

NEFAB PROGRAMME BUSINESS PLAN 2017 - 2021

Version 1.0

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1. INTRODUCTION

Dear reader!

NEFAB Programme's Business Plan 2017 – 2021 is a strategic roadmap for the cooperation of the air navigation service providers (ANSPs) of the North European Functional Airspace Block in further five years.

The Business Plan 2017-2021 builds on the NEFAB Strategies within the framework of the Single European Sky and requirements of the aviation industry. Committing to these provisions, the NEFAB air navigation airspace providers will continue series of activities aimed to improve airspace and services in terms of cost efficiency, airspace efficiency for civil and military users, and reduced environmental impact.

The upcoming five years will see seamless Free Route operations within the NEFRA region, i.e. NEFAB and DK/SE FAB, and the Borealis Free Route Airspace programme extending Free Route operations to a large portion of the Northern Europe by 2021.

NEFAB ANSPs will continue cooperation in decided areas which have been identified as operational and business enablers. This will be supported through the new NEFAB Business Model aiming to enhance the potential of the NEFAB Programme and seek optimum framework for the ANSP cooperation for agreed projects in the coming years.

NEFAB Programme will continue to cooperate closely with their stakeholders and to participate in the industry events and developments, working together to improve the ATM network performance.

Anders Kirsebom Chief Executive Avinor - ANS Tanel Rautits CEO EANS Raine Luojus Chief Executive Finavia – ANS Dāvids Tauriņš CEO LGS

2. EXECUTIVE SUMMARY

NEFAB 5-years Business Plan has been developed with full regard of the regional and European trends and future perspectives that are likely to impact the operations and business.

Changes in the European Air Traffic Management are driven through the **Single European Sky** initiative. The **SES Performance Scheme** is one of the key instruments of the initiative aiming at achieving the general objectives of the SES and hence setting performance targets within four key performance areas (safety, capacity, cost-efficiency, and environment). The evolution of the Performance Scheme both in short and longer term with lessons learnt from the first reference period (RP1) was launched in 2016. The results of this study will help in setting up performance objectives for RP3. A new **Performance Review Body** shall be in place in 2017 to take over the mandate from EUROCONTROL and continue evolving into an independent regulator.

The interim update of the Single European Sky rules, the **SESII**+ is still in a deadlock. These requirements are expected to refine the existing legal framework, bridge the gaps and overlaps in legislation and considerably shift the focus towards performance oriented model. The new legislation is expected to address the functional airspace blocks requiring more flexible, industry led and performance-focused structures.

The coming years are marked with the **SESAR Deployment** launched in December 2014 with establishment of SESAR Deployment Alliance to the EC-mandated role of the Deployment Manager, to plan and coordinate a major modernisation of European airspace. SESAR deployment is perceived as a main driver for change in aviation and is under a close focus of the EC. The Deployment Programme covering the most recent update of the most urgent initiatives and activities is reviewed annually through the DM Stakeholder Consultation platform.

In December 2015, the Commission published a comprehensive strategy for the European aviation sector. The **Aviation Strategy** contains a number of policy proposals and contributes directly to the EC priorities. The Strategy proposes a revision of the Safety Regulation emphasising that safety and environmental protection are pre-requisites for a competitive aviation sector. The Strategy also claims that investments in innovative projects are fundamental for the efficiency of the EU Single Sky therefore focussing, inter alia, on deploying SESAR innovative projects and setting up EU-wide rules to ensure safe drone operations for all airspace users.

In the light of the assessment of the achievements during RP1 and the first year of RP2, and setting of new **performance** targets for RP3, air navigation service providers will be required to reconsider their ambitions and potential in provision of cost-efficient services. Teaming up with FAB partners and pursuing of the initiatives through industrial partnerships will contribute to less fragmented and more efficient ATM network.

NEFAB business planning takes account of all these trends and developments to ensure that the Business Plan for the upcoming years provides a comprehensive roadmap for ANSP cooperation within the NEFAB Programme.

3. VISION AND MISSION

A NEFAB vision

NEFAB is a functional airspace solution, where service is optimized to customer expectations, with focus on safe, cost efficient and environmental performance

A NEFAB mission

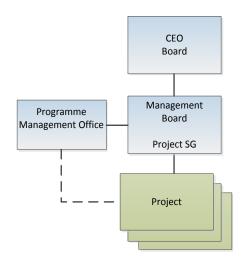
The mission is to achieve optimal efficiency through harmonization, shared services and integration to the highest extent possible while pursuing optimal civil-military coordination.

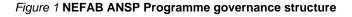
4. NEFAB ORGANISATION, CUSTOMERS AND SERVICES

4.1. NEFAB Programme organisation

NEFAB ANSP Programme is based on the ANSP Cooperation Agreement and Business Model. The Programme is the planning and execution of common activities, including business planning, budget and cost management, project initiation and execution, and communication, resourced by the NEFAB air navigations service providers. The Programme is organised on several levels to ensure strategic and tactical decisions and daily management:

- NEFAB ANSP CEO Board
- NEFAB Management Board
- NEFAB Programme Management Office
- Joint activities and projects





NEFAB CEO Board is the ultimate and strategic decision making body for the NEFAB ANSP cooperation.

NEFAB Management Board supervises the progress of NEFAB Programme including Business plans and projects, and executes tactical decisions and guidance.



NEFAB Programme Management Office (PMO) manages and supports the NEFAB Programme in the cooperation with air navigation service providers, States, and external stakeholders.

Projects are established as separate project structures, whenever feasible, in the areas which are recognised as collaborative activities between two or more cooperating ANSPs.

A study to enhance the Programme's structures was finalised in 2016. The new structures will be aligned with the business plans and commitments within the next business planning cycle and will look into optimised Programme's management.

4.2. NEFAB airspace

NEFAB airspace is composed of the following flight information regions (FIR) and upper information regions (UIR) of the North European airspace: Estonia, Finland, Latvia, Norway, and Bodø Oceanic.

The map below shows the NEFAB airspace:



Figure 2 NEFAB airspace

4.3. NEFAB ANSPs - services, facts and figures

The **NEFAB ANSPs** cover a large geographical area and serve air traffic to and from a wide range of airports, from small remote regional airports to national hubs with considerable traffic volumes. In addition there are also considerable amounts of



overflying traffic in NEFAB airspace, including ultra-long haul operations. Hence the role of air transport in NEFAB area is considerable.

The NEFAB air navigation service providers are:

- AVINOR (Avinor Air Navigation Services AS, Norway)
- A EANS (Lennulliiklusteeninduse AS, Estonia)
- FINAVIA (Finavia Corporation, Finland)
- ▲ LGS (Latvijas gaisa satiksme SJSC, Latvia)

Avinor (Avinor Air Navigation Services AS) provides aerodrome control and approach control services at airports, air traffic services in Norwegian airspace and maintenance and operation of the technical infrastructure for air navigation. It is a wholly-owned subsidiary of the Avinor Group.

EANS (Lennulliiklusteeninduse AS) provides air traffic management services in Estonian airspace. Services include Air Traffic Services, CNS/ATM technical support, aeronautical information, consultancy services, and training

Finavia (Finavia Corporation) provides airport and air navigation services, and maintains and develops the network of 22 airports and Finland's air navigation system. Finavia's air navigation services are responsible for controlling the use of Finnish airspace and for providing the related en-route services and air navigation services at Finavia's airports.

LGS (Latvijas gaisa satiksme SJSC) provides air traffic management services in Latvian airspace. Services include Air Traffic Services, CNS, (including MET services), CNS/ATM technical support, and aeronautical information.

NEFAB ANSP services:

| | ATC en-route | ATC Oceanic | ATC approach | ATC aerodrome(s) | AIS | CNS | MET | ATCO TRAINING | |
|--|--------------|-------------|--------------------|------------------|--|-----|-----|---------------|--|
| Avinor Flysikring AS www.avinor.no | Y | Y | Y | Y | Y | Y | Ν | Y | A wholly-owned subsidiary of the Avinor Group |
| EANS www.eans.ee | Y | N | Y | Y | Y | Y | Ν | Y | Joint-stock company as of 1998 100% State-owned |
| Finavia www.finavia.fi | Y | N | Integrated civil/r | | Public Limited Company Integrated civil/military ANSP 100% State-owned | | | | |
| LGS www.lgs.lv | Y | Ν | Y | Y | Y | Y | Y | Y | Joint-stock company as of 1997 100% State-owned |

NEFAB unit cost forecast for RP2:

The Performance Review Body (EUROCONTROL) has noted that by 2019 NEFAB unit cost (\leq 2009) will be -31.7% lower than the Union-wide aggregated determined unit cost, DUC (51.26 \leq 2009).



| | 2015 | 2016 | 2017 | 2018 | 2019 |
|--|--------|--------|--------|--------|--------|
| Real en route UCs/DUCs (in €2009 prices) | 39.47 | 38.36 | 37.45 | 36.14 | 34.99 |
| Trend in real en route UCs/DUCs (in €2009 prices) % n/n-1 | -1.83% | -2.80% | -2.36% | -3.50% | -3.19% |

Table 1 Determined unit cost (DUC) for en route ANS aggregated at FAB level (€2009 prices) for second reference period (RP2). Source: NEFAB Performance Plan 2015-2019

4.4. NEFAB customers

The customer groups of the NEFAB ANSPs vary across the states.

Estonia

Overflying traffic with major European and Asian carriers constitutes a large portion of the en-route revenue. Main customers of EANS in 2015 were Finnair (20.4%), Deutsche Lufthansa (6.9%), Russia Airline (6.6%), British Airways and KLM (3.6% and 3.5% accordingly). These airlines together with AirBaltic (3.3%) and Air France (3.1%) count for ca 47% percent of the total en-route revenue.

Finland

The major national carrier Finnair represents 33% of the operations at Finnish airports but 58% of the TN revenue. The main focus is on the international traffic into/out of Helsinki. Finavia ANS provides services to global carriers on overflights between Asia and central Europe and between Russia/Middle East and the North American continent. Overflights represent ca 29 % of en-route volume/revenues for Finavia ANS.

Latvia

Overflying traffic with major European and Asian carriers constitutes large portion of the en-route revenue. The national air carrier Air Baltic together with Finnair, Lufthansa and Aeroflot currently count for approximately 34% of the total en-route revenue of LGS.

Norway

The three national carriers (SAS, Norwegian and Widerøe) constitute slightly more than 40 percent of the total en-route revenue for Avinor ANS. The number of overflights is increasing and in 2015 overflights represented approximately 15% of the total number of movements. Emirates and United Airlines are the two largest overflying customers.

The traffic flows in NEFAB airspace are mainly:

- South-West North-East flows and v.v. between Europe and Russia/Asia, through Latvian, Estonian and Finnish airspace, and between Central/Western Europe and major Finnish and Northern Russian destinations (St Petersburg)
- South-East North-West flows and v.v. between Russia/Middle-East and US/Canada through the airspace of all the NEFAB states, and between European and US and Canada, through the airspace of Norway
- North-South flows between Finland and European destinations through Latvian, Estonian airspace, and between Norwegian airports and European destinations
- Flows between major city pairs in NEFAB states and with DK-SE FAB States

Military airspace users constitute the other customer segment in NEFAB. The military air traffic is either operating within segregated military training or exercise areas or as a regular traffic is sharing airspace with civil operators. The airspace and service



provision must have required capacities and capabilities to support all customers therefore NEFAB ANSPs are continuously seeking improvements in balancing the needs between efficiency of civil traffic and military mission effectiveness.

4.5. NEFAB customer services

According to the <u>Seven-Year Forecast (2016-2022)</u> by STATFOR, the EUROCONTROL Statistics and Forecast Service, the projected growth of en-route service units **2022/2015** is 1.0% for NEFAB and, respectively, 2.5% for Estonia, 1.2% for Finland, 2.4% for Latvia, and 0.6% for Norway. The projected growth over the second reference period (RP2) 2019/2014 for NEFAB in total is 0.4%, where respective growth by states is 2.1% for Estonia, 1.0% for Finland, 2.0% for Latvia, and -0.3% for Norway.

The forecast of the number and growth (%) of the IFR Flight Movements (as per baseline scenario) for the business planning period **2017-2021** is provided in the table below.

| | 2017 | 2018 | 2019 | 2020 | 2021 |
|---------|-----------|-----------|-----------|-----------|-----------|
| NEFAB | 1,021.000 | 1,034,000 | 1,049,000 | 1,066,000 | 1,078,000 |
| | (0.4%) | (1.3%) | 1.4% | (1.7%) | (1.1%) |
| Estonia | 201,000 | 207,000 | 213,000 | 219,000 | 224,000 |
| | (2.0%) | (2.7%) | (2.8%) | (3.0%) | (2.5%) |
| Finland | 254,000 | 257,000 | 260,000 | 264,000 | 267,000 |
| | (0.8%) | (1.1%) | (1.2%) | (1.6%) | (1.0%) |
| Latvia | 255,000 | 261,000 | 268,000 | 275,000 | 281,000 |
| | (2.2%) | (2.5%) | (2.7%) | (2.7%) | (2.2%) |
| Norway | 599,000 | 604,000 | 610,000 | 618,000 | 622,000 |
| | (-0.6%) | (0.8%) | (1.0%) | (1.4%) | (0.7%) |

Table. IFR Flight Movements and growth compared to previous year in % (baseline scenario). Source: 7-year IFR Flight Movements and Service Units Forecast: 2016-2022 by STATFOR, EUROCONTROL

According to the STATFOR, the low-cost market share is expected to increase all over Europe generating additional flight movements. So when compared to 2015, the low-cost carrier growth in 2022 (baseline scenario) is expected to increase in Estonia from 18% to 26%, in Finland from 11% to 16%, and in Norway from 21% to 25% while in Latvia the low-cost segment is expected to reduce from 72% to 65%.

For the benefit of airspace users, NEFAB ANSPs on November 12 2015 implemented Free Route Airspace (FRA) in NEFAB states, a ground-breaking concept where the FRA extends to lower levels of controlled airspace as well as across NEFAB FIRboundaries. It is now possible to plan the most optimal route regardless of the ATS routes. However, this is just a beginning as the concept is being enhanced further. A seamless connection of free route airspace in NEFAB East (Estonia, Finland and Latvia), Denmark and Sweden is operational as of June 23 2016. In the next steps, the seamless FRA area will expand with establishing seamless FRA interface with Norway and will continue further in the Borealis FRA Programme with connecting to the Free Route Airspace in the UK, Ireland, and Iceland by 2021. It will enable airline and business aviation customers to plan and take the most cost effective, fuel efficient and timely routes across a large airspace managed by nine members of the Borealis Alliance saving time, money and fuel.

5. ENVIRONMENT MAPPING: TRENDS AND CHALLENGES

A Single European Sky and future of ATM

The interim update of the Single European Sky rules, the SES II+ aims at speeding up the implementation of the Single European Sky to make the European air transport system less fragmented and more competitive. The SES II + enhances focus on competition by proposing a competitive approach to the provision of support services and enhancing industrial partnership. It also wants proofs that a functional airspace block has the potential to progressively deliver overall added value, including in the use of airspace, as well as technical and human resources, aiming to make FABs more flexible, industry led, and more focused on performance.

However, the SESII+ is still in a deadlock. Meanwhile the European Parliament's research points out that the progress made in air traffic management and airports is regarded insufficient; therefore existing rules need to be enforced to take account of what is currently blocking the advancement of the Single European Sky.

In December 2015, the European Commission published a comprehensive strategy for the European aviation sector. In addition to maintaining high EU standards in the aviation, making progress on innovation, digital technologies and investments, and placing the EU as a leading player in international aviation, the Strategy is aiming to tackle limits to growth in the air and on the ground. The main challenge for the growth of EU aviation is to address the capacity, efficiency and connectivity constraints. For this reason, the Strategy stresses the importance of completing the Single European Sky project.

In addition, CANSO insists that States create a 'level playing field' for ANSPs to be able to operate on an equal level with each other as business-oriented organisations. The different national conditions under which ANSPs operate need to be harmonised across Europe. In addition, simple and clear SES regulations are needed, without the EC micromanaging the businesses of ANSPs.

A Performance targets and levels (RP2 and beyond)

Further years will be marked by evolution of Performance Review Body (PRB) and preparation of performance objectives and targets for the third reference period (RP3). With expiration of the EUROCONTROL's mandate in end 2016, a new PRB shall be established, envisaged for an interim period of three years, 2017-2019, and succeeded by an independent Performance and Economic Regulator, IPER, from 2020.

Preparing for this, the Commission has started an ex-post assessment of RP1 including the evolution of the Performance Scheme both in short and longer term. The Industry Consultation Body (ICB), a platform established by the EC for the definition of the future ATM strategy and its implementation, shall deliver to the Commission the definition of an independent regulator and their vision of the future of the Network Manager. The ICB together with CANSO are also working on a RP1 'lessons learnt'. All this will serve as basis for setting up a new performance regulator and performance objectives for RP3.

NEFAB Programme's targets set in the NEFAB Performance Plan for RP2 in all four key performance areas of safety, capacity, cost-efficiency, and environment are consistent with the relevant Union-wide performance targets. However, for ANSPs ranking among the low cost and efficient service providers, further cost reductions



might be a challenge therefore NEFAB Programme will continue to monitor the objective setting for RP3.

▲ Politics and Economics

The EUROCONTROL's analysis of the events falling into the 7-year horizon such as change in travel patterns due to conflicts, or potential changes in travel demand in response to political events show no effect on NEFAB economics. The assumptions of adjustment to IFR movements in this respect (i.e. arrival, departure, internal, overflight traffic) over the whole period have a total cumulative effect of zero. In Norway, some impact is foreseen due to reintroduction of a fee for all passengers on flights departing from Norwegian airports, both domestic and international.

In the light of global events and trends, the Commission's Aviation Strategy is looking forward to developing best practices in minimum service levels in airspace management. Comprehensive guidelines from the EC will identify regulatory actions and serve for ANSPs as a reference point for further contingency arrangements on a functional airspace block's level.

A Competitive trends impacting business

Competitive capacity is in the spotlight of the EC in the SES II+ draft regulation and in the Aviation Strategy which examines ways to improve the conditions of the entire EU aviation sector by bolstering its competitiveness and sustainability. The Commission believes that aviation's contribution to the overall performance of the EU economy and its global presence is so significant, that it is critical that the EU aviation sector remains competitive, maintains its leadership position and is able to grow.

Competition is impacting the ATM through decisions to open local markets seeking more cost-efficient provision of air navigation services. Tendering for services what once were the core business in own state has now become the reality. It urges ANSPs to reconsider cost-efficiency of their services and seek cost reduction opportunities within their own organisations and through teaming up with other partners. Remote air traffic management is one of such opportunities. Being a relatively new trend, remote ATM is developing rapidly as remote tower solutions. ANSPs throughout Europe are teaming with manufacturers and working with various partners in different regions. The Norwegian Avinor has launched a major remote tower programme to enable remote services in numerous sites throughout Norway. The NEFAB Programme has launched a Case Study to explore remote tower services within NEFAB.

A Cooperation with the Network Manager and Deployment Manager

Network Manager has been created by the EC as a function to optimise the aviation network performance, with EUROCONTROL nominated in this capacity until the end of the RP2. NM is recognised by NEFAB ANSPs as a support to their daily business, with Network Operations Plan and Network Strategy Plan supporting NEFAB Target Concept 2020+. Close cooperation with NM is especially crucial with the deployment of ambitious Free Route Airspace projects by several stakeholders.

The SESAR Deployment Alliance was appointed in the end 2014 to the EC-mandated role of the Deployment Manager (DM), to plan and coordinate a major modernisation of European infrastructure. The Deployment Programme, a break-down of the Pilot Common Project to project level, is reviewed and updated annually to highlight the most urgent initiatives and activities to be undertaken in order to ensure an effective and synchronized deployment and avoid significant gaps. NEFAB partners are actively participating in the consultation via the Stakeholder Consultation Platform, to ensure that NEFAB air navigation service providers have a common representation of their interests towards the Deployment Manager.



A Cooperation with states and NSAs within NEFAB

Political influence at state level is of high importance as all NEFAB ANSPs are state owned and their developments are dependent on decisions of their owners. In addition, the progress of functional airspace blocks is monitored by the EC and underperformance may result in the EU infringement procedure.

Given the overlap of politics and business, a timely involvement of state stakeholders is crucial to the success of the NEFAB Programme activities, through monitoring and overviewing the ongoing activities at the state level and establishing a common platform and strategy with the owners. NEFAB Programme recognises the need of getting more involved in the development of states strategy and its implementation plans, to align inputs and enable feasibility of decided strategic targets

▲ Industrial partnerships

Industrial partnership is vital for NEFAB as proper cooperative arrangements can help become more visible, improve performance, and get promoted in the external markets.

All NEFAB ANSPs are members of the Borealis alliance together with IAA, Isavia, Naviair, NATS and LFV. Borealis Alliance is a strategic business cooperation between the ANSPs covering the northern hemisphere from west of Greenland to the Russian border and from the North Pole to the continental part of Europe. The Vision of Borealis is to be the leading ANSP Alliance that enables its Members to drive better performance for stakeholders through business collaboration.

The primary objective of the Alliance is to facilitate cooperation between the Members, on commercially-recognised business partnering principles that make a contribution to the operational and financial performance of Members' air traffic services. The secondary objective is to enable Members collectively to be more influential with relevant trade, regulatory and policy bodies in Europe and internationally by developing a common position on major issues and expressing it jointly.

NEFAB ANSPs (except LGS) are today partners in SESAR through the NORACON consortium; however, NORACON will be terminated in early 2017.

6. SETTING STRATEGIES

The objective of NEFAB is to achieve optimal performance in the areas of safety, environmental sustainability, capacity, cost-efficiency, flight efficiency and military mission effectiveness, by the design of airspace and the organization of air traffic management regardless of existing boundaries.

The strategies and associated business plans are being built in the context of the EU requirements, primarily, the legislative framework of the Single European Sky and other EU rules, aiming at building European network performance. These mandatory requirements urge to increase operational efficiency and FAB-wide performance. Furthermore, the Deployment Programme (DP) is setting the roadmap by industry how to get organised to ensure synchronised, coordinated and timely PCP implementation. It is therefore crucial that ANSPs are aware what they are expected to implement in order to comply with PCP regulation, and recognise that their investment plans are aligned enough with DP so that they could be in position to use possible co-funding opportunities.

NEFAB strategies are developed with full regard of these objectives. The strategies are built on two levels, the states and ANSPs. The state strategy comprises the vision and strategic objectives of the NEFAB cooperation from the perspective of the

participating States. The ANSPs strategy captures strategic targets and associated business tasks, focusing on working arrangements and structures to achieve more results from the resources put into the FAB work. Therefore, in order to achieve optimal performance, both internal potentials and external opportunities are being sought.

NEFAB Programme Business Plan identifies three strategic target areas and associated business deliverables for further 5 years business planning cycle, to manage the expectations and requirements stemming out of the NEFAB strategies and EU legal framework.

These target areas are:

- **A** EXPLOITATION OF BUSINESS OPPORTUNITIES
- ▲ OPERATIONAL EFFICIENCY
- **A** SUSTAINABLE NEFAB STRUCTURE

The strategic target areas have been built with account of various perspectives, from the inbound, as NEFAB structure, to business angle, state regulatory perspective, operational (internal) ANSP business and European network perspective. In addition, targets are based on agreed cooperative arrangements among NEFAB ANSPs and hence decided to be of a common interest for achieving win-win situations for NEFAB partners.

6.1. Exploitation of business opportunities

6.1.1. Strategic rationale: Buying services/ selling know-how/ services would enable NEFAB ANSPs to become market players. Regular monitoring of business environment will help identify opportunities and cooperation areas. This will be facilitated through sustainable structures within the NEFAB Programme and joint projects and activities.

6.1.2. Strategic targets/goals:

| | Strategic targets/goals | Enablers | EU | Reference | | | Timeline | | |
|-----|--|--|----------------------------|----------------------------|------|------|----------|------|------|
| | | (ref 6.1.3 below) | requirement (yes/no) | t | 2017 | 2018 | 2019 | 2020 | 2021 |
| 1 | Markets and opportunit | ies | | | | | | | |
| 1.1 | Analysis of markets and opportunities Regular monitoring and analysis of markets and individual business cases | a, b, c, d | no | NEFAB ANSPs Strategy | | | | | |
| 2 | Industrial partnerships | | | | | | | | |
| 2.1 | Seeking business opportunities and co- funding through partnerships on a | opportunities and co- funding through | NEFAB ANSPs Strategy | | | | | | |
| | larger scale e.g. Borealis Alliance or other FABs/States | | | | | | | | |

6.1.3. Enablers:

- a) New business development structures and business-oriented deliverables
- b) Joint business arrangements
- c) Coordinated strategic investments and business planning within NEFAB
- d) Business dialogue with owners
- e) External financing/co-funding opportunities



6.2. Operational efficiency

6.2.1. Strategic rationale: Developing operational efficiency together to be more efficient in the competing market

6.2.2. Strategic targets/goals:

| | Strategic targets/goals | Enablers | EU | Reference | | | Timeline | • | |
|-----|---|-------------|---------------------------|------------------------------|-------------------|------|----------|---------------|-----------|
| | | (ref 6.2.3 | requirement | | 2017 | 2018 | 2019 | 2020 | 2021 |
| | | below) | (yes/no) | | | | | | |
| 1 | Industrial partnerships for | improved i | network perform | mance | | | | | |
| 1.1 | Multi FAB Free Route | b, e, f | yes | IR (EU) No | | | | | |
| | Airspace (Borealis FRA | | | 716/2014 | | | | | |
| | Programme) | | | (Pilot Common | | | | | |
| | Participation at development | | | Project) ¹ ; | | | | | |
| | and implementation phases of Borealis FRA Programme, | | | 1 10,000, , | | | | | ÷ ; |
| | including development of | | | | | | | | |
| | common harmonised OLDI | | | | | | | | |
| | concept to reduce | | | | | | | | |
| | coordination | | | | | | | | |
| 2 | NEFAB Target Concept 20 | 20+ | | | | | | | |
| | | | 1 | - | | | | 1 | - |
| 2.1 | NEFAB Network Plan | | | NEFAB | | | | | |
| | update | | | ANSP Strategy | | | | | |
| | Update of operational requirements, network plan | | | Strategy | | | | | \mapsto |
| | appendices for TC 2020+ and | | | NEFAB | | | | | |
| | implementation by activity | | | TC2020+ | | | | | |
| 2.2 | FRA post- | | | NEFAB | | | | | |
| | implementation | | | TC2020+ | | | | | |
| | monitoring of scenarios | | | | | | | | |
| | 6 and 8 through regular | | | | | | | | , |
| 2.3 | interaction with customers Cross-border operations | a, b, c, d, | no | NEFAB | | | | | |
| 2.5 | Study of new sectorisation | e, f | 110 | States | | | | | |
| | with objective of improved | | | Strategy; | | | | | |
| | cost efficient service provision | | | NEFAB | | | | | |
| | in NEFAB based on traffic flows and CBA | | | ANSPs Strategy; | | 1 | | \rightarrow | |
| | | | | NEFAB TC | | | | | |
| | Study extension of the cross border sectorisation with | | | 2020+; | | | | | |
| | Denmark and Sweden | | | NEFRA | | | | | |
| | | | | Strategy/ Borealis | | | | | |
| 2.4 | NEFAB Contingency | a, b, c, d, | Yes (for | IR (EU) | | | | | |
| | Concept (based on scope | e, f | individual ANSPs only) | 1035/ 2011 ² ; | | | | | |
| | definition, cost and impact | | No EU | NEFAB | - | 1 | ; | | |
| | analysis) | | requirement | States | | | | | |
| | | | FAB-wide | Strategy; | | | | | |
| 2.5 | Common Flight Planning | b, c, e | no | NEFAB | | | | | |
| | Centre | | | ANSPs Strategy | - | Ì | | | |
| 2.6 | Safety Management | а | no | | | | | | |
| | System harmonisation | | | | \longrightarrow | | | | |
| 2.7 | Safety Management | a,b, | no | | | | | | |
| | System integration | | | | _ | 1 | ╞ | | |
| | | | | | | | | | |

¹ Commission Implementing Regulation (EU) No 716/2014 of 27 June 2014 on the establishment of the Pilot Common Project supporting the implementation of the European Air Traffic Management Master Plan

² Commission Implementing Regulation (EU) No 1035/2011 of 17 October 2011 laying down common requirements for the provision of air navigation services (ref 8.2: "Air navigation service providers shall have in place contingency plans for all the air navigation services they provide in the case of events which result in significant degradation or interruption of their operations").



| 3 | NEFAB Remote TWR Cond | cept | | | | | |
|-----|--|---------------------|--------------|--|--|--|---|
| 3.1 | NEFAB Low-Cost Remote Towers concept | a, b, c, d, e, f | no | NEFAB ANSPs Strategy | | | , |
| 4 | NEFAB projects stemming | from Pilot | Common Proje | ct | | | |
| 4.1 | Identify potential common NEFAB projects stemming from | - | yes | IR (EU) No 716/2014 (Pilot | | | |
| | Pilot Common Project (SCP to explore potential) | | | Common Project); | | | , |
| 5 | Compliance with the Perfo | ormance sch | neme | | | | |
| 5.1 | RP2 : monitor developments and ANSP performance 2014-2019 | - | yes | IR (EU) No 390/2013 (Performan ce Scheme) ³ | | | |
| 5.2 | RP3: monitoring of and participation in objective and strategy setting; compliance monitoring as of 2020 | - | yes | | | | |

6.2.3. Enablers:

- a) Study and business case for harmonisation and integration of SMS
- b) Harmonisation of national legislative acts (- together with states and NSAs)
- *c)* Revenue sharing model and principles (- *in context with TC2020+ cross border sectorisation and services*)
- d) Optimized contingency arrangements (- NEFAB Contingency Concept based on scope definition, cost and impact analysis in NEFAB TC2020+; NEFAB to support NSAs)
- e) External financing/co-funding opportunities
- f) Cooperation with neighbouring FABs/states

6.3. Sustainable NEFAB structure

6.3.1. Strategic rationale: Optimum working arrangements and structures bringing an added value to participating ANSPs and enabling efficient resource and programme management

6.3.2. Strategic targets/goals:

| Strategic | Enablers | EU | Reference | | | Timeline | e | |
|---|--|---|--|---|---|---|---|---|
| targets/goals | (ref 6.3.3 below) | requirement (yes/no) | | 2017 | 2018 | 2019 | 2020 | 2021 |
| Efficient Programme's | structure an | d business orie | ented delivera | bles | | | | |
| Yearly revision of NEFAB business structures in response | а | no | NEFAB ANSPs Strategy | | | | | |
| to Programme's requirements and NEFAB objectives | | | | | | | | |
| Building/supporting ne | twork perfor | mance | | | | | | |
| Close and interactive cooperation with NM to support ATM in | a, c | no | NEFAB ANSPs Strategy | | | | | |
| | targets/goals Efficient Programme's Yearly revision of NEFAB business structures in response to Programme's requirements and NEFAB objectives Building/supporting ne Close and interactive cooperation with NM | targets/goals(ref 6.3.3 below)Efficient Programme's structure anYearly revision of NEFAB business structures in response to Programme's requirements and NEFAB objectivesaBuilding/supporting network perfor Close and interactive cooperation with NM to support ATM ina, c | targets/goals(ref 6.3.3 below)requirement (yes/no)Efficient Programme's structure and business orieYearly revision of NEFAB business structures in response to Programme's requirements and NEFAB objectivesanoBuilding/supporting network performanceClose and interactive cooperation with NM to support ATM ina, cno | targets/goals(ref 6.3.3 below)requirement (yes/no)Efficient Programme's structure and business oriented deliveraYearly revision of NEFAB business structures in response to Programme's requirements and NEFAB objectivesanoNEFAB ANSPs StrategyBuilding/supporting network performanceClose and interactive cooperation with NM to support ATM ina, cnoNEFAB ANSPs | targets/goals(ref 6.3.3 below)requirement (yes/no)2017Efficient Programme's structure and business oriented deliverablesYearly revision of NEFAB business structures in response to Programme's requirements and NEFAB objectivesanoNEFAB ANSPs StrategyBuilding/supporting network performanceClose and interactive cooperation with NM to support ATM ina, cnoNEFAB ANSPs Strategy | targets/goals(ref 6.3.3 below)requirement (yes/no)20172018Efficient Programme's structure and business oriented deliverablesYearly revision of NEFAB business structures in response to Programme's requirements and NEFAB objectivesanoNEFAB ANSPs StrategyBuilding/supporting network performancea, cnoNEFAB ANSPs StrategyaClose and interactive cooperation with NM to support ATM ina, cnoNEFAB ANSPs Strategya | targets/goals(ref 6.3.3 below)requirement (yes/no)201720182019Efficient Programme's structure and business oriented deliverablesYearly revision of NEFAB business structures in response to Programme's requirements and NEFAB objectivesanoNEFAB ANSPs StrategyNEFAB ANSPs StrategyIIBuilding/supporting network performanceClose and interactive cooperation with NM to support ATM ina, cnoNEFAB ANSPs StrategyIIIImage: Close and interactive cooperation with NM to support ATM ina, cnoNEFAB ANSPs StrategyIII | targets/goals(ref 6.3.3 below)requirement (yes/no)2017201820192020Efficient Programme's structure and business oriented deliverablesYearly revision of NEFAB business structures in response to Programme's requirements and NEFAB objectivesanoNEFAB ANSPs StrategyIIIIBuilding/supporting network performanceClose and interactive cooperation with NM to support ATM ina, cnoNEFAB ANSPs StrategyIIIIIINEFAB ANSPs Strategy |

³ Commission Implementing Regulation (EU) No 390/2013 of 3 May 2013 laying down a performance scheme for air navigation services and network functions



| 2.2 | Close and interactive cooperation with DM | a, c | no | NEFAB ANSPs Strategy | | |
|-----|---|------|----|----------------------------|--|--|
| 3 | Stakeholder engageme | nt | | | | |
| 3.1 | Continuous dialogue with NEFAB ANSP owners (States) | b, c | | NEFAB ANSPs Strategy | | |
| 3.2 | Interaction between the States and ANSPs | b, c | | NEFAB ANSPs Strategy | | |
| 3.3 | Interaction with NEFAB State level bodies | | | | | |
| 3.3 | Customer Consultation at Programme level | С | no | NEFAB ANSPs Strategy | | |

6.3.3. Enablers:

- a) Joint business/ working arrangements
- b) Business dialogue with owners
- c) Stakeholder engagement action plans

7. KEY ENABLERS TO ACHIEVE TARGETS

The section describes key enablers which are high level drivers to achieve the agreed strategic targets. The key enablers are supported by more detailed enablers, which refer to particular activities stemming out of the three key target areas and are prerequisites for their fulfilment.

7.1. NEFAB Target Concept 2020+

NEFAB ANSP partners will continue the development of the Target Concept beyond the year 2015 as interim step towards the 2020+ targets, for realizing further improvements and benefits. The 2020+ programme will be mobilized as the continuation of the current 2015 concept.

The Concept Phase of the Target Concept 2020+ will be started in 2016. The Concept of Operations will be developed to gradually encompass the higher ambition level described in the NEFAB Feasibility Study for the year 2020 as well as to include different elements of the SESAR ATM Target Concept and its Concept of Operations, which represent a paradigm shift from an airspace-based environment to trajectory and performance based environments.

The Target Concept 2020+ will be based on the identified improvement areas in alignment with the European ATM Master Plan including numerous activities aimed to improve operational efficiency. One of the major initiatives will be the Borealis Free Route Airspace programme, initiated by the cooperating partners in the Borealis Alliance - Avinor (Norway), EANS (Estonia), Finavia (Finland), IAA (Ireland), Isavia (Iceland), LFV (Sweden), LGS (Latvia), NATS (United Kingdom) and Naviair (Denmark). The Programme will enable airline and business aviation customers to plan and take the most cost effective, fuel efficient and timely routes across the entire airspace managed by Borealis members saving time, money and fuel.

7.2. Cooperation with neighbouring FABs and states

NEFAB ANSPs will continue close cooperation with DK/SE FAB and Iceland pursued at ministerial, NSA and ANSP levels for further support and enhancement of the NEFRA Programme.

Cooperation with other FABs and states will be enhanced, in particular, with FABs within Borealis Alliance in order to support the major Free Route Airspace Programme.

NEFAB ANSPs will in addition seek cross-border cooperation aiming at increased performance within the FAB and contribution to the overall improvement of the European network.

7.3. External financing/co-funding opportunities

The EU co-funding opportunities are essential to support development and deployment within NEFAB, for more efficient use of the R&D resources. NEFAB development initiatives are linked with the ATM Master Plan that outlines the essential operational and technological changes that are foreseen to provide SESAR contributions (besides other initiatives) to achieve the European SES performance objectives. SESAR Deployment Manager is driving the deployment to ensure that new technologies and solutions that have already been tested and validated through the SESAR Joint Undertaking are delivered into everyday operations across Europe, providing significant benefits to airspace users and the environment. The SESAR Deployment Programme is supporting and guiding through the implementation of Pilot Common Project, six essential ATM functionalities in the ATM Master Plan that have demonstrated their readiness for deployment and to produce benefits.

NEFAB ANSPs have an active role and joint representation on the FAB-level at the Stakeholder Consultation Platform established by the DM. The Platform is open to all current and future operational stakeholders in the European ATM that are required to implement Common Projects. A FAB-level representation is regarded important to support investments relevant for NEFAB in the future deployment plans hence ensuring the co-financing for our investments.

7.4. Aligned investments and business planning within NEFAB

The NEFAB Performance Plan includes a list of planned investments that each NEFAB ANSP has reported for the 2015 – 2019 period. These and future investments are cross-checked for their potential alignment to identify cost-savings. A NEFAB-wide perspective on the investment plans will be sought where feasible to ensure more efficient and cooperative solutions.