Total	**207**	**308**

Environment-related contacts in 2017, all airports

	Different persons	Total contacts
Helsinki Airport	207	308
Turku	8	9
Tampere-Pirkkala	6	7
Oulu	4	4
Vaasa	2	3
Utti	1	2
Ivalo	1	1
Jyväskylä	1	1
Kuopio	1	1
Rovaniemi	1	1
Total	**232**	**337**

Environmental feedback in the vicinity of Helsinki Airport



Air quality

We are continuously monitoring air quality in the Helsinki Airport area, as part of the air quality monitoring programme in the Helsinki region. We also carry out our own measurements on a regular basis.

Most of the total emissions in the airport area are generated by aircraft; however, these emissions are rapidly diluted as emissions heights increase. Their impact on ground-level air quality is low. The impact of ground-level emission sources on local air quality is higher. Therefore, emissions are limited to the immediate proximity of the airport.

Nitrogen dioxide levels were measured for three months in 22 measurement points between October and December 2016. The measurements were performed, using passive samplers. A similar three-month measurement (at the same time and in roughly the same measurement points) had been carried out in 2006 and 2011. Over the years, air quality has improved at nearly all measurement points. The results of these measurements are presented in a map journal.

HSY's measurement wagon at the airport for the whole year

In 2017, a movable measurement wagon of the Helsinki Region Environmental Services Authority (HSY) measured air quality around Terminal 1 as part of the air quality measurement programme in the Helsinki region. Concentrations of nitrogen dioxide remained below guideline values throughout the year. The threshold limit set for breathable particles was exceeded eight times during spring when dust levels are high.

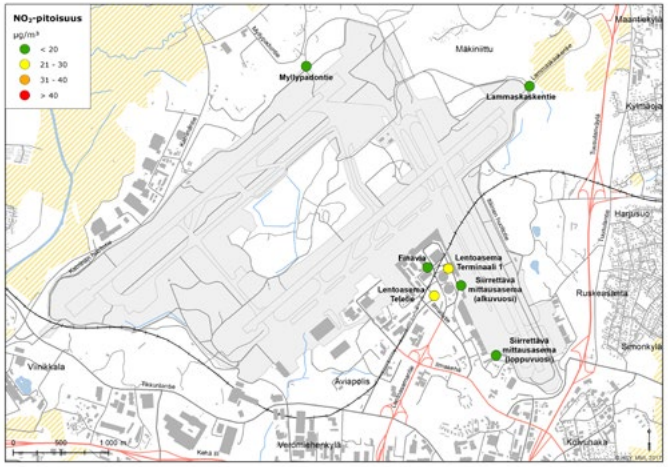
In addition to the measurement trolley, passive collector measurements carried out in five different measurement points in different parts of the airport indicate that air quality has improved. The effects of the airport on air quality are local.

Passive samplers' annual average NO_2 concentratiom mg/m^3

	2014	2015	2016	2017
Airport Terminal 1	37	37	31	29
Airport Teletie				23
Airport Rahtitie	23	23	23	20*
Airport Lentäjäntie 3	20	21	21	20
Airport Myllypadontie	12	12	12	12
Airport Lammaskaskentie	12	12	12	11

*Measurement wagon had to be moved in October because of a construction site.

Locations of passive collectors



Energy and water consumption and emissions

Energy efficiency work at our airports is guided by Finavia's Energy and Climate Programme. Our energy consumption per passenger is going in the right direction.

Among other things, airports use energy for heating, ventilation, cooling, illumination and maintenance equipment. In future, we will increase the use of automated methods to control the systems on the basis of demand. The requirements laid out in the BREEAM environmental certification system for buildings are considered in the planning and implementation of the Helsinki Airport development programme. The objectives guide energy efficiency, activities during the construction stage and well-planned commissioning of the buildings. The airport development project currently under way (south and west pier as well as the Plaza) was granted the interim design-stage BREEAM certificate with an Excellent rating as the only Finnish construction project in 2017. The buildings included in the development programme are the first facilities that Finavia will incorporate into the BREEAM environmental certification system for buildings.

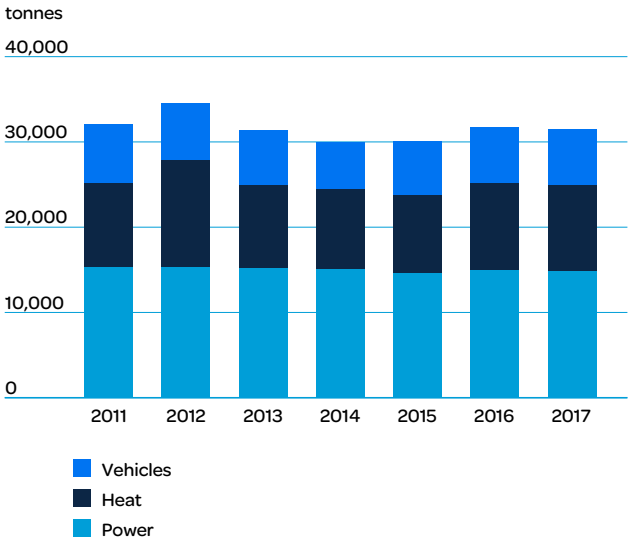
A 124 kWp solar energy system was installed on the roof of the new south pier in July 2017. The total output of this system and the system to be installed on the west pier (which is still under construction) will exceed 500 kWp. This means that it is among the ten largest production units in Finland.

In 2017, Helsinki Airport received certification 3+ (highest level) under the ACA (Airport Carbon Accreditation) carbon dioxide emissions reduction programme of the Airports Council International (ACI). Finavia operations at the airport are carbon neutral because there has been a continuous reduction in the emissions index and the remaining emissions (9,200 tonnes including emissions caused by personnel's business travel) have been compensated with emissions units purchased from carbon markets. The 2016 units were purchased from biogas and wind power projects completed in India. All units had been verified in accordance with the Gold Standard and half of them had also been accredited with the CDM standard. All electricity used at the airport in 2016 was generated with Nordic wind power (guarantee of origin under the RES-GO system).

To reduce vehicle emissions, all apron buses at Helsinki Airport switched to renewable diesel fuel in July 2017. The new fuel (Neste MY) will reduce CO_2 emissions by as much as 90 per cent.

In connection with runway renovation, LED technology was introduced as runway lighting at Oulu Airport. Lighting based on the same technology was also installed on the renovated runway 2 at

Finavia's own activities' CO_2-emission



Helsinki Airport. As a result, energy consumption will decrease by as much as 80 percent.

Airport maintenance (heating, waste water management and waste management) causes both direct and indirect atmospheric emissions. As an airport operator, it is essential that we also look at the emissions and fuel consumption of airplanes using our airports.

Key figures for energy, water and emissions 2017

	Year 2017	Change, %
Heating consumption	53 GWh	6,2%
Heating consumption per passenger	2.3 kWh/pax	-3.4%
Electricity consumption	77 GWh	1,4%
Electricity consumption per passenger	3.4 kWh/pax	-7.3%
Water consumption	171,000 m^3	8.9%
Water consumption per passenger	7.5 l/pax	-0.4%
Ground equipment energy consumption	26 GWh	0.0%
Ground equipment energy consumption per passenger	1.1 kWh/pax	-15.0%
Carbondioxide emissions per passenger	1.4 kg/pax	-6.7%
Passenger	22.7 million	9.2%

In 2017, the total amount of emissions and fuel consumption of aircraft during the LTO cycle increased by about two percent, compared to 2016.

The table on the right shows the fuel consumption and emissions of aircraft flying at altitudes of less than 915 metres (3,000 feet) during the LTO (Landing and Take Off) cycle. Airplane emissions are calculated for the internationally specified LTO cycle. The calculation includes emissions from take-offs and landings up to 915 m (3,000 feet) and the associated taxiing. For a large passenger aircraft, this means emissions from a distance of approximately six kilometres from the airport during take-off, and 18 kilometres during landing.

The total emissions and fuel consumption of Finavia's ground equipment remained more or less unchanged, compared with 2016. Ground equipment includes the vehicles used for winter maintenance, apron control, repairs, and general maintenance. The emissions are calculated on the basis of fuel consumption figures and vehicle details.

The calculations of values per passenger do not include Halli and Utti Airports, because there is no regular passenger traffic at these airports.

Aircrafts' LTO (Landing and Take-Off) cycle emissions of aircraft by airport, civil aviation

Airport	LTO-cycle (number)	CO [t/a]	HC [t/a]	NOx [t/a]	SOx [t/a]	CO_2 [t/a]	Fuel [t/a]
Enontekiö	100	1	0	0.7	0.1	200	50
Halli	200	2	0.1	0.01	0.002	10	4
Helsinki-Vantaa	89,200	770	80	690	50	172,100	55,000
Ivalo	1,100	10	1.2	9.8	0.7	2,300	750
Joensuu	1,900	10	0.2	3.4	0.3	1,000	330
Jyväskylä	2,800	20	0.6	2.7	0.3	900	280
Kajaani	1,200	2	0.1	2.6	0.2	800	250
Kemi-Tornio	1,700	8	0.3	3.2	0.3	1,000	310
Kittilä	1,700	20	1.8	14.7	1.1	3,600	1,150
Kokkola-Pietarsaari	3,100	10	0.4	3.1	0.3	1,000	310
Kuopio	4,900	30	1.2	6.5	0.6	2,000	600
Kuusamo	600	4	0.3	2.8	0.2	800	250
Maarianhamina	1,800	10	0.5	1.9	0.2	700	210
Oulu	6,500	50	4.9	28.9	2.6	8,100	2,600
Pori	11,000	110	2.5	1.2	0.2	800	240
Rovaniemi	3,400	40	3.4	19	1.6	5,000	1,600
Savonlinna	500	1	0.1	0.7	0.1	300	80
Tampere-Pirkkala	21,800	210	5.4	10.1	1	3,600	1,100
Turku	7,700	50	2.9	13.1	1.2	3,900	1,200
Utti	600	8	0.2	0.03	0.003	30	9
Vaasa	4,300	30	1.3	8.9	0.9	2,800	900
Total	**166,100**	**1,396**	**107.4**	**823.34**	**61,905**	**210,940**	**67,223**

Consumption of energy and water by Finavia airports

Airport	Electricity MWh	Heating MWh	Water m^3
Enontekiö	490	290	280
Halli	71	231	129
Helsinki-Vantaa	54,877	23,824	126,070
Ivalo	631	2,014	1,997
Joensuu	611	1,231	1,316
Jyväskylä	1,117	1,315	4,476
Kajaani	548	912	1,017
Kemi-Tornio	601	891	1,047
Kittilä	1,667	2,014	4,216
Kokkola-Pietarsaari	507	737	1,318
Kuopio	1,662	2,186	4,344
Kuusamo	628	852	924
Maarianhamina	442	805	602
Oulu	4,189	5,267	7,093
Pori	568	1,198	1,530
Rovaniemi	3,115	3,675	5,594
Savonlinna	436	0*	243
Tampere-Pirkkala	1,615	1,780	2,991
Turku	2,008	977	3,759
Utti	36	124	81
Vaasa	1,476	2,286	2,467
Total	**77,295**	**52,609**	**171,494**

*Savonlinna Airport uses geothermal heat. The consumption of heat energy has been combined with the consumption of electricity.

Ground equipment emissions and fuel consumption per airport

Airport	CO (t)	HC (t)	NOx (t)	Particles (t)	SO_2 (t)	CO_2 (t)	Fuel (t)
Enontekiö	0.2	0.1	0.6	0.03	0.001	60	20
Halli	0.4	0.1	0.9	0.05	0.001	120	40
Helsinki-Vantaa	9.8	3.7	22.7	1.3	0.03	2,870	980
Ivalo	0.6	0.2	1.4	0.08	0.002	170	50
Joensuu	0.4	0.2	1.3	0.07	0.002	160	50
Jyväskylä	0.8	0.3	1.6	0.09	0.002	190	60
Kajaani	0.4	0.2	0.9	0.05	0.001	110	30
Kemi-Tornio	0.5	0.2	1.2	0.06	0.001	140	40
Kittilä	1.1	0.5	3.2	0.17	0.004	360	110
Kokkola-Pietarsaari	0.3	0.2	1	0.05	0.001	110	30
Kuopio	0.9	0.4	2.9	0.15	0.003	310	100
Kuusamo	0.4	0.2	1.3	0.07	0.001	150	50
Maarianhamina	0.2	0.1	0.4	0.02	0.001	50	20
Oulu	1.3	0.6	4	0.22	0.004	450	140
Pori	0.3	0.1	0.6	0.03	0.001	80	20
Rovaniemi	1.4	0.7	4.3	0.23	0.005	470	150
Savonlinna	0.2	0.1	0.5	0.03	0.001	70	20
Tampere-Pirkkala	0.6	0.3	2	0.11	0.002	230	70
Turku	1	0.3	1.6	0.09	0.002	190	60
Utti	0.2	0.1	0.3	0.02	0.001	60	20
Vaasa	0.6	0.2	1.5	0.08	0.002	170	50
Total	**22**	**9**	**54**	**3.0**	**0.07**	**6,520**	**2,110**

Emissions into water and soil

The most significant environmental impacts of our airports result from anti-icing treatments of runways and from anti-icing and de-icing treatments of aircraft.

Acetates and formates are among the runway de-icing agents with the smallest impact on the environment. They are readily biodegradable and contain no nitrogen. The propylene glycol used for de-icing and anti-icing treatments is not classified as harmful, but it causes an environmental load on waterways by increasing oxygen consumption.

We aim to minimise the environmental load caused by substances used in winter operations of airports on waterways and soil. We monitor the groundwater quality at 14 airports and the surface water quality at 21 airports using approximately 380 monitoring points.

In 2017, we focused on improving the management of urban runoff at Helsinki Airport.

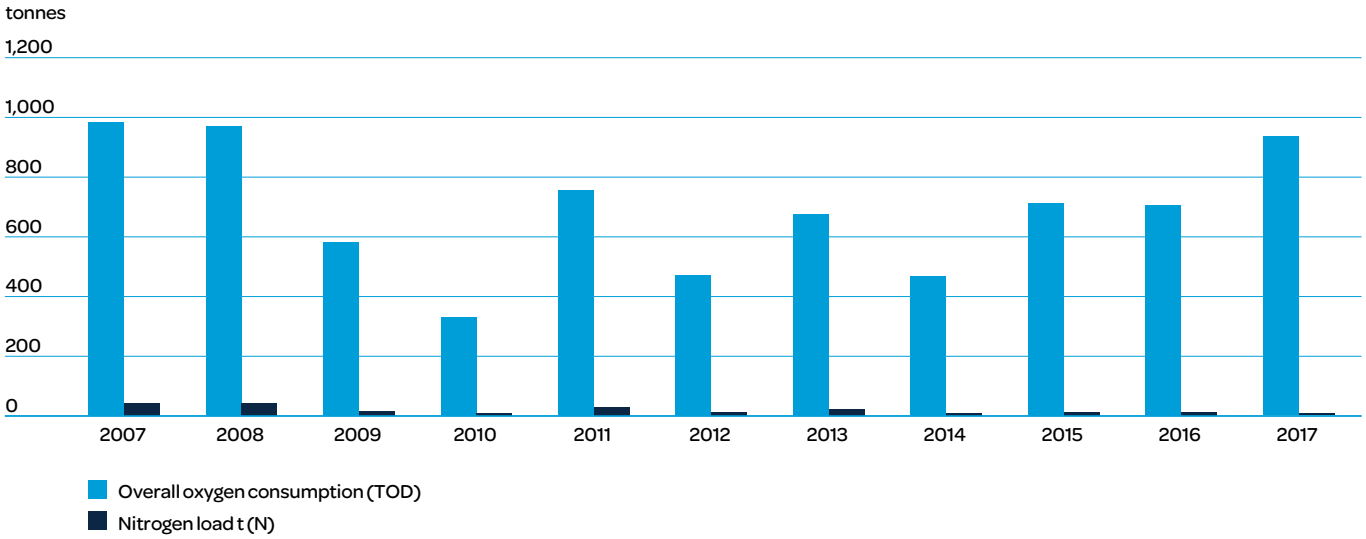
This is how we reduce the environmental impacts of winter operations of airports

- Mechanical methods, such as sweeping and ploughing, are the primary methods for clearing snow off runways.
- Acetate-based and formate-based agents are used to prevent skidding. They readily decompose and contain no nitrogen.
- We are constructing and reconditioning de-icing and anti-icing stations where the agents used can be more efficiently collected. Overall, we invested a total of EUR 66 million in de-icing areas during 2010–2017. In addition to Helsinki Airport, glycol is collected at Tampere, Jyväskylä, Oulu and Kuopio Airports.
- We closely monitor weather conditions in our airport maintenance work and develop our monitoring system.
- We set standard instructions for ground handling companies that carry out de-icing activities. We encourage companies to also use mechanical methods in the removal of snow from aircraft, such as compressed air.

Actions in 2017

- During the winter season of 2016–2017, about 80 (93) per cent of the approximately 1.7 million litres of glycol used at Helsinki Airport was recovered. The 2017 recovery rate was 52 (45) per cent in Tampere and 70 (39) per cent in Oulu. The recovery rates fluctuate yearly with the changing weather conditions. Some of the glycol sticks to the surface of the aircraft and cannot be recovered.
- At Helsinki Airport, plans for the management of urban runoff discharged into Kylmänoja and for ditch arrangements were submitted to the ELY Centre = Centre for Economic Development, Transport and the Environment of Uusimaa in spring 2017. The ditch arrangements were started in autumn 2017.
- A survey of the capacity of embanked basins used to treat urban runoff was completed. The survey was submitted to the ELY Centre = Centre for Economic Development, Transport and the Environment of Uusimaa.
- In spring 2017, water treatment equipment (Effe®) developed by BK-Hydrometa Oy was deployed at Helsinki Airport to reduce odour nuisances caused by propylene glycol and the load it causes on the side ditch of Veromiehenkylänpuro.
- Refuelling stations were modernised at Tampere-Pirkkala, Kittilä and Jyväskylä Airports to meet the requirements of the most recent standard.
- The development of waste management arrangements was continued at network airports. Storage containers for hazardous waste were acquired at airports. Waste management arrangements were audited at Ivalo and Kuusamo Airports.

Biological oxygen depletion and nitrogenous pollution caused by de-icing agents



Use of anti-icing agents for runways

About one third of the total quantity of anti-icing agents is used at Helsinki Airport. The consumption is at its highest during mild winter weather. The volume of traffic also affects the consumption volumes. The use of chemicals has varied over the past few years, as have the weather conditions. We aim to optimise consumption with the help of continuous training, uniform instructions and weather monitoring systems. The use of anti-icing agents increased at Helsinki Airport and network airports during 2017 compared with the previous years. Because of weather conditions, the most difficult months in terms of anti-icing operations were January, November and December.

Loads caused by anti-icing, anti-icing and de-icing agents

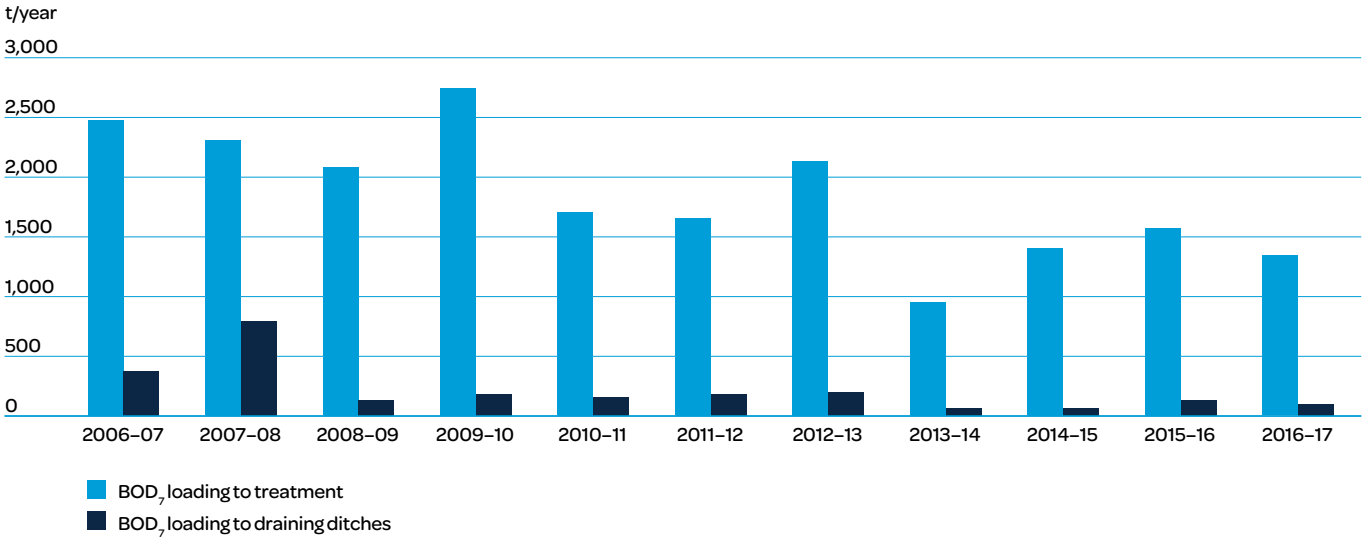
The pollution load caused by anti-icing treatment agents on the aquatic environment has significantly decreased since the turn of the century, when the use of urea was discontinued. The nitrogen pollution load has almost entirely ceased, and the oxygen consumption load has decreased at best to one-third of what it was in the early 1990s. In the 2000s, we have switched at several airports to using liquid formate, which exerts a minimal load on the environment. In recent years, the load has varied due to the fluctuation in the use of the agents, since that depends on weather conditions.

In November, there was a slow leak in a liquid formate tank at Helsinki Airport, causing emissions of approximately 35 tonnes. When analysing surface water and groundwater samples taken around the site of the incident, no impacts on water quality were identified. The quality of water will continue to be investigated during spring 2018.

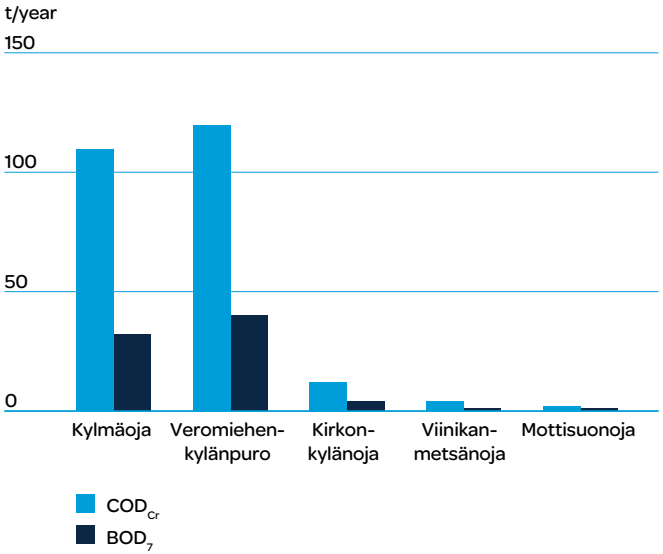
Quantity of runway de-icing agents used at Finavia's airports 2017

Airport	Quantity of runway de-icing agents				
	Urea t	Acetate 100% t	Formiate 100% t	Betaine 100% t	Glycol 100% m^3
Enontekiö	0	0	6	0	27
Halli	0	27	0	0	0
Helsinki-Vantaa	0	0	1,368	0	1,742
Ivalo	0	44	0	0	44
Joensuu	0	0	37	0	23
Jyväskylä	0	105	0	15	9
Kajaani	0	0	13	0	10
Kemi-Tornio	0	60	0	0	5
Kittilä	0	125	0	0	66
Kokkola-Pietarsaari	0	41	0	0	6
Kuopio	0	92	0	0	25
Kuusamo	0	0	67	0	17
Maarianhamina	0	17	0	0	0
Oulu	0	0	190	0	83
Pori	0	0	33	0	12
Rovaniemi	0	115	0	0	77
Savonlinna	0	0	6	0	1
Tampere-Pirkkala	0	160	0	0	30
Turku	0	165	0	0	52
Utti	0	0	11	0	0
Vaasa	0	0	114	0	25
Total	**0**	**951**	**1,847**	**15**	**2,254**

Biological oxygen depletion load to treatment and draining ditches at Helsinki Airport



Chemical and biological oxygen consumption to different draining ditches at Helsinki Airport 2016–2017



At Helsinki Airport, water containing aircraft anti-icing and de-icing agents is collected by using suction vehicles and by leading the water to the waste water sewage system. The majority of agents can be collected for treatment. The urban runoff water that cannot be led to a waste water treatment plant is discharged into the Vantaanjoki and Keravanjoki rivers via six ditches.

In addition to Helsinki Airport, suction vehicles are also used for collecting glycol-containing runoff water at Tampere-Pirkkala, Oulu, Kuopio and Jyväskylä Airports.

At Tampere-Pirkkala Airport, a de-icing agent storage tank of a ground handling company was overfilled in October. The volume leaked into the rainwater sewer was estimated to be 2.5 m^3. When analysing the water samples taken from the urban runoff discharge ditch, no impacts on water quality were identified.

The quantity of oxygen-consuming substances is described by their chemical and biological oxygen consumption. In addition to the surface water coming from the airport, the humus-containing water in the nearby swamps affects the chemical oxygen consumption in the ditch waters. Our efforts in managing urban runoff water have produced good results, for example in Kylmäoja running on the western side of Helsinki Airport. The loading of Kylmäoja has decreased considerably from the early 2000s, thanks to better management of glycol-containing waters and the fact that aircraft de-icing and anti-icing operations are now concentrated in designated areas. As a result of improved water quality, the trout, for example, has returned to Kylmäoja. In addition, Finavia has supported actions of the City of Vantaa to recondition fish reproduction locations.

Fire drills

We have cooperated with environmental authorities regarding the deposits of perfluorinated compounds in the fire drill areas of our airports. Some of these compounds were commonly used in extinguishing foams for fuel fires until 2011, when their use was banned within the EU. These film-forming foams are no longer used in Finavia's fire drill operations; instead, the fires are put out with water during the exercises. In 2017, new gas simulators were deployed for drills to extinguish aircraft fires at Rovaniemi and Oulu Airports.

Waste

We reduce the volume of waste generated in airport operations and deliver the waste primarily for recycling. The Helsinki Airport development programme requires subcontractors to provide detailed reports, for example, regarding the treatment of waste generated in demolition work.

We revised the airport waste details reporting system in 2016. It now allows the compilation of more detailed information about the locations where waste is deposited, for example. Mixed waste is increasingly used at energy plants of municipalities or companies, as a result of which the volume of mixed waste disposed of at landfill sites has decreased and the volume of recycled waste has increased.

The waste volumes generated in airport operations are shown in the table. The waste volumes also include waste received from operators in Finavia's airport area on the basis of contractual obligations, but it excludes the waste generated in the major construction projects implemented at the airports.

The information of Helsinki Airport development programme can be found here.

Material efficiency targets steer construction work at Helsinki Airport

Targets have been set in the Helsinki Airport development programme for the utilisation of demolition and construction waste, and all contractors must observe these targets. We are also investigating the best ways to utilise the excess soil excavated in the construction projects carried out as part of the development programme.

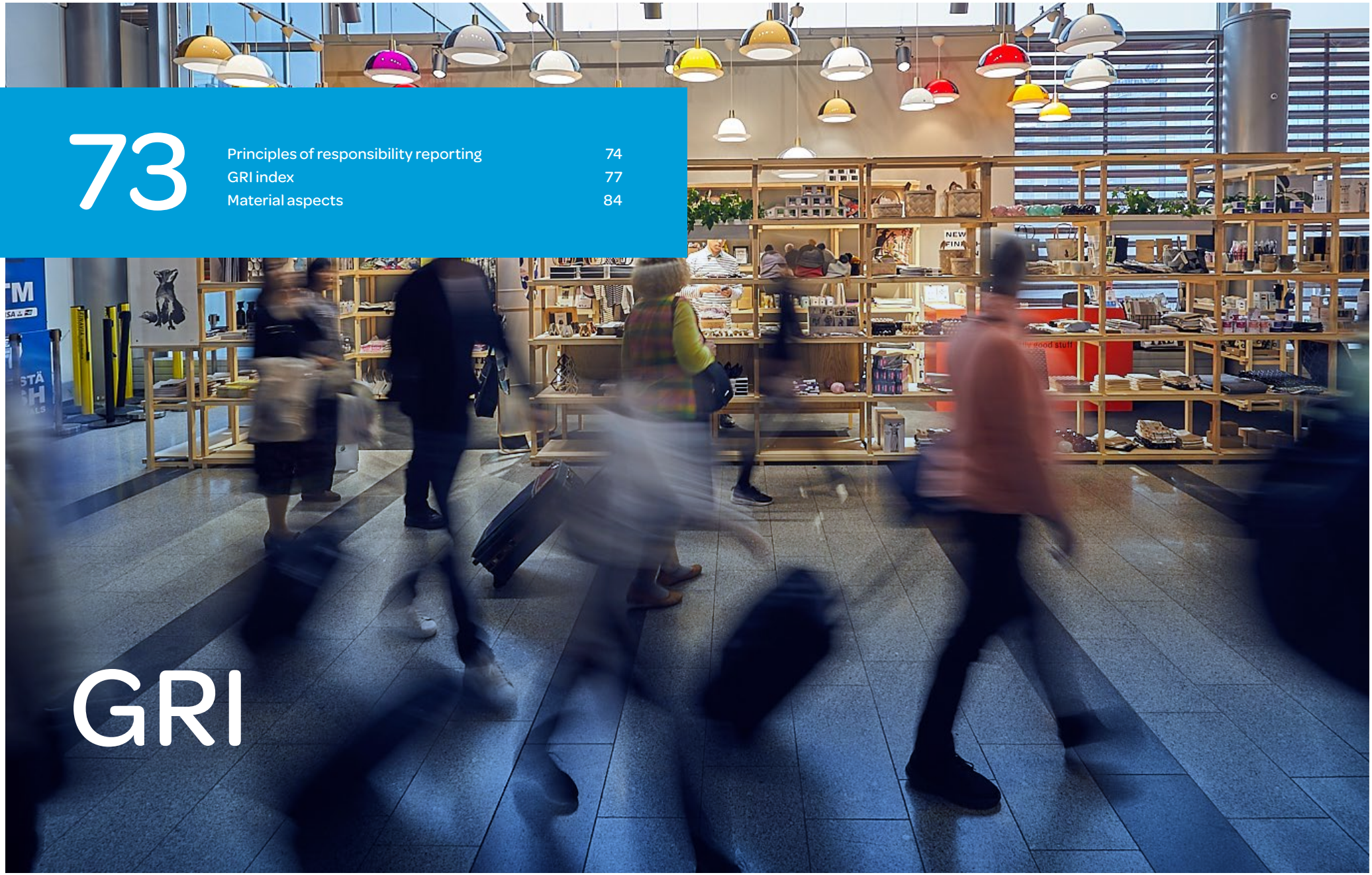
In 2012, Finavia obtained an environmental permit for reusing crushed tarmac in the Helsinki Airport area. A total of some 7,200 tonnes of crushed tarmac that had been removed during the resurfacing of a runway and taxiways was reused in 2017, for example, for paving maintenance roads and a parking area. Crushed tarmac containing coal tar removed during the runway reconstruction was transported for proper handling. Coal tar was used in the 1950s and the 1960s for binding purposes below the asphalt layer.

The waste management campaign started in 2016 was continued at network airports. During the campaign, waste management training has been provided for airport personnel and reviews have been conducted at airports to offer guidance on the sorting, packaging and labelling of regular and hazardous waste, as well as responsibilities related to transportation. Proper containers for hazardous waste were also acquired for all airports. The campaign will continue and airports will be supported to keep their areas clean and in good order.

Waste volumes per airport in 2017, tonnes

Airport	Mixed waste (t)	Recyclable waste (t)	Hazardous waste (t)
Enontekiö	0.2	28.7	0.0
Halli	2.2	17.4	4.0
Helsinki-Vantaa	0.5	2,387.9	44.6
Ivalo	0.5	249.0	0.3
Joensuu	1.6	20.7	0.5
Jyväskylä	0.0	46.0	1.1
Kajaani	8.5	14.0	5.9
Kemi-Tornio	0.0	13.6	0.2
Kittilä	60.9	35.0	18.8
Kokkola-Pietarsaari	1.1	16.8	8.5
Kuopio	0.0	81.1	1.6
Kuusamo	10.1	1.1	0.1
Maarianhamina	0.0	15.8	0.1
Oulu	0.0	116.0	2.7
Pori	4.0	22.8	1.7
Rovaniemi	0.0	99.5	5.8
Savonlinna	0.0	13.0	2.5
Tampere-Pirkkala	0.0	74.9	15.3
Turku	0.0	51.8	1.5
Utti	0.0	2.3	5.2
Vaasa	9.4	32.9	2.0
Total	**98.9**	**3,340.2**	**122.4**

The table shows the change, compared to previous year. Recycled waste includes all waste reused as material or for energy generation. In 2017, no remediation of contaminated soil was carried out at airports.



GRI

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Principles of responsibility reporting

Finavia's corporate responsibility reporting complies with the core option of G4 guidelines of the Global Reporting Initiative (GRI). In addition, reporting uses indicators specified in the Airport Operators Sector Supplement (AOSS). The Finnish Government's decision-in-principle regarding the owner policy of the Finnish state and its requirements for corporate responsibility reporting have also been taken into account in reporting.

Coverage of reporting

The information in the corporate responsibility section of this Annual Report covers the entire Group. However, some information only applies to Finavia Corporation. These cases are separately indicated. Reporting and key indicators cover the period of 1 January–31 December 2017. In addition, the report includes individual information from January–March 2018. Such information has been separately indicated.

Mitopro Oy, a specialist in corporate responsibility, has verified that Finavia's 2017 Annual Report corresponds with the GRI G4 guidelines and confirms that the reporting fulfils the core requirements of the guidelines.

Financial indicators

Financial indicators cover the operations of Finavia Group. The figures are based on the company's accounts and financial statements. The Financial Accounting Standards (FAS) are observed in financial reporting. The financial indicators have been audited.

Finavia complies, as applicable, with the Corporate Governance Code of Finnish listed companies approved by the Finnish Securities Market Association in 2015.

Air traffic data

Flight details are obtained from the air navigation systems of ANS Finland. Airline-specific details of passengers, freight and mail are collected from the forwarding companies operating at the airports. The data is collected in the traffic database. Air traffic statistics are based on traffic database data.

Reporting complies with the core scope of application of G4 guidelines of the Global Reporting Initiative (GRI).

Environmental information

Traffic details, runway usage and distribution of aircraft types
Traffic details, the distribution of runway usage and aircraft type information are obtained from the Cognos system in which the information is recorded from the Airport2020 system of airports.

Locations of flight routes and noise information
Finavia operates a continuous noise and route monitoring system (ANOMS) at Helsinki Airport, which uses the input from radars to record the route details and the noise measurement data from nine noise measurement stations to record noise details. The system data provides route distribution and routes for noise area calculations for reporting purposes.

Anti-icing agents for runways
Airports register their anti-icing measures and the volume of chemicals used in an electronic maintenance journal, from which the Environmental Unit obtains data for reporting. With regard to Helsinki Airport, Airport Maintenance reports the monthly volumes of chemicals used. The Traffic Area Services Unit checks the correctness of information contained in the electronic journal.

The consumption of anti-icing agents is presented in the Annual Report as a 100 percent concentration, obtained by deducting the 50 percent proportion of water from the quantities of liquid agents used. The oxygen consumption load caused by the anti-icing agents is calculated by using the biological oxygen demand (BOD_7) factor of each product. An exception to this is urea, where the calculation factor used is its theoretical oxygen demand (ThOD) due to its decomposition process differing from the other agents. The factors used are shown in the table on the right.

	BOD_7 mg/g
Acetate solution	300
Granular acetate	670
Liquid formate	90
Granular formate	170
Liquid betaine (Betafrost)	720
Solid betaine (Nutristim)	1,440
Urea (ThOD)	2,100

Of the anti-icing agents, urea and betaine cause nitrogen loading. A factor of 0.466 g/g is used to calculate the nitrogen loading of urea, a factor of 0.12 g/g is used to calculate that of solid betaine and a factor of 0.06 g/g is used to calculate that of liquid betaine (Betafrost).

De-icing and anti-icing agents for aircraft
The ground handling companies performing de-icing and anti-icing treatments on aircraft keep a record of the treatments and the quantities of liquids used (types I and IV). Each month, the ground handling companies submit daily data on liquid usage quantities and the number of treatments to the Environmental Unit and to the invoicing units of those airports where the recovery of glycol has been arranged. For other airports, the ground handling companies provide the Environmental Unit with monthly details of the quantities of different types of liquids used. The Environmental Unit asks smaller companies to provide monthly data about the volume of different liquid types used at six-month intervals.

In the Environmental Report, the annual usage volumes are presented as 100 percent propylene glycol, obtained by deducting the proportion of water from the quantities used. The proportion of water is 20 percent in type I liquid and 50 percent in type IV liquid.

Aircraft emissions
Aircraft emissions are calculated using the landing and take-off (LTO) cycle, an international standard. The emissions are calculated for flight altitudes below 915 m (3,000 ft.), taking into account different aircraft and engine types. The calculation includes emissions caused by take-off and landing up to 3,000 ft. and the associated taxiing. Each emission component has its own factor, obtained from the Emissions and Dispersion Modeling System (EDMS) database developed and maintained by the US aviation authority. Finavia has its own software for calculating the LTO cycle.

Emissions from Finavia's ground vehicles
The factors for different emission components are obtained from the Lipasto system maintained by VTT. The calculation is based on fuel consumption and takes into account the characteristics of different vehicles.

Finavia's total emissions (CO_2)
Emissions caused by electricity and heating are calculated from the total consumption using airport-specific factors obtained from different sources. Heating energy is produced in different ways at different airports (pellets, district heating, etc.), and the factor for electricity varies annually with the production of electricity. Total emissions include all Finavia's emissions from electricity, heating and ground vehicles.

Consumption of electricity, heating energy and water
The airports read the electricity, heating energy and water meters each month and enter the readings into Granlund Manager. Finavia's Facility Services and Energy Unit checks the correctness of this information. The Environmental Unit obtains information about the consumption of electricity, heating energy and water from Granlund for environmental reporting.

The consumption figures per passenger are calculated by dividing the total consumption by the annual number of passengers. Consumption figures for Kauhava, Halli and Utti Airports are deducted before this calculation, because they do not have any actual passenger traffic.

Waste

The airports obtain information about their annual accumulation of waste from the annual reports and invoices of waste management companies. The airports enter the data in Finavia's Environmental Information system, from where the Environmental Unit obtains it for environmental reporting.

In the report, the accumulated waste volumes are divided into mixed waste, recyclable waste and hazardous waste. Recyclable waste includes separately collected biowaste, metal, glass, recycled paper and cardboard, lubricant waste, used tyres, WEEE, as well as sorted construction waste and mixed waste sent for incineration.

Fuels

Refuelling volumes of vehicles and fleet are monitored at airports. Vehicles are filled with petrol at public service stations, and the volumes are monitored using receipts. Each year, the airports compile information about fuel used by ground vehicles in Finavia's Environmental Information system, from where the Environmental Unit retrieves it for environmental reporting.

Feedback on environmental issues

Feedback on environmental issues (including feedback received through the WebTrak system) is registered in a browser-based feedback system, in which it is also archived. The number of feedback messages and their nature are obtained from the environmental feedback system for environmental reporting.

Personnel details

Personnel details for key indicators are obtained from different HR systems. The key indicators cover either the Finavia Group or Finavia Corporation; this is shown for each indicator. The calculation of key indicators is also guided by the general instructions of the Accounting Board regarding the calculation of the personnel indicators shown in the Annual Report.

Person-years refer to regular annual working hours excluding overtime and other hours outside regular working hours. Periods without pay reduce an employee's person-year contribution. Years of service are calculated from the date the uninterrupted employment began. The age and gender distribution show the number of individuals in permanent employment relationships divided according to age and gender in accordance with the average number of personnel in 2017. Personnel turnover describes the turnover of permanent employees so that the departure turnover is the percentage of leaving employees and the incoming turnover is the percentage of recruited employees of total personnel.

Accidents and sick leave are calculated as calendar days, so that a day of absence is recorded when an accident or illness causes an absence for the whole day. Training days are also calculated as whole days.

All personnel are included in the scope of performance appraisals. Performance appraisals are activated and saved annually in the HR system. The number of appraisals held is based on the number of appraisals activated during the year.

Passenger satisfaction

Information for the network's passenger satisfaction survey is collected through personal interviews in the departure gate areas of 15 different airports. The number of interviews is proportional to passenger volumes, and 200–570 interviews per airport are conducted each year. (In total, about 5,280 interviews were conducted in 2017.)

The results are calculated using the overall averages of the average scores for nine measured parameters. Red Note conducted the survey in 2016 and 2017.

Customer satisfaction at Helsinki Airport is monitored through an international Airport Service Quality Survey measuring passenger satisfaction at airports. At Helsinki Airport, the information is collected through personal interviews in the gate areas in accordance with the passenger structure. Roughly 350 interviews are conducted every month, and about 4,184 passengers were interviewed in 2017.

Feedback on Finavia's corporate responsibility reporting can be sent to comms@finavia.fi.

GRI index

Code	Content of GRI	Location	Notes
Strategy and analysis			
G4-1	Review by the CEO	CEO's review	
G4-2	Key impacts, risks and opportunities	Key responsibility themes Operating environment and megatrends Value creation Board of Directors' report / Operating environment	
Organisational profile			
G4-3	Name of the reporting organisation		Finavia Corporation
G4-4	Most important brands, products and services	Businesses (Finavia.fi) Value creation Board of Directors' report / Development of business operations and changes in group structure	
G4-5	Location of the organisation's headquarters		Vantaa, Finland
G4-6	Countries where the organisation operates		Finavia only operates in Finland.
G4-7	Ownership and legal form	Board of Directors' report / Shares and share capital Remuneration statement	
G4-8	Markets	The year 2017 / Key figures Board of Directors' report / Traffic development and changes in group structure	
G4-9	Scale of the reporting organisation	The year 2017 / Key figures Board of Directors' report / Development of business operations and changes in group structure	
G4-10	Number of employees by type of employment contact, by region and by gender	Personnel in 2017	
G4-11	Coverage of collective bargaining agreements	Personnel in 2017	
G4-12	Supply chain	Cooperation with suppliers and partners Value creation	
G4-13	Major changes in size, structure, ownership and supply chain during the reporting period	Board of Directors' report / Development of business operations and changes in group structure	

Code	Content of GRI	Location	Notes
G4-14	Adherence to the precautionary principle		Finavia observes the precautionary principle in all its operations. In all its operations, Finavia takes measures to avoid or reduce environmental risks and adverse impacts.
G4-15	List externally developed principles or other initiatives to which the organisation subscribes or which it endorses	Stakeholder cooperation	
G4-16	Memberships of associations and advocacy organisations	Stakeholder cooperation	
Identified material aspects and boundaries			
G4-17	Aspect boundaries		All Group companies are included in the consolidated financial statements. The associated company Taxi Point Oy was disregarded due to its negligible impact on group equity. The information in the responsibility section of the Annual Report covers the entire Group. However, some information only applies to Finavia Corporation. These cases are separately indicated.
G4-18	Defining the report content	Reporting principles Key responsibility themes	Finavia has determined the content of the environmental responsibility report In accordance with the reporting principles laid out in GRI G4 guidelines.
G4-19	Material aspects	Material aspects G4-17	
G4-20	Boundaries for material aspects within the organisation	Reporting principles	
G4-21	Boundaries for material aspects outside the organisation		No information has been collected from outside Finavia.
G4-22	Restatements of information provided in previous reports		There are no material restatements of information provided in previous reports.
G4-23	Significant changes from previous reporting periods in the scope and aspect boundaries		No significant changes from previous reporting periods in the scope and aspect boundaries.
Stakeholder engagement			
G4-24	List of stakeholder groups engaged by the organisation	Stakeholder cooperation	
G4-25	Basis for identification and selection of stakeholders	Stakeholder cooperation	
G4-26	Approach to stakeholder engagement	Stakeholder cooperation	
G4-27	Key topics and concerns that have been raised through stakeholder engagement	Stakeholder cooperation	
Report profile			
G4-28	Reporting period	Reporting principles	
G4-29	Date of most recent previous report		Finavia's previous responsibility report was published on 16 March 2017.
G4-30	Reporting cycle		Once per year
G4-31	Contact point for questions regarding the report or its contents	Reporting principles	
G4-32	GRI content comparison		
G4-33	Organisation's policy and current practice with regard to seeking external assurance for the report		The contents of the report have not been verified. Mitopro Oy has checked the compliance of the report with GRI G4 guidelines.

Code	Content of GRI	Location	Notes
Governance			
Governance structure and its composition			
G4-34	Governance structure and committees	Governance and compensation report / Administrative and operative bodies	
G4-35	Delegation of authority	Managing corporate responsibility Board of Directors' report Governance and compensation report / Administrative and operative bodies	
G4-36	Persons in position of responsibility	Managing corporate responsibility	
G4-38	Composition of the Board of Directors	Board of Directors (Finavia.fi) Governance and compensation report / Administrative and operative bodies	
G4-39	Position of the Chair of the Board of Directors	Board of Directors (Finavia.fi) Governance and compensation report / Administrative and operative bodies	
G4-41	Avoiding conflicts of interest	Governance and compensation report / Related party transactions	
Board of Directors' role in setting purpose, values and strategy			
G4-42	Board of Directors' role in setting purpose, values and strategy	Board of Directors (Finavia.fi) Governance and compensation report / Administrative and operative bodies	
Board of Directors' role in risk management			
G4-45	Board of Directors' role in the identification of risks	Managing corporate responsibility Governance and compensation report / Internal control, risk management and internal audit	
G4-46	Reviewing the effectiveness of risk management procedures	Governance and compensation report / Internal control, risk management and internal audit	
G4-47	Risk review frequency	Managing corporate responsibility Governance and compensation report / Internal control, risk management and internal audit	
Board of Directors role in the assessment of economic, social and environmental responsibility performance			
G4-51	Remuneration policies for the Board of Directors and senior executives	Governance and compensation report / Remuneration statement	
G4-52	Process for determining remuneration	Governance and compensation report / Remuneration of the Board of Directors	

Code	Content of GRI	Location	Notes
Ethics and integrity			
G4-56	Values and business principles	Managing corporate responsibility Governance and compensation report / Internal control, risk management and internal audit Equality and non-discrimination Value creation	Familiarisation with ethical guidelines is part of the induction of new employees. Managers are responsible for overseeing that the instructions are adhered to, and managers must themselves act in an exemplary manner. The operational policies, ethical principles, and instructions related to the operational manuals and operational policy decisions are stored in the company's intranet where the company's personnel can access them.
Specific standard disclosures			
Disclosures on management approach			
	General disclosure on management approach (DMA)	Key responsibility themes Managing corporate responsibility Financial targets and operational prerequisites This is how we manage flight safety Service and customer experience Personnel development Environment in Finavia in 2017	
Financial responsibility			
Economic performance			
G4-EC1	Direct economic value generated and distributed	Financial added value generated by Finavia for its stakeholders	
G4-EC4	Financial assistance received from Government		Finavia received a total of EUR 13,896.05 in environmental subsidies from the State of Finland in 2017.
Market presence			
AO1	Total number of passengers annually, broken down by passengers on international and domestic flights	Year 2017 / Key figures Board of Directors' report / Traffic development Value creation	
AO2	Total annual number of aircraft movements	Use of runways and distribution of traffic Value creation	
AO3	Total amount of cargo tonnage		The amount of cargo increased by 6.1 per cent.
Indirect economic impacts			
G4-EC7	Development and impact of infrastructure investments and services supported	Development of Helsinki Airport Charity and sponsorship policy	
G4-EC8	Significant indirect economic impacts, including the extent of impacts	Financial added value generated by Finavia for its stakeholders Finavia as a taxpayer	
Purchasing practices			
G4-EC9	Proportion of spending on local suppliers	Cooperation with suppliers and partners	No percentage was reported.

Code	Content of GRI	Location	Notes
Environmental responsibility			
Materials			
G4-EN1	Materials used by weight or volume	Emissions into water and soil / Use of anti-icing agents and de-icing chemicals in 2017 Waste	
G4-EN2	Percentage of materials used that are recycled input materials		During the winter season 2016–2017 about 80 (93) per cent of the approximately 1.7 million litres of glycol used at Helsinki Airport was recovered. In Jyväskylä, 11 per cent of glycol was recovered. The 2017 recovery rate was 52 (55 per cent three years' average) in Tampere, 70 (39) per cent in Oulu and 29 per cent in Kuopio. The aim is to reuse the glycol in anti-icing and de-icing.
Energy			
G4-EN3	Energy consumption within the organisation	Consumption of water and energy	
G4-EN6	Reduction of energy consumption	Consumption of water and energy Environmental responsibility at Finavia	
G4-EN7	Reductions in energy requirements of products and services	Consumption of water and energy	
Water			
G4-EN8	Total water withdrawal	Consumption of water and energy	
AO4	Quality of storm water	Emissions into water and soil	
Biodiversity			
G4-EN11	Each operational site owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas		Turku, Kajaani and Joensuu Airports are located adjacent to protected areas and Natura sites. Helsinki, Vaasa, Oulu and Mariehamn Airports are located about 200–500 metres from protected areas or Natura sites.
Emissions			
G4-EN15	Direct greenhouse gas emissions (scope 1)	Energy and water consumption and emissions	
G4-EN16	Indirect greenhouse gas emissions (scope 2)	Energy and water consumption and emissions	
G4-EN17	Other indirect greenhouse gas emissions (scope 3)		
G4-EN19	Reduction of greenhouse gas emissions	Energy and water consumption and emissions	
G4-EN21	NOx, SOx and other significant air emissions	Atmospheric emissions Energy and water consumption and emissions	
Effluents and waste			
G4-EN22	Total water discharge	Emissions into water and soil	
G4-EN23	Total weight of waste by type and disposal method	Waste	
G4-EN24	Significant spills	Emissions into water and soil	There was a leak in a liquid formate tank at Helsinki Airport in November.

Code	Content of GRI	Location	Notes
AO6	Aircraft and pavement de-icing / anti-icing fluid used and treated	Emissions into water and soil	
Products and services			
G4-EN27	Extent of impact mitigation of environmental impacts of products and services	Aircraft noise control Atmospheric emissions Consumption of energy and water Use of runways Emissions into water and soil Waste Environmental responsibility at Finavia	
Compliance			
G4-EN29	Significant fines and non-monetary sanctions for non-compliance with environmental laws and regulations		No cases during 2017.
Overall			
G4-EN31	Total environmental protection expenditures and investments	Environmental investments Year 2017	
Environmental grievance mechanisms			
G4-EN34	Number of grievances about environmental impacts filed, addressed and resolved through formal grievance mechanisms	Environment-related feedback	
Noise			
AO7	Number of people residing in areas affected by noise	Aircraft noise control	
Social responsibility			
Labour practices and decent work			
Employment			
G4-LA1	Total number and rates of new employee hires and employee turnover	Personnel in 2017	Not reported by gender or age group.
Labour / management relations			
G4-LA4	Minimum notice periods regarding operational changes		In co-determination negotiations, Finavia observes the time limits laid down in the law and in collective bargaining agreements.
Occupational health and safety			
G4-LA6	Type of injury, lost days, absenteeism and work-related fatalities	Well-being at work	No fatalities.
Training			
G4-LA9	Average hours of training per year per employee by gender and by employee category	Personnel development	Personnel training days reported. No division by gender or employee category.
G4-LA11	Percentage of employees receiving regular performance and career development reviews	Reporting principles	All employees are included in the development reviews.
Diversity and equal opportunity			
G4-LA12	Composition of governance bodies and breakdown of employees	Governance and compensation report / Personnel in 2017 Equality and non-discrimination	At the end of 2017, Finavia's Board of Directors had six members, three of whom were women. Average age of the Board members was 53 years. At the end of 2017, Finavia's Executive Group had nine members two of whom were women. Average age of the Executive Group members was 51 years.

Code	Content of GRI	Location	Notes
Equal remuneration for women and men			
G4-LA13	Equal remuneration for women and men	Equality and non-discrimination	Not reported by employee category.
Labour practices grievance mechanisms			
G4-LA16	Number of grievances about labour practices filed, addressed and resolved through formal grievance mechanisms		No cases during 2017.
Human rights			
Non-discrimination			
G4-HR3	Total number of incidents of discrimination and corrective actions		There was one case pending in Finnish courts during 2017, in which a Finavia employee demanded compensation from Finavia for alleged discrimination. Vantaa District Court rejected the claim in 2016, stating that there is no evidence of gender-based discrimination. The employee in question appealed against the decision to a Court of Appeal where the case was covered on 19 June 2017 and the Vantaa District Court's decision was reaffirmed. The employee in question has after this applied for leave to appeal from Supreme Court.
Society			
Anti-corruption			
G4-SO4	Communication and training on anti-corruption policies and procedures	Governance and compensation report / Internal control, risk management and internal audit	Familiarisation with ethical guidelines is part of the induction of new employees in all business units.
G4-SO5	Confirmed incidents of corruption and actions taken		No incidents during 2017.
Public policy			
G4-SO6	Total value of political contributions by country and recipient / beneficiary	Charity and sponsoring	In accordance with our charity and sponsorship policy, we do not donate money to political parties, politicians or political institutions.
Anti-competitive behaviour			
G4-SO7	Total number of legal actions for anti-competitive behaviour, anti-trust and monopoly practices and their outcomes		No cases during 2017.
Compliance			
G4-SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations		No cases during 2017.
Product responsibility			
Customer health and safety			
G4-PR1	Assessment of the health and safety impacts of products and services	We are responsible for aviation safety	No percentages were reported.
Product and service labelling			
G4-PR5	Results of surveys measuring customer satisfaction	Services and customer experience Board of Directors' report / Development of business operations and changes in group structure	
Compliance			
G4-PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services		No cases during 2017.

Material aspects

Other essential aspects for GRI's G4 priciples.

Aspect laid out in GRI G4	Aspect essential for Finavia Economic responsibility
Economic responsibility	
Economic performance	Efficiency and profitability
Market presence	Efficiency and profitability
Indirect economic impacts	Ability to reform efficiency and profitability
Purchasing practices	Open stakeholder cooperation efficiency and profitability
Environmental responsibility	
Materials	Efficiency and profitability Environmental protection and climate issues
Energy	Environmental protection and climate issues Efficiency and profitability
Water	Environmental protection and climate issues
Biodiversity	Environmental protection and climate issues
Emissions	Environmental protection and climate issues
Effluents and waste	Environmental protection and climate issues
Products and services	Service level in accordance with customer expectations Ability to reform Environmental protection and climate
Compliance	Legislation and regulation
Overall	Environmental protection and climate issues
Environmental grievance mechanisms	Environmental protection and climate issues
Noise	Environmental protection and climate issues
Social responsibility	
Labour practices and decent work	
Employment	Good HR management and well-being at work Open stakeholder cooperation
Labour/management relations	Good HR management and well-being at work Open stakeholder cooperation
Occupational health and safety	Safety

Aspect laid out in GRI G4	Aspect essential for Finavia Economic responsibility
Training and education	Good HR management and well-being at work
Diversity and equal opportunity	Good HR management and well-being at work Open stakeholder cooperation Transparency and good governance
Equal remuneration for women and men	Good HR management and well-being at work
Labour practices grievance mechanisms	Good HR management and well-being at work Open stakeholder cooperation Transparency and good governance
Human rights	
Non-discrimination	Good HR management and well-being at work Open stakeholder cooperation Transparency and good governance
Society	
Anti-corruption	Open stakeholder cooperation Transparency and good governance Legislation and regulation
Public policy	Open stakeholder cooperation Transparency and good governance
Anti-competitive Behaviour	Open stakeholder cooperation Transparency and good governance Legislation and regulation
Compliance	Open stakeholder cooperation Transparency and good governance
Product responsibility	
Customer health and safety	Safety Service level in accordance with customer expectations Legislation and regulation
Product and service labelling	Service level in accordance with customer expectations
Compliance	Legislation and regulation Service level in accordance with customer expectations