



**FINTRAFFIC**

# **Annual Report 2020**

# Towards the world’s safest, smoothest and most environmentally friendly traffic

We provide and develop traffic control and management services for all modes of transport. We help people and goods to arrive safely, smoothly and with respect for the environment. Intelligent traffic control services, digital services for businesses and consumers, and up-to-date traffic data will help Finland become a pioneer in sustainable transport and logistics.

We want to offer an excellent and attractive workplace for top experts. We employ 1,100 professionals.

**Parent company**

Traffic Management Company Fintraffic Ltd

**Subsidiaries**

- Fintraffic Air Navigation Services Ltd is responsible for air navigation services.
- Fintraffic Vessel Traffic Services Ltd is responsible for vessel traffic services.
- Fintraffic Railway Ltd is responsible for rail traffic control and management.
- Fintraffic Road Ltd is responsible for road traffic control and management.

## How to read the report package



**Annual Report 2020**  
Strategy, key events of 2020, and a review of responsibility and sustainability.



**Governance and Remuneration Report 2020**  
Information about the company’s governance and steering system, and the remuneration paid to the CEO and members of the Board of Directors. [Read the report here.](#)



**Report of the Board of Directors and Financial Statements**  
A description of the company’s operations in 2020 and a summary of its financial results and financial position. [Read the report here.](#)

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# Year 2020



# CEO's Review

2020 was an exceptional year due to the global coronavirus pandemic. Traffic volumes collapsed in all modes of transport, as leisure travel stopped, people began working from home, and all kinds of meetings were avoided when possible. We do not yet know what the consequences of this will be for future travel, or how public transport and other transport service providers will recover from the crisis.

Fintraffic's objective is for Finland to have the world's safest, smoothest and most environmentally friendly traffic. In our opinion, this can be achieved by increasing digitalisation in the transport system in collaboration with our excellent partner network and our expert personnel.

Creating a world-class traffic ecosystem in Finland is the key objective of the autumn revision to our strategy, and we are now working purposefully towards it. In particular, this means digitalising the traffic system in order to cross-utilise data between different modes of transport, routes, vehicles, service providers and end users. This is a prerequisite for creating well-oiled travel chains and competitive logistics chains. In order to make traffic data widely and fully available to operators in the sector, we have invited these operators to join us in planning the transport ecosystem as a whole, and also to define common objectives and operating methods. We will also support the competitiveness of Finnish transport operators and their chances of success by gradually building a real-time digital situational picture of the traffic system for each mode of transport. This situational picture will be shared with citizens, com-



panies and society as a whole in order to enable more sustainable and lower-emission transport. I am pleased to announce that this work to increase digitalisation in the transport system has gotten off to a good start.

Throughout the year, our traffic control on land, at sea and in the air has provided high-quality and uninterrupted services. We managed to provide road, rail and maritime traffic control services more efficiently than in 2019 by, for example, developing processes and competence, investing in information systems and technology, reorganising our operations in a more efficient manner, and tendering out numerous purchased services in both administration and operative functions. In line with our company's strategic ownership policies, we are committed to improving our service level and boosting the efficiency of our traffic management service provision with investments of EUR 30 million over the coming years. It is important for us to provide high-quality services as cost-effectively as possible.

Our priorities are clear: traffic safety comes first under all circumstances. After that are traffic flow, reliability, preparedness, cost-effectiveness and generating other benefits for society. Only then comes profit generation. As a state-owned special assignment company, we seek only moderate profitability. This target was not

reached in 2020, as the company made a loss of eight million euros due to the impacts of the coronavirus pandemic. The pandemic had the greatest impact on international travel, and in particular on air traffic volumes and thereby income from air navigation services. Although major adjustments were made in air navigation, these measures were insufficient to cover the lost income and its business was heavily loss-making in 2020. Profitability in maritime, road and rail transport was at the budgeted level after an exceptionally profitable year in 2019. Traffic volumes were lower than normal all across the board, and particularly in passenger traffic.

We are a key player when it comes to keeping the wheels of society turning. Our main operational risks relate to serious accidents caused by us and threats to information and cybersecurity. We continued to purposefully and systematically improve safety and preparedness levels. We launched a broad-ranging, multi-year development programme to raise the level of information and cybersecurity in all modes of transport, significantly increased our financial investments in this area, and engaged in closer cooperation with key stakeholders and external service providers.

At the end of the year, we redesigned our visual image and changed our name. This brand overhaul enabled us to introduce a single logo and shared visual image for all modes of transport – one that communicates the company's role

**“Creating a world-class traffic ecosystem in Finland is the key objective of the autumn revision to our strategy, and we are now working purposefully towards it.”**

as a transport innovator. The three layers of the joint logo's letter F illustrate the transport system: the bottom layer represents infrastructure, the middle layer traffic data and digitalisation, and the top layer services for end users. In order to be competitive, the transport system needs all three layers, and these layers have to work seamlessly together. We now work as a more cohesive traffic management company under a more recognisable and memorable name. We are now Fintraffic.

Our strategic objective is to make Fintraffic a workplace with motivated employees who are the best in their field. We want our personnel to feel that they are doing meaningful work at an excellent workplace. We are seeking to create a solution-oriented corporate culture that is based on respectful interaction and working together,

and supports innovation and renewal.

The coronavirus pandemic has made this a challenging year, and all personnel have been forced to work in exceptional circumstances. We established a separate coronavirus team to outline policies and provide our personnel with guidance as the situation evolved. I would like to thank all Fintraffic personnel for following our contingency guidelines during the pandemic. There were no confirmed work-related coronavirus infections at our workplaces.

I would also like to thank both personnel and all of our partners for their excellent work and cooperation over the past year. It is a pleasure to be developing a sustainable transport system and enhancing Finnish wellbeing with you all!

**Pertti Korhonen**



# Key indicators for 2020

Revenue

MEUR **182.4**  
(MEUR 221.9)

Operating profit

MEUR **-8.0**  
(MEUR 21.3)

Personnel (average)

**1,125**  
(1,091)

**9**

(10) groundings prevented

**0**

serious accidents

**344 TB**

(295) TB of data transferred in the Digitraffic service



# Business areas in brief



## Air navigation services

Revenue MEUR **49.3** (80.2)  
Personnel **443** (441)

- Our services
- managing the use of Finnish airspace and providing flight route and air navigation services at 22 airports in Finland
  - designing and maintaining the infrastructure and systems required for air navigation in compliance with international standards
  - special tasks related to air rescue and territorial surveillance
  - training and consulting services.



## Vessel traffic services

Revenue MEUR **18.1** (21.7)  
Personnel **101** (99)

- Our services
- vessel traffic services
  - safety radio operations
  - monitoring international waters
  - radio navigation services.



## Rail traffic management

Revenue MEUR **69.6** (74.4)  
Personnel **465** (464)

- Our services
- railway traffic control
  - traffic planning to coordinate track work and traffic
  - capacity management
  - operating centre services
  - passenger information services for rail travel
  - responsibility for safety and technical control rooms
  - expert and training services.



## Road traffic management

Revenue MEUR **43.5** (44.0)  
Personnel **80** (71)

- Our services
- operative traffic management at traffic management centres
  - maintaining technical systems in road tunnels and managing variable signage
  - road weather systems
  - road ICT services
  - up-to-date open data on road conditions and traffic.



## Traffic ecosystem

- Our services
- promoting cooperation between operators in the transport sector\*: coordinating cooperation, investment solutions and co-development solutions
  - developing digital traffic infrastructure\*: technical data platform, data, and basic digital business services
  - collating digital rulebooks\*: templates, standard agreements, standards for cooperation and data transfer
  - continuous development of existing services: Digitraffic, the Traffic Situation service, Feedback Channel.

\* In cooperation with other operators in the traffic ecosystem.

01

JANUARY

We released a new version of the Traffic Situation app. The app now provides users with even more accurate information about road traffic conditions and variable signage. Real-time train timetables are also available now.

02

FEBRUARY

Work to renew the Southeast Finland centralised railway traffic control system continued during the year. This project (KAKO) will enable railway traffic controllers to work more flexibly, streamline travel, and improve general preparedness in traffic management.

03

MARCH

Coronavirus restrictions led to the launch of codetermination negotiations in air navigation. As a result of these negotiations, all air navigation personnel were laid off.

We joined the One Sea ecosystem, in which our role is to promote safety in self-driving vessel traffic.

We introduced a new system at our vessel traffic centres during the spring. The Cadis system will promote safe sailing in Finnish coastal waters and the Saimaa deep fairway, and will also help to prevent accidents at an earlier stage.

We signed a partnership agreement with YSP Oy for the renewal, deployment and testing of a tunnel control system in Mestarintunneli on Ring Road I in 2020–2022.

04

APRIL

We entered a new era in late April, when the system functionality for planning voltage outages in the track network was transferred to a mobile platform for railway contractors.

As part of the Digirail project, we began piloting future positioning systems. In the first pilot, we installed positioning equipment in two locomotives.

We made a new agreement on track maintenance in Uusimaa with the Finnish Transport Infrastructure Agency and GRK Rail. Our alliance will be responsible for maintaining railway tracks in Uusimaa for the next five years.

We completed the Digirail feasibility study that we have been working on with the Ministry of Transport and Communications, the Finnish Transport Infrastructure Agency, Traficom, the VR Group and Helsinki Regional Transport. We propose that Finland introduce a modern, radio network-based train control system.

We added all of Finland’s natural gas refuelling stations to the Traffic Situation app, and piloted notifications on road traffic conditions and disruptions.

05

MAY

We won an international tender to train 70 Luxembourg air traffic controllers using Avia College’s simulator in Vantaa during 2021.

We signed partnership agreements for Cross-Border Cooperation projects being coordinated by the Finnish Transport Infrastructure Agency. These projects will develop crossing point infrastructure on Finland’s eastern border over the coming years.

Our road and rail traffic management functions are also involved in this work. Our Annual General Meeting was held remotely on 26 May 2020.

With our assistance, the 1.7 million users of the 112 Suomi mobile app can now receive road traffic bulletins via the app.

Events in 2020



06

JUNE

We launched a new service on our website that collates and shares information about road and railway traffic volumes.

We also launched the Komento-silta (Navigating Bridge) project, which seeks to create a vision for rail traffic management in 2030 and define the steps required to achieve that vision.

As part of the Digirail project, we began the construction of a test track on the Kouvola-Kotka/Hamina section of track.

07

JULY

The Finnish Transport Infrastructure Agency ordered a new Situation Manager service for Helsinki and Tampere. This service seeks to restore rail traffic as quickly as possible in the event of damage or an accident.

09

SEPTEMBER

We launched a pilot of RAMI – a new passenger information system for rail travel – in Leppävaara, Espoo. The goal is to provide passengers with more standardised and consistent announcements about rail traffic in Finland.

We added information about flight arrivals and departures to the Traffic Situation service. The service now provides information about all modes of transport.

10

OCTOBER

We published our revised strategy, which seeks to build the world's safest, smoothest and most environmentally friendly transport system in Finland.

11

NOVEMBER

A new capacity control system for operative railway traffic control went into service. Eight new capacity controllers will be responsible for track use and capacity management at Helsinki Railway Station and Ilmala railway yard.

In vessel traffic management, we launched the eVäylä development project, which will create a new digital situational picture and information exchange service for autonomous vessel traffic.

Towards the end of the year, we took responsibility for the nationwide introduction of the Central Baltic EfficientFlow project's port application. The goal is for all ports in Finland to start using the port application developed at the Port of Rauma.

In road traffic management, we launched a project with the Finnish Meteorological Institute to investigate the potential for using IoT (Internet of Things) sensor technology to improve road weather forecasts.

12

DECEMBER

The changes made to approaches at Helsinki Airport in 2019 have produced excellent results. Employing the continuous descent approach technique has reduced emissions by 10–30 per cent.

Noise levels have also decreased. In cooperation with Traficom, we prepared a service portal for drone operators. As of January 2021, registration via the SkyNavX portal will be mandatory for both amateurs and professionals.

We signed an agreement with Sähköautoilijat ry, an association for drivers of electric vehicles. Thanks to this agreement, all charging points for electric cars in Finland can now be located via the Traffic Situation service.

We announced our brand overhaul. All Group companies are now linked by the use of 'Fintraffic' in their names. Since 1 January 2021, our parent company has been known as Traffic Management Company Fintraffic Ltd and our subsidiaries as Fintraffic Air Navigation Services Ltd, Fintraffic Railway Ltd, Fintraffic Road Ltd, and Fintraffic Vessel Traffic Services Ltd.



# Operating environment and strategy



OPERATING ENVIRONMENT

# Aiming for safe, efficient and low-emission traffic

Trends that have a fundamental impact on our business include targets for low-emission traffic and improving transport efficiency. People’s travel habits are also changing. These changes are being accelerated by digitalisation, urbanisation, an ageing population, climate change, the sharing economy, and public debt. In 2020, the operating environment was also strongly shaped by the coronavirus pandemic and its consequences. In the long term, urbanisation will increase demand for public transport and smooth travel chains. An ageing population will increasingly favour public transport. Increased environmental awareness will steer consumer behaviour towards greater energy-efficiency and lower emissions. Car ownership will be partly replaced by sharing economy solutions whose development will be accelerated by the increased intelligence and autonomy of vehicles. The pandemic has also significantly increased debt among many companies and public-sector actors. This is also being reflected in transport companies as a concrete collapse in demand for many services, which has

in turn led to increased pressure to do things more efficiently, more sustainably and in new ways. The pandemic has also had other effects. Remote working and virtual meetings have grown in popularity, which has allowed us to travel less. This may have particularly far-reaching consequences on commuter numbers, and particularly in air transport. Digitalisation has also taken a big leap. Various digital traffic applications have grown in popularity and, for example, the use of cash has further declined. Thanks to the pandemic, we have learned how to better optimise our travel – even in cities. For example, you can visit a store and the pharmacy in a single trip, and do your shopping more sensibly and less frequently. And you don’t have to make all the trips yourself – a variety of food delivery services have exploded in popularity.

Strategy and impact

Objectives	Key indicators
Safe and smooth traffic and an optimised transport system	Serious accidents or damage caused by the company (0 incidents in 2020).
High-quality and efficient traffic management services	Annual efficiency (road, rail and maritime traffic services were provided at a lower cost level in 2020 than in 2019 (MEUR -2.8), even though the activity level rose considerably during the same period).
Better services for passengers and logistics	Number of interface calls to the ecosystem's data platform (Digitraffic) (3.2 billion calls in 2020, growth of 25% on 2019). Number of organisations enrolled in the transport ecosystem (56 in 2020).
Increasing added value for customers and stakeholders	Overall score in the air navigation customer survey 4.2 (3.8 / 1–5). Overall score given by stakeholders for daily cooperation in rail traffic control 8.68 (4–10).
An excellent and evolving workplace community	Score for workplace atmosphere in the personnel pulse survey (3.8 in 2020 on a scale of 1–5). Score for leadership in the personnel pulse survey (4.0 in 2020 on a scale of 1–5).
Reduction in emissions	GHG emissions from domestic traffic 11.3 million tons of CO2e in 2019 (11.7 in 2018) / Source: Statistics Finland; Percentage of continuous descent operations (CDO) 77% / Source: Finavia, Fintraffic Air Navigation Services. Market share of rail transport in travel and logistics chains 5.4% in 2019 / Source: EU / Ministry of Transport and Communications.
Increased use of public transport	Market share of public transport in terms of passenger traffic kilometres 7% / Traficom 2016.
All costs are lowered	Household travel costs as a percentage of consumption expenditure 15% / Statistics Finland, 2016. Companies’ logistics costs 12.2% of GDP / Logistics 2018 study.
Accidents are minimised	Deaths in road traffic 220 (205 in 2019) / Traficom / Finnish Road Safety Council, 2020. 9 groundings prevented in maritime traffic (10 in 2019) / Fintraffic VTS. Amount of open data produced by Fintraffic 344 TB (295 TB in 2019) / Fintraffic 2020.
Revenue and export opportunities from new traffic services	Number of companies in the transport sector 31,000 (Statistics Finland, Business Statistics). Revenue of companies in the transport sector EUR 20.7 billion (Statistics Finland / Ministry of Economic Affairs and Employment). People employed by companies in the transport sector in the passenger and logistics market 60,000 (Statistics Finland / Ministry of Economic Affairs and Employment).
Traffic supports Finland’s competitiveness	The number of international air connections from Finland 169 in 2019 (accessibility) / Finavia. Finland ranks fifth in open data (Global Open Data Index).



**VISION:**

The safest, smoothest and most environmentally friendly traffic in the world.

**MISSION:**

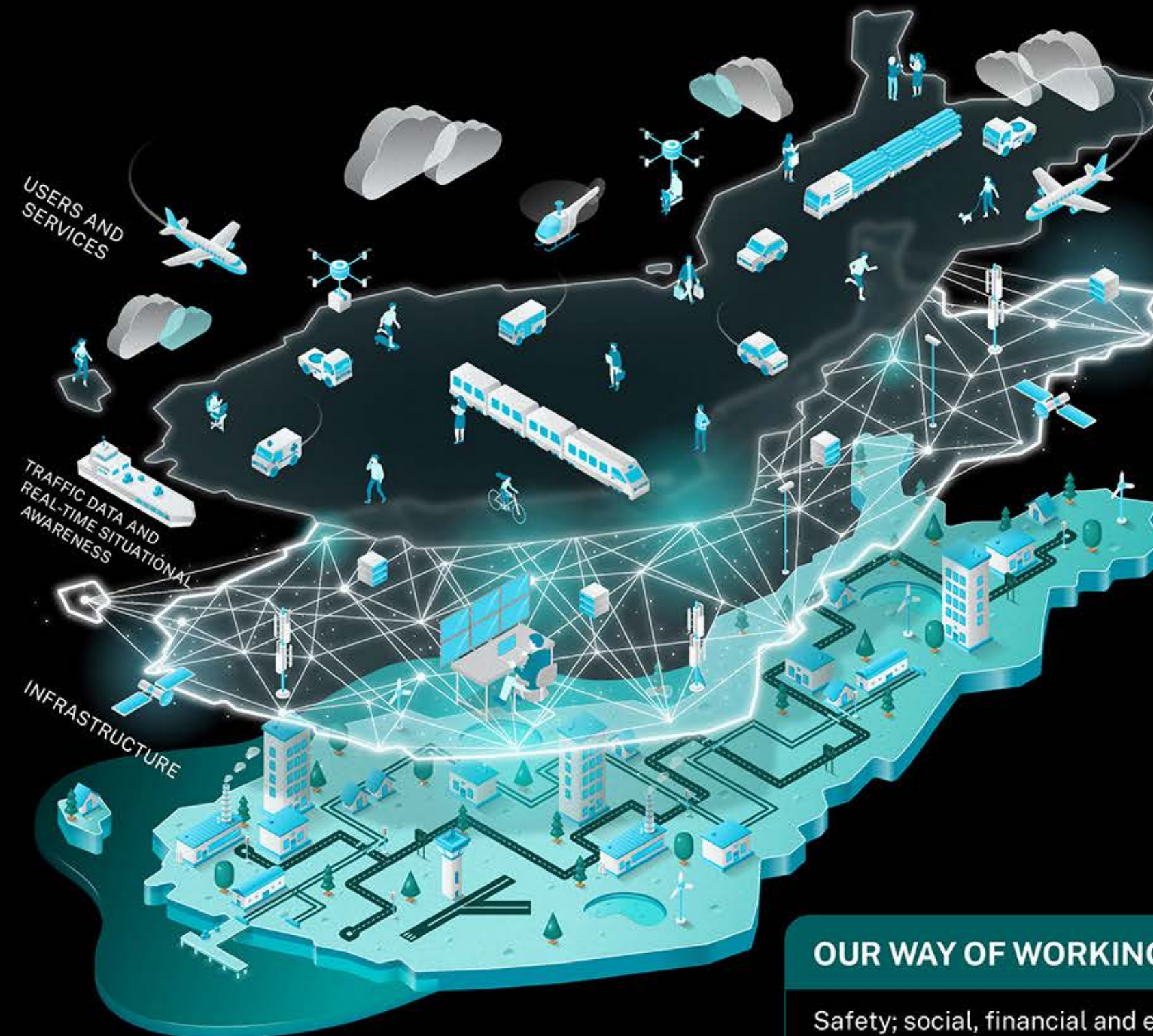
The world's best traffic management and traffic ecosystem service.

**MOBILITY IS CHANGING**

- Digitalisation
- Urbanisation
- Ageing population
- Climate change
- Indebtedness
- Sharing economy

**OUR GOALS**

- Safe and smooth transport and optimised transport system
- Efficient, high-quality traffic management
- Better services for both passengers and logistics
- Growing added value for customers and stakeholders
- Excellent and renewing work community

**OUR SPEARHEAD PROJECTS**

1. Determined improvement of transport safety
2. Renewal of our operations
3. Creating a world-class transport ecosystem
4. Real-time situational picture of traffic, i.e. digital twin
5. Expertise, good governance and dynamic corporate culture

**WHEN WE SUCCEED, FINLAND THRIVES**

- + Lower emissions
- + More public transport
- + Cost reductions for everyone
- + Minimising accidents
- + Revenue and export potential in new transport services
- + Transport supports Finland's competitiveness

**OUR WAY OF WORKING**

Safety; social, financial and environmental responsibility; good governance





## STRATEGY

# Digitalisation to boost the development of new services and Finland's transport system

In the autumn, we published our updated strategy, which extends to 2024. This strategy's vision is for Finland to have the world's safest, smoothest and most environmentally friendly traffic. We want to provide the world's best traffic management and be of service to the ecosystem.



**Sanna Reponen,**  
Chief Development  
Officer

Reducing emissions, maintaining accessibility, improving competitiveness and overcoming financial challenges are demanding more and more from the transport system and its services. Traffic management, traffic data and their associated services will play a key role in developing the transport system. So how are we at Fintraffic going to achieve our vision and strategic targets? Chief Development Officer Sanna Reponen and Chief Impact Officer Mikko Saariaho give us some answers.

**Mikko:** Quickly creating new services will enable Finland to get the most out of its transport system. In order to do this, we will have to drastically increase digitalisation in our transport system. This can be achieved by creating a more comprehensive real-time situational picture of traffic events and infrastructure on land, at sea and in the air. Companies need this in order to be able to develop their own services. For our



**Mikko Saariaho,**  
Chief Impact  
Officer

part, we can contribute to the optimisation of the transport system with our traffic control services and open data.

**Sanna:** We are actively working to increase digitalisation in the transport system. Real-time modelling of transport system infrastructure and traffic events will enable us to manage, process and share real-time traffic data, optimise traffic, and help transport operators to develop new services. Traffic data and its utilisation have both taken a big leap forward as a result of the coronavirus.

**Mikko:** However, we can't do all of this alone: we need to cooperate with other operators in the transport sector. Our goal is to create a network of transport operators in Finland that will be able to get the most out of data.

**Sanna:** Thanks to the situation caused by the coronavirus pandemic, transport operators are increasingly willing to collaborate. Companies



are seeking to build smooth travel chains so that, for example, you can use a single app to buy a trip from Hanko to Hailuoto. The same goes for cargo logistics. When a packet moves smoothly onwards, it generates significant savings for everyone. We can accelerate this development by bringing all of the various operators together into a network and providing them with the data they need for new services. No operator can move on from this challenging situation alone.

#### How is safety visible in Fintraffic's operations?

**Mikko:** Everything revolves around the systematic improvement of safety, and it is also one of our strategic spearhead projects. We are committed to improving traffic safety with smart traffic control solutions and new traffic services based on real-time data. This will require the continuous development of our operating culture and methods.

**Sanna:** Improving traffic safety means developing the transport system as a whole, all the way from traffic control to safe logistics and preventing accidents and environmental damage. This means, for example, raising our preparedness level, enhancing information and cybersecurity, and gaining a deeper understanding of risk management. We had a good level of preparedness even before the coronavirus, but its importance has been further underlined during the pandemic.

#### And what about Fintraffic's employees – what kind of strategic targets do you have with regard to personnel?

**Sanna:** As this is only our second year of operation, we are still working to build a shared and standardised corporate culture. We want to create a corporate culture that supports renewal and innovation, and also life-long learning for personnel.

**Mikko:** We want our personnel to feel that they are doing meaningful work at an excellent workplace. Good leadership also plays a key role at Fintraffic, and we want it to be professional, humane and fair.

#### How do you feel looking forward?

**Mikko:** We are also genuinely concerned about how the transport sector will look after the coronavirus crisis. Its impacts are most visible in public transport, as passenger numbers have collapsed. We have also seen signs that families are buying more cars to avoid using public transport. Public transport will not regain its former position unless it offers a good level of service and smooth travel chains. In our opinion, this will require closer cooperation within the Finnish transport ecosystem and increased cross-utilisation of data between various operators. And we are determined to promote these developments.

**Sanna:** In order for us to succeed, we must grow into an operator that can genuinely renew the transport system. This also requires us to renew our own operations. Everyone has to succeed in order for the whole to work.

**“Quickly creating new services will enable Finland to get the most out of its transport system. In order to do this, we will have to drastically increase digitalisation in our transport system.”**



# How we create value for society

Our aim is to provide the world's best traffic management and services for the traffic ecosystem.

**Our vision is for  
Finland to have the  
world's safest, smoothest  
and most environmentally  
friendly traffic.**

## Our foundation for value creation

### Finances

- Revenue from service sales EUR 182.4 million

### People

- More than 1,100 employees at locations in 29 municipalities
- Cooperation and joint value creation with partners and other stakeholders

### Traffic data

- Digitraffic, a traffic data platform based on open data

### Tools

- Systems and equipment
- 44 traffic control centres

## We provide

### Reliable and functional basic services

- Rail traffic management
- Road traffic management
- Vessel traffic services
- Air navigation services

### Ecosystem services

- Digitraffic: a platform that provides up-to-date traffic information as open data.
- Traffic Situation: provides traffic data to end users.
- Feedback Channel: a channel through which Finns can report problems, give feedback or make suggestions about traffic routes.
- Other services that we provide to companies and end users, including ecosystem management services and the Drone Register.

### Transport system development

- We promote the use of traffic data: about 14 million interface calls per day.
- We boost cooperation between various transport operators.
- We develop new smart solutions and services.

## We make an impact by

### Improving the safety of the transport system

- We reduce personal, material and environmental damage by preventing accidents, disseminating information and rapidly repairing faults.
- We enable the authorities to operate effectively.
- We ensure a safe and efficient transport system by anticipating system-level changes.

### Ensuring smooth traffic flow and Finland's accessibility

- We prevent exceptional circumstances.
- We promote efficient and comprehensive travel and transport chains.
- We enable optimised travel chains, cost-effective logistics and a good customer experience with the aid of real-time system-level data.

### Promoting low-emission transport

- Our services help to reduce traffic emissions.

### Strengthening the national economy and companies' competitiveness

- We generate cost savings for society, companies and households by enabling transport, maintenance and route planning to be optimised.
- Our traffic data and services for transport-sector companies help to create user-oriented, internationally successful transport services.
- We attract transport operators to our markets with world-class control and data services.
- We pave the way for customer-oriented alternatives to private cars for both urban and inter-city travel.



# Business





# Air navigation services

**Our vision is for Finland to have the world's safest, smoothest and most environmentally friendly airspace. We want to provide the world's best airspace management, air navigation services and traffic data.**

We are responsible for managing Finland's airspace and providing flight route services and air navigation services at 22 airports in Finland. In 2020, our area control centre provided services for about 110,450 flights (2019: 272,205), of which 24,649 were overflights of Finnish airspace (2019: 62,472). Helsinki Airport had approximately 75,512 (2019: 190,000) operations last year, with an average of 207 per day (2019: 521). We ensure that captains receive their landing permits safely. In order for air navigation to work, we are also responsible for the necessary infrastructure, system design and system maintenance in accordance with international standards. Technical air navigation also encompasses the maintenance of radar, navigation equipment and radio equipment in the airport environment.

## A challenging operating environment

Our year was strongly coloured by the coronavirus pandemic and its impact on air traffic. Airports fell silent and the majority of flights were cancelled. In the spring, there were no less than 80–90 per cent fewer flights than in the corresponding period of the previous year, and 12 airports had no traffic at all. In terms of the year as a whole, the number of flights in Finnish airspace contracted by about 60 per cent.

En route charges were lowered by about 1.5 per cent during the year.

However, in spite of the pandemic, we achieved our punctuality targets for 2020. We operated completely without delays, and not a single flight failed to depart for a reason relating to air navigation. Our safety targets were also met. It was only in our financial targets that we fell short, as a result of the collapse in air traffic volumes, which led to significant adjustment measures and a reduction in investments.

We have implemented a large number of measures to optimise air traffic. According to a study conducted by Eurocontrol, the efficiency of our flight routes ranks amongst the highest in Europe. Route planning, continuous descent approaches and close international cooperation are ways of reducing emissions.

## Greater efficiency through spearhead projects

We progressed with our spearhead projects as planned during the year. One of these projects is FINEST, which we are implementing in collaboration with Estonian Air Navigation Services (EANS). The project seeks to provide airspace users with a standardised, dynamic, competitive and cost-effective cross-border air navigation service. Operating air traffic in a single airspace without national borders enables airlines to make more efficient – and therefore more environmentally friendly – route choices. We con-



tinued to introduce the operating model and are aiming to finish the project in 2022.

Multi-ROT, the remote control concept that we are planning with Finavia, progressed in early 2021 with the signing of a Memorandum of Understanding with Finavia. Introducing air traffic control services which could be flexibly provided from a single workstation to one or more airports.

The proliferation of unmanned aerial vehicles (that is, drones) in the air transport market has increased the need for new kinds of traffic management services. In cooperation with Traficom, we have been preparing a portal for drone operators, where both amateurs and professionals will register in the future. From the beginning of 2021, it will be compulsory for drone operators to register, familiarise themselves with the learning materials and pass an online flying test.

The system also supports the digitalisation of general aviation and forms part of the air navigation service. This service will be further developed during the spring, and a situational picture for air traffic will be added to meet the needs of all aviation operators.

One of our most important projects is to increase the sale of air navigation, training and consulting services outside Finland. International demand for Finnish air navigation expertise is growing well. In the spring, for example, we won

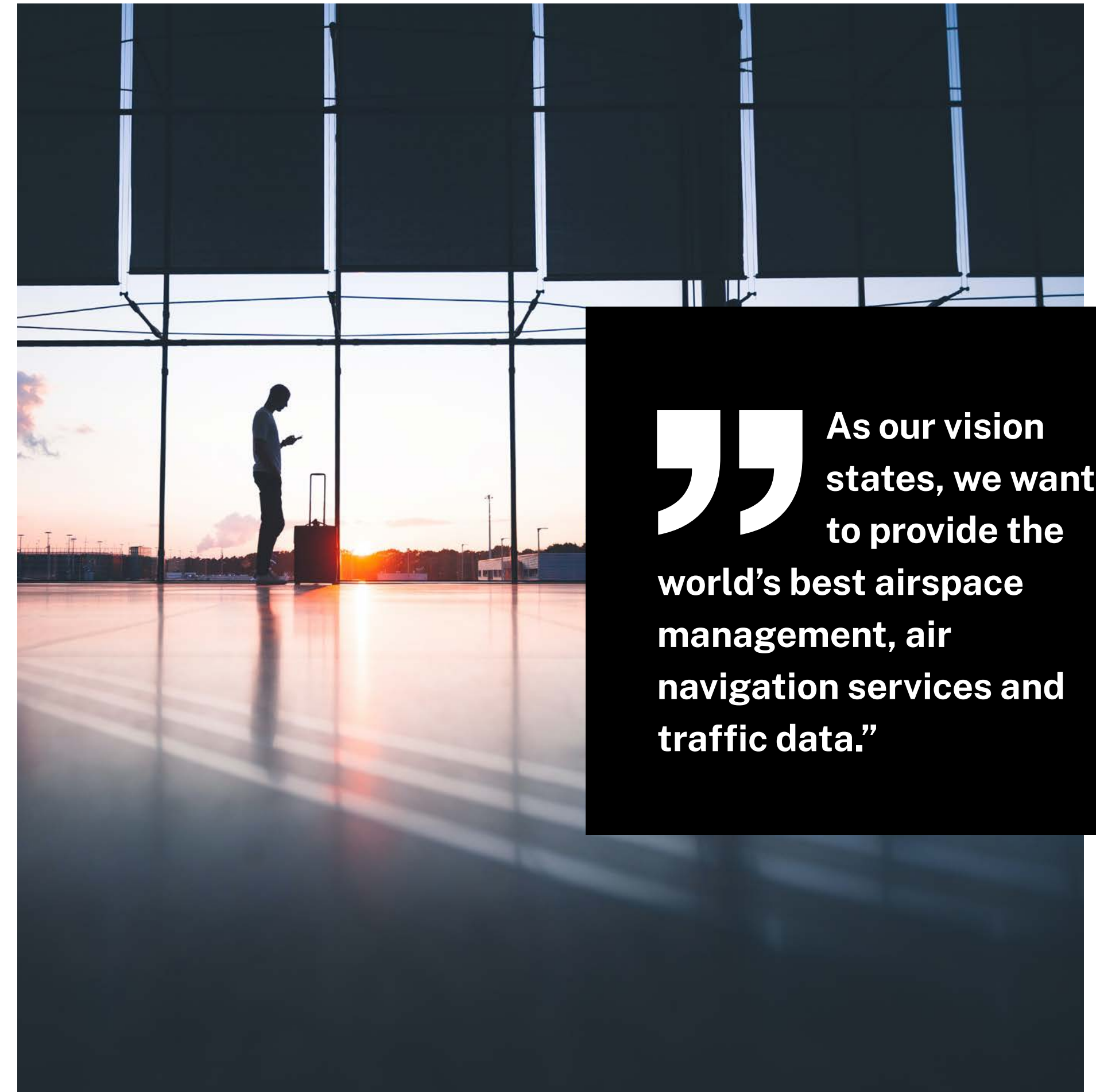
an international tender to train Luxembourg air traffic controllers in 2020–2021. By being competitive in international markets, we ensure that our expertise is world-class – and as our vision states, we want to provide the world’s best airspace management, air navigation services and traffic data.

### Close dialogue with personnel

As a result of the pandemic, our office staff began working remotely in the spring. Both Finnair (our main airline customer) and other airlines cancelled a significant number of their flights, which led to a major reduction in work. We were forced to engage in several codetermination negotiations during the year in order to adjust our operations.

We engaged in active dialogue with our personnel on how we could best cope with the challenging changes in our operating environment with minimal damage. Everyone performed well in spite of the crisis. We were forced to implement difficult measures and make some tough decisions concerning personnel. Redundancies were, however, avoided as all of the adjustments were carried out as lay-offs.

In spite of the reduction in air traffic, there was still work for air navigation personnel in the form of reporting obligations, projects and cooperation with the authorities. This work continued as normal.



**“As our vision states, we want to provide the world’s best airspace management, air navigation services and traffic data.”**



## Stronger international cooperation

The sharp fall in air traffic resulting from the coronavirus pandemic and its financial consequences naturally dominated international debate as well. European States decided to postpone the collection of navigation charges for about six months. As a result, we delayed the collection of several million euros in receivables from airlines. Although this helped the airlines to survive a difficult situation, it affected our company's cash position.

Raine Luojus, CEO of Fintraffic Air Navigation Services, took over as Chair of the Civil Air Navigation Services Organisation (CANSO) in June. CANSO is an interest group that represents service providers, and it plays an important role in discussions with the EU Commission on proposals related to air navigation. Thanks to this appointment, we will be well placed to influence developments in the sector in Europe.

## New online service for drone operators

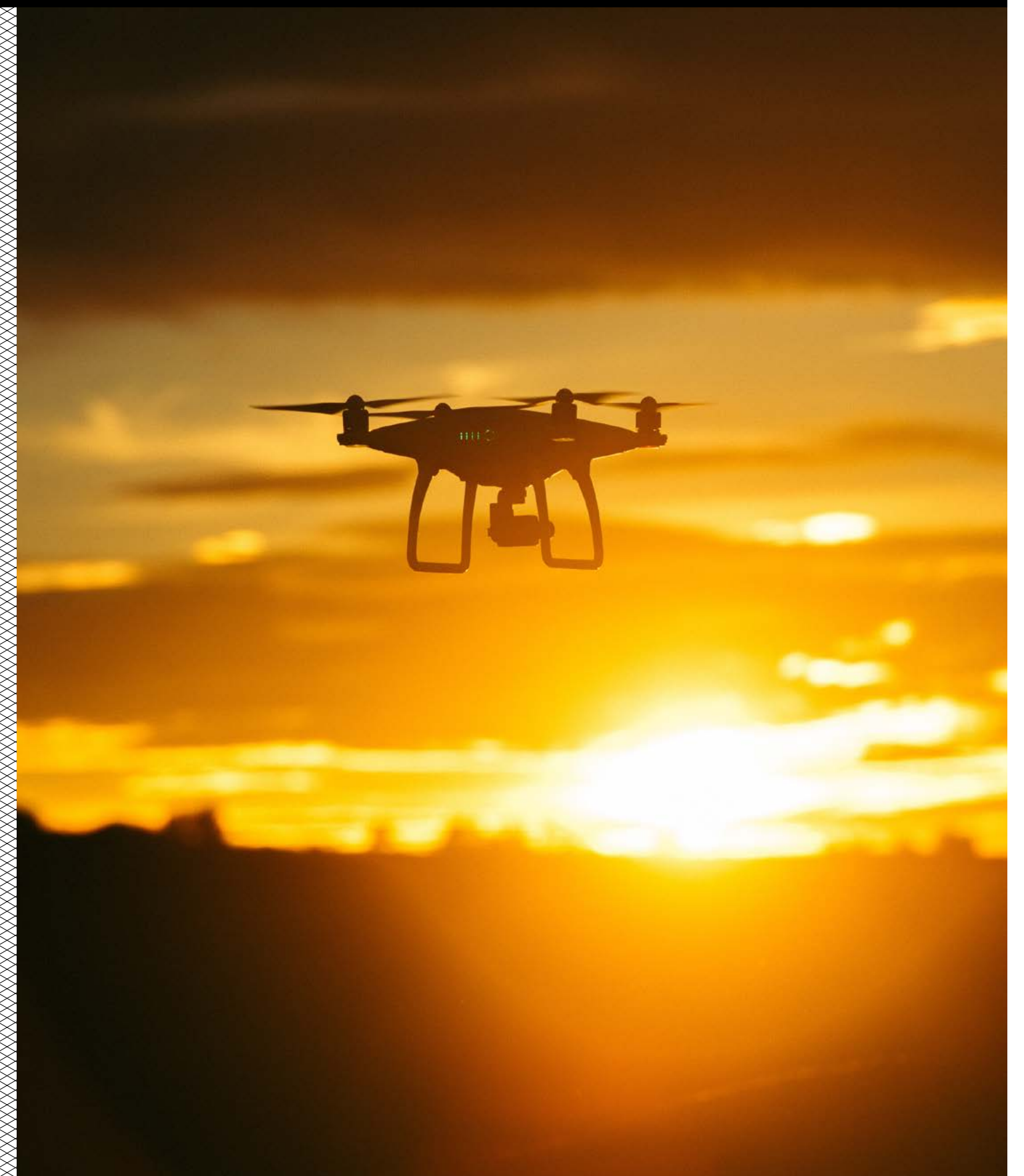
At the beginning of 2021, we opened a new online service for operators of unmanned aerial vehicles (aka drones), where both amateurs and professionals can register with the Finnish Transport and Communications Agency (Traficom).

As of February 2021, registration will be compulsory for all operators of drones equipped with cameras. Operators of camera-less drones that weigh less than 250 g, or which are classed as toys, will not have to register. When registering, operators will also have to familiarise themselves with drone operation learning materials and pass an online test. Drone operators can use the portal to register as either a private person or an organisation.

The new service is based on an EU regulation and aims to ensure overall air traffic safety, that is, of both ordinary air traffic and the growing volume of unmanned aerial vehicles.

The popularity of drones has risen sharply in recent years, and their use is also expected to increase in commercial business in the near future. In Finland, there are an estimated 50,000 drones whose operators will be subject to the new regulations.

One of our future goals is to develop the portal into a marketplace that provides advisory services and a situational picture of the airspace for drone operators themselves.







# Vessel traffic services

Our goal is for maritime transport to be smart and efficient, and for Finland to be competitive. Our operations ensure safe and smooth-flowing vessel traffic, and also protect fragile marine environments.

More than 100 million tons of cargo moves through our sea routes every year. 90 per cent of Finland's exports and 80 per cent of its imports are transported by sea. Each year, almost 20 million passengers also travel between the ports of Finland and other countries.

Our task is to ensure that both foreign trade and domestic vessel traffic is safe and uninterrupted. We also prevent accidents and mitigate their potential environmental hazards. Our vessel traffic centres monitor the safe passage of passenger ships, cargo vessels and tankers through Finland's coastal waters 24/7, every day of the year. In addition to vessel traffic services, we provide safety radio and radio navigation services, a digital situational picture, and information exchange services.

## Creating a common situational picture

In addition to ensuring safety and smooth traffic flow, our key objectives include environmental protection, Finland's competitiveness, and the company's financial efficiency. Reducing greenhouse gases is a common objective in the shipping sector as a whole. During the year, we sought more comprehensive and effective solutions to promote these objectives. One answer lies in digitalisation. More data and a better situational picture will help us to achieve low-emission targets and improve maritime safety.

During the year, we took on a clearer role as the provider of a maritime information exchange platform, smart data services, and an enhanced situational picture. In our eVäylä project, which will run from 2020–2025, we will be enhancing information exchange between vessel traffic services and port operators and creating a foundation for the digital management of evolving vessel traffic. We are aiming for efficient and real-time data transfer between vessels, Finnish ports and variety of other port operators. This will enable safer, smoother and more efficient shipping, and the ability to link maritime transport to other modes of transport. The project will also implement the data exchange interfaces between vessel traffic services and remote pilots that are required for remote piloting.

We continued our development of vessel route and timetable data and reached the pilot stage in a project that is utilising machine learning. A common interface service will improve both the common situational picture and the seamless usability of data, and this will have extensive impacts on the functionality of port logistics chains in particular.

## High standards in operations, and developing a quality and safety system

During the year, our vessel traffic centres prevented nine vessels from running aground.





**” In addition to ensuring safety and smooth traffic flow, our key objectives include environmental protection, Finland’s competitiveness, and the company’s financial efficiency.”**

We also gave navigational assistance to/for six vessels and prevented a variety of dangerous situations by informing the vessels about them. A total of 940 reports of violations and incidents in vessel traffic were made. Of these, more than 80 per cent were logged in sea areas controlled by Fintraffic, and the rest in international waters.

We continued to develop our ISO9001 quality system and expanded it to cover the entire company. No deviations were detected in the scheduled assessment carried out at the end of the year. In addition to working on our quality system, we continued to build a safety management system for our company. We also carried out risk assessments, safety surveys and audits, and organised safety training.

### **Investing in personnel’s wellbeing and ability to cope at work**

As a result of the coronavirus pandemic, personnel’s wellbeing and ability to cope at work took centre stage. Personnel working at our VTS centres had to adopt strict coronavirus safety practices, and other personnel began working remotely.

We organised managerial training on topics such as coronavirus safety, working capacity management, wellbeing and coping at work, the Working Hours Act, key terms and conditions of employment, coaching-focused





supervisory work, and managing remote and decentralised work. Personnel at VTS centres received training in exceptional practices, and general training also continued almost as normal online.

According to a Pulse personnel survey, personnel satisfaction remained at a good level.

Our personnel were most satisfied with their workplace atmosphere, operational development, and cooperation with colleagues. The results demonstrated that our decentralised working model, in which non-traffic centre personnel worked remotely, was also effective.

### Open and close cooperation

The Baltic Sea is known for being one of the busiest sea areas in the world. An average of 2,000 commercial vessels are either under sail or at port at any time. Maritime traffic in the Baltic Sea requires increasingly close cooperation in order to run smoothly.

We worked in close cooperation with the authorities, ports and shipping companies during the year. We continued to strengthen our international cooperation as a member of the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA). Its aim is to promote the safety, economy and performance of international

shipping. We also joined the One Sea ecosystem in March. This ecosystem promotes the development of autonomous maritime transport.

We continued close cooperation in several EU projects. For example, the Sea Traffic Management EfficientFlow project has provided Finnish ports with a new harbour application whose nationwide introduction is now in the pipeline under our leadership. This harbour application will be introduced at all Finnish ports as a service that will provide end users with a situational picture and open date/time data. The service will enable the exchange of port-specific information between port operators, and will also enhance information exchange with Fintraffic.



## eVäylä – towards smarter maritime transport

Digitalisation and automation are firmly making their way into maritime transport. This gives us a good opportunity to get a more holistic image of our environment. In order to get the most out of digitalisation, we must improve information exchange and share situational pictures more effectively between maritime operators.

Having a comprehensive situational picture means that we have more accurate information about vessel positions and movements, on-coming and intersecting traffic, time/date data, deviations in fairway use, real-time data on weather conditions, and a situational picture of navigation aids.

In the future, we will be providing all the tools required to achieve this by way of eVäylä's information and situational picture services. EVäylä is a five-year maritime traffic management spearhead project that was launched in 2020. The project is seeking efficient and real-time data transfer between vessels, Finnish ports and a variety of other port operators.

eVäylä encompasses many individual projects in which we are developing information exchange between vessel traffic services and port operators, creating a foundation for the digital management of developing vessel traffic, and implementing the information exchange interfaces required for remote piloting. This will, for example, allow an increased amount of piloting to be handled remotely in a safe manner.

Together, this will enable safer, smoother and more efficient vessel traffic over the coming years, and also allow maritime transport to be connected to other modes of transport.







# Railway traffic control and management

Our vision is for Finland to have the world's safest, smoothest and most environmentally friendly rail transport. We provide some of the best rail traffic management services in the world.

Every year, we ensure safe and smooth traffic flow for more than 500,000 trains and just over 82 million passengers. It is our duty to ensure that passengers and cargo reach their destination safely. Our services include railway traffic control, traffic planning to coordinate track work and traffic, capacity management, operating centre services and passenger information services. We are also responsible for the safety control room and technical control room. We provide customer and training services to, among others, railway operators.

## Safe services and high standards

We enjoyed several successes this year.

Throughout the year, we provided traffic control and other services safely and to a high standard. The coronavirus pandemic brought its own challenges to rail traffic. The number of trains in operation decreased by about four per cent on the previous year. The coronavirus also led to a variety of exceptional arrangements. Personnel working at our control centres had to adopt strict coronavirus safety practices, and other personnel began working remotely. We curbed the effects of the pandemic by focusing on personnel safety through, for example, working arrangements, wearing masks and cleaning facilities. Our personnel have proactively shouldered responsibility for the situation. We are working with personnel to ensure that operations con-

tinue uninterrupted, and have been very successful in this.

## Development work in the best interests of the entire railway network

Several strategic projects were launched and continued during the year. These projects primarily seek to increase automation in railway traffic management, enable dynamic and location-independent traffic management, and harness data in development. Our aim is to provide more customer-oriented and more cost-effective services to an even higher standard. Efficiency, safety and preparedness all improved during the year.

We continued our work to duplicate the rail traffic remote control system with the aim of increasing the preparedness level: in the event of a disruption, different control areas would be able to provide services more flexibly. We also made progress with the renewal of the Southeast Finland centralised traffic control system during the year. This project, which was launched in 2017, has progressed as planned towards its scheduled full deployment in 2022. The remote control system is already in use on the Savonlinna-Parikkala and Kouvola-Pieksämäki rail connections.

Many of our major strategic development projects made successful progress. For example, excellent progress was made on Digirail and it became one of the top national transport projects.





**” Many of our major strategic development projects made successful progress. For example, excellent progress was made on Digirail and it became one of the top national transport projects.”**

Progress was also made in our major development portfolio, which includes the Komentosilta (Navigating Bridge) project. This project is creating a vision for traffic control and management in 2030. Our project to analyse the feasibility of dynamic traffic management was completed, and we intend to begin implementing its findings on a practical level during 2021.

The Finnish Transport Infrastructure Agency ordered a new Situation Manager service for Helsinki and Tampere in the summer. This service is intended to restore traffic as quickly as possible in the event of damage or an accident, and will also handle the appropriate safety procedures. This is a new function for us. We launched the development phase in September and are aiming to start the production phase in early 2021.

In November, we launched another completely new function for us: capacity management. A total of eight new capacity controllers will be responsible for track use and capacity management at Helsinki Railway Station and Ilmala railway yard. The capacity control function was commissioned by the Finnish Transport Infrastructure Agency and will operate at Helsinki Railway Station and Ilmala railway yard.

In the spring, we signed an agreement with the Finnish Transport Infrastructure Agency and GRK Rail for the maintenance of railway tracks in Uusimaa for at least the next five years. The Uusimaa region is the busiest maintenance



area in terms of traffic, with at least 1,000 trains stopping at Pasila every day. Our goal is for this alliance of three operators to work seamlessly together in track maintenance and traffic planning.

In the autumn, we piloted a brand-new kind of passenger information system in Leppävaara, Espoo. The RAM system will replace the existing system, which has been in service for more than 20 years. We want to provide passengers with more up-to-date, consistent and standardised information about rail travel throughout Finland. Thanks to the new system, display monitoring, maintenance and reliability will be improved. At the same time, the familiar announcer “Eva” will be replaced with a new voice. Our target is to have the whole of Finland covered by autumn 2021.

We will continue to develop our traffic management functions to further enhance the safety, flow, reliability and efficiency of traffic. The achievement of these targets will be supported by investing in the modernisation and digitalisation of traffic control systems, enhancing operating processes, developing personnel competence, reorganising operations at control centres, and providing appropriate working conditions for personnel.

### **Job and customer satisfaction at an excellent level**

According to the Pulse personnel survey, job satisfaction was at an excellent level. Personnel were particularly satisfied with supervisory work, the workplace atmosphere and cooperation with colleagues.

In early 2020, we conducted a customer and stakeholder survey of our main stakeholders’ opinions on topics such as the importance and success of cooperation and the success of our operations. According to the respondents, we have been more successful than in the previous year in operative traffic control, traffic planning, control centre services, and passenger information. We received the best scores in expertise, smooth cooperation and safety. More than a third of respondents felt that cooperation had improved during the past year, and almost half of all respondents believed that cooperation would increase over the following year. Respondents felt there was room for development in reachability, operative communications and customer-orientation.





## Digirail enables safe and smooth rail traffic

The technical lifespan of Finland's current National Train Control System (NTCS) will be coming to an unavoidable end in the late 2020s. The Digirail project was launched in 2019 to replace the existing automatic train control system with a modern, radio network-based European Rail Traffic Management System (ERTMS). The Digirail project will renew the entire control and safety infrastructure (that is, the automatic train control system and signals) using modern technology and in line with EU standards. The new train control system will be based on a radio network, which will significantly reduce the amount of trackside equipment required. The Digirail steering group is chaired by the Ministry of Transport and Communications, and Fintraffic is leading the project in collaboration with the Finnish Transport Infrastructure Agency. The steering group also includes several important stakeholders, such as Traficom, VR and HSL.

### **Significant benefits for passengers and the entire rail network**

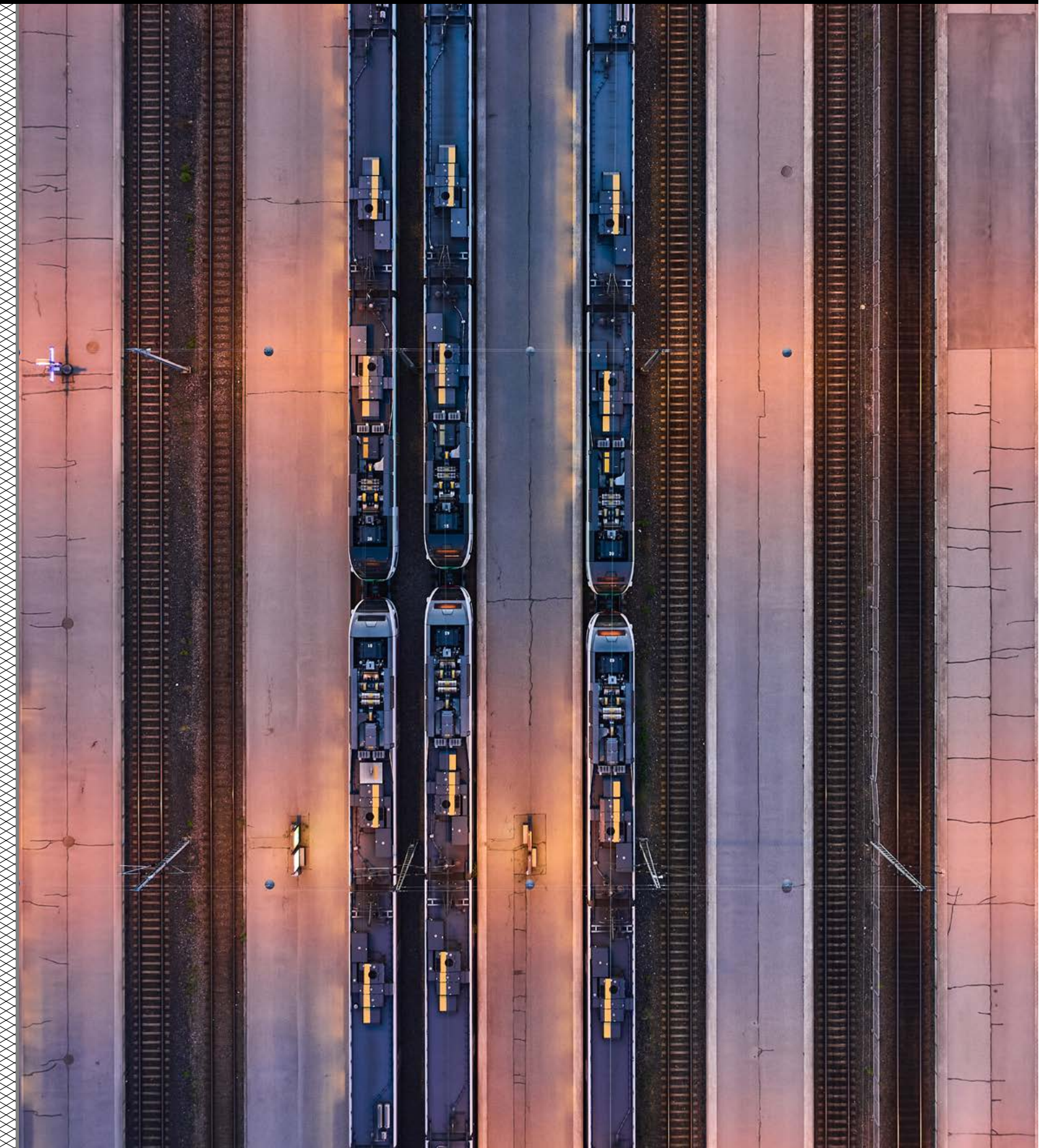
A modern, radio network-based control system would enable us to increase track capacity, improve punctuality and traffic flow, and increase the num-

ber of both trains and passengers in the existing rail network. Track capacity could be increased by up to 30 per cent. Thanks to Digirail, the impacts and duration of incidents will also be reduced. Better and more punctual train services will support the transition to more sustainable modes of transport. If rail transport had a higher market share, traffic emissions would noticeably decrease. Increasing rail transport's market share is an EU-wide objective. Digirail would also pave the way for safer train services and enable the creation of new digital services that are aimed directly at train passengers.

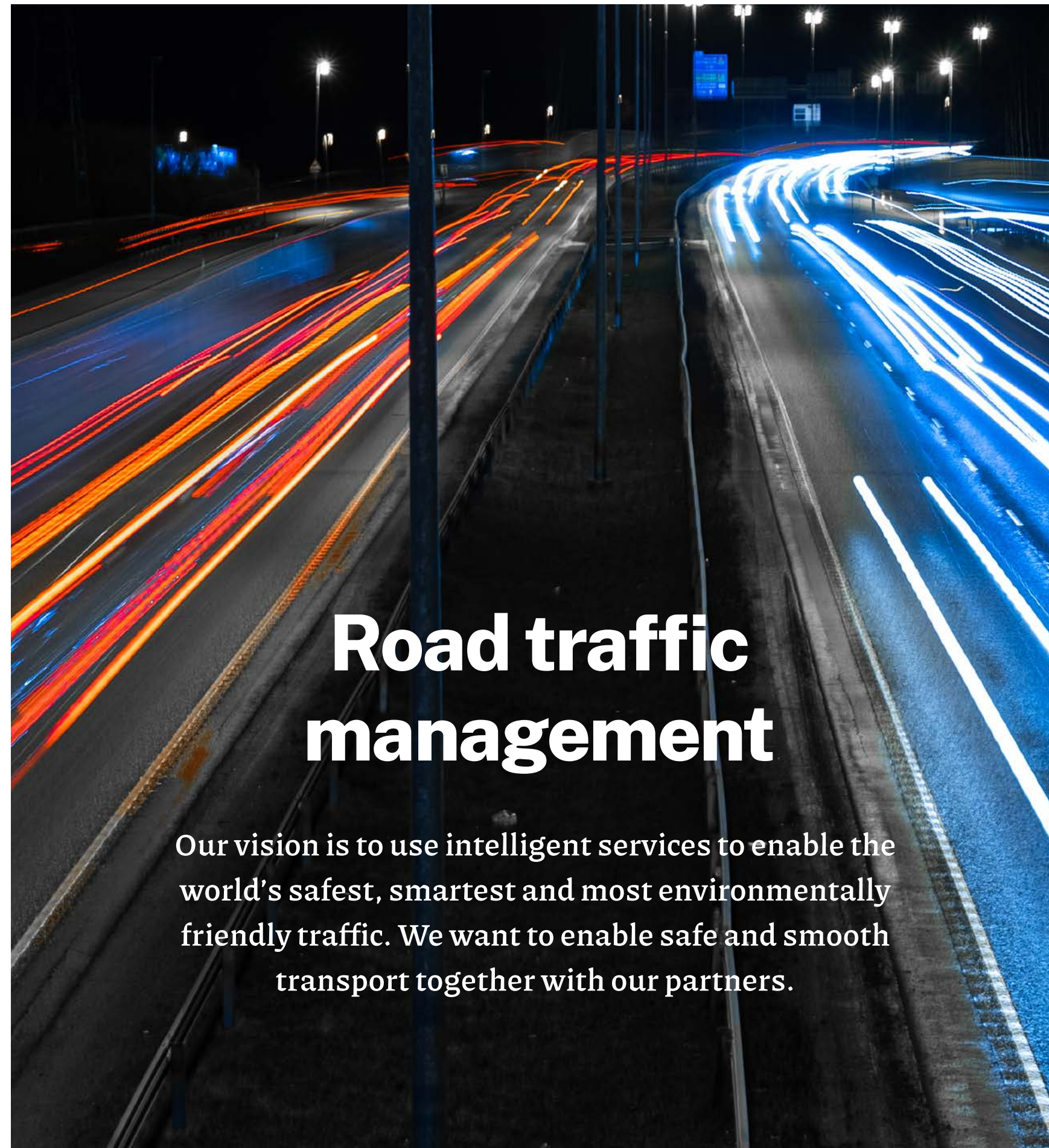
### **What next?**

The project's feasibility phase ended in April 2020. The ongoing preparatory phase was launched in August and will end in April 2021. Next up will be the development and verification phase, which is currently scheduled to run until 2027.

The goal is to begin construction of the new system during 2028 and have it fully deployed throughout the entire Finnish rail network by 2040. Political decisions on the project's progress are expected during spring 2021 as part of the Government's transport system action plan (Transport 12).







# Road traffic management

Our vision is to use intelligent services to enable the world's safest, smartest and most environmentally friendly traffic. We want to enable safe and smooth transport together with our partners.

Finland's passenger and goods transport relies on smooth and efficient road traffic. Road transport accounts for about 63 per cent of goods traffic and 90 per cent of passenger traffic. The Finnish road network measures a total of 78,000 kilometres, and more than 120 million kilometres are driven every day on our roads. In road traffic management, we ensure safe and smooth traffic flow 24/7/365. Our work to promote safe and smooth traffic encompasses everything from technical system design for roads, crossing points and tunnels to continuous traffic monitoring and the provision of road weather data for the entire chain.

Our operations rely on us having an uninterrupted, real-time situational picture of traffic at our disposal. This data is generated by traffic management, weather and road condition equipment that includes about 20,000 devices, such as 900 road weather cameras, 420 road weather stations and a variety of automated incident detection systems. Using this traffic and weather data, we control things such as speed limits, traffic information displays, traffic lights and tunnels.

We are the nerve centre of road traffic information. Our road traffic centre sends 10,000 traffic bulletins per year. We also answer calls to Fintraffic's Road User Line, a channel through which road users can report acute traffic issues. A total of almost 150,000 calls are received by our road traffic centre each year. We are responsi-

ble for ensuring that information about incidents and exceptional circumstances is received by different authorities, such as the police and rescue services, and also by other operators, such as roadside contractors and maintenance.

**Streamlining** Due to the coronavirus pandemic, 2020 was also an exceptional year in road traffic management. Half of our personnel started working remotely, and those working at our road traffic centres had to adopt strict coronavirus safety practices. In spite of the exceptional circumstances, no incidents caused by the company occurred during the year.

The coronavirus pandemic was visible in road traffic volumes, and traffic on main roads fell by about 10 per cent on the previous year. This was reflected in traffic control, which freed up control resources for internal development projects. Some purchased services were also replaced by internally produced services, and we were able to tender smaller procurement packages with more cost-effective pricing. We stepped up the planning of development activities and investment projects. For example, we developed a new production model for counting traffic in the road network.

## Creating new services and a real-time situational picture

The goal of Fintraffic's road traffic management is to be an enabler for Finland's evolving road traffic ecosystem. Its spearhead product



and service development projects progressed as planned during the year. Good progress was made towards our goal of creating a digital twin of the road network and a real-time situational picture with regard to infrastructure, road conditions, weather conditions and traffic. To further this goal, we released a revamped version of the TLOIK platform. The platform now contains all of the road network control systems, communications and maintenance management tools for the entire Finnish road network, advanced automated recommendations based on weather and traffic conditions, and a situational information package that draws on hundreds of cameras, road weather stations and other devices.

We also launched several pilot projects to develop road weather services. These projects are investigating ideas such as the opportunities afforded by IoT technology in road weather forecasting. We also developed the interfaces and capabilities of our road traffic weather condition service, so that data generated by external providers can now be received for analysis and further processing. Towards the end of the year, we launched a revamped version of our WebKeli service for stakeholders.

One of the most significant events in road infrastructure was the opening of the Highway 12 Lahti Southern Ring Road to traffic in December. At the same time, the new Patomäki and Liipo-



**“The goal of Fintraffic’s road traffic management is to be an enabler for Finland’s evolving road traffic ecosystem. Its spearhead product and service development projects progressed as planned during the year.”**



la tunnels were transferred into our control. The Tampere–Kangasala section of Highway 12 was completed in June, and we were responsible for renewing its traffic control devices. More than 10 traffic light crossings were also completed during the year.

### Investing in corporate culture

We continued the renewal of our corporate culture that was launched in 2019. Our personnel were highly involved and participated in a variety of workshops and brainstorming sessions to develop various aspects of our corporate culture. All of these sessions were successfully arranged remotely.

Our goal is to create an even more open and agile operating culture. We defined shared behavioural models and created a unique story for ourselves. We also adopted new values that will guide us in the future.

### Closer cooperation

We worked closely with our partner network. Our operations revolve around seamless and effective daily cooperation with authorities and stakeholders to resolve faults and incidents. During the year, we also engaged in international cooperation via a variety of EU expert forums in the interest of safer and smoother road traffic.

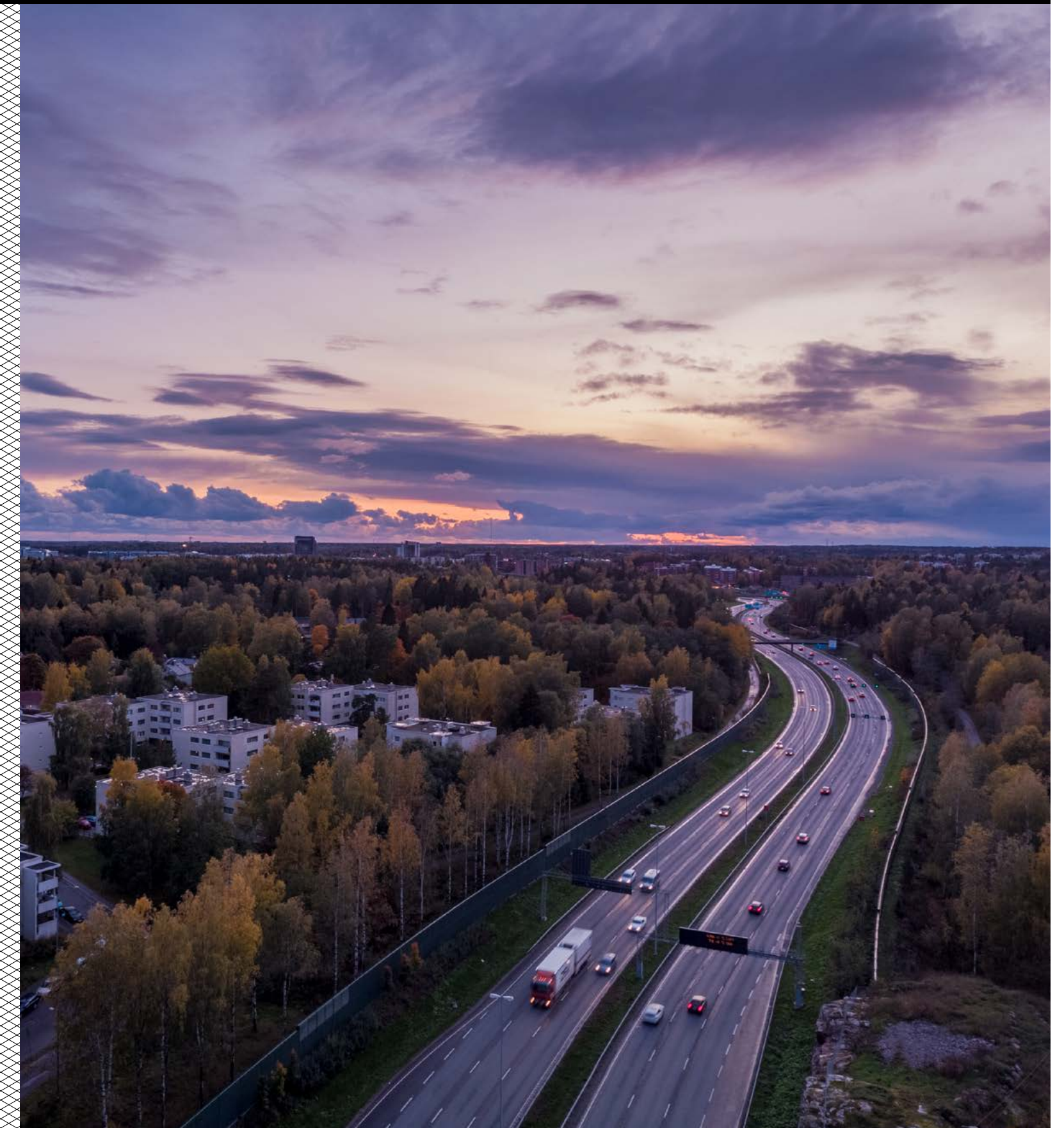
## Evolving digital twin provides a real-time situational picture of traffic

The digital twin creates a virtual digital copy of physical road traffic. It provides a real-time picture of the actual situation with regard to infrastructure, weather conditions, maintenance and traffic. The digital twin enables traffic optimisation and the management, processing and sharing of traffic-related data. It also helps transport sector operators to develop new services.


One of the first embodiments of the digital twin is a situational picture wall that provides road traffic centres with an “at-a-glance” view of the overall state of road traffic. The platform for this is TLOIK, an acronym for ‘road traffic management integrated user interface’ in Finnish.

The digital twin has significant benefits: it can speed up travel and goods chains, make public transport more attractive, boost service innovation and support regional equality. It also generates data that helps to optimise road network investments and maintenance.

The digital twin will take some major leaps forward over the next few years as data collection and technical architecture improve.







# Ecosystem provides a boost for Finland

Our vision is a sustainable and evolving traffic system that we are digitising in cooperation with other operators in the transport sector.

Our three key objectives for 2020 were: 1) creating a strategy, 2) progressing with projects that support the development of the traffic ecosystem, and 3) increasing the use of traffic data provided by Fintraffic. We achieved all of these objectives as planned. Our vision is a sustainable and evolving transport system that we are digitising in cooperation with other operators in the transport sector. The transport system encompasses a broad range of different operators and services. It consists of passenger and cargo traffic for all modes of transport, as well as the transport networks, telecommunication connections, data, mobility services, vehicles and control systems that support them.

Different areas have traditionally been examined separately. Our goal has been to combine data and services, so that travel is as smooth as possible and service providers also benefit. At Fintraffic, we are boosting the Finnish traffic ecosystem, which consists of cooperation between transport operators, digital transport infrastructure, and a digital rulebook.

## Coronavirus pandemic boosts desire for cooperation

The coronavirus pandemic had a considerable impact on the entire transport sector. Passenger numbers fell dramatically, which led to a collapse in profitability for many operators. We didn't get to meet each other face-to-face dur-

ing the year either, which is central to building trust.

On the other hand, the plight of the transport sector has forced operators to renew their operating models, and this has boosted efficiency and promoted digitalisation. This altered market has made transport operators even more aware that we can only overcome this together.

## Building the traffic system of the future requires cooperation

One of our key objectives is to engage in closer cooperation with other operators in the sector. In the spring, we drew up an ecosystem strategy on the basis of interviews with industry operators. We interviewed 30 key operators in the transport sector about their current challenges, opportunities, and required capabilities. We also asked them about their expectations and opinions of Fintraffic's operations.

The interviewees welcomed the fact that Finland has proactive operators, good and innovative forums for cooperation, a comprehensive situational picture of traffic, and functional data platforms. The challenges they listed included the fragmented nature of the sector, inefficiency and a lack of standardisation.

We launched the new strategy at a virtual stakeholder event in October. The measures proposed in the strategy will be refined in col-



## Traffic Ecosystem

### VISION:

Sustainable and evolving transport system.

### MISSION:

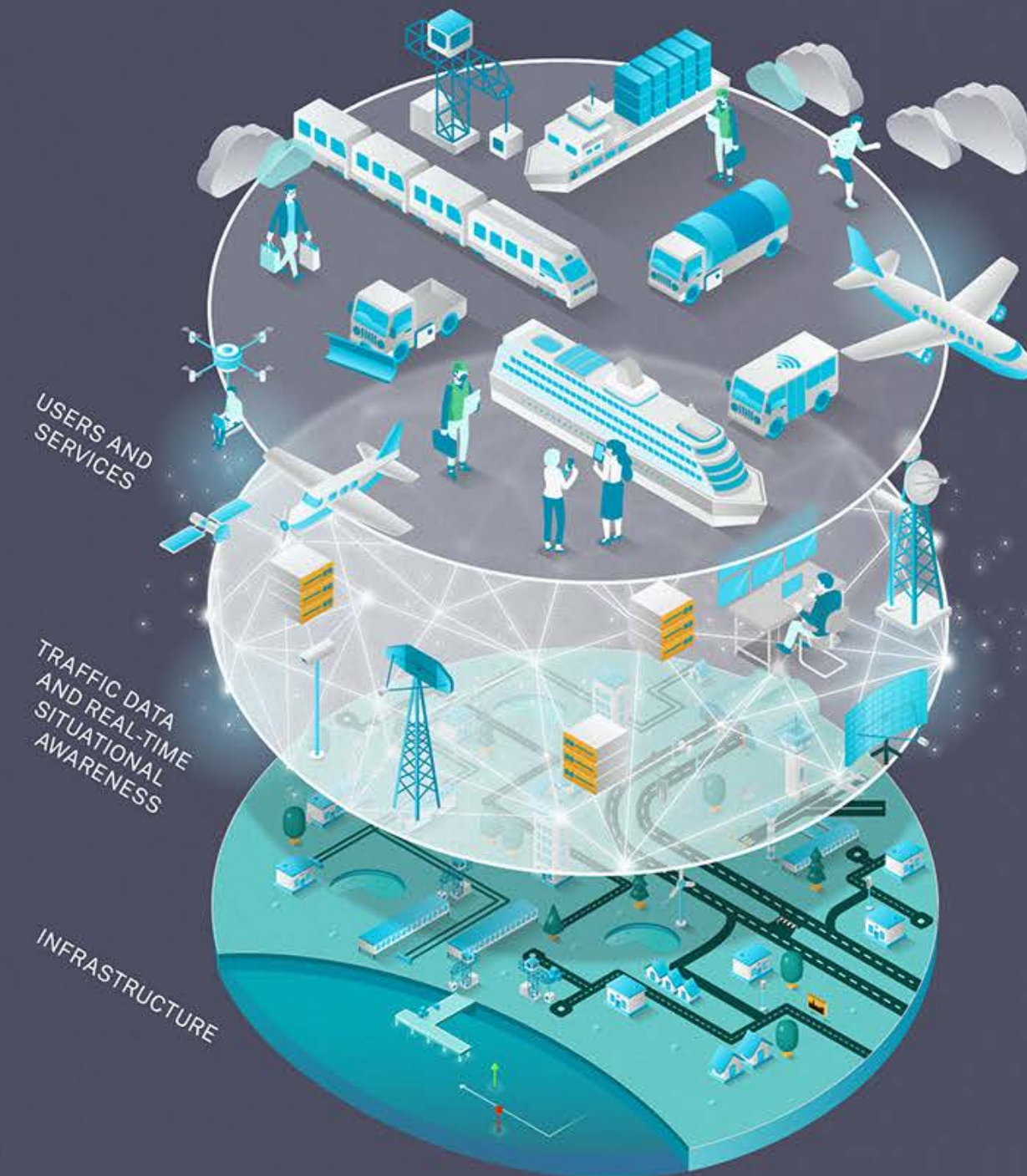
Digitisation of the transport system in collaboration with operators in the field.

#### MOBILITY IS CHANGING

- Better data availability improves analysis and optimisation
- Transport automation is increasing
- New mobility services are emerging
- Drone logistics is a growing field
- Climate change poses challenges

#### OUR GOALS

- Creating consistent and fair operating models in developing new services across multiple modes of transport
- Harmonising data and laying the groundwork for efficient and transparent cooperation
- Continuing development of our digital platform, Digitraffic
- Coordinating and producing standards, investment solutions, basic digital business services, agreement structure for collaboration



#### SPEARHEAD THEMES

1. Collaboration between operators in the transport branch
  - Shared goals and values
  - Coordinated cooperation
  - Investment decisions
  - Joint development solutions
2. Digital transport infrastructure
  - Data platform technology
  - Data
  - Basic digital business services
3. Digital traffic regulations
  - A coherent collection of templates and standard agreements
  - Standards for cooperation and data transfer

#### WHEN WE SUCCEED, FINLAND THRIVES

- + Optimised and increasingly automated transport system
- + Travel and logistics chains and services are more efficient and smoother
- + Emerging business opportunities
- + People and goods move effortlessly
- + Saving taxpayer money
- + Lower emissions

#### OUR WAY OF WORKING

Collaboration, fairness, transparency, boldness





laboration with industry operators during 2021. Concrete efforts were launched at a meeting in January 2021, during which we agreed on how to move forward in practice in open working groups. We also agreed that we will jointly define our vision, objectives and roadmap.

### Work on many fronts

We are working to develop the ecosystem in all modes of transport. Port operators are now better informed about ship arrivals. Thanks to the improvements made in road transport, users will now be able to receive almost up-to-date information about road maintenance. We created a drone register for air traffic. We also cooperated with 5G operators, so that we will be able to use 5G technology in rail traffic. During the year, we began preparations to transfer public transport data from Traficom. The Digitransit system contains information about things such as routes, stops and timetables. The transfer will be carried out in early 2021.

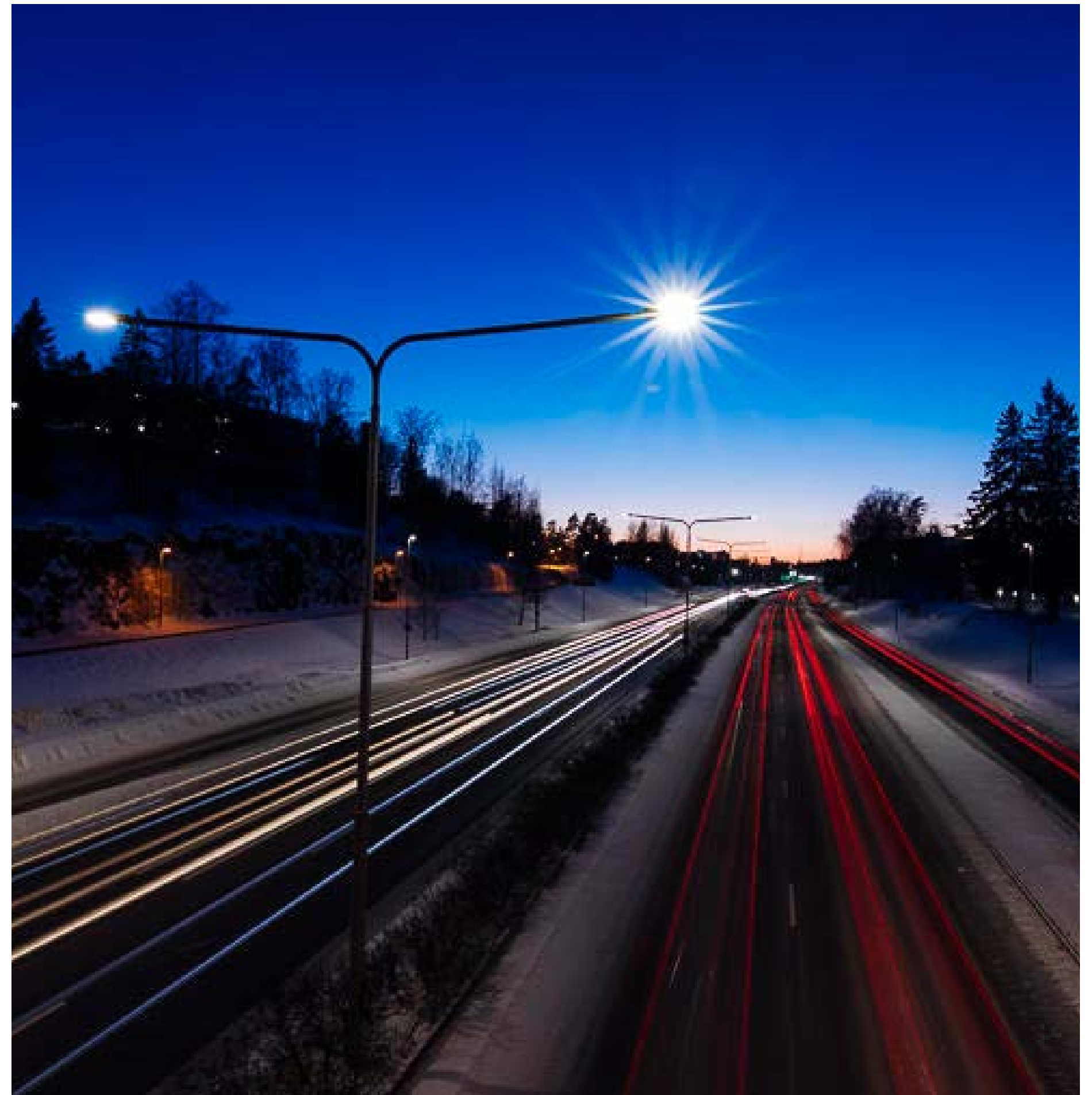
More people used the data we provided. For example, we launched cooperation with Bauer Media's radio channels. As a result, Bauer Media began using the Traffic Situation service in Radio Nova's traffic programmes. This increased not only the service's visibility, but also the number of people using our traffic data. We also signed an agreement with Sähköautoilijat ry, an association for drivers of electric vehicles.

Thanks to this agreement, all charging points for electric cars in Finland are now displayed in the Traffic Situation service.

We were involved in forming the Travel Information Group with Matkahuolto, HSL, Traficom and other operators. This group wants to determine how we can improve the quality of information in Finnish public transport. Although we have well-functioning systems, we face challenges in the quality and accuracy of information. For example, there are shortcomings in information about stops, which makes it difficult to build smooth travel chains.

All logistics consignment notes will soon be digital. We are playing a key role in this change project, as we will be the digital cargo information provider in Finland. We focused on preparatory work for this project during the year.

We were also actively involved in EU standardisation work. One of the key objectives is the standardisation of national access points, so that they can share information in the most consistent manner and format possible.





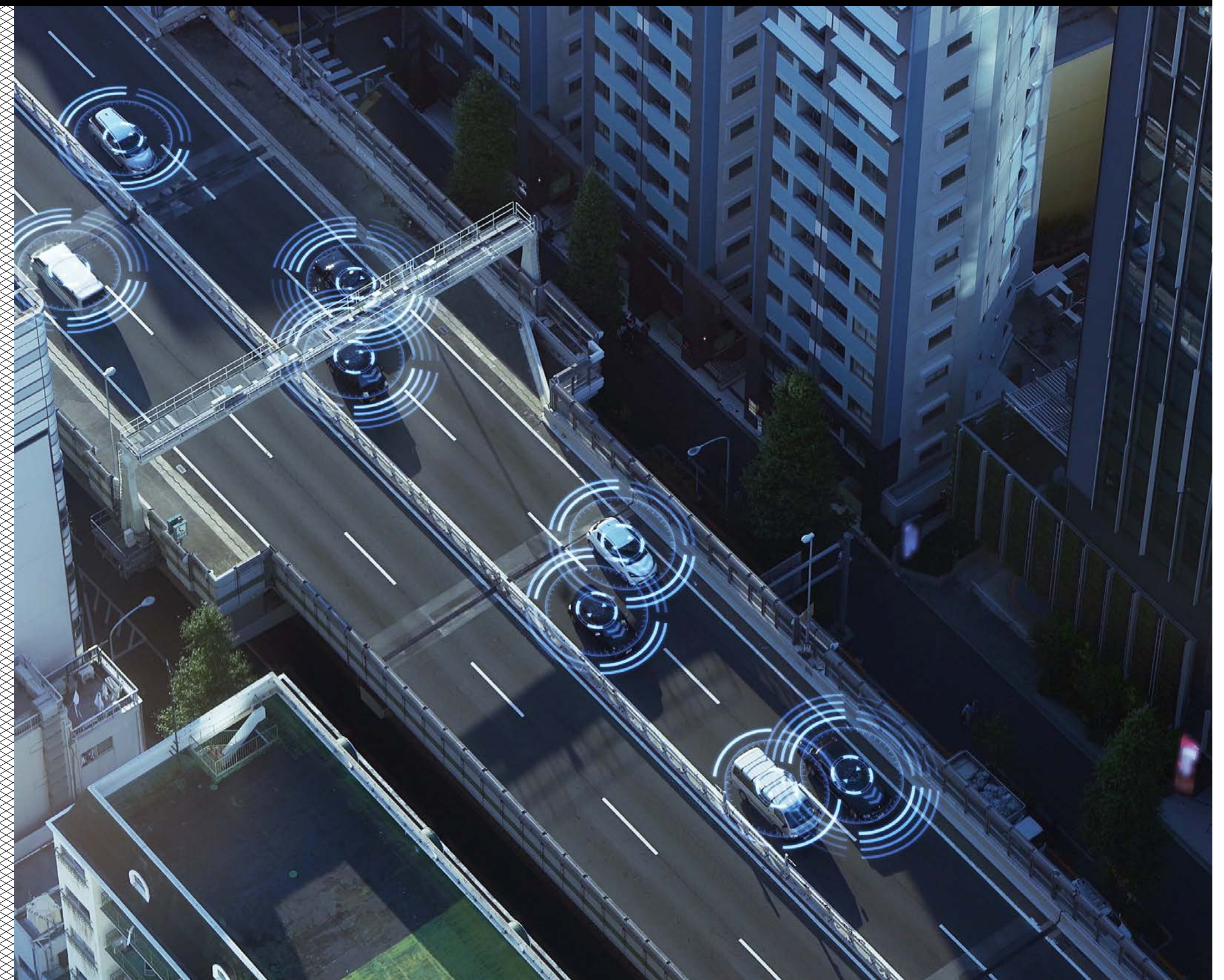
## Use of real-time traffic data continues to grow

Digitraffic is an innovative marketplace for traffic data, and its functionalities are creating the foundation for the emergence of a world-class transport market in Finland. More than 3.2 billion calls were made to Digitraffic's interfaces in 2020 – a rise of 25 per cent on the previous year.

Digitraffic connects traffic data providers and users. It enables them to collect, combine, share and, if necessary, charge for traffic data, thereby promoting business in the transport ecosystem.

Our goal is to help transport operators to create brand-new services by providing developers with open traffic data. The data we provide is used extensively in, for example, road navigation systems and services, and also in mobile apps targeted at consumers. The available data is produced by traffic control systems, traffic measurement systems, and systems that monitor weather and road conditions. Digitraffic gives data providers both a marketplace and an effective platform for distributing their data.

Finns are making more active use of real-time traffic data to support travel. For consumers, Digitraffic provides the Traffic Situation service, which is available as both a web service and a mobile app. This service contains information about a broad variety of things, such as roadworks, disruptions in traffic, weight restrictions, and winter maintenance. The service also displays images from hundreds of road weather cameras all around Finland, as well as information about icy roads, driving conditions, and navigational warnings at sea. For rail travel, the app has station-specific timetables and punctuality data for passenger traffic. There is also information about air traffic. You can also use the mobile app to leave feedback about the condition of roads.





# Responsibility





# Responsibility as part of decision-making

At Fintraffic, responsibility issues are an integral part of our business. Our responsibility efforts are based on our company's corporate culture and financial targets. Every year, we publish a report on responsibility and sustainability as part of our Annual Report.

We want to meet the expectations placed on state-owned companies, which is why we have integrated responsibility into our decision-making. We have to take into account the financial, social, regional and environmental impacts of our operations, so that we can be a pioneer in responsibility, transitioning to a carbon-neutral circular economy and harnessing digitalisation.

At the same time, we must identify the impacts of climate change on our business and the impacts our operations have on the climate, the environment and biodiversity. Measurable targets should be set for these. We must also take into account Finland's goal of being carbon neutral by 2035 and the Paris Agreement's objective to limit climate change to 1.5 degrees. We are also committed to supporting the UN Global Compact's Action Plan and its principles relating to the environment, labour, human rights, and anti-bribery and anti-corruption activities.

The majority of Finns use our services on a daily basis – we want to be worthy of their trust.

## Impact at the heart of strategy and sustainability

On a global scale, we are an exceptional company, as we are responsible for controlling all modes of transport and providing traffic data and services to a wide range of stakeholders. This also gives us a unique opportunity to influence major transport sustainability themes, such as climate issues and traffic safety.

It is not enough for us simply to be responsible. We want to better understand how our services indirectly affect society and the environment. Only in this way can we help our customers, stakeholders and the whole of Finland to develop an even more sustainable transport system.

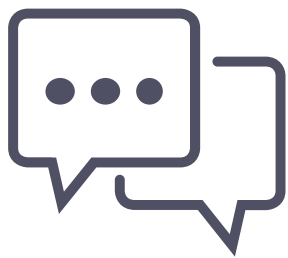
## Materiality analysis defines materiality themes

Our goal is to make responsibility an integral part of our business and to be a pioneer in selected areas of responsibility. We want our responsibility

efforts to strongly support the company's business, stakeholder relations and strategic implementation, and for development in this area to be part of our daily work. During the year, we performed a materiality analysis to determine our materiality themes. We also drew up a roadmap to show how we intend to reach the target state. The key objective for 2020 was to identify materiality themes for business functions and corporate responsibility. In 2021–2022, responsibility will be part of everything we do and begin to generate added value for our business. Our goal for 2023–2024 is to be a pioneer in selected areas of responsibility.



We used a materiality analysis to identify our materiality themes:



Social responsibility

- ➔ Continual improvements in safety
- ➔ Committed, motivated and healthy personnel
- ➔ A diverse, equal and discrimination-free workplace community



Environmental responsibility

- ➔ Energy and material efficiency, and carbon neutrality
- ➔ Environmentally efficient traffic control



Sustainability

- ➔ Social impact
- ➔ Financial added value and efficiency
- ➔ Good, transparent governance

After this, we draw up an action plan, indicators and targets for each topic. We have identified how our themes correspond to the GRI framework and the UN's Sustainable Development Goals.

Fintraffic supports the UN's Sustainable Development Goals





# Good governance

	SAFETY	SOCIAL RESPONSIBILITY		ENVIRONMENTAL RESPONSIBILITY	FINANCIAL RESPONSIBILITY	GOOD GOVERNANCE
		Workplace community	Partners			
Our work is steered by policies and guidelines	<ul style="list-style-type: none"><li>• Safety policy</li><li>• Information and cybersecurity policy</li><li>• Risk management policy</li></ul>	<ul style="list-style-type: none"><li>• Remuneration management</li><li>• Equality and diversity plan</li></ul>	<ul style="list-style-type: none"><li>• Management and organisation</li><li>• Procurement principles</li></ul>	<ul style="list-style-type: none"><li>• Management and organisation</li><li>• Environmental strategy</li><li>• Procurement principles</li></ul>	<ul style="list-style-type: none"><li>• Management and organisation</li><li>• Group's decision-making guidelines</li><li>• Guidance on actual beneficiaries and politically influential persons, as per the Act on Detecting and Preventing Money Laundering and Terrorist Financing</li><li>• Financial policy</li><li>• Risk management policy</li><li>• Procurement principles</li></ul>	<ul style="list-style-type: none"><li>• Code of Conduct</li><li>• Guidelines on compliance with competition law</li><li>• Insider guidelines</li></ul>
Responsibilities	<ul style="list-style-type: none"><li>• SQE Director</li><li>• Safety management team</li><li>• Persons responsible for safety at subsidiaries</li></ul>	<ul style="list-style-type: none"><li>• HR Director</li></ul>	<ul style="list-style-type: none"><li>• Chief Impact Officer</li></ul>	<ul style="list-style-type: none"><li>• SQE Director</li></ul>	<ul style="list-style-type: none"><li>• CFO</li></ul>	<ul style="list-style-type: none"><li>• CEO</li><li>• Director of legal affairs and procurement</li><li>• Responsibility divided between several directors</li></ul>
Activity in 2020	<ul style="list-style-type: none"><li>• Establishing an information and cybersecurity management team</li><li>• Establishing a coronavirus management team</li><li>• Launching the information and cybersecurity management system</li><li>• Updating the safety action plan</li><li>• Launching guidelines for best practices in safety</li><li>• Revising safety reporting practices</li></ul>	<ul style="list-style-type: none"><li>• Revising the overall remuneration policy</li><li>• Drawing up anti-substance abuse guidelines</li><li>• Creating coronavirus-related guidelines and implementing occupational health and safety measures to control the coronavirus pandemic</li><li>• Setting up a whistleblowing channel</li><li>• Adding special services to occupational healthcare</li></ul>	<ul style="list-style-type: none"><li>• Establishing a joint working group with other industry operators to develop the transport ecosystem</li><li>• Sharing information and opinions on the transport sector with authorities, politicians and the media</li></ul>	<ul style="list-style-type: none"><li>• Updating the environmental strategy</li><li>• Establishing an environmental management team</li><li>• Developing environmental indicators</li><li>• Launching the creation of an environmental information system</li></ul>	<ul style="list-style-type: none"><li>• Establishing a model for financial reporting</li><li>• Developing an internal calculation model for monitoring service-specific costs, the activity level, and operational efficiency</li><li>• Introducing Power BI</li><li>• Procurement principles</li><li>• Putting the new management system and management model into practice</li><li>• Improving operational efficiency</li><li>• Adjustment measures resulting from the collapse in air traffic volumes and loss of income from air navigation</li></ul>	<ul style="list-style-type: none"><li>• Mobilising and establishing the use of regulations and guidelines in the company</li><li>• Organising training in topics related to good governance</li></ul>

We are a wholly state-owned special assignment group operating under the ownership steering of the Ministry of Transport and Communications. Our special assignment is to safeguard the essential traffic control services required by society, the authorities and commerce. Our special assignment also involves ensuring reliability in the event of disturbances under both normal and exceptional circumstances.

As our operations are significant to society, it is our duty to act responsibly, sustainably and as transparently as possible in everything we do.

In accordance with the Government Resolution on State-ownership Policy issued on 8 April 2020, as the owner of the company, the State is seeking the best possible overall financial and social benefit from the management of its assets, and this will be assessed on the basis of how well and at what cost the company fulfils its social service duties. The company's decision-making and governance comply with the Limited Liability Companies Act, the company's Articles of Association, the guidelines for the ownership steering of limited liability companies issued by

the Ministry of Transport and Communications on 1 January 2019, the strategic ownership policies for Traffic Management Company Fintraffic Ltd issued on 16 October 2019, and the corporate governance code contained in the Group's own management system.

Our decision-making, governance and management comply with the Limited Liability Companies Act, Traffic Management Company Fintraffic Ltd's Articles of Association, and the majority of the Corporate Governance Code issued by the Securities Market Association in

2020. Our company's highest decision-making body is the Annual General Meeting. It decides on the matters specified in the Limited Liability Companies Act and the company's Articles of Association.

Our most important objective for the year was to integrate the operating methods and rules created in 2019 into all of our operations on a practical level. We did this systematically by, for example, organising training on rules and operating methods for our personnel.



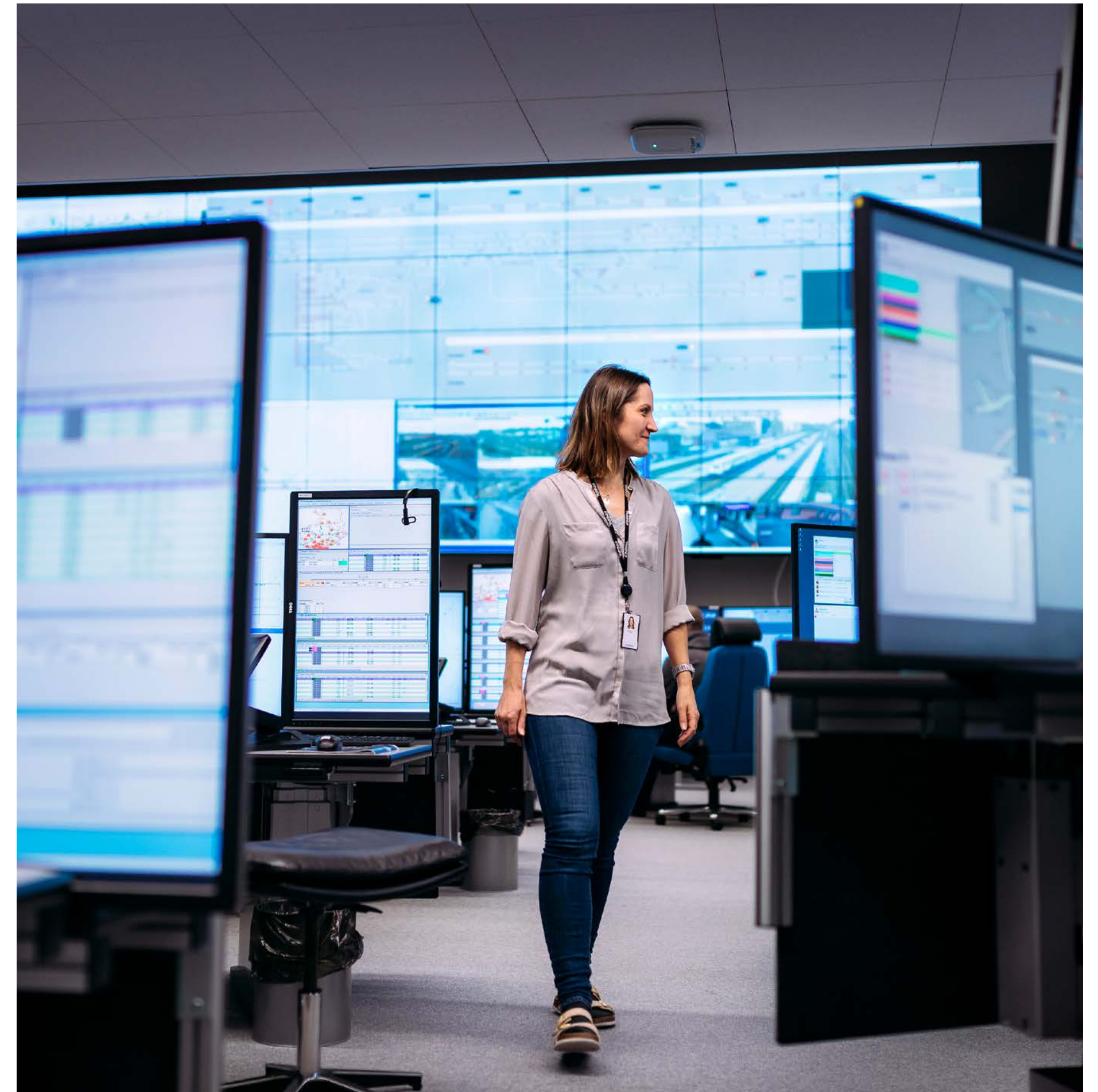
# Safety

We operate in an extremely safety-critical sector, which is why safety is a priority in everything we do. At worst, any potential accidents can cause damage to people, the environment and the economy.

Continuously improving the safety level of traffic management lies at the heart of our safety efforts. Ensuring safety includes activities such as incident management, risk management, preparedness, information and cybersecurity, corporate security, and the management of safety deviations. Our main operational risks relate to serious accidents, accident precursors, and threats to information and cybersecurity. A new risk factor was also identified: a pandemic such as the coronavirus, which can at worst temporarily paralyse the functionality of control centres. Managing human factors is also a key aspect of risk management.

## **The operational capacity and safety level of operative functions remained good**

The safety level of traffic control remained good throughout the year across all modes of transport. There were no serious accidents in any mode of transport. Targets for significant deviations in safety were achieved in all modes of transport except rail traffic control. The number of serious dangerous incidents also decreased





significantly in rail traffic control. No significant deviations or breaches in information or cybersecurity were reported during the year. Maritime traffic control prevented nine vessels from running aground.

As a result of the coronavirus pandemic, 2020 was a very exceptional year and underlined the importance of preparedness, good situational management and preemptive measures. We tightened up many practices and guidelines, stopped all external visits to control centres, focused on hygiene, and adopted the use of face masks. We engaged in extensive cooperation with the health authorities and occupational healthcare. Thanks to these measures, our operational capability remained good.

Only seven coronavirus infections were detected during the year in our company, and none of these led to extensive quarantines or caused any difficulties with the availability of personnel at control centres. None of the coronavirus infections were work-related.

### **Continued investments in information and cybersecurity**

The significance of information and cybersecurity also increased during the year, and considerable investments were made in this area. We defined an information and cybersecurity strategy, established an information and cybersecurity

management team, and renewed our information and cybersecurity management system. We also strengthened our expertise through internal training and by hiring more experts in the field.

On the basis of our revised strategy, we launched a broad-ranging, multi-year development programme to raise the level of information and cybersecurity in all modes of transport. We also significantly increased our monetary investments in information and cybersecurity, and intensified our cooperation with key stakeholders and external service providers.

### **Working practices established for the safety management team**

Safety efforts are led by the safety management team. During the year, we established an information and cybersecurity management team and a coronavirus management team to work alongside it.

Our safety efforts are steered by our policies for safety, risk management, and information and cybersecurity. These policies have been approved by the Board of Directors. Safety management is based on our management systems for both safety and information and cybersecurity.

The safety management team firmly established its working practices during the year. We intensified cooperation between different modes of transport, and launched our Safety Best Prac-

tices concept in the fourth quarter. We want to network more closely with other operators in the sector and also seek best practices from outside the Group.

### **Training and practical exercises for personnel**

We continually maintain personnel competence through a variety of training and share best practices between different modes of transport. We have extensive training programmes for personnel working in traffic control. We also organise safety exercises for personnel. Employees must meet the safety-related competence requirements that have been defined for different workstations.

### **Reporting renewed and safety tours organised**

We supervise safety levels using a variety of means. We conduct both internal and external audits, and organise management safety tours. We report on safety issues to the authorities.

During the year, we renewed our safety reporting practices. We measure safety using both common indicators and indicators for specific modes of transport. Common indicators include the number of accidents, serious accident precursors and significant deviations in safety, and the success of safety control functions. We have

extensive sets of indicators for deviation management in particular, and advanced anomaly analysis processes. The basic premise is that we should be able to report all potential deviations, investigate them and react immediately.

Improvements to the safety level of traffic management will continue in 2021, we will continue to systematically improve the safety level of traffic management and coronavirus-related situational management. We will also develop risk management. We will be focusing on information and cybersecurity, and on improving our ability to detect any associated threats. Our cooperation with the Finnish Transport Infrastructure Agency and other stakeholders will continue in the area. We are also aiming to develop safety-related digital tools.



# Environmental responsibility

Transport accounts for a fifth of Finland’s climate emissions. We are therefore determined to ensure that Finland is as low-emission as possible. This will be achieved via our traffic control services and by providing traffic data and digital services to end users. We have divided our environmental work into two parts: managing the environmental impact of our own business and influencing emissions throughout the entire transport system.

In 2020, we spent a lot of time clarifying our environmental goals. We updated our environmental strategy and created the foundations for our own environmental management. We also established an environmental management team that started up in the middle of the year. We drew up a roadmap showing our environmental targets and key areas for development.

Our new environmental strategy extends to 2024 and states that: we are an environmentally oriented group; we are an enabler for a smooth and environmentally efficient transport system; we are an influencer for environmentally driven travel; and we prevent accidents and environmental damage.

All state-owned companies must be carbon neutral by 2035. We are also committed to achieving this target. We will be revising our roadmap for carbon neutrality during 2021.

## A key role in building a sustainable transport system

Our operations can significantly influence traffic flow and service level in the transport system – and thereby impact emissions from various modes of transport.

We have identified several areas of the transport system whose environmental load is directly or indirectly affected by the services and information we provide.

Boosting the efficiency of travel chains through digitalisation will help to achieve significant reductions in both emissions and costs. Reducing the market share of private vehicles from its current level of 85 per cent to 80 per cent of kilometres driven in passenger traffic would reduce traffic emissions by an estimated 300,000 tons of CO<sub>2</sub> per year. Boosting the efficiency of goods logistics chains would lower transport emissions by 44,000 tons of CO<sub>2</sub> per year.

Increasing digitalisation in rail transport with the aid of our Digirail spearhead project would raise train traffic capacity in the Pasila district of Helsinki by about 10 million journeys. This would improve the market share of sustainable modes of transport in passenger traffic. In road transport, we can save a considerable amount of time by developing traffic control and improving information flows. For example, introducing these measures on Ring Road I could save up to 10,000 working days per year.

### Our key means of improving the sustainability of Finland’s transport system are:

- creating and sharing a real-time situational picture of traffic
- increasing digitalisation in the transport system
- preventing congestion and optimising routes and speeds
- accelerating development in travel and logistics services with the aid of traffic data and ecosystem services as well as the integration of different modes of transport
- promoting the popularity of public transport
- optimising transport route investments, maintenance and route usage
- effective airspace management
- making rail transport smoother and improving its attractiveness
- preventing accidents and environmental damage.





**“Our operations can significantly influence traffic flow and service level in the transport system – and thereby impact emissions from various modes of transport.”**

Vessel traffic services prevented nine vessels from running aground in 2020. 24,274 continuous descent approaches were made at Helsinki Airport last year, which equates to 77 per cent of all approaches.

### **Environmental indicators and reporting developed**

During the year, we developed our environmental indicators and reporting, and launched the creation of an environmental information system. This system will be introduced in 2021 and will enable both data collection and effective reporting. In the future, we aim to report on our own eco-efficiency, such as water and electricity consumption, material use, and waste generation. We are currently developing our environmental performance measurement, and data specification will be carried out during 2021. In 2020, the company determined that it had consumed 13,953 MWh of electricity and 685 MWh of thermal energy. Scope 2 emissions from purchased electricity consumption totalled 212.9 tons of CO<sub>2</sub> and Scope 2 emissions from thermal energy consumption 24 tons CO<sub>2</sub>. The company generated 72.5 tons of waste, which caused an estimated 20.49 tons of CO<sub>2</sub> emissions.

### **Focus on building an environmental management system and improving energy efficiency**

In 2021, we will be focusing on establishing our environmental management model and building an environmental management system. The goal is to have clearly defined environmental indicators for different modes of transport by the early year, so that their development can be monitored and reported on. We are also committed to enhancing our own energy efficiency. We want to improve our personnel's environmental expertise in both the environmental management team and more broadly throughout the Group. Our third key objective is to draw up an environmental policy.



# Social responsibility

The goal of our new strategy, which we updated during the year, is to make Fintraffic a workplace with motivated employees who are the best in their field. We want our personnel to feel that they are doing meaningful work at an excellent workplace. We are seeking to create a solution-oriented corporate culture that is based on respectful interaction and working together, and supports innovation and renewal. We work to ensure that our leadership is professional, humane and fair.

1,129 people worked for our company at the end of the year. 22 per cent of them were women and 78 per cent men. The average age of our personnel was 45. As we provide traffic control services around the clock, the majority of our personnel do shift or period-based work. The HR team, led by the HR Director, provides all of our HR services. Although the company's occupational safety manager is part of the HR organisation, responsibility for occupational safety is always held by operative management.

## More efficient HR systems with the aid of automation

As our company is still quite young, we spent the year focusing on creating a foundation for our work. Some of the development projects launched in late winter and early spring were sidelined by the coronavirus. However, in spite of the exceptional circumstances, we continued to describe and improve our HR processes, and made preparations to put our HR master system out to tender. We also developed the intranet into a shared communication channel for the entire Group. Our goal is to utilise as much automation

as possible in HR management systems, and thereby achieve efficiency. This will enable us to free up the time of supervisors for work that genuinely adds value.

We drew up anti-substance abuse guidelines for our company and renewed our overall remuneration policy. We simplified the remuneration model and made sure that it is suitable for a state-owned special assignment company. Our remuneration model also pays better attention to exceptional circumstances. During the year, we developed a model for managing working capacity risks and wellbeing at work. We worked to further good leadership and create a corporate culture with the ability to evolve.

## A challenging year for personnel

Due to the coronavirus pandemic, 2020 was a challenging year for personnel. Air navigation in particular suffered as a result of the reduction in tourism and flights, which forced us to make extensive layoffs among air navigation personnel. Redundancies were, however, avoided.

All personnel were forced to work in exceptional circumstances. We created new guide-

lines for personnel working at control centres, instructed people to wear face masks, stopped all external visits, and paid special attention to hygiene. Everyone who was able to work remotely began working from home as of March. Combined with a lack of social contacts, other stresses arising from the exceptional circumstances naturally took their toll on personnel. On the other hand, some of those working from home also reported an increase in wellbeing.

## Employer supports wellbeing

Our goal is to support our personnel's wellbeing and ability to cope at work. During 2020, we introduced a new low-threshold support service as part of occupational healthcare: Mielen Chat and Mielen Sparri (Mood Chat and Mood Sparring). Mood Chat is available to employees 24/7. Employees who require short-term psychotherapy will be able to receive it with a referral from an occupational healthcare physician, and it will be provided by us, as the employer. In late 2020, we also agreed on a limited pilot of the wellbeing service Auntie. Auntie aims to support supervisors in leadership and other issues involving their



wellbeing or ability to cope at work. These activities are concrete implementations of our working capacity management programme, which seeks to reduce absences arising from mental health.

The working capacity management action plan approved for 2020 and 2021 includes themes such as change management and a more detailed analysis of sickness absences and how to influence them.

Sickness absences remain low

Sickness absences were down on the previous year and stood at 2.8 (3.4) per cent. The number of sick days totalled 1,144 fewer days than in 2019. 53 per cent of personnel did not have any sickness absences during the year. Most sickness absences lasted less than ten days. 22 per cent of sickness absences lasted 11–30 days and 21 per cent lasted 91–365 days.

All of our personnel have access to the same extensive occupational healthcare services. We put our occupational healthcare services out to tender in late 2019. The occupational healthcare services for all companies in the Fintraffic Group are provided by Suomen Terveystalo Oy.

Working environment and conditions enhanced

At workplaces, Fintraffic’s occupational health and safety efforts focused on safe working conditions, a safe working environment, and measures to maintain employees’ mental and physical working capacity.

Employer and employees worked together to develop working conditions and the working environment, so as to eliminate work-related hazards and dangerous situations and to prevent them from occurring in the first place. Steps were taken to minimise dangers to occupational health and safety to ensure that no serious incidents involving our employees occur at any of our workplaces. Efforts were also made to minimise occupational diseases, accidents and near misses.

Due the exceptional nature of the year, unit-specific health and safety measures and Group-level guidelines were successfully put into practice to control the coronavirus pandemic. There were no work-related coronavirus infections at Fintraffic workplaces.

In 2020, there were three accidents at work and two commuting accidents that resulted in sick leaves for Fintraffic personnel that lasted at least one day. The greatest physical risk of an accident at work or while commuting appears to

Key personnel figures in 2020

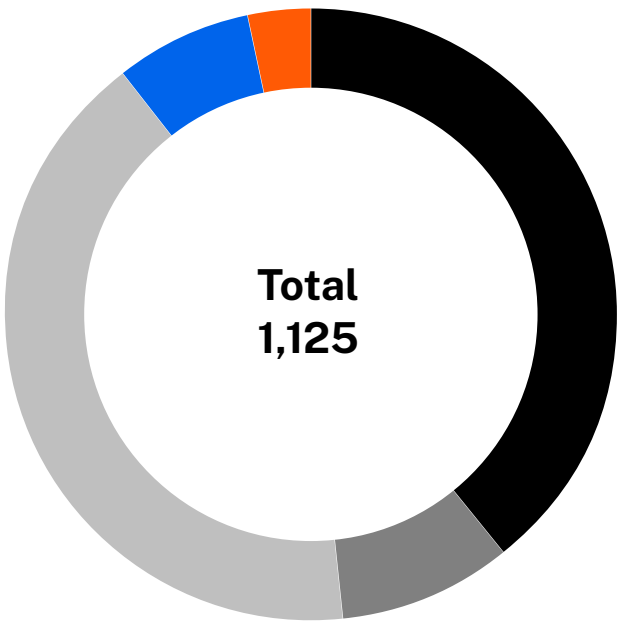
Average age of personnel

45 years

Average length of employment contracts

13 years

Personnel by business area



- Air navigation services 443
- Vessel traffic services 101
- Rail traffic management 465
- Road traffic management 80
- Fintraffic 36

Age distribution of personnel



- under 30 5%
- 30-39 25%
- 40-49 32%
- 50-59 27%
- over 60 11%



be from slipping or tripping on the way to or from work. The accident frequency for Fintraffic personnel in 2020 was 2.14 (number of accidents per million hours worked per year).

### Personnel satisfied with the workplace atmosphere

We conducted a personnel satisfaction survey in August. On the basis of the survey results, our personnel are satisfied with their working atmosphere, their colleagues, and supervisory work. On a scale of 1–5, the average score for these questions was 4. There was widespread satisfaction with supervisory work in particular, and also with opportunities for on-the-job learning.

### We provide diverse support for competence development

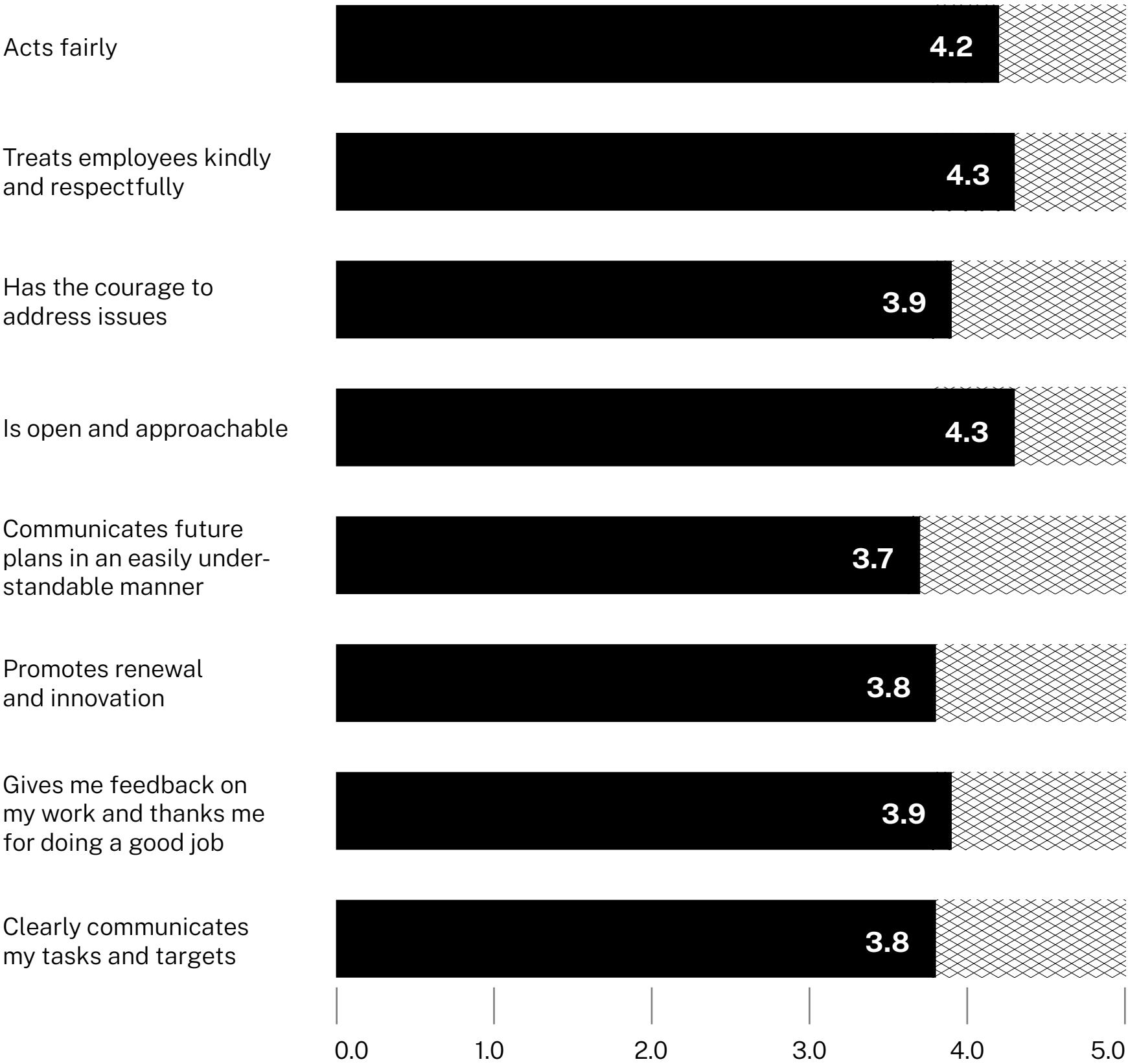
Our strategic spearhead projects include harnessing and developing competence, good leadership, and a corporate culture that supports renewal. We support our personnel’s competence development in diverse ways, and have continued to develop competence via on-the-job learning, guidance and support, and training and study. We regularly hold development, target and performance discussions with personnel, in order to go through the type of competence development support that each person needs in order to achieve their goals. During the year,

we organised managerial and leadership training on topics such as working capacity management, the new Working Hours Act, key terms and conditions of employment, and managing remote and decentralised work. A total of about 60 supervisors participated in managerial and leadership training, which equates to slightly less than half of all supervisors. We continued our service development training programme in the form of apprenticeships, and a total of 18 experts took part in this programme. During the year, we arranged monthly training in jurisprudence and procurement for those working with contracts and procurement. We also organised English language training. About 80 per cent of our personnel work in operative positions. They received training specific to their mode of transport, such as air navigation training, simulation exercises, training for on-the-job trainers and work coaches, traffic control training, and traffic safety training.

### We promote equality

Anyone can apply for our open positions regardless of their national origin, ethnic background, gender or other similar characteristics. One of our objectives is to pay attention to gender when making appointments in order to achieve a balanced gender structure in executive management for both the Group and its subsidiaries. During the year, we also significantly increased

### Supervisor index results:







the number of women in the Group Management Team when making new appointments. However, we always ensure we choose the best applicant for the job. As an employer, we want to create a workplace that enables a good work-life balance. Flexible working hours are just one way in which we try to achieve this.

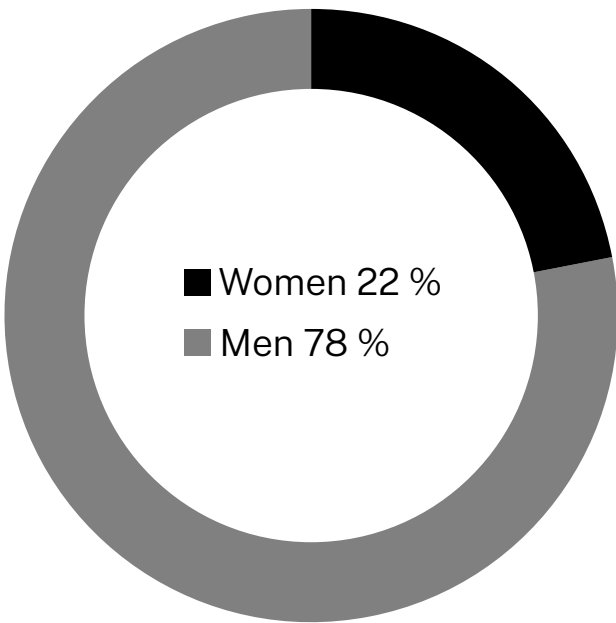
**We negotiated new collective agreements**

Different subsidiaries comply with different collective agreements. During the year, we signed a new company-specific collective agreement for road and maritime traffic control for the period 6 November 2020–28 February 2022. We are also currently negotiating collective agreements for air navigation. In December 2020, the employer terminated the collective agreement for air traffic controllers due to the major changes that have occurred in the operating environment as a result of the coronavirus pandemic. Negotiations with air traffic controllers on a new collective agreement will be launched in early 2021.

**Whistleblowing channel introduced in early autumn**

An EU directive obliges all public-sector organisations and all companies employing more than 50 people to organise a channel for reporting things such as suspected cases of misconduct.

**Number of men and women**



Ensuring genuine anonymity is vital, as the directive revolves around protecting the whistleblower from all discrimination and ensuring a safe way of reporting suspected misconduct.

In late 2020, we introduced an internal whistleblowing channel on our intranet and an external channel on our website. These channels enable both our personnel and partners to make anonymous reports of any suspected criminal offences, violations and misconduct, or any breaches of our Code of Conduct.



## Proactive work to contain the coronavirus pandemic

At the first signs of the coronavirus pandemic in 2020, Fintraffic decided to establish an internal contingency team. The team was tasked with safeguarding the traffic control services that are vital for society to function. Without air traffic control services, aircraft cannot take off or land; and trains and ships cannot operate safely without rail traffic management and vessel traffic services. The team was led by our Group's risk management director, and its members consisted of representatives from various Group companies and key Group functions.

The contingency team met frequently during the year and drew up plans for various pandemic scenarios. It also coordinated and arranged necessary coronavirus-related procurements, studied various procedures for improving hygiene in working environments, drew up Group-wide guidelines and rules, and actively communicated with both companies and various authorities. The coronavirus situation changed frequently during the course of the year, and our operations and guidelines were always adapted to the situation.

We actively communicated with personnel about the coronavirus situation through a variety of channels, such as the intranet. Briefings about the coronavirus situation were also organised. In the summer, at personnel's request, we also began organising separate weekly meetings that were attended by both shop stewards and occupational health and safety personnel. These meetings went through the contingency team's policies – key issues were communicated to personnel.

No work-related coronavirus infections were detected in the Fintraffic Group during 2020. The proactive efforts of the contingency team, shop stewards and occupational health and safety personnel will continue in 2021.







# A reliable and efficient partner

Given our significant social impact, we engage in continual active dialogue with our various stakeholders. We want to be a reliable and unbiased partner that operates efficiently and transparently.

We divvied up responsibility for our various stakeholders within the Management Team in late 2019, and have been working accordingly since the beginning of 2020. We created standardised practices and engaged in closer cooperation with our partners.

One example of our cooperation in 2020 is the launch of a project to develop the transport ecosystem. Cooperation with our partners began with a workshop in January 2021, in which we agreed on concrete ways of moving forward in a variety of different working groups.

Our key partners in the public sector include the Finnish Defence Forces, the Finnish Transport Infrastructure Agency, Traficom, Customs, and the Police. In the private sector, our key partners are those operators in the transport ecosystem for whom we provide open data and associated services. In this way, we

also enable the creation of new business and services.

## A strong position in Finnish transport debate

One of the key goals of our stakeholder relations is to gain a stronger position in Finnish transport debate, so that various actors know who to turn to in transport-related issues. We proactively provide information and opinions on developments in the sector to authorities, politicians and the media. We want to bring our expertise to the table, and thereby improve the operating environment of both our company and Finland as a whole. We want to ensure that the benefits of increased digitalisation in transport are taken sufficiently into account during decision-making, and that the Finnish transport system is developing in the right direction.

At the moment, we only measure our stakeholder relations by business area. In 2021, we are aiming to conduct a Group-wide reputation and stakeholder survey, so that we can measure the effectiveness of our cooperation and monitor its development.



# Financial responsibility

For us, financial responsibility means taking care of the company's profitability and operational efficiency. As a state-owned special assignment company, it is important for us to promote an economically efficient transport system in Finland.

During the year, we established our Group's financial reporting model. We communicated our results by publishing both a half-year report and a financial statement bulletin.

As a special assignment company, we do not seek to maximise profit. Instead, we strive for moderate profitability. This target was not reached in 2020, as the company made a loss due to the impacts of the coronavirus pandemic. The Group's revenue totalled EUR 182.4 (221.9) million and the operating result for the financial year was EUR -8.0 (21.3) million. The sharp fall in air traffic volumes had a major impact on this result, as it led to a collapse in income from air navigation.

We made adjustments in air navigation by cutting costs, laying off personnel and implementing other measures. However, this was not enough to cover the loss of income and air navigation was heavily loss-making in 2020. After an exceptionally good year in 2019, 2020 still went as planned for road, rail and maritime transport as far as profit was concerned, even though overall traffic volumes were lower than normal all across the board, and particularly in passenger traffic. Goods volumes, on the other hand, remained almost unchanged.

EU legislation, in the form of the traffic risk-sharing mechanism for air navigation services, had a significant impact on the Group's result. Under normal circumstances, the mechanism works in such a way that, if traffic falls below the forecast in the draft performance plan, air navigation charges will rise in two year's time in accordance with the performance and charging schemes. Due to the drastic change in the market environment in the air transport sector, the traffic risk-sharing mechanism will not be applied normally in 2020 and 2021. Emergency legislation seeks to prevent any sharp fluctuations in traffic charges, taking into account airlines' ability to pay, and ensuring that air navigation providers are able to operate.

## Increased efficiency plays a key role

We strive for efficiency in all of our operations. In line with our strategic ownership policies, we are committed to improving our service level and boosting the efficiency of our traffic management service provision by developing our operating model with cumulative investments of EUR 30 million over the coming years.

If the operating model is not renewed, it may be difficult to develop the service level with cur-

rent funding. By using our resources wisely and sustainably, we will be able to provide the best possible support for the renewal of Finnish transport and development in the sector as a good employer.

We began developing an internal calculation model to monitor service-specific costs, our operational activity level, and operational efficiency. This will enable us to monitor not only service-specific costs, but also costs specific to each mode of transport. We will also continue other projects, such as harnessing Power BI to analyse and report on financial data.

In 2020, we introduced the Fintraffic management system and governance model that was approved in 2019. We made minor alterations to the model, such as changes in the size classes for decision-making on expenditures.

In risk management, we identified key operational risks and drew up plans to manage them. We also further developed our procurement function during the year, and improved efficiency via tendering.

The best economic value and impact will be generated by ecological and efficient traffic control that promotes safety and improves traffic flow at transport system level. We also create



## Cash flows for stakeholders

Customers, MEUR	2020	2019
Revenue	182.4	221.9
Goods suppliers and service providers, MEUR	2020	2019
Purchases of materials and services	46.9	45.4
Other operating expenses	31.3	31.5
Investments	61.7	22.8
<b>Total</b>	<b>139.8</b>	<b>99.7</b>
Personnel, MEUR	2020	2019
Salaries and fees	72.0	77.6
Pension costs	11.5	13.5
Employee-related expenses	2.4	2.4
<b>Total</b>	<b>85.8</b>	<b>93.4</b>
Public sector, MEUR	2020	2019
Taxes (direct taxes)	1.0	6.0
Shareholders , MEUR	2020	2019
Dividends and returns of capital	0.0	0.0
Increase in shareholder value (profit for the financial year)	-9.4	14.7
<b>Total</b>	<b>-9.4</b>	<b>14.7</b>
Financiers, MEUR	2020	2019
Financial expenses (net)	0.4	0.5

Unlike the accrual based figures, investments are reported on cash basis. Investments, of which 29.6 M € based on business transaction.

economic value by storing traffic data in one place, as this makes the data easier to utilise in the development of services that produce added value and solutions that promote functional traffic systems. Better traffic flow also helps Finland's competitiveness. When it comes to improving Finland's competitiveness in the area of passenger and goods logistics, a significant role is played by the strategic partnership between our company and the Finnish Transport Infrastructure Agency with regard to road, rail and maritime transport. Cooperation with other authorities and private-sector transport operators is also important.

### Greatest risks and opportunities

From a financial perspective, the greatest risk in 2021 is the continuation of the coronavirus pandemic and its impact on air traffic volumes, income from air navigation and the profitability of the air navigation service. In 2020, Fintraffic Air Navigation Services Ltd made a loss of EUR 16.1 million with revenue of only EUR 49.3 million (-39%). Fintraffic Air Navigation Services Ltd is currently obliged to provide the State with services and include the costs of their provision in en route charges. However, as income from en route charges has fallen significantly as a result of the pandemic, the costs of providing these services have mainly been borne by the company itself. These services include Aeronautical Informa-

tion Circular, airspace management, air rescue services, and services for the State's aviation operations at combined civil and military airports. The company has held discussions with the Ministry of Transport and Communications as to the possibility of government purchases relating to these services. We estimate that air traffic volumes in 2021 will be about half of those in 2019, and will gradually start to increase over the coming years.

Another uncertainty concerns how much additional funding the Finnish Transport Infrastructure Agency will receive in the State budget to purchase services in light of the challenging economic situation caused by the coronavirus pandemic. This will impact the Group's ability to make investments and develop its business.

During the year, we will continue to improve the quality of our services and increase our financial efficiency. One key way of achieving this will be to develop our operating model – for example, by investing in systems, such as automation, that will support processes.

In the longer term, we can also develop new business models and expand our customer base.

### No significant changes in taxation practices

There were no significant changes in taxation practices in 2020. The most important tax-related change during the year was that, for the first



## Taxes to be paid and accounted for

Key indicators for paying taxes, MEUR	2020	2019
Revenue	182.4	221.9
Profit before taxes	-8.4	20.8
Tax losses utilised	0.0	0.0
Personnel	1,125	1091
Taxes payable and tax-like charges, MEUR	2020	2019
Income tax	0.0	4.9
Employer contributions	1.0	0.6
Transfer tax	-0.9	0.9*
Other taxes and tax-like charges	0.7	0.7
<b>Total payable</b>	<b>0.7</b>	<b>7.1</b>
* 2020 refund.		
Taxes to be accounted for, MEUR	2020	2019
Payroll taxes	22.2	22.4
VAT, sales	67.1	74.7
VAT, purchases	-56.6	-56.8
<b>Total taxes to be accounted for</b>	<b>32.6</b>	<b>40.3</b>

The figures presented in the tax report have been collated from the Financial Statements of subsidiaries on an accrual basis.

time, the Group formed a tax group, thereby enabling internal tax equalisation.

Fintraffic complies with current legislation on the payment, collection, settlement and reporting of taxes and charges. All of the Group companies are Finnish and almost all taxes are paid and registered in Finland. Fintraffic has no branches in other countries. Fintraffic does not pay or register taxes in any tax havens (as defined by the OECD) and has not received any financial support from such countries.

In 2020, Fintraffic's total tax footprint was EUR 33.4 (47.4) million.

During the year, the company received public funding of EUR 4.6 million, of which EUR 2.9 million is related to Traficom's support for Finland's Eurocontrol membership fees. EUR 1.5 million in funding has been received to finance air navigation training.

Fintraffic pays its taxes mainly to Finland. The company's stakeholders have not expressed their views related to corporate taxation. Company works meticulously according to laws and regulations and applies advance rulings on taxation in special situations.



# GRI Index

This is Fintraffic’s first report in accordance with the Global Reporting Initiative (GRI) framework. Our responsibility reporting is based on the materiality themes that we identified in 2020. The reporting period is 1 January–31 December 2020. Fintraffic reports on responsibility in accordance with GRI Standards at Core level.

GRI 102 GENERAL DISCLOSURES			
Standard	Content	Location	Comment
Organisational profile			
102–1	Name of the organisation	Front cover	
102–2	Activities, brands, products, and services	p. 2, Business areas in brief p. 7	
102–3	Location of headquarters	Back cover	
102–4	Location of operations	p. 2	
102–5	Ownership and legal form	p. 2, Governance and Remuneration Report p. 4	
102–6	Markets served	p. 2, Business areas in brief p. 7	
102–7	Scale of the organisation	Key indicators for 2020 p. 6, Business areas in brief p. 7	
102–8	Information on employees and other workers	Social responsibility pp. 43–47	
102–9	Supply chain	GRI Index	Fintraffic is a service company. Our main production factors are personnel, software and equipment, our control centres and open data. We provide traffic management services, digital traffic services and information for our customers, stakeholders and end users. Fintraffic does not produce material products.
102–10	Significant changes to the organisation and its supply chain	CEO’s Review p. 4	
102–11	Precautionary Principle or approach	GRI Index	Fintraffic applies the precautionary principle.
102–12	External initiatives	Responsibility as part of decision-making p. 36	
102–13	Membership of associations	Business p. 22	



Standard	Content	Location	Comment
Strategy			
102-14	Statement from senior decision-maker	CEO's Review p. 4	
Ethics and integrity			
102-16	Values, principles, standards, and norms of behaviour	Strategy, p. 14	
Governance			
102-18	Governance structure	Governance and Remuneration Report pp. 4-10	
102-19	Delegating authority	Governance and Remuneration Report pp. 4-10	
102-20	Executive-level responsibility for economic, environmen- tal, and social topics	Governance and Remuneration Report pp. 4-10	
102-22	Composition of the highest governance body and its committees	Governance and Remuneration Report pp. 4-10	
102-23	Chair of the highest governance body	Governance and Remuneration Report pp. 4-10	
102-24	Nominating and selecting the highest governance body	Governance and Remuneration Report pp. 4-10	
102-26	Role of highest governance body in setting purpose, values, and strategy	Governance and Remuneration Report pp. 4-10	
102-28	Evaluating the highest governance body's performance	Governance and Remuneration Report pp. 4-10	
102-29	Identifying and managing economic, environmental, and social impacts	Governance and Remuneration Report p. 11	
102-30	Effectiveness of risk management processes	Governance and Remuneration Report p. 11	
102-31	Review of economic, environmental, and social topics	Governance and Remuneration Report p. 11	
102-35	Remuneration policies	Governance and Remuneration Report pp. 12-16	



Standard	Content	Location	Comment
<b>Stakeholder engagement</b>			
102-40	List of stakeholder groups	A reliable and efficient partner p. 48	
102-41	Collective bargaining agreements	Social responsibility p. 44	
102-42	Identifying and selecting stakeholders	A reliable and efficient partner p. 48	
102-43	Approach to stakeholder engagement	A reliable and efficient partner p. 48	
102-44	Key topics and concerns raised	A reliable and efficient partner p. 48	Fintraffic intends to conduct a Group-wide reputation and stakeholder survey in 2021.
<b>Reporting practice</b>			
102-45	Entities included in the consolidated financial statements	p. 2	
102-46	Defining report content and topic boundaries	Responsibility as part of decision-making pp. 36-37	
102-47	List of material topics	Responsibility as part of decision-making pp. 36-37	
102-48	Restatements of information	GRI Index	No changes in reported data.
102-49	Changes in reporting	GRI Index	No significant changes. This is Fintraffic's first report using the GRI framework.
102-50	Reporting Period	GRI Index	1 January 2020-31 December 2020
102-51	Date of most recent report	GRI Index	06/04/2020
102-52	Reporting cycle	GRI Index	Annually
102-53	Contact point for questions regarding the report	GRI Index	viestinta@fintraffic.fi
102-54	Claims of reporting in accordance with the GRI Standards	GRI Index	
102-55	GRI content index	GRI Index	
102-56	External assurance	GRI Index	The report has not been verified.
<b>Management Approach</b>			
103-1	Explanation of the material topic and its boundary	Responsibility as part of decision-making pp. 36-37	
103-2	The management approach and its components	Responsibility as part of decision-making p. 36, Good Governance p. 38	
103-3	Evaluation of the management approach	Good Governance p. 38	



LIST OF MATERIAL TOPICS

GRI 200 ECONOMIC DISCLOSURES			
Standard	Content	Location	Comment
GRI 201: Economic Performance			
201-1	Direct economic value generated and distributed	Financial responsibility pp. 49–51	
GRI 203: Indirect Economic Impacts			
203-2	Significant indirect economic impacts	How we create value for society p. 15	
GRI 207: Tax			
207-1	Approach to tax	Financial responsibility pp. 49–51	
207-2	Tax governance, control, and risk management	Financial responsibility pp. 49–51	
207-3	Stakeholder engagement and management of concerns related to tax	Financial responsibility pp. 49–51	
GRI 300 ENVIRONMENTAL DISCLOSURES			
Standard	Content	Location	Comment
GRI 302: Energy			
302-1	Energy consumption within the organisation	Environmental responsibility pp. 41–42	
GRI 305: Emissions			
305-1	Direct (Scope 1) GHG emissions	Environmental responsibility pp. 41–42	
305-2	Energy indirect (Scope 2) GHG emissions	Environmental responsibility pp. 41–42	
GRI 307: Environmental compliance			
307-1	Non-compliance with environmental laws and regulations	GRI Index	No cases in 2020.



GRI 400 SOCIAL DISCLOSURES			
Standard	Content	Location	Comment
GRI 403: Occupational Health and Safety			
403-1	Occupational health and safety management system	Social responsibility pp. 43–47, Safety pp. 39–40	
403-2	Hazard identification, risk assessment, and incident investigation	Safety pp. 39–40	
403-3	Occupational health services	Social responsibility pp. 43–47	
403-4	Worker participation, consultation, and communication on occupational health and safety		
403-5	Worker training on occupational health and safety	Safety pp. 39–40, Social responsibility pp. 43–47	
403-6	Promotion of worker health	Social responsibility pp. 43–47	
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Social responsibility pp. 43–47	
403-8	Workers covered by an occupational health and safety management system	Social responsibility pp. 43–47	
403-9	Work-related injuries	Safety pp. 39–40, Social responsibility pp. 43–47	
GRI 404: Training and Education			
404-2	Programmes for upgrading employee skills and transition assistance programmes	Social responsibility pp. 43–47	
GRI 405: Diversity and Equal Opportunity			
405-1	Diversity of governance bodies and employees	Social responsibility pp. 43–47, Governance and Remuneration Report p. 3	
GRI 416: Customer Health and Safety			
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	GRI Index	No cases in 2020.
GRI 419: Socioeconomic compliance			
419-1	Non-compliance with laws and regulations in the social and economic area	GRI Index	No cases in 2020.



