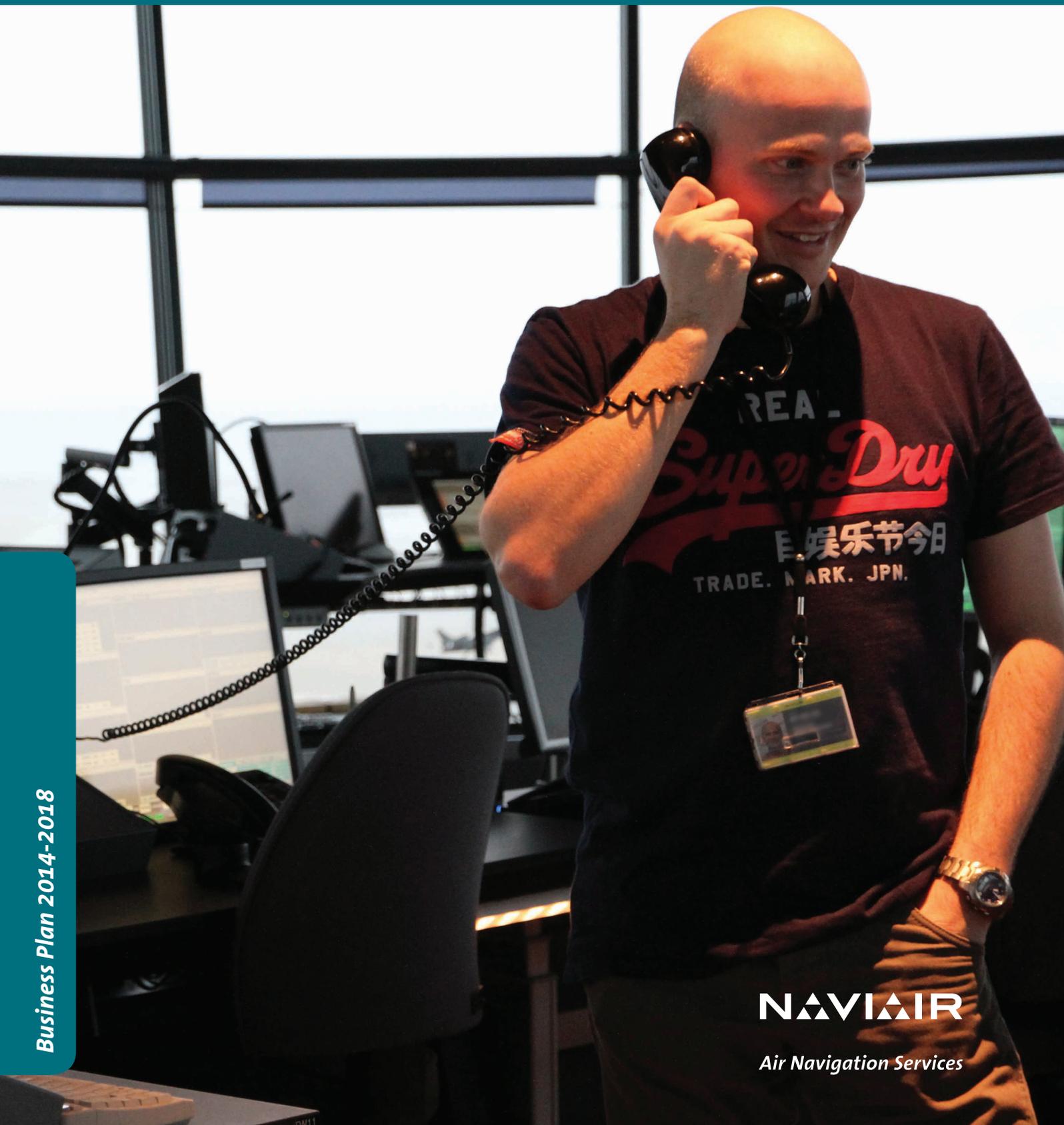


Business Plan

2014-2018



Business Plan 2014-2018

NAVIAIR

Air Navigation Services



Efficiency improvements and international harmonisation

Despite several years of air traffic stagnation and the consequent reduction in our earnings, again in 2013 we have been successful in adapting Naviair to current market conditions. Among other things, we have maintained our focus on continuously lowering our costs.

With regard to traffic, 2013 turned out more positively than expected at the beginning of the year, although traffic remained at a considerably lower level than anticipated when the unit rates for the so-called first reference period were set in 2011. However, we have coped with the negative fluctuations in our earnings and finances through strict cost management and structural adjustments.

In the light of this, we are therefore able to meet our objective of working for lower unit rates for our customers. Our constant focus on finances means that we will be reducing our unit rates for En route, TNC Copenhagen and Billund in 2014.

In the past year, we have continued to follow our long-term strategy, focusing on our core business and on developing and consolidating the company through international partnerships. This will enable us to enhance our contribution to the overall harmonisation and greater efficiency of European air traffic management.

- Through our co-ownership of NUAC we will continue to improve the efficiency of en route services.
- We have already implemented improvements to air traffic management that benefit both the airlines' finances and their environmental performance, through fuel savings, shorter flight times and lower greenhouse gas emissions. Among other things, in 2011, Naviair and LfV introduced Free Route Airspace, allowing airlines to fly the shortest possible and most direct route through our airspace.
- In 2013, NUAC established cooperation with the ANSPs in Norway, Finland, Estonia and Latvia in order to extend Free Route Airspace to cover the entire Nordic area from November 2015.
- We continuously explore the possibilities of new airspace improvements – including by working through NUAC to optimise the traffic around the airports in Copenhagen and Malmö by establishing an Øresund terminal area.

In the field of technology we are continuing our work on implementing a unique harmonisation into seven control centres spread over five countries through the COOPANS alliance.



- In autumn 2013, the system of the Copenhagen ATCC was upgraded as planned, without inconvenience to air traffic.
- The plan for the first six months of 2014 is that the seven ATCCs of all the COOPANS partners will be updated, so that they all have the same harmonised and uniform systems.
- As a partner we save over 30 per cent on our development costs compared with the costs we would incur if we had to develop the systems independently. At the same time, harmonisation offers greater flexibility through the opportunities to use expertise across all the partners, standardise supplementary training for employees and make optimum use of the ATCO skills of all the partners.

Similarly, with regard to training, the drive towards increased harmonisation of ATCO training continues.

- On 20 December 2013, the ownership of Entry Point North was extended by the addition of the Irish IAA, so there are now four European ANSPs backing the harmonisation of training at Entry Point North.

We will be expanding our activities in the North Atlantic area – for example by moving our Flight Information Centre in Greenland from Kangerlussuaq to Nuuk in 2014.

In addition, we are cooperating with Iridium (telecommunications) and a number of ANSPs on including opportunities to improve the efficiency of ATM over the North Atlantic by using satellite-based aviation surveillance technology.

We will not compromise on our high level of safety, even though we are maintaining focus on strict financial management and awareness of costs. We also retain our objective of always having the necessary capacity available for our customers, and at the same time ensure Air Traffic Management (ATM) without significant delays.

In the Naviair business plan we describe our strategy and our objectives for the future. The business plan also contains a description of the initiatives we intend to prioritise over the next five years. Lastly, the business plan includes a review of the framework for our activities and an overview of the customers we work for. The plan sets out the general direction for Naviair and of course, on the basis of this plan, we continually adapt to any demands arising along the way.

Enjoy!

Morten Dambæk
CEO

Anne Birgitte Lundholt
Chairman



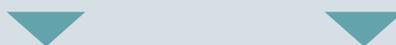
Strategic platform

Naviair is a company owned by the Danish state represented by the Ministry of Transport.

To fulfil our mission and achieve our vision, we have drawn up three sub-strategies each of which sets out guidelines on how to meet our objectives in a specific area. To achieve our objectives, we will: create value for society and our customers, continually develop our company, and have talented, committed and motivated employees.

Strategic platform

Mission and vision



Three sub-strategies

Value creation • Development • Employees



Seven critical success factors

Safety • Capacity • Efficiency • Environmental responsibility • Financial responsibility • Development • Attractive workplace



Mission

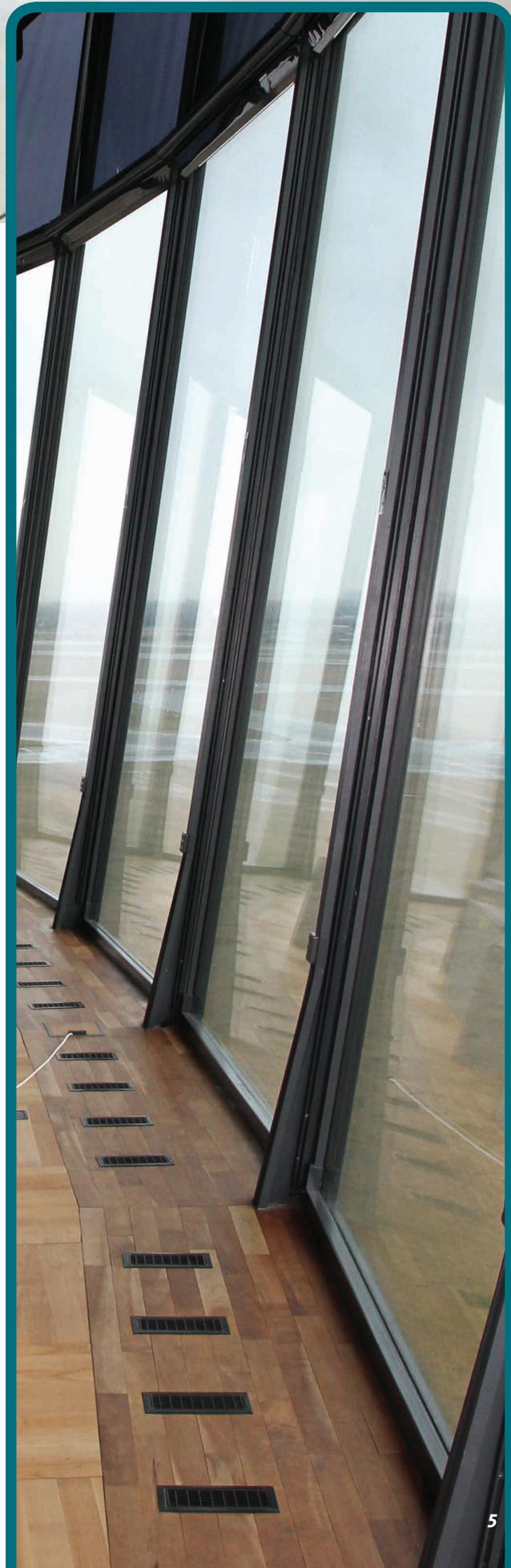
Naviar contributes to the creation of value and welfare for society by developing and providing safe and efficient Air Traffic Management (ATM), fulfilling our role as a vital part of the aviation value chain.

Vision

We will always be among the best ANSPs in Europe.

We will continually develop our company and secure a strong position with customers and partners by participating in international alliances.

We will achieve our ambitions through talented, committed and motivated employees who thrive on working in a demanding environment in which targeted employee development and involvement form the basis for maintaining an attractive workplace.



The three sub-strategies



Creating value for society and our customers

Naviair will always focus on supporting customer needs to secure our long-term existence. We will therefore continuously strengthen and develop customer relations through close cooperation focusing on safety, quality and price to ensure that Naviair's services optimally support our customers.

One way in which we create value is by developing and strengthening NUAC, which took over the operation of the ATCCs in Copenhagen, Malmö and Stockholm on behalf of Naviair and LFV in 2012. Through joint coordination of air traffic, we also secure the basis for environmental and climate improvements.

- We will maintain our high level of safety and at the same time continually develop our capacity level and improve efficiency.
- We will support airline and airport growth through increased cooperation and joint planning.
- We will focus on financial responsibility, efficiency and being cost-conscious.
- We are environmentally conscious and continually strive to achieve climate improvements in aviation.

Developing the company

Naviair will develop continually and maintain a strong position with customers and partners by participating in international alliances.

Naviair provides air navigation services and technical maintenance. These services must be continuously developed and made attractive to both existing and new customers. We will strengthen European cooperation within air navigation services and relations with the Danish Transport Authority, Danish Defence and DMI to provide the basis for our sustained growth and development.

We will cement and develop our market position through international partnerships and alliances such as NUAC, Entry Point North, COOPANS, Aireon, NORACON and Borealis. Broad, solid cooperation on jointly owned entities, alliances and partnerships is essential to provide the necessary strength in relation to other players in the market.

We will strengthen our technical and operational development through international cooperation with other ANSPs. This cooperation comprises procurement and supply chain management.

- We will develop closer cooperation with our North European industry counterparts through NUAC, Entry Point North, COOPANS, NORACON and Borealis.
- Modelling our efforts on COOPANS, we will form new alliances with other partners and suppliers, where strategically expedient and positive for our business and the development of our core areas.
- We will provide technical and operational services to airports and enter into technical strategic partnerships.
- Based on specific needs analyses, focused tender procedures and tight supply chain management, we will invest in automated and standardised systems.



Talented, committed and motivated employees

Naviair is a workplace that offers good professional and personal development opportunities and is able to both retain and attract talented and committed employees. It is important that all employees thrive in a workplace that makes high demands of its employees in terms of skills and performance.

Naviair will continuously develop management, organisation and employees.

We will implement targeted development of employee culture and skills to ensure that we always focus on safety, capacity and efficiency in our provision of air navigation services.

The ambition to retain our leadership position among the safest and most efficient ANSPs in the industry requires ongoing development, determination of responsibilities, involvement and skills – as well as standards and rules.

- We will ensure that our employees always have the right skills and motivation to support our core business.
- We will continually strengthen leadership skills through skills development and supplementary training, mutual sparring and involvement in the strategic development and management of the company.
- We will ensure ongoing development in efficiency, management, culture, skills and communications.
- We will ensure that our employees bear our strategies in mind and adhere to our values.

Critical success factors

To ensure that we achieve our long-term objectives, we have identified a number of critical success factors. They form the basis for the specific key performance indicators that we have defined to ensure that we remain focused on achieving our strategic objectives.



Safety

At Naviair, we always maintain a high level of flight safety.

Capacity

At Naviair, we ensure that we have adequate capacity and handle air traffic with as few delays as possible.

Efficiency

At Naviair, we make optimum use of our resources.

Environmental responsibility

At Naviair, we ensure handling of air traffic that reduces air pollution and minimises noise.

Financial responsibility

At Naviair, we are financially responsible in all respects and we are cost-conscious.

Development

At Naviair, we constantly strive to develop all our areas of activity via alliances, harmonisation and standardisation.

Attractive workplace

At Naviair, we are positive, motivated and well-functioning, and all our employees have the right skills.



Areas of activity

Naviar has been designated to provide aviation infrastructure and is therefore an important player in society.

En route – Denmark

Area control services in Danish airspace from:

- ATCC in Copenhagen *

Approach control service to Copenhagen Airport from:

- ATCC in Copenhagen *

Briefing service from:

- ATCC in Copenhagen *

**) The ATCC in Copenhagen is operated by NUAC on behalf of Naviar*

Flight Information Services from:

- ATCC in Copenhagen *

Technical support and maintenance of ATM/CNS equipment in Denmark:

- ATM equipment
- Radar installations
- Navigation and communications systems

En route – Greenland

Briefing service from:

- Flight Information Centre in Kangerlussuaq (relocating to Nuuk in 2014)

Flight Information Services from:

- Flight Information Centre in Kangerlussuaq (relocating to Nuuk in 2014)

Technical support and maintenance of CNS equipment in Greenland and the Faroe Islands:

- Navigation and communications systems in Greenland and the Faroe Islands
- Surveillance (ADS-B) in Greenland and the Faroe Islands
- Radar installations in the Faroe Islands

Local Air Traffic Services

Aerodrome control service from:

- Tower in Copenhagen
- Tower in Roskilde
- Tower in Billund
- Tower in Aarhus
- Tower in Aalborg
- Tower on Bornholm

Approach control service to airport from:

- Tower in Roskilde
- Tower in Billund
- Tower in Aarhus
- Tower in Aalborg
- Tower on Bornholm

Aerodrome Flight Information Services from:

- Tower on Vágur

Other areas of activity

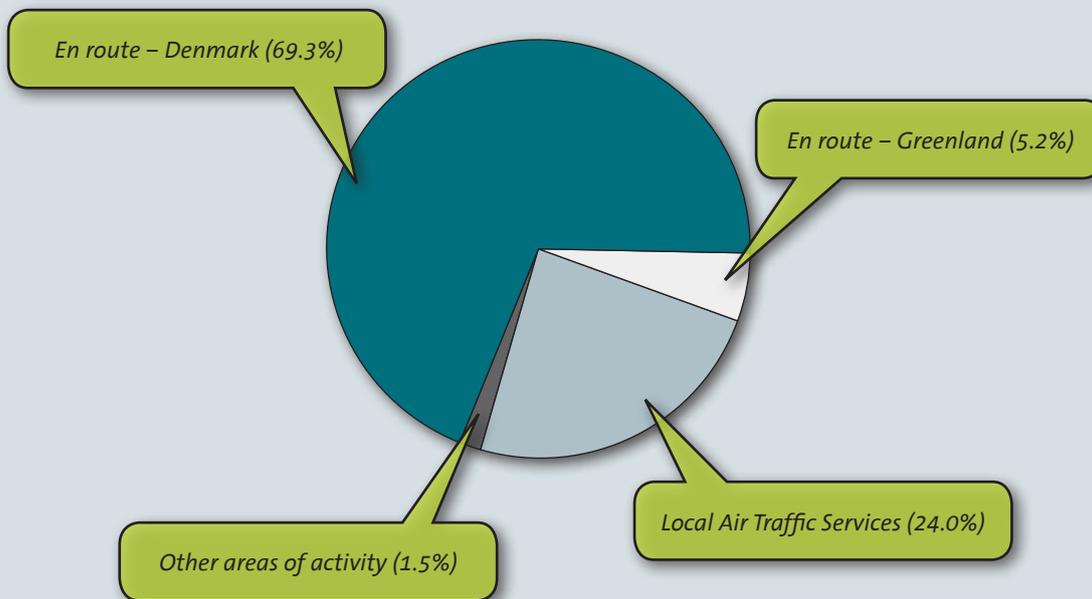
Sale of technical support and maintenance of ATM and airport CNS equipment from:

- Technical station in Copenhagen
- Technical station in Billund
- Technical station in Aalborg

Sale of technical-operational knowhow



Naviair's revenue by area of activity



Source: Naviair Q3 2013 forecast



En route – Denmark

En route – Denmark comprises area control services in Danish airspace and ATM over Danish airports, including approach control service to Copenhagen Airport. The activities in this area also include briefing and flight information services from the ATCC in Copenhagen. This area also comprises technical support and maintenance of radar installations and communications systems in Denmark. By far the largest portion of Naviair’s revenue comes from en route traffic charges in Danish airspace.

Naviair bases its en route traffic outlook on Eurocontrol’s forecasts (STATFOR). In September 2013, Eurocontrol adjusted its service unit forecast for the period to 2019. Based on this, Naviair expects service unit growth in 2014 to be just over 2 per cent ahead of 2013. Despite this positive service unit outlook, the expected growth is still some way from the level that formed the basis when the requirements for the first reference period of the performance scheme were set.

En route – Greenland

En route – Greenland comprises briefing and flight information from the Flight Information Centre in Kangerlussuaq. These activities also comprise technical support and maintenance of radar installations in the Faroe Islands and navigation and communications systems in Greenland and the Faroe Islands.

In the case of the airspace above FL 195, Air Traffic Control (ATC) of the northern sector has been outsourced to Iceland and is provided from Reykjavik in Iceland, while ATC of the southern sector has been outsourced to Canada and is provided from Gander in Canada. Naviair provides the technical equipment in Greenland that is used by Nav Canada and ISAVIA. Furthermore, we operate Search & Rescue services over Greenland from the Air Rescue Coordination Centre in Kangerlussuaq. Lastly, we provide CNS services from Kangerlussuaq, where we operate the national COM centre. From this centre, we monitor international and national ATS networks.

In 2014, we will be relocating our Flight Information Centre from Kangerlussuaq to Nuuk, where we will be moving into

Development in service units – En route





a newly established centre. The new centre in Nuuk will be in the same building as the Arctic Command and the relocation will thus carry into effect the decision to place aviation Search & Rescue operations together with the Joint Rescue Coordination Centre. Responsibility for Search & Rescue operations in Greenland will be transferred formally from the Danish Ministry of Transport to the Danish Ministry of Defence on 1 January 2014.

This move will also ensure that Naviair has access to a better IT infrastructure, which will be the best possible way to future-proof the development options for equipment and technology – and thus benefit from future opportunities in the field of IT.

Lastly, the relocation will help to secure more long-term staff retention in Greenland. Our staff turnover in Greenland has previously been very high and characterised by relatively short-term employment.

Local Air Traffic Services

Local air traffic services comprise aerodrome control and approach control in a number of airports and aerodrome flight information in the Faroe Islands.

Our largest customer in this area is Copenhagen Airports A/S, from whom we expect a small increase in air traffic in 2014. We expect the volume of air traffic in Billund to remain unchanged.

Based on the development in air traffic in 2012 and 2013, we expect the rate of growth for the other airports to remain at the present level.

The Danish domestic airports are of major importance to the development of aviation in Denmark. At Naviair, we therefore focus on any initiative that can underpin aviation in Denmark by ensuring a high level of capacity and efficiency at the towers in Denmark.

Other areas of activity

Other areas of activity primarily comprise technical support and maintenance of ATM and airport CNS equipment in Denmark. Naviair's support and maintenance of mainly CNS equipment for third parties, such as airports, help to reduce Naviair's unit costs.

This area is an excellent supplement to Naviair's core activities and facilitates optimum utilisation of resources.

We also contribute technical and operational assistance – partly ATCOs on fixed-term contracts to, for example, LFV Aviation Holding, Entry Point North, COOPANS partners and other interested business partners.

We also cooperate with a number of ANSPs on incorporating the possibilities for improving the efficiency of ATM over the North Atlantic by using satellite-based aviation surveillance technology.

Outsourcing

We have opted to outsource some non-core activities. Outsourcing is decided on a case-by-case basis. Cleaning, canteen operation, security and reception service as well as maintenance of building services are currently outsourced.

Customer base

We strive to provide the best service to our customers at all times. We maintain a high level of safety and provide the requested capacity at a cost level that is optimum in relation to our standard of service.

Airlines

Via our ATCC in Copenhagen and from our towers we service a number of international airlines with more than 600,000 flights annually.

At the beginning of 2013, it was forecast that air traffic would remain at a low level throughout the year. However, air traffic increased already in the second quarter – and this positive trend was sustained for the rest of the year, with air traffic in Danish airspace in 2013 being up 2.7 per cent on 2012.

Following a number of years with highly uncertain forecasts and a negative trend in traffic figures, it is too early to say whether aviation is about to emerge from the prolonged crisis that began in 2008 or whether these are merely minor periodical fluctuations. Recent years' fluctuations in traffic figures show that airlines have become far better at aligning both the number of routes and departures to current market needs. Traffic may thus increase or decline almost without any notice, and these unpredictable fluctuations will of course affect both capacity utilisation and earnings at Naviair. We are well equipped to address these challenges.

Airports

Copenhagen Airports A/S is our largest airport customer. The airport plays an important role due to its international status as a North European hub. As a subcontractor, we strive to ensure that traffic is managed safely and efficiently to make Copenhagen Airport an attractive airport compared with the competition. For a number of years, we have been ensuring that there have been no appreciable delays attributable to ATM. At the same time, Naviair's performance in the environmental and climate areas is instrumental in making Copenhagen Airport a fuel-efficient – and therefore CO₂-saving – option for airlines.

The other airports in Denmark play a key role both to the development of aviation in Denmark and to the sustained efficiency of domestic aviation. It is important that the Danish airports continue to be able to attract air traffic in competition with other modes of transport and in competition with nearby airports in our neighbouring countries. As a subcontractor to these airports, we therefore focus on keeping the price of our services at the lowest possible level.

Danish Defence

Since the 1990s, Danish Defence has evolved from having as its primary role to defend Denmark and uphold its sovereignty to undertaking humanitarian and international tasks. At the same time, Danish Defence has fewer aircraft today. This has led to a change in the way in which Danish Defence uses Danish airspace, particularly for training purposes. The structure of training areas in which civil air traffic is separated from Danish Defence activities has therefore changed.

Naviair is in close contact with Tactical Air Command Denmark and continuously coordinates activities taking place in Danish airspace in order to ensure that the requirements of Danish Defence are met with the least inconvenience to civil air traffic.

Naviair also cooperates closely with the Arctic Command with respect to its activities in Greenland and North Atlantic airspace.

DMI

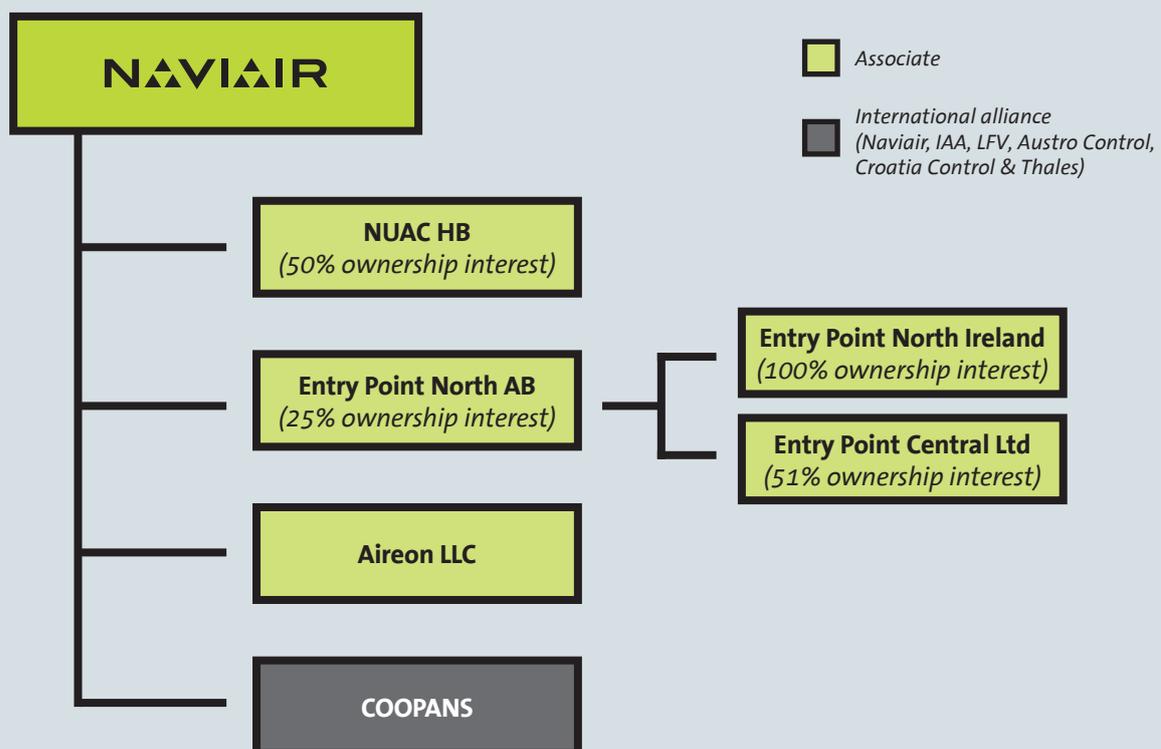
Naviair provides technical services to DMI on a contract basis. The main areas are technical support and maintenance of airport-related meteorological equipment and weather radars.

The Naviair family

To achieve our vision and the objective of always being among the best in our industry, Naviair's business model is based on strong involvement in four international partnerships or alliances:

- We are improving the efficiency of ATM in the Danish-Swedish FAB on an ongoing basis. The jointly owned Swedish general partnership NUAC HB operates the three ATCCs in Copenhagen, Malmö and Stockholm on behalf of the owners – Naviair and LFV.
- We are developing ATCO and ATSEP training at the international ATS training academy, Entry Point North.
- In collaboration with other ANSPs, we are developing ATM over the North Atlantic by using satellite-based aviation surveillance technology.
- We are developing our ATM systems in the COOPANS alliance.

The Naviair family



International partnerships and alliances

Naviair is part of a variety of partnerships and alliances to ensure our vision of always being among the best ANSPs in Europe.

NUAC



Owners:
Naviair – Denmark
LFV – Sweden

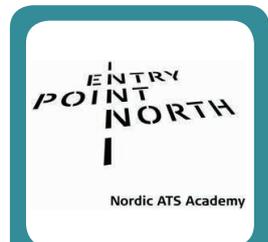
NUAC was established in 2009 as the first – and to date only – integrated operating company in Europe that is responsible for en route ATM in a joint functional airspace block (FAB). NUAC operates the three ATCCs in Copenhagen, Malmö and Stockholm on behalf of the owners, Naviair and LFV.

NUAC has approximately 750 employees on secondment from Naviair and LFV. The ATCCs and all other equipment used by NUAC remain Naviair's and LFV's property, but are made available to NUAC. The co-ownership of NUAC contributes to the achievement of our ambition to harmonise ATM, and NUAC is also paving the way for improving the efficiency of ATM as well as airspace improvements.

In addition to our efforts to improve efficiency, we have already implemented improvements to ATM that benefit both the airlines' finances and their environmental performance, through fuel savings, shorter flight times and lower greenhouse gas emissions. As early as 2011, Naviair and LFV introduced Free Route Airspace in the Danish-Swedish FAB. In 2013, Naviair and LFV established cooperation with the ANSPs in the NEFAB partnership (Norway, Finland, Estonia and Latvia) to extend Free Route Airspace to the whole of the Nordic area from November 2015. NUAC is providing the operational implementation of NEFRA in the Danish-Swedish FAB.

NUAC is also working on developing, improving and enhancing the efficiency of ATM in the area around the airports in Copenhagen and Malmö through future restructuring and improvements in the so-called Øresund terminal area.

Entry Point North



Owners:
Naviair – Denmark
Avinor – Norway
IAA – Ireland
LFV – Sweden

The ATS training academy, Entry Point North, is jointly owned by Naviair, Avinor, IAA and LFV. The academy was established in 2006 as the first transnationally owned academy offering ATM training, and IAA became co-owner of the academy on 20 December 2013. Entry Point North offers Recruitment services, Initial training, Conversion training, Refresher training and Development training. In line with the ambition in SES, the primary aim of Entry Point North is to provide standardised and harmonised training for ATCO trainees and ATCOs.

Since 2011, the course portfolio of Entry Point North has also included training of technical personnel carrying out maintenance of ATM and CNS equipment. The training course Air Traffic Safety Electronics Personnel (ATSEP) provides students with the skills and practical capabilities they need to be able to operate and maintain ATM equipment approved for operational use. The training course has had students from, for example, Maastricht Upper Area Control Centre, LVNL, General Civil Aviation Authority in the United Arab Emirates and Indonesia

Besides providing ATS training to its four owners, Entry Point North services ANSPs worldwide on commercial terms by selling training courses tailored to customer requirements that are held either at Entry Point North in Sturup or on-site at the customer. Entry Point North has more than 40 customers in more than 20 countries.



COOPANS



Partners:

Naviair – Denmark
Austro Control – Austria
Croatia Control – Croatia
IAA – Ireland
LFV – Sweden

The COOPANS alliance is a partnership between Naviair, Austro Control, Croatia Control, IAA and LFV, with Thales as supplier.

The purpose of COOPANS is to upgrade and harmonise the partners' ATM systems into a single unified system that uses common software and entails harmonised maintenance processes and operational concepts. The COOPANS alliance is developed on an ongoing

basis and is open to new partners joining.

Through the COOPANS alliance we aim to cut our development costs through continuous – joint – upgrading of the ATM system. The alternative would be extensive, very costly, individual 'big bang' ATM system migrations. In addition, COOPANS aims to harmonise operational and technical procedures in order to limit specific and individual functionalities in the various companies. We expect to cut our system development costs by at least 30 per cent compared with the costs each partner would incur if it had to develop the technology independently. To this should be added savings in operating expenses from joint work concepts.

Besides savings, the COOPANS alliance meets the EU objective of harmonising ATM systems in Europe. Being a partner in COOPANS thus helps us to meet a whole range of current and future EU regulatory requirements in due time, including the performance requirements (see section on European framework), and to be in line with – and make our mark on – the development of SESAR. We mainly achieve this via NORACON, which we are continuing to link more and more closely to COOPANS.

The first system upgrade was rolled out in 2012. A further three system upgrades have since been implemented, and the plan is that all five partners' seven ATCCs must be upgraded to the same system level, beginning in spring 2014. This will mark a milestone in the COOPANS alliance, as it will allow synchronous upgrades in all ATCCs in future. At the same time, the future cooperation will offer major advantages in terms of both joint training, sharing of expertise and joint utilisation of resources.



Aireon



Owners:
 Naviair – Denmark
 ENAV – Italy
 IAA – Ireland
 Iridium – USA
 Nav Canada – Canada

Naviair has entered into an agreement to join a joint venture that will set up the world's first satellite-based global aviation surveillance system over the coming years.

The joint venture is led by Aireon LLC, which is headquartered in Virginia, USA. Besides Naviair (with a 6% ownership interest), the other joint venture partners are the US telecommunications company

Iridium Communications Inc. (24.5%) and the ANSPs Nav Canada (51%), ENAV (12.5%) and IAA (6%).

The new system will be based on 66 satellites and a number of back-up satellites that Iridium will be launching in the period 2015-2017. When fully operational, the system will be able to provide 100 per cent global aviation surveillance. Current radar-based aviation surveillance systems only cover approximately 10 per cent of the planet. The remaining – often remote – areas are currently without surveillance coverage.

The improved surveillance will mark a major leap forward in ATM as the new system will enable ANSPs to use airspace far more efficiently.

NORACON



Members:
 Naviair – Denmark
 Austro Control – Austria
 Avinor – Norway
 EANS – Estonia
 Finavia – Finland
 IAA – Ireland
 ISAVIA – Iceland
 LfV – Sweden
 Swedavia – Sweden

NORACON is a consortium that cooperates on participation in the SESAR programme (see section on European framework). NORACON was set up in 2009 and consists of nine European members: Naviair, Austro Control, Avinor, EANS, Finavia, IAA, ISAVIA, LfV and Swedavia.

The NORACON consortium is a formal member of SJU (see section on European framework). Through NORACON, Naviair is able to influence decisions on the pan-European development in the technical-operational area

and thus also the interests of the COOPANS alliance. At the same time, through NORACON, the partners have been protecting their long-term strategic investments in a SESAR perspective. Naviair seeks to influence the development so that the focus is on feasible projects offering specific, clear advantages and support Naviair's and NUAC's operational concepts.

Via the work in NORACON, Naviair will follow on and influence the preparation for the SESAR implementation phase, which is expected to run from 2014-2020.



Borealis

In the Borealis alliance, Naviair cooperates with a number of North European ANSPs on coordinating ATM. The other members of Borealis are Avinor, EANS, Finavia, IAA, ISAVIA, LFV, LSG and NATS.

Borealis was set up in 2012 as a formal, binding alliance to replace the previous, informal cooperation. The alliance will focus on a number of core areas – at both national and FAB level – to ensure coordination, alignment and integration of the good existing cooperation. The alliance will also prepare a joint vision and guidelines for each of the following core areas:
Communications, Navigation and Surveillance, Aeronautical Information Management, and Free Route Airspace.



borealis
ALLIANCE

Members:

Naviair – Denmark
Avinor – Norway
EANS – Estonia
Finavia – Finland
IAA – Ireland
ISAVIA – Iceland
LFV – Sweden
LSG – Latvia
NATS – UK



Environmental and climate initiatives

Like all other forms of transport, aviation affects both the environment and the climate. According to the World Resources Institute, the International Energy Agency and the International Air Transport Association, between 2 and 3 per cent of global air pollution is caused by air transport.

At Naviair, we are working hard to reduce the impact on the environment and climate in our part of the aviation value chain. We are constantly seeking ways to reduce this impact by improving our procedures and the technology we use.

Emissions of CO₂ & other greenhouse gases from aviation

According to the IPCC, the air transport share of global CO₂ emissions amounts to approximately 2 per cent. By way of comparison, the share of the transport sector as a whole amounts to approximately 20 per cent and road transport alone accounts for 14 per cent of CO₂ emissions at the global level. Regardless of the quantity of emissions, the target is always, of course, to reduce pollution as far as possible.

Naviair helps to reduce the impact of aviation on the environment and climate through efficient ATM and by continuing to develop optimum infrastructure systems. We endeavour both to give the aircraft direct routes between destinations and to position them at the most fuel-efficient altitude for each type of aircraft. We also ensure that aircraft take off, land and operate on the ground at airports in the most fuel-efficient way.

Flight safety is naturally given top priority in ATM. Even with the highest level of safety, we are always working to optimise ATM and at the same time focusing our attention on any opportunity to implement climate improvement initiatives.

We do this by prioritising a service-oriented culture, in which we endeavour to meet airlines' and pilots' requests for routes and altitudes. At the same time, we focus on developing the most efficient traffic concepts and ensuring the most flexible use of airspace. Our work is, of course, also guided by the recommendations of the European aviation organisations.

In all the focus areas involving the highest fuel consumption, we have made good headway on the development of climate-friendly traffic concepts. This applies to Free Route Airspace, Continuous Climb Operations, Continuous Descent Operations and Required Navigation Performance.

In November 2011, together with LfV, we introduced Free Route Airspace in Danish-Swedish airspace, allowing airlines to fly the shortest possible, most direct route through our airspace. As a result, the airlines can already calculate at the planning stage that an aircraft needs to carry less fuel and thus reduce its take-off weight, thus saving fuel both by flying with lighter aircraft and by flying the shortest possible route.

Eurocontrol has calculated that Free Route Airspace reduces CO₂ emissions in Danish-Swedish airspace by altogether 40,000 tonnes per year. Through NUAC we are now cooperating with the companies in NEFAB to extend Free Route Airspace to cover the whole of the Nordic area – i.e. the airspace over Norway, Sweden, Finland, Denmark, Estonia and Latvia. When this is implemented, no later than November 2015, it will result in further considerable climate improvements.

At Copenhagen Airport, we use Continuous Climb Operations at take-off for over 95 per cent of all departing aircraft. This saves the environment from approximately 32,000 tonnes of CO₂ emissions annually. At the same time, the airlines save a total of approximately 10,000 tonnes of fuel per year. These savings were documented by Eurocontrol in 2009. Using Continuous Climb Operations, the aircraft taking off are allowed to depart from the so-called Standard Instrument Departure procedure, which requires them to remain at different altitudes in graduated steps several times during departure. Instead, the aircraft are given permission to climb directly to their desired cruising level, and at the same time turning directly towards their destination as quickly as possible.

The Continuous Descent Operations concept enables pilots to plan the most fuel-efficient and climate-friendly approach to airports from the aircraft's cruising level to landing. This enables the pilot to optimise the use of engine power during the last part of the flight. At airports

with a high traffic density, it may be difficult to implement Continuous Descent Operations and at the same time maintain high capacity with optimum density between departing and arriving aircraft. But during periods of low traffic intensity, it is possible to use the concept – without Continuous Descent Operations hampering the possibility of maintaining the high proportion of Continuous Climb Operations. In 2009, more lenient level restrictions for approaches to Copenhagen Airport were introduced, enabling airlines to implement approximated Continuous Descent Operations.

At Copenhagen Airport, we are also cooperating closely with the airport, the airlines and other relevant players to reduce particle emissions, for instance through efficient management of aircraft while they are operating on the ground at the airport.

In Danish-Swedish airspace at Copenhagen Airport, we are working together with the Danish and Swedish authorities to establish a more efficient, more expedient airspace structure in the form of an integrated terminal area in the Øresund region. One benefit of such a structure will be that arrivals and departures at the airport will become even more efficient, saving fuel and reducing the environmental and climate impacts.

Noise

Clear restrictions have been laid down for arrivals and departures at all the airports where Naviair provides ATM. The restrictions protect the surroundings from noise inconvenience from air traffic. We of course adhere scrupulously to the set limits and in addition we contribute actively to reducing noise at and around the airports by applying the most efficient traffic procedures. We therefore only experience very few cases of infringement of the noise limits where Naviair shares responsibility.

Environmental and climate initiatives in our buildings and technical installations

Naviair operates 24/7, 365 days a year. That is one of the reasons why our energy consumption is relatively high, for instance in our buildings and technical installations. Our technical installations, in particular, require a great deal of energy for both operation and cooling.

In the past year, we have carried out considerable energy optimisation in our IT area.

By converting or replacing various equipment, we have reduced our energy consumption for servers by 400,688 kWh, for storage by 32,044 kWh, for networks by 19,053 kWh, for UPS by 54,215 kWh and for cooling by 184,184 kWh.

Altogether, we have thus reduced our energy consumption in this area by 86 per cent, corresponding to an annual saving in energy costs of approximately DKK 0.8 million and an annual CO₂ reduction of 310 tonnes.



In order to further reduce our energy consumption and our CO₂ emissions, between now and 2017, we will also establish groundwater cooling to replace our current cooling system, which is due to be upgraded on account of both its age and official requirements.

Our preliminary investigations have shown that we will be able to cut our energy costs by DKK 1-1.5 million per year while reducing the CO₂ emissions from our heat and electricity consumption by approximately 275 tonnes per year. The savings will come both from lower consumption of electricity for cooling and through heat recovery. The result of a test drilling in 2012 has confirmed the findings of our preliminary investigation. The investment in the system amounts to approximately DKK 32 million. The system is now under construction.

We are also making targeted efforts to reduce our energy consumption for lighting by replacing our light fittings with LED fittings on an ongoing basis. In addition to the energy savings, these replacements will enable us to reduce our consumption of light fittings and the number of hours spent on replacing light fittings, because the new fittings have a longer life.

Climate strategy

We strive to align our climate efforts to customer wishes and requirements while also participating in the environmental and climate work in SES, SESAR, NUAC, COOPANS and NORACON.

Based on Eurocontrol's and IATA's joint Flight Efficiency Plan, we will continue to develop and ensure flexible utilisation of airspace by means of:

- Short routes, direct routes to destinations and fuel-efficient altitudes.
- The option of fuel-efficient approaches to Danish airports.
- Minimal ground delays with engines idling through efficient ATM at airports.
- Continuous Climb Operations wherever possible – with direct routes and climbs to cruising level.

European framework

The EU Member States and a number of other European countries have jointly committed to harmonising and integrating ATM in Europe into a single airspace (Single European Sky). This will mean that ATM across Europe will be subject to the same framework and development targets.

Single European Sky – SES

The EU aims to integrate ATM in Europe into a single airspace (Single European Sky). The aim is to improve efficiency, create a more cost-efficient ATM system and ensure environment-friendly handling of air traffic in Europe.

The EU targets are set out in the Single European Sky (SES) legislative package from 2004 and various amendments to it in the SES II legislative package from 2009.

In June 2013, the European Commission put forward proposals for new rules, the so-called SES II+ package. These proposals will now be discussed by the European Council of Ministers and the European Parliament.

In accordance with the EU rules, the many geographical areas based on state boundaries were combined to form functional airspace blocks with effect from December 2012. Performance targets have been introduced (see section on Performance scheme). Powers and responsibilities relating to safety in the ATM area have been transferred to the European Aviation Safety Agency (EASA), and Eurocontrol takes care of the overall pan-European coordination via its role as Network Manager. Furthermore, environmental rules and regulations have been introduced to curb pollution.

Performance scheme

Naviair has been complying with the new European performance schemes since 2012. This means that we are subject to a scheme with targets for the development in our costs, and with risk-sharing in terms of the development in air traffic. Unlike previously, we are therefore no longer guaranteed that we will fully recover our costs.

We must also meet targets concerning safety and regularity. We are responsible for ensuring that we always have both the necessary resources and up-to-date technical equipment to maintain the highest level of safety, meet customer requirements and needs and maintain efficient ATM. We therefore focus on being both highly flexible and cost conscious and ensuring that our financial position is always sound. At the same time, we will always endeavour to provide airlines with the best possible service and develop the most efficient airspace structure to the benefit of our customers.

The performance scheme is the result of the Single European Sky legislation through which the EU aims to ensure both more efficient utilisation of European airspace and sufficient airspace capacity to accommodate the growing level of air traffic. Another objective is to cut CO2 emissions and the costs of air navigation services.

The performance improvements will be achieved through EU-wide, FAB-wide and nationwide performance targets. ANSPs will be measured on their performance. ANSPs that do not satisfy the performance requirements may be subject to corrective action. The targets are legally binding on EU Member States.

The EU-wide performance targets are adopted by the European Commission and used to prepare a performance plan for each national airspace (nationwide performance targets) or for the Functional Airspace Block (FAB) of which the national airspace is a part (FAB-wide performance targets). The first reference period of the performance scheme runs for three calendar years from 2012 to 2014 and comprises the en route area only. Subsequent reference periods, which also comprise charges related to terminals and airports (Terminal Navigation Charges), will run for five calendar years at a time, the first time from 2015.



Performance targets must be set in the following four areas: Safety, Capacity, Environment and Cost efficiency. The targets for the Danish-Swedish FAB and Naviair-Denmark for the first reference period are shown in the appendix Performance scheme – First reference period.

The environmental targets will not be set until from the second reference period. The negotiations on the targets to be set for the second reference period are already under way, and the targets will be finalised in 2014.

Single European Sky ATM Research – SESAR

SESAR is the EU's programme for development of the new generation of an integrated European ATM system. The programme combines technology with operational, financial and legislative aspects. In 2009, the European Council of Ministers adopted a European ATM Master Plan, most recently updated in autumn 2012, which describes how the new generation of the European ATM system will be implemented in the period from 2014 onwards.

A joint undertaking, structured as a Public-Private Partnership, the SESAR Joint Undertaking (SJU), has been set up to manage and develop SESAR. The members are: the European Commission, Eurocontrol and the aviation sector (including a number of ANSPs). Each member has one third of the seats and bears one third of the costs. Naviair participates in SJU's work through NORACON (see section on International partnerships and alliances). In 2013, the EU Council of Ministers extended SJU to cover the period up to 2024.

SESAR's development phase has been extended from 2014 to 2016, and this phase will therefore overlap with the deployment phase.



Appendices

Performance scheme – First reference period

Danish-Swedish FAB	2012	2013	2014
<i>Safety</i>			
Separation minima infringements per 100,000 flight hours with severity A and B with direct ATM involvement (LFV/Naviair/NUAC)	1.49	1.45	1.42
<i>Capacity</i>			
Average minutes of delay – En route	0.20	0.15	0.08
Naviair and Denmark	2012	2013	2014
<i>Cost efficiency</i>			
Naviair – Determined costs (DKK million) ¹⁾	640.40	666.44	673.53
Naviair – Determined unit rate (EUR) ²⁾	51.70	52.85	50.42
Denmark – Determined unit rate (EUR) ³⁾	63.14	64.20	61.51
User rate (EUR)	71.52	73.52	75.49

The above table shows the requirements set in the performance plan for the Danish-Swedish FAB for the first reference period.

¹⁾ "Naviair – Determined costs" is Naviair's share of the cost base.

²⁾ "Naviair – Determined unit rate" is Naviair's share of the user rate, excl. over-recovery/under-recovery.

³⁾ "Denmark – Determined unit rate" is Denmark's share of the user rate, excl. over-recovery/under-recovery (Naviair, DMI, the Danish Transport Authority and costs for Eurocontrol).

Abbreviations and designations

ANSP: Air Navigation Service Provider

ATM: Air Traffic Management

ATS: Air Traffic Services

Austro Control: ANSP Austria

Avinor: ANSP Norway

CNS: Communications, Navigation and Surveillance

COM: Communication

COOPANS: CO-Operation of Air Navigation Service providers

Croatia Control: ANSP Croatia

DMI: Danish Meteorological Institute

EANS: ANSP Estonia

EASA: European Aviation Safety Agency

Eurocontrol: European Organisation for the Safety of Air Navigation

FAB: Functional Airspace Block

Finavia: ANSP Finland

Free Route Airspace: Airlines' free planning of their flights between defined entry and exit points

IATA: The International Air Transport Association

ICAO: International Civil Aviation Organization

IPCC: Intergovernmental Panel on Climate Change

ISAVIA: ANSP Iceland

IAA: ANSP Ireland

LFV: ANSP Sweden

LSG: ANSP Latvia

LVNL: ANSP Netherlands

Nav Canada: ANSP Canada

NATS: ANSP UK

NEFAB: North European Functional Airspace Block (consists of Norway, Finland, Estonia and Latvia)

NEFRA: North European Free Route Airspace

NORACON: NORth European and Austrian CONSortium (North European technical cooperation)

NUAC: Nordic Unified Air traffic Control (NUAC is a jointly owned Swedish general partnership under Naviair and LfV that has been responsible for the operation of the three ATCCs in Copenhagen, Malmö and Stockholm since 2012)

SES: Single European Sky (EU initiative to unify European airspace)

SESAR: Single European Sky ATM Research programme (EU programme on development of the new generation of an integrated European ATM system)

SJU: SESAR Joint Undertaking (European Commission initiative designed to develop the new generation of an integrated European ATM system)

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