



52 885 200 THE YEAR 2017 **PASSENGERS** • 696 700 **DEPARTURES AND LANDINGS** 3098 PERMANENT EMPLOYEES 98 PER CENT **REGULARITY**

85 PER CENT

PUNCTUALITY

Avinor's target is a punctuality rate of 88 per cent. The lower rate of punctuality in 2017 is primarily due to adverse weather conditions in January and December.



About Avinor

Avinor is a wholly state-owned limited liability company under the authority of the Norwegian Ministry of Transport and Communications and is responsible for the 45 state-owned airports and air navigation services for civilian and military aviation in Norway.

AVINOR'S AIRPORTS

Avinor's airports vary by size and traffic volume. Oslo airport is the hub of Norwegian aviation and a transit airport for traffic between Norway and the rest of the world. It accounts for more than half of Norway's air traffic and just over 70 per cent of the country's total international traffic. Stavanger, Bergen, and Trondheim also have a sizeable proportion of direct international traffic. Some other airports also have international traffic: Tromsø, Bodø, Harstad/Narvik, Molde, Ålesund, Haugesund, Kristiansand, and Kristiansund. This is in addition to some international charter traffic at individual airports.

27 of Avinor's 45 airports have short runways of between 800 and 1,200 metres. These are used by smaller aircraft types such as the Bombardier Dash 8, air ambulances, and private aircraft. These small airports are of huge importance in ensuring the habitation and economies of remote areas.

The opening of new Oslo airport in April and the new terminal at Bergen airport, Flesland, in August 2017 were two major milestones in efforts to modernise and improve the efficiency of Norwegian aviation and to pave the way for the future. Both of these major projects were delivered on time, within budget, and with the right level of quality. Feedback from passengers using the two airports has been very positive.

The government's ownership report regarding Avinor and the National Transport Plan (NTP) for 2018 to 2029 were adopted by the Norwegian parliament in June 2017. The ownership report clarified that Avinor must continue to plan a third runway east of Oslo airport in the municipality of Ullensaker. In addition the

Norwegian parliament has approved the construction of a new airport in Bodø and stressed that this must take place as soon as possible – in the first part of the NTP period. The majority of the Norwegian parliament was also in favour of the construction of a new airport in Mo i Rana. Narvik Airport, Framneslia, was decommissioned in 2017 after 42 years of operation.

AIR NAVIGATION SERVICES

Air navigation services are provided by way of a separate company – Avinor Flysikring AS – which is wholly owned by Avinor. Avinor Flysikring AS provides services including en-route navigation services, approach control services, and control tower services, as well as flight navigation services and services relating to technical operations. Avinor Flysikring AS is responsible for air navigation in Norwegian airspace and provides services to both civil and military aviation. A process commenced in 2017 to explore the possible separation of air navigation services from Avinor. This process will continue in 2018. It is uncertain if or when any such separation will take place.

AVINOR IS SELF-FUNDING

Avinor is a self-funding business and its airport operations are run as a single unit, in which the financially profitable airports finance the financially unprofitable airports. Oslo airport is the hub of Norwegian aviation and a transit airport for traffic between Norway and the rest of the world. The profit generated by Oslo airport is crucial for the financing of the network of airports spread across the rest of Norway.

VISION

We create valuable relationships.

MISSION

Avinor will develop and operate a safe, efficient, and sustainable aviation system throughout Norway.

VALUES

- · Open
- · Accountable
- Dynamic
- · Customer-focused

NOK MILLION	2017	2016	2015	2014	2013
Operating income airport operations	10 162.1	9 674.9	9 424.1	9 561.5	9 001.1
Operating income air navigation services	2 085.2	1 990.8	2 087.6	2 014.8	1 897.3
Total operating income group	11 526.0	10 788.1	11 989.4	10 671.0	9 977.6
EBITDA group	3 126.4	3 520.7	4 691.8	3 648.3	2 993.0
Profit after tax	499.3	1 028.6	2 449.0	1 398.7	890.9
Number of airline passengers (figures in 1 000)	52 885	50 803	50 025	50 107	48 799
Number of aircraft movements (figures in 1 000)	697	704	724	738	731

1) The Group uses EBITDA as an alternative performance measure (APM). This calculation is directly reconciled in the profit and loss account. EBITDA is used because it is an approximate calculation of free cash flow from operations.

Avinor's primary sources of income are fees from airlines and passengers and income from the rental of space for retail operators, tax-free sales, food and drink, and other passenger services. In addition, Avinor has income from the rental of space to airport hotels and parking facilities.

The shares in Avinor AS are wholly owned by the Norwegian state as represented by the Ministry of Transport and Communications. The Ministry of Transport and Communications manages the ownership by the Norwegian state and determines Avinor's financial framework. In addition, the Ministry of Transport and Communications regulates the aviation fees.

TRAFFIC IN 2017

53 million passengers travelled to or from Avinor's airports (scheduled, charter, and offshore) in 2017 – an increase of 4.1 per cent compared with 2016. International traffic increased by 6.3 per cent, while domestic traffic increased by 2.8 per cent compared with the previous year. Looking at the last four years as a whole, one can see that visitors from overseas have driven the growth of Norwegian aviation, with 10 per cent annual growth in overseas visitors to Norway and 18 per cent growth in overseas visitors using Oslo airport as a hub.

27.5 million passengers used Oslo airport in 2017, which is an increase of 6.6 per cent compared with 2016.

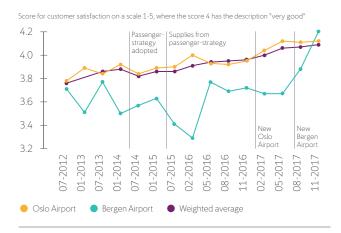
There was a total of 697,000 movements (take-offs and landings) at Avinor's airports in 2017, which is a slight decline of just over 1 per cent compared with the year before. The increase in passenger numbers is therefore relative to the number of passengers per flight (load factor) and not to the number of movements. We saw a similar trend in 2016.

In 2017, there were 82,358 overflights using Norwegian airspace, which is an increase of 2.7 per cent compared with 2016.

SATISFIED CUSTOMERS

Passenger satisfaction is measured regularly. Avinor participates in the global Airport Service Quality (ASQ) survey, which

ASQ OVERALL SATISFACTION - AVERAGE 8 LARGEST AIRPORTS



belongs to and is implemented by Airport Council International. According to this survey, Avinor's passenger satisfaction has never been higher and has increased steadily over the last ten quarters.

AIR SAFETY AND SECURITY CONTROL

Security is Avinor's highest priority and the primary objective is to prevent undesired events and ensure good emergency preparedness.

There were no aviation accidents with or without personal injury in Norwegian aviation to which Avinor was a contributing party in 2017. There were three serious aviation incidents to which Avinor was a contributory party. Two events concerned the non-observance of minimum airspace distances at Kjevik and Bodø, while the third concerned a car on the runway during the departure of an aircraft at Bodø.

Threat levels in relation to air passenger safety are the same as in previous years. In 2017, Avinor conducted analyses to further identify vulnerabilities at all its airports and is now implementing tailored security measures.





Norway depends on aviation

Norway is a vast country with challenging topography. Norwegian businesses are outward-looking and depend on aviation. Aviation is essential for habitation, tourism, healthcare, education, sport and culture, and for the Norwegian Armed Forces.

There are more than 200 direct international connections with at least one weekly departure from Avinor's airports. The number of direct intercontinental routes rose to 22 in 2017 and is expected to increase further in the coming years.

The importance of aviation to Norwegian tourism is substantial and increasing. The number of tourists visiting Norway by air has increased from 2.4 million to 4.4 million between 2011 and 2016. Tourists arriving in Norway by air spend an average of seven days in the country. Their consumption in 2016 had a value of approximately NOK 46 billion (NOK 1,500 per day). Without a good route network, this development would not have been possible.

Flying is the dominant means of travelling between southern Norway and northern Norway, as well as between Norway and overseas. Travelling by train, bus, or car takes too long and is not a realistic option. Flights cover relatively short distances along the coast of western Norway and northern Norway. Here fjords and mountains make land-based transport incredibly arduous. For this reason, the state purchases air route services for journeys of relatively short distances because of their importance to people and business alike. Even for short journeys in southern Norway, the proportion made by air is high. A journey between Stavanger and Oslo takes one hour by air and a total of an hour to and from the airport. Road and rail options take between seven and eight hours, adding more than ten hours to a return journey compared with flying.



Stavanger-Oslo journey times by train, plane and car

How much do we fly?

In 2017, Norwegians flew more than 11 million return journeys, which equates to around one trip overseas and one trip in Norway per person. There has been no significant increase in this trend among Norwegians since 2011. The increase in air travel in recent years is due to more people from abroad travelling via Avinor's airports.

Air travel is measured in several different ways. Here is a simple explanation:

Terminal passengers

Avinor states how many passengers use its airports, be they arriving, departing, or transferring between flights (counted as a transfer both on arrival and departure). The total number is called "terminal passengers". The figure for Norway in 2017 was 55 million terminal passengers, including 2 million at private airports and 53 million at Avinor's airports.

Individual journeys

In order to calculate the number of journeys from the point of departure to a destination, transfer passengers must be excluded and we must instead look at the number of passengers who have arrived or departed. In addition, the number of passengers travelling domestically must be halved, as they are counted at

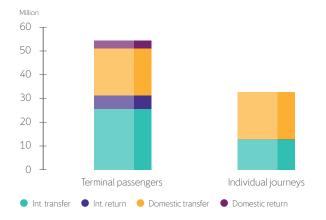
both the departure airport and destination airport, i.e. twice per trip. Passengers travelling to or from overseas are counted only at the Norwegian end of their trip.

In 2017, around 26 million passengers travelled within Norway. This represents 13 million individual journeys. 20 million passengers arrived and departed on international flights. This represents 20 million individual journeys (figure 1). In other words, in 2017 almost 33 million flights were made to, from, and within Norway.

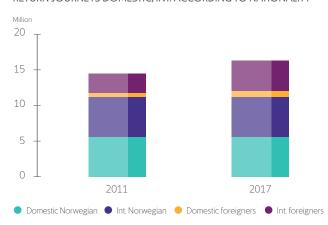
Return journeys

When we think about flights, we often think about round trips. In 2017, just over 16 million return journeys were made (figure 2). Just over 11 million of these were made by Norwegians, and 5 million were made by foreigners. On average, every Norwegian takes one international return flight and one domestic return flight per year.

TERMINAL PASSENGERS AND INDIVIDUAL JOURNEYS 2017



RETURN JOURNEYS DOMESTIC/INT. ACCORDING TO NATIONALITY







Future traffic trends

There is a strong correlation between the economy and air travel. Air travel trends mirror economic cycles. When the economy is good, air travel grows. It then flattens out or shrinks when the economy is weak. Economic growth and globalisation have increased demand for air travel.

Increased productivity has laid the foundation for growth in prosperity, including growth in tourism. Continued economic growth is expected in the coming years, which together with the associated expansion in the routes on offer will contribute to increased demand for air travel.

Norway's population is expected to grow from 5.3 million in 2017 to 6.3 million by 2040 (Statistics Norway), which in itself will result in an increase in air travel. In addition, incomes are increasing. These are the two main drivers in air travel forecasts.

The Norwegian Centre for Transport Research ($T\emptyset I$) has estimated that by 2040 air travel will grow to around 44 million passengers per year. International growth will be higher than domestic growth. Overall annual passenger growth is estimated at 2.1 per cent.

Passenger growth in the various markets 2016-2040

PERIOD	DOMESTIC	EUROPE	INTERCONTINENTAL	TOTAL
2016-2040	33 %	107 %	143 %	66 %
Million passengers 2016	15.1	10.8	0.6	26.5
Million passengers 2040	20.0	22.4	1.4	43.8

Aviation and the climate

In general, there is considerable understanding of the importance of aviation in Norwegian society, as well as concern about its impact on the environment and climate. Efforts relating to effective climate and environmental measures must be intensified. Avinor's goal is to be a leader in the aviation sector with regard to climate and the environment.

GREENHOUSE GAS EMISSIONS IN DOMESTIC AVIATION

According to Statistics Norway, greenhouse gas emissions from all domestic civil aviation in 2016 (most recent official figures) corresponded to 2.25 per cent of total domestic emissions (1.2 million tonnes out of a total of 53.3 million). It is these emissions which are covered by the Kyoto Protocol and which are reported in Statistics Norway's statistics on greenhouse gas emissions from Norwegian territory. This principle is used in all countries.

GREENHOUSE GAS EMISSIONS IN INTERNATIONAL AVIATION

Greenhouse gas emissions from international traffic (i.e. from Norwegian airports to the first overseas destination) equated to 1.5 million tonnes of CO_2 equivalents in 2016. These emissions are reported annually by the Norwegian Environment Agency to the United Nations Framework Convention on Climate Change (UNFCCC).

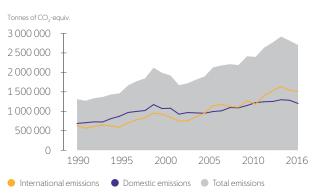
GREENHOUSE GAS EMISSIONS FROM NORWEGIAN AVIATION AS A WHOLE

Total greenhouse gas emissions from all jet fuel for civil purposes sold at Norwegian airports in 2016 (most recent official figures) equates to around 5 per cent of Norway's total emissions, in the order of 2.7 million tonnes of CO_2 equivalents. For the second year in a row, there was a reduction in greenhouse gas emissions from both international and domestic traffic. Between 2015 and 2016 the reduction was roughly 4 per cent. This reduction in greenhouse gas emissions is primarily due to the use of aircraft that are more energy-efficient and fewer aircraft movements.

GREENHOUSE GAS EMISSIONS FROM INTERNATIONAL AVIATION

According to IATA, total $\rm CO_2$ emissions from global aviation amounted to 811 million tonnes, or about 2 per cent of total global $\rm CO_2$ emissions (36 billion tonnes) in 2016. In addition, the fact that some of the emissions occur at high altitudes increases their climatic impact. CICERO estimates an additional factor of between 0.8 and 2.5, with a model average of 1.8. Only a limited amount of domestic traffic in Norway occurs at these altitudes.

GREENHOUSE EMISSIONS FROM NORWEGIAN AVIATION 1990-2016





Measures to reduce greenhouse gas emissions

More than 95 per cent of greenhouse gas emissions in aviation comes from aircraft. The most important emission-reducing measures are related to fleet renewal, increasing the efficiency of airspace, sustainable biofuel, and the introduction of electric and hybrid-electric aircraft.

FLEET RENEWAL

In the short term, new and modern aircraft fleets are the most important contribution to reducing greenhouse gas emissions from aviation. The aircraft are lighter and their engines are more efficient. The measures are related to new engine technology, the increased use of composite materials instead of aluminium, new and lighter seats, and other cabin interior innovations. In addition, the aerodynamics of the fuselage and wing profiles are improved. Since 2001, greenhouse gas emissions per seat kilometre in Norway have been more than halved as a result of fleet renewal

AIRSPACE EFFICIENCY IMPROVEMENTS

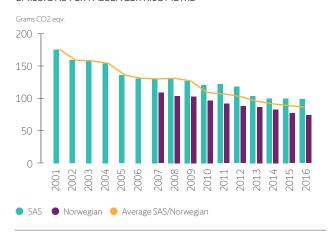
Airspace efficiency improvements coupled with the optimisation of landings and take-offs are important measures through which Avinor can exercise considerable influence. Free Route Airspace was implemented in 2016, and improved navigation technology facilitates more accurate and flexible approach and departure procedures. Since Avinor commenced a project for satellite-based approaches at Oslo airport, several thousand curved approaches have been carried out. The advantage of these approach procedures is that flights can pass around densely populated areas close to the airport, reducing noise for the airport's neighbours. In addition, aircraft can fly shorter routes, thus reducing their fuel consumption and greenhouse gas emissions. In 2017 the pilot project was completed and the procedures were approved by the Norwegian Civil Aviation Authority, so they are available to anyone who would like to apply for approval. The procedures for curved approaches have been implemented at several Avinor airports, and several more airports will implement them in the years to come.

In 2017 Avinor Flysikring AS continued its co-operation in the functional NEFAB airspace block (Norway, Estonia, Latvia, and Finland) through the Borealis Alliance (which, in addition to NEFAB, includes the airspace blocks of UK/Ireland and Denmark/Sweden). Efforts are underway to develop Free Route so that it applies to all areas in the Borealis Alliance.

JET BIOFUEL

Jet biofuels are now available at Oslo and Bergen airports. Several more airports will follow. 1.25 million litres of sustainable jet biofuel were used in Norway in 2016. This corresponded to 0.1 per cent of all jet fuel sold in Norway. There was very limited availability of jet biofuel in the market in 2017, resulting in the mixture of only 125,000 litres of jet biofuel during the year. The biofuels sold to airlines in Norway are produced without palm oil or palm oil products. In June 2017 the Norwegian parliament stipulated that from 2019, 1 per cent of jet fuel in Norway must be biofuel. The plan is to increase this amount to 30 per cent by 2030 if such fuel is available.

EMISSIONS PER PASSENGER KILOMETRE





Electric or hybrid electric aircraft in passenger traffic in 2025?

ELECTRIFICATION OF AVIATION

Avinor's goal is for all Norwegian domestic aviation to be electrified by 2040. Avinor is playing an active role in achieving this goal. Together with the Norwegian Association of Air Sports (NLF), Avinor has established a long-term project for the introduction of electric aircraft in Norwegian aviation. The project is supported by the government, and the project partners are Widerøe, SAS, and the climate foundation ZERO.

There is considerable interest in the development of electric aircraft. A number of stakeholders, including Boeing, Airbus, Siemens, Rolls Royce, and NASA, are working with and can see the commercial potential of electric and hybrid-electric aircraft.

Norway is in a unique position to utilise electric aircraft thanks to its established local network using small aircraft, considerable experience, great interest in transport electrification, and almost 100 per cent renewable electricity.

A realistic expectation is that the first electric or hybrid-electric aircraft will enter passenger service in Norway by around 2025. Avinor has commenced work to map current and future capacity with a view to charging electric aircraft at the company's airports. Avinor has been commissioned by the government to develop a programme that paves the way for the introduction of electric aircraft in commercial aviation.



Corporate social responsibility

Avinor's corporate social responsibility has four primary areas: ensuring good aviation services for the whole of Norway; being a driving force in climate and environmental efforts; being a professional and good employer; and ensuring that we run our business responsibly.

Goals and results for corporate social responsibility in 2017

Avinor shall ensure good aviation services for the whole of Norway

GOAL	RESULTS
Punctuality: 88 per cent within 15 minutes	85 per cent
Regularity: 98 per cent	98 per cent
All airports must be certified in accordance with the ISO 14001:2015 standard	In 2017, Avinor's environmental management and operations were certified in accordance with the ISO 14001:2015 standard. Fourteen airports are now covered by Avinor's joint certification. An additional 18 airports underwent their first certification audit at the end of 2017, and the remaining airports will be phased into the certification in 2018.
Air transport must be accessible by everyone	The survey under the supervisory authority of the Norwegian Civil Aviation Authority is due for completion in the summer of 2018. All of Avinor's airports will be universally designed during their planning in accordance with technical regulations.
Avinor must streamline, modernise, and invest in increased capacity	 The modernisation programme is on track. Oslo and Bergen airports were opened as planned. The development of technology for remote-controlled control towers is on track. A prototype driverless snow plough will be tested in 2018. A new airport in Bodø is being planned. Narvik airport has been decommissioned.
Avinor must to work to improve the customer experience	 The ASQ (Airport Service Quality) survey shows that satisfaction among our passengers has never been higher. The customer centre in Bodø has been expanded. A new version of our digital travel buddy has been launched.
Avinor must prevent undesired incidents and ensure good emergency preparedness	No aviation accidents in which Avinor was a contributing party. Three serious incidents without injuries in which Avinor was a contributing party.

Avinor shall be a driving force in the work on climate and environmental challenges within aviation

 Avinor's own verifiable greenhouse gas emissions from airport operations increased f in 2017, approximately 600 tonnes compared with 2012.
· Biodiesel used for Avinor's own vehicles in Trondheim, Bergen, and Oslo.
Ten new vehicles, of which six are electric and three are hybrid.
 Oslo, Trondheim, Bergen, Kristiansand, and Stavanger airports accredited by the Airport Carbon Accreditation (ACA) programme.
 All airlines that refuel at Oslo and Bergen airport can buy jet biofuel. In 2017 125,000 litres of jet biofuel was mixed in.
For the second year in a row, there was a reduction in greenhouse gas emissions from both international and domestic traffic.
Oslo airport has the highest proportion of public-transport-based ground transport in Europe at 70 per cent.
· Together with NLF, in 2017 Avinor ordered Norway's first battery-powered electric aircraft.
Avinor's energy consumption increased from 2016 to 2017.
Origin-guaranteed electricity has been purchased for all of Avinor's airports.
$\cdot \ \text{All carpark lighting is being changed to controlled LED lighting. This is due for completion in 2018.}$
A solar power facility is being developed in Svalbard.
Avinor currently sorts 57 per cent of its waste.
More de-icing chemicals than permitted at 11 airports.
Measures implemented to remove PFOS from both the ground and the water.
5,350 curved approaches at Oslo airport in 2017.
· Compliance with the new departure corridor at Oslo airport exceeded 95 per cent in 2017.
 Altered approach and departure procedures at Bergen and Stavanger airports reduced the impact of noise from helicopters.

Avinor shall be a professional and attractive employer

GOAL	RESULTS
Create a Group-wide culture of improvement	 Established training framework. Efforts to ensure that all airport managers are approved pursuant to the new requirements of the
	Norwegian Civil Aviation Authority, including a new programme for Operational Maintenance Managers (airport managers).
	· 12 new internship places in 2017, making a total of 24.
Sickness absence of 4.5 per cent or lower	4.5 per cent
LTI rate 3.0	1.4
Reduce breaches of working hours provisions	· 27 per cent reduction in the number of breaches of working hours provisions.
	· 0.5 per cent reduction in the use of overtime.
Avinor aims to increase its percentage of women employees to 25 per cent in 2020	· In 2017 the percentage of women among permanent employees has been 22 per cent
As an Inclusive Working Life company, Avinor emphasises the prevention of exclusion from work	 In 2017, Avinor had adapted work agreements in place with approximately 30 employees to enable them to maintain their employment with the company
Avinor shall contribute to higher employment of people with disabilities and reduced occupational opportunities	 In 2017 several schemes were implemented for the employment of people with disabilities and reduced occupational opportunities. The experience from this has been positive

Avinor shall ensure that it conducts its business responsibly

GOAL	RESULTS
Employees, suppliers, and partners must be familiar with and comply with Avinor's ethics guidelines	90 per cent of all employees have completed the course on Avinor's ethics guidelines.
	Established anti-corruption programme with focus on prevention and control activities.
	\cdot Co-operation initiated with Skatt Øst to strengthen efforts to combat crime in the workplace.
	$\cdot \ \text{Avinor's notification committee received 200 notifications, all of which were addressed.}$

Executive management



DAG FALK-PETERSEN



ANDERS KIRSEBOM Managing Director Avinor Flysikring AS



ØYVIND HASAASAirport Director
Oslo airport



ASLAK SVERDRUP Airport Director Bergen airport, Flesland



LEIF ANKER LORENTZENAirport Director
Stavanger airport, Sola



MARIT HELENE STIGEN
Airport Director
Trondheim airport, Værnes



MARGRETHE SNEKKERBAKKEN Division Director Regional Airports



PETTER JOHANNESSEN Executive Vice President economy, finance and IT



JON SJØLANDER Executive Vice President strategy and development



EGIL THOMPSONExecutive Vice President communication and marketing



MARI HERMANSEN Executive Vice President HR, legal and business support



STINE RAMSTAD WESTBY Executive Vice President operations and infrastructure

Board of Directors



OLA MØRKVED RINNAN Chairman Consultant



OLA HENRIK STRAND Vice Chairman CEO, BluWrap



LINDA BERNANDER SILSETH Board member



HERLOF NILSSEN
Board member
Managing Director,
Helse Vest RHF



ELI SKRØVSETBoard member
CFO, Eksportkreditt, Norge



BJØRN TORE MIKKELSEN Board member, employee representative Team leader, Kirkenes airport



HEIDI ANETTE SØRUM Board member, employee representative Head safety deputy



OLAV AADAL Board member, employee representative Supervisor, Værnes TWR/APP Avinor Flysikring AS

Avinor is responsible for the 45 state-owned airports and air navigation services for civilian and military aviation in Norway. This network links Norway together – and links Norway to the world.

Avinor is a driving force in environmental work in aviation and a driving force to reduce the combined greenhouse gas emissions from Norwegian aviation. The company has a leading role in the work on developing and delivering biofuel for aircraft and the electrification of aviation.

Every year, Avinor contributes to conducting safely and efficiently more than 50 million flights. About one half travel to and from Oslo airport

More than 3,000 employees are responsible for planning, developing and operating airports and air navigation services. Avinor is funded by aviation fees and commercial sales at the airports.



AVINOR AS Org.nr. 985 198 292 Dronning Eufemias gate 6 0191 Oslo

Postboks 150 2061 Gardermoen

avinor.no

