EUROCONTROL

2019

LSSIP 2019 - ESTONIA
LOCAL SINGLE SKY IMPLEMENTATION

Level 1 - Implementation Overview

FOREWORD

"We manage a seamless European airspace by linking together the elements of the European air traffic management system. Focusing on performance of the European network, we ensure that flights reach their destination safely, on time, with the least possible impact on environment and in a cost-efficient way".

With this mission, as Director NM, I must ensure to develop and operate effectively and efficiently the air traffic management network in Europe and beyond, to meet current and future airspace and ground capacity needs, in full partnership with all operational stakeholders.

In particular, one of the NM activities through the Infrastructure Division, is to focus on the planning and monitoring of the European ATM implementation of the SES objectives at the local level according to EU legislation.

For more than 26 years, the Local Single Sky ImPlementation (LSSIP) documents are expressing yearly the commitment of civil and military national organisations (Regulators and National Supervisory Authorities), Air Navigation Service Providers and Airport Operators, towards the implementation of the European ATM Master Plan (Level 3).

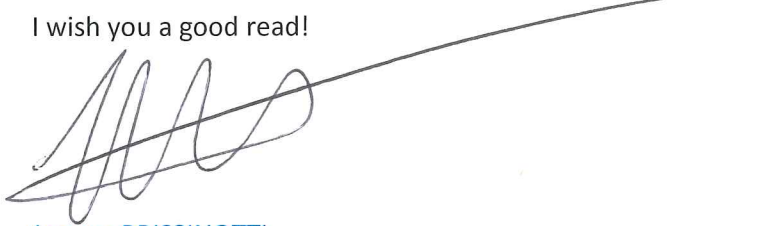
These documents provide an extensive and harmonised picture, for the benefit of the ATM community at large, of how all ECAC States as well as States having a Comprehensive Agreement with EUROCONTROL, and stakeholders concerned, are progressing in planning and deploying the mature elements of the European ATM Master Plan and the European aviation policies.

The reliability and quality of the data provided by the national stakeholders is of such a high quality that it allowed, for the fifth consecutive year, for the information in the LSSIP documents to constitute the sole source of information for the development of ICAO's Aviation System Block Upgrades (ASBUs) Implementation Monitoring Report in the ICAO EUR Region. EUROCONTROL undertakes this work, on behalf of ICAO, for all 55 ICAO/EUR States in accordance with the Global Air Navigation Plan (GANP).

In addition, EUROCONTROL is developing efficient practices to avoid unnecessary duplication of reporting. We are cooperating with the SESAR Deployment Manager, the SESAR Joint Undertaking, the European Defence Agency and NATO on optimising the reporting mechanisms for relevant stakeholders by collecting some of the information needed on their behalf through the LSSIP process.

I would like to thank all the stakeholders for their engagement and substantial effort spent in contributing to the production of this LSSIP document. I see this as a proof of commitment to the principles of transparency and partnership, to the benefit of the entire ATM community!

I wish you a good read!



Iacopo PRISSINOTTI
Director NM – Network Manager
EUROCONTROL

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Reference Documents	
LSSIP Documents	https://www.eurocontrol.int/service/local-single-sky-implementation-monitoring
Master Plan Level 3 – Plan Edition 2019	https://www.eurocontrol.int/publication/european-atm-master-plan-implementation-plan-level-3-2019
Master Plan Level 3 – Report Year 2019	https://www.eurocontrol.int/publication/european-atm-master-plan-implementation-report-level-3-2019
European ATM Portal	https://www.atmmasterplan.eu/
STATFOR Forecasts	https://www.eurocontrol.int/statfor
National AIP	https://aim.eans.ee/
FAB Performance Plan	https://www.nefab.eu/docs

APPROVAL SHEET

The following authorities have approved all parts of the LSSIP Year 2019 document and the signatures confirm the correctness of the reported information and reflect the commitment to implement the actions laid down in the European ATM Master Plan Level 3 (Implementation View) – Edition 2019.

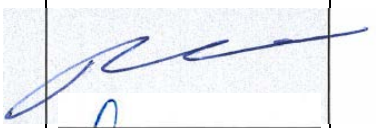
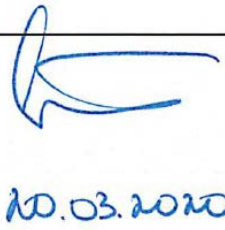
Stakeholder / Organisation	Name	Position	Signature and date
Estonian CAA	Rait Kalda	Director General	
EANS	Ivar Värk	Chairman of Management Board and CEO	 20.03.2020
Estonian Air Force	Rauno Sirk	Active Commander of the Estonian Air Force Colonel	 27.03.20
Tallinn Airport Ltd	Riivo Tuvike	Chairman of Management Board	 24.03.2020

TABLE OF CONTENTS

Executive Summary

National ATM Context

Member State of:

Main airport covered by LSSIP: EETN

Main national stakeholders:

- The Civil Aviation Authority (CAA)
- The Navigation Services Agency
- The Air Force
- The Military Air Traffic Service Office
- The Airports

In 2019 the GDP increased by 4,3%, the forecast for 2020 is for a 2,3% increase.

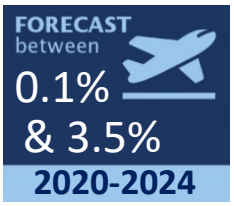
GNSS RNP APCH procedures are implemented at Kuressaare, Kärdla, Tartu and Tallinn aerodromes. Implementation at Pärnu aerodrome is planned for 2021 summer.

The National PBN Implementation plan is still under development. Navigation infrastructure assessment study is ongoing. Based on assessment study's results the rationalization plan will be developed.

A-CDM implementation at Tallinn airport is postponed to 2020 and Tallinn aerodrome traffic area modernization phase 2 works are planned to end on DEC 2021.

Traffic and Capacity

Summer Forecast (May to October inclusive)



Estonia is part of: The North European Functional Airspace Block

Number of national projects: 4
Number of FAB projects: 2
Number of multinational projects: 1

Summary of 2019 developments:

Objective ITY-AGVCS2 (8,33 kHz Air-Ground Voice Channel Spacing below FL195) is implemented (since 02 January 2020).

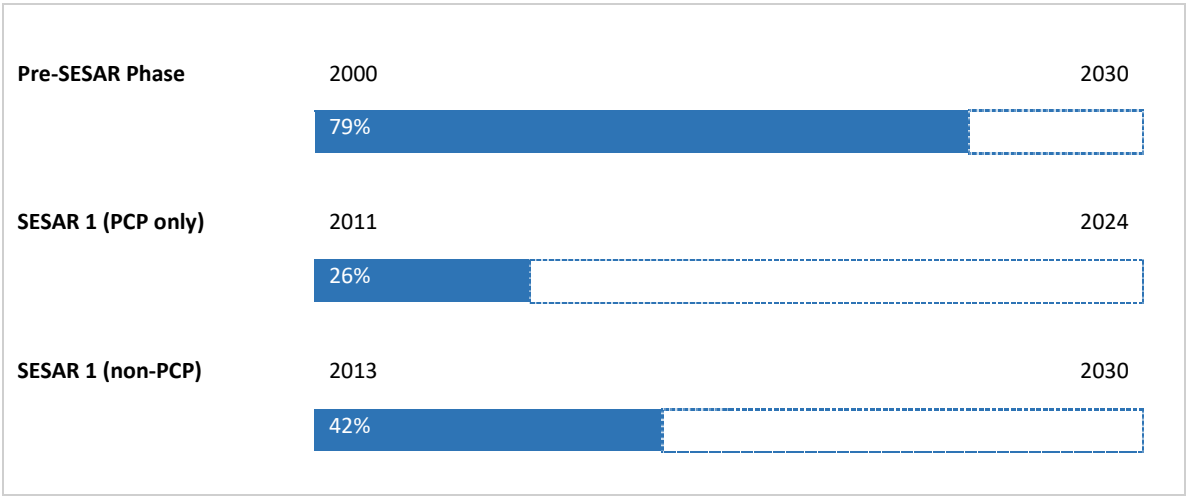
Progress per SESAR Phase

The figure below shows the progress made so far in the implementation of the SESAR baseline (Pre-SESAR and SESAR1 non-PCP) and the PCP elements.

It shows the average implementation progress for all objectives grouped by SESAR Phases, excluding those for which Estonia is outside the applicability area as defined on a yearly basis in the European ATM Master Plan (Level 3) 2019, i.e. disregarding the declared "NOT APPLICABLE" LSSIP progress status.

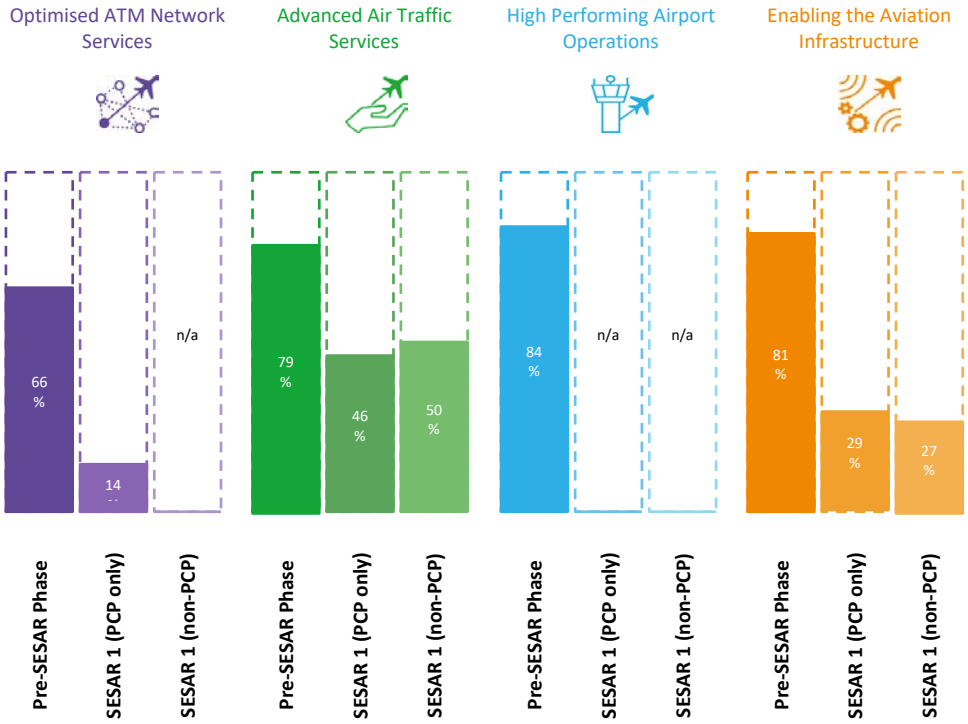
The SESAR 1 (non-PCP) progress in the graphics below for Estonia is based on the following objectives:

ATC02.9 – STCA for TMAs; **COM11.2** - Voice over IP in airport/terminal) and **NAV12** - ATS IFR routes for rotorcraft).



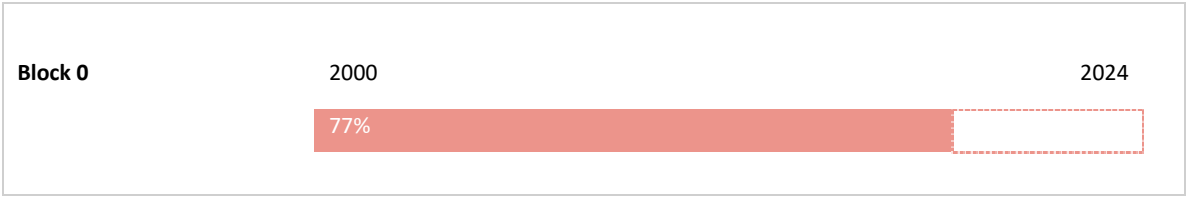
Progress per SESAR Key Feature and Phase

The figure below shows the progress made so far, per SESAR Key Feature, in the implementation of the SESAR baseline and the PCP elements. The percentages are calculated as an average, per Key Feature, of the same objectives as in the previous paragraph.



ICAO ASBUs Progress Implementation

The figure below shows the progress made so far in the implementation of the ICAO ASBUs Block 0. The overall percentage is calculated as an average of the relevant Objectives contributing to each of the relevant ASBUs; this is a summary of the table explained in Chapter 5.3 – ICAO ASBU Implementation Progress.



ATM Deployment Outlook

State Objectives

✓	**Deployed in 2018 - 2019**	None

By 2020	By 2021	By 2022	By 2023+
- Electronic Terrain and Obstacle Data (eTOD) INF07 - 06 % progress **- Ground-Based Safety Nets** ATC02.8 - 58 % progress **- 8,33 kHz Air-Ground Voice Channel Spacing below FL195** ITY-AGVCS2 - 100 % progress **- RNP Approach Procedures to instrument RWY** NAV10 - 23 % progress **- New Pan-European Network Service (NewPENS)** COM12 - 80 % progress **- Aircraft Identification** ITY-ACID - 92 % progress **- Ensure Quality of Aeronautical Data and Aeronautical Information** ITY-ADQ - 74 % progress **- Harmonise Operational Air Traffic (OAT) and General Air Traffic (GAT) Handling** AOM13.1 - 01 % progress **- Surveillance Performance and Interoperability** ITY-SPI - 88 % progress **- Migrate from AFTN to AMHS** COM10 - 96 % progress **- Initial ATC Air-Ground Data Link Services** ITY-AGDL - 94 % progress	**- Voice over Internet Protocol (VoIP) in Airport/Terminal** COM11.2 - 27 % progress **- Full Rolling ASM/ATFCM Process and ASM Information Sharing** AOM19.3 - 00 % progress **- ASM Management of Real-Time Airspace Data** AOM19.2 - 00 % progress **- Automated Support for Conflict Detection, Resolution Support Information and Conformance Monitoring** ATC12.1 - 83 % progress **- Collaborative Flight Planning** FCM03 - 98 % progress **- Management of Pre-defined Airspace Configurations** AOM19.4 - 00 % progress **- RNAV 1 in TMA Operations** NAV03.1 - 70 % progress **- Voice over Internet Protocol (VoIP) in En-Route** COM11.1 - 27 % progress **- Traffic Complexity Assessment** FCM06 - 00 % progress **- Interactive Rolling NOP** FCM05 - 00 % progress **- Short Term ATFCM Measures (STAM) - Phase 2** FCM04.2 - 00 % progress		**- Information Exchanges using the SWIM Yellow TI Profile** INF08.1 - 10 % progress

Airport Objectives - Tallinn Airport

✓	**Deployed in 2018 - 2019**	None

By 2020	By 2021	By 2022	By 2023+
- Airport Collaborative Decision Making (A-CDM) AOP05 - 18 % progress			**- Continuous Descent Operations (CDO)** ENV01 - 62 % progress

Introduction

The Local Single Sky ImPlementation (LSSIP) documents, as an integral part of the Master Plan (MP) Level 3 (L3)/LSSIP mechanism, constitute a short/medium term implementation plan containing ECAC States' actions to achieve the Implementation Objectives as set out by the MP Level 3 and to improve the performance of their national ATM System. This LSSIP document describes the situation in the State at the end of December 2019, together with plans for the next years.

Chapter 1 provides an overview of the ATM institutional arrangements within the State, the membership of the State in various international organisations, the organisational structure of the main ATM players - civil and military - and their responsibilities under the national legislation. In addition, it gives an overview of the Airspace Organisation and Classification, the ATC Units and the ATM systems operated by the main ANSP;

Chapter 2 provides a comprehensive picture of the situation of Air Traffic, Capacity and ATFM Delay per each ACC in the State. It shows the evolution of Air Traffic and Delay in the last five years and the forecast for the next five years. It also presents the achieved performance in terms of delay during the summer season period and the planned projects assumed to offer the required capacity which will match the foreseen traffic increase and keep the delay at the agreed performance level;

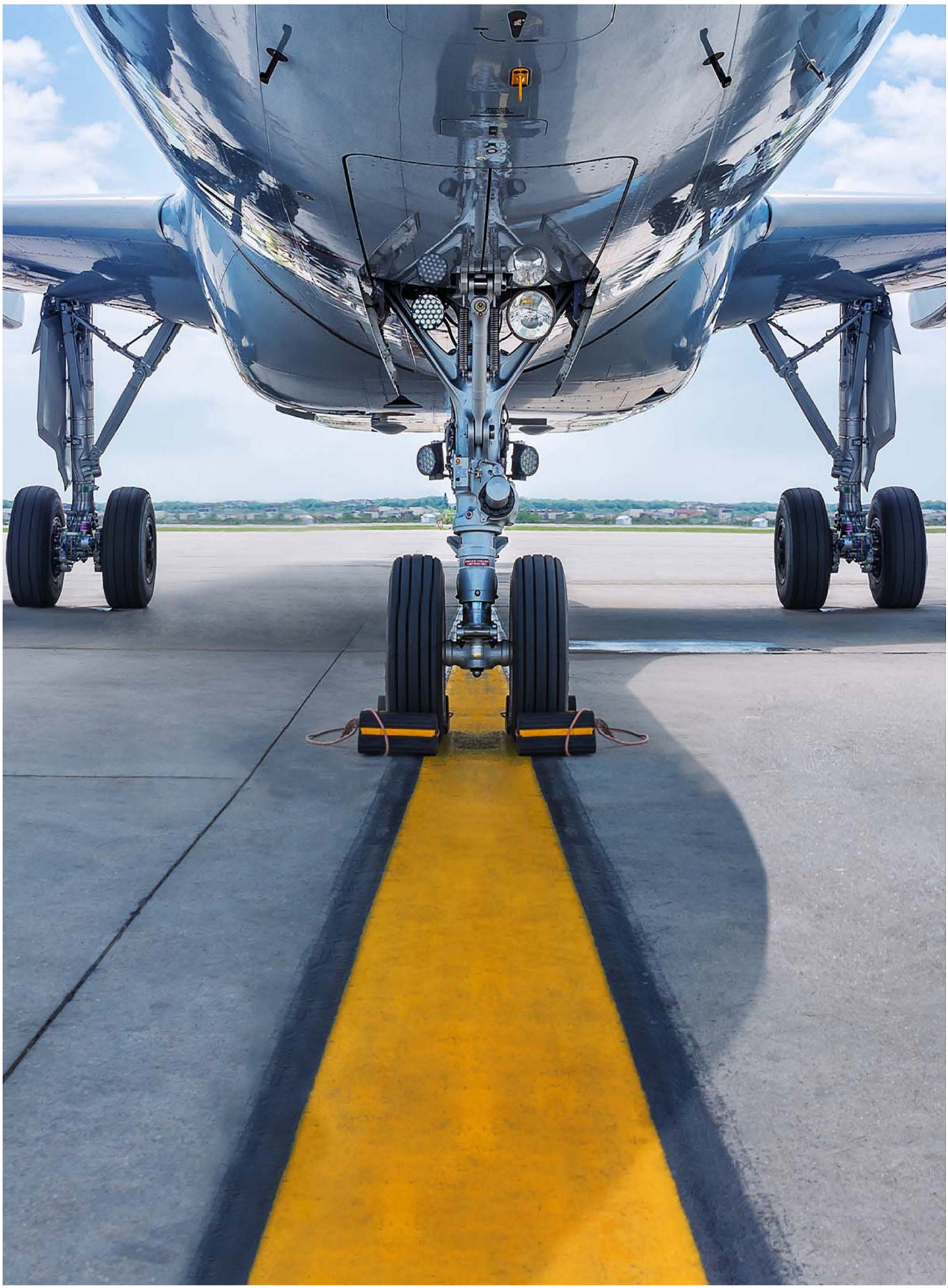
Chapter 3 provides the main Implementation Projects (at national, FAB and multinational level) which contribute directly to the implementation of the MP Operational Improvements and/or Enablers and Implementation Objectives. The Level 1 document covers a high-level list of the projects showing the applicable links. All other details like description, timescale, progress made and expected contribution to the ATM Key Performance Areas provided by the State per each project are available in the Level 2 document;

Chapter 4 deals with other cooperation activities beyond Implementation Projects. It provides an overview of the FAB cooperation, as well as all other multinational initiatives, which are out of the FAB scope. The content of this chapter generally is developed and agreed in close cooperation between the States concerned;

Chapter 5 contains aggregated information at State level covering the overall level of implementation, implementation per SESAR Key Feature and implementation of ICAO ASBUs. In addition, it provides the high-level information on progress and plans of each Implementation Objective. The information for each Implementation Objective is presented in boxes giving a summary of the progress and plans of implementation for each Stakeholder. The conventions used are presented at the beginning of the section.

The Level 1 document is completed with a separate document called LSSIP Level 2. This document consists of a set of tables organised in line with the list of Implementation Objectives. Each table contains all the actions planned by the four national stakeholders (REG, ASP, MIL and APO) to achieve their respective Stakeholder Lines of Action (SLoAs) as established in the European ATM Master Plan L3 Implementation Plan Edition 2019. In addition, it covers a detailed description of the Implementation Projects for the State as extracted from the LSSIP Data Base.

The information contained in Chapter 5 – Implementation Objectives Progress is deemed sufficient to satisfy State reporting requirements towards ICAO in relation to ASBU (Aviation System Block Upgrades) monitoring.



1. National ATM Environment

1.1. Geographical Scope

International Membership

Estonia is a Member of the following international organisations in the field of ATM:

Organisation		Since
CANSO	✓	1 January 2000
ECAC	✓	1995
EUROCONTROL	✓	1 January 2015
European Union	✓	1 May 2004
EASA	✓	1 May 2004
ICAO	✓	24 January 1992
NATO	✓	1 April 2004
ITU	✓	22 April 1992
EDA	✓	12 July 2004

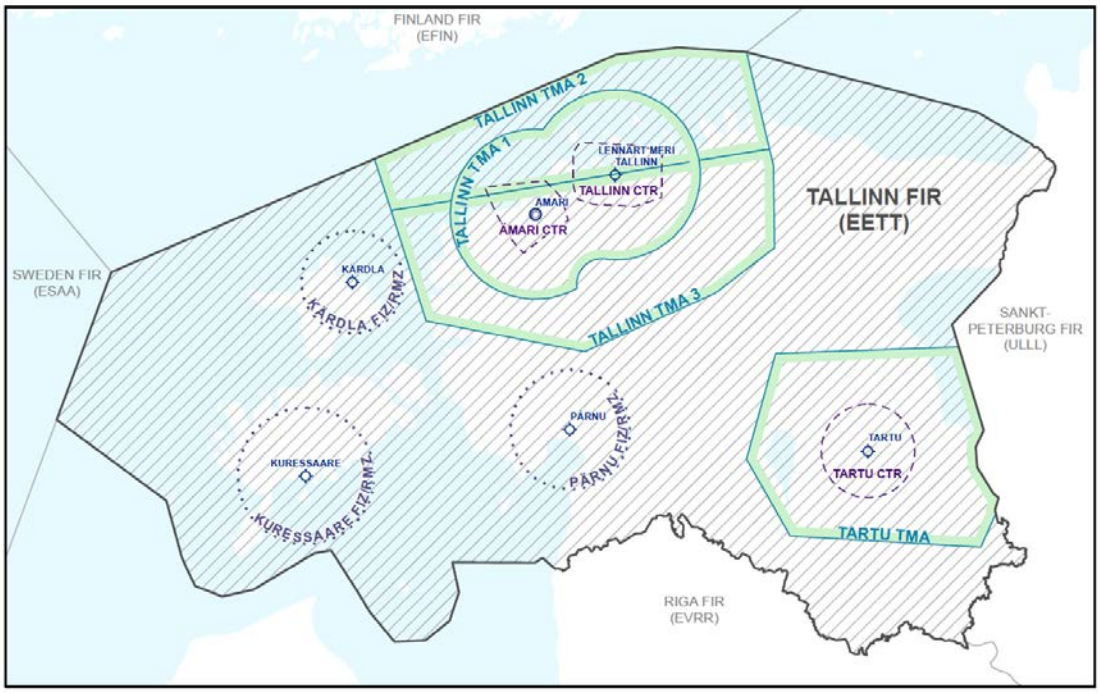
Geographical description of the FIR(s)

The geographical scope of this document addresses the Estonia 'Tallinn Flight Information Region' FIR:

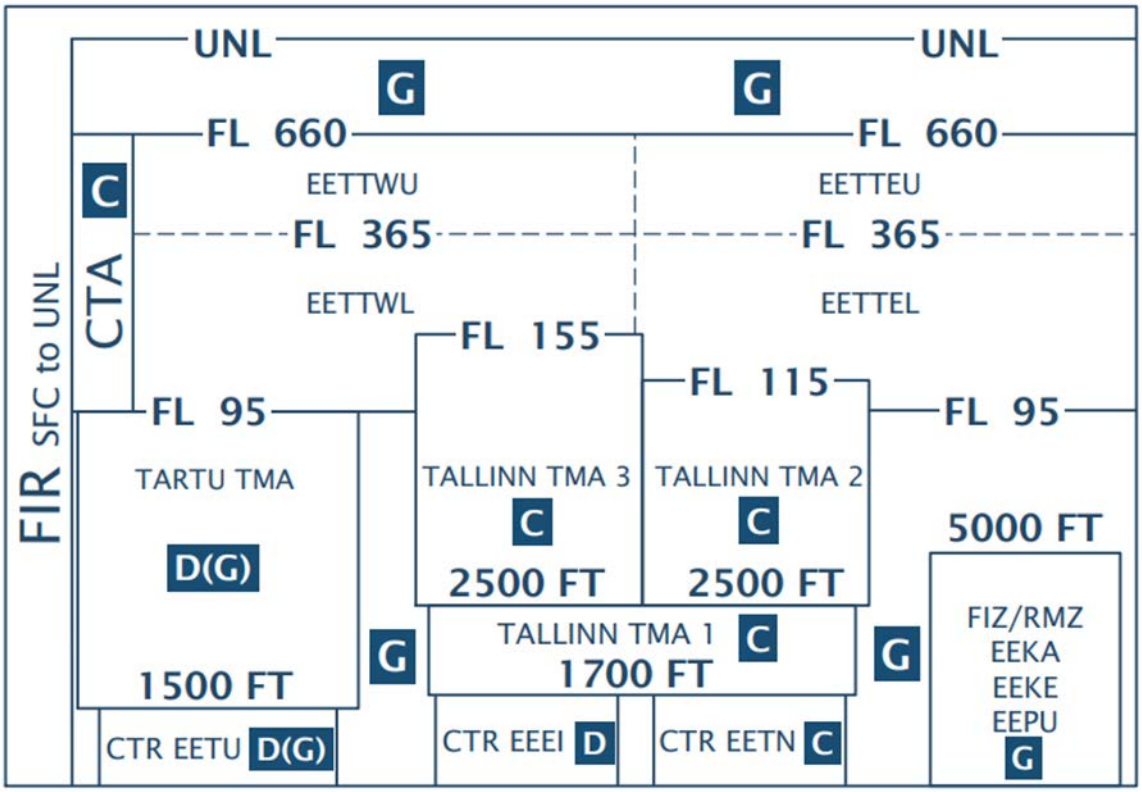
Tallinn FIR is surrounded by FIRs of 4 States, namely Helsinki FIR and Helsinki TMA in the north, St. Petersburg FIR in the east, Riga FIR/TMA in the south and Sweden FIR-s in the west.

St. Petersburg belongs to the Russian Federation, a non- ECAC State.

The Control Area (CTA) covers the geographical limits of the Tallinn FIR from FL 95 up to FL 660. Control Zones (CTR-s) are implemented around 3 airports, namely Tallinn, Tartu and Ämari (Military). In addition, there are Kärdla, Kuressaare and Pärnu FIZ.



Airspace Classification and Organisation



FIR: GND - UNL

CTA: FL 95 - FL 660

In accordance with national regulations, only the Imperial System is used in Estonia.

ATC Units

The ATC units in the Estonian airspace, which are of concern to this LSSIP, are the following:

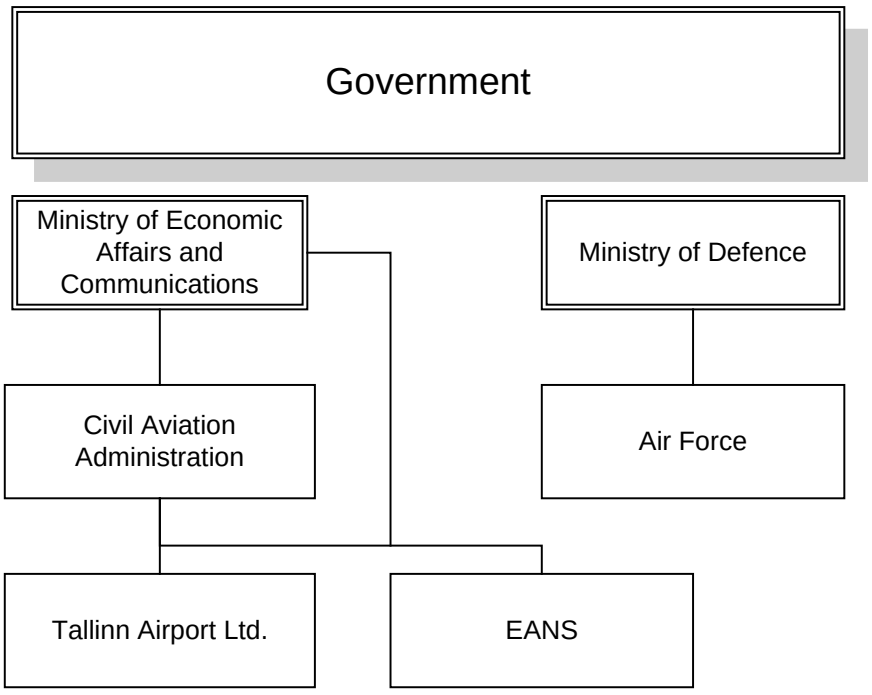
ATC Unit	Number of sectors		Associated FIR(s)	Remarks
	En-route	TMA		
TALLINN ATCC	3	1	Tallinn UTA (Class C) + CTA (Class C)	+ 1 Feeder sector suite operational regularly (EUROCAT 2000) as from Nov 2005
Tallinn APP		1	Tallinn TMA	Collocated with Tallinn ACC
Tartu APP		1	Tartu TMA	

1.2. National Stakeholders

The main National Stakeholders involved in ATM in Estonia are the following:

- The Ministry of Economic Affairs and Communications (MoEA&C);
- The Estonian Civil Aviation Administration (ECAA);
- Estonian Air Navigation Services (Estonian ANS or EANS);
- Ministry of Defence;
- Estonian Defence Forces Air Force;
- Tallinn Airport Ltd.

Their activities are detailed in the following subchapters and their relationships are shown in the diagram below.



Civil Regulator(s)

General Information

Civil Aviation in Estonia is the responsibility of the Ministry of Economic Affairs and Communications. The different national entities having regulatory responsibilities in ATM are summarised in the table below. The ECAA is further detailed in the following sections.

Activity in ATM:	Organisation responsible	Legal Basis
Rule-making	Ministry of Economic Affairs and Communications	Rule-making Ministry of Economic Affairs and Communications Statutes of Ministry of Economic Affairs and Communications (Regulation of Government of the Republic of Estonia no. 323 of 23 October 2002)
Safety Oversight	Estonia Civil Aviation Administration (ECAA)	Safety Oversight Estonia Civil Aviation Administration (ECAA) Aviation Act Statutes of Estonian Civil Aviation Administration (Regulation of the Minister of Economic Affairs and Communications No 73 of 31. July 2006)
Enforcement actions in case of non-compliance with safety regulatory requirements	ECAA	Aviation Act Statutes of Estonian Civil Aviation Administration (Regulation of the Minister of Economic Affairs and Communications No 73 of 31. July 2006)
Airspace	ECAA	Aviation Act Statutes of Estonian Civil Aviation Administration (Regulation of the Minister of Economic Affairs and Communications No 73 of 31. July 2006)
Economic	MoEA&C	Statutes of Ministry of Economic Affairs and Communications (Regulation of Government of the Republic of Estonia no. 323 of 23 October 2002)
Environment	Ministry of Environment	Statutes of Ministry of Environment (Regulation of Government of the Republic of Estonia no. 19 of 10 December 2009)
Security	ECAA	Aviation Act Statutes of Estonian Civil Aviation Administration (Regulation of the Minister of Economic Affairs and Communications No 73 of 31. July 2006)
Accident investigation	Estonian Safety Investigation Bureau (ESIB)	Aviation Act

Estonian CAA

The Estonian Civil Aviation Administration (CAA or ECAA) is in the jurisdiction of the Ministry of Economic Affairs and Communications and it is the Estonian Safety Supervisory Authority, responsible for exercising state supervision over the compliance with the requirements deriving from legal acts regulating the field of activity of ECAA. It has enforcement powers and it is the extra-judicial body, which conducts proceedings in matters of misdemeanours. ECAA participates in the drafting of legal acts concerning its area of activities, makes proposals on the amendments of those legal acts, such as the improvement of Estonian-language aviation terminology, participates in the development of policies, strategies, development plans, prepares and implements projects in its area of activities,

including international projects. The CAA is institutionally separated from the Estonian Service Providers.

Annual Report published:	Y	The Annual Safety report 2019 is under preparation.

National Civil Aviation Master Plan (CAMP):	N	National CAMP is referenced in ICAO resolutions below: • A39-23: No Country Left Behind (NCLB) Initiative (Draws the attention of Contracting States requesting technical cooperation and technical assistance to the advantages to be derived from well-defined projects based on civil aviation master plans) • A39-25: Aviation's contribution towards the United Nations 2030 Agenda for Sustainable Development (Urges Member States to enhance their air transport systems by effectively implementing SARPs and policies while at the same time including and elevating the priority of the aviation sector into their national development plans supported by robust air transport sector strategic plans and civil aviation master plans, thereby leading to the attainment of the SDGs) • A39-26: Resource Mobilization (Requests the Secretary General to develop guidance material to assist States in including and elevating the priority of the aviation sector into their national development plans and developing robust air transport sector strategic plans and civil aviation master plans).

The ECAA website is: https://www.ecaa.ee/en

The organization chart is available in Annexes.

Estonian Air Navigation Services - EANS

Service provided

EANS is a state owned stock company and a main service provider in Tallinn FIR, at Tartu and Tallinn Airports. The Air Traffic Services units of domestic airports provide service in defined portions of terminal airspace and belong to the airport enterprises.

The functions of EANS are:

- Provision of airspace utilisation;
- Provision of Air Traffic Service;
- Publication, exchange and dissemination of Aeronautical Information - Aeronautical Information Services;
- Consultancy Services and expertise in the field of aviation.

	EANS		
Governance:	MoEA&C	**Ownership:**	100% State (MoEA&C)
Services provided	**Y/N**	**Comment**	
ATC en-route	Y		
ATC approach	Y		
ATC Aerodrome(s)	Y	Currently Tallinn and Tartu CTR. There is a plan to start provision of the services also at other Estonian regional airports by using Remote TWR concept.	
AIS	Y		
CNS	Y		
MET	N	Environment Agency (https://www.keskkonnaagentuur.ee/)	
ATCO training	Y	EANS provides OJT and complementary training.	
Others			
Additional information:			
Provision of services in other State(s):	N		
Annual Report published:	Y	This is the annual report covering yearly activities of the ANSP.	

Further information is available on the EANS website: http://www.eans.ee

The organisation chart is available in Annexes.

ATC systems in use

Main ANSP part of any technology alliance[1]	N	

FDPS

Specify the manufacturer of the ATC system currently in use:	Thales
Upgrade[2] of the ATC system is performed or planned?	Performed in 2017
Replacement of the ATC system by the new one is planned?	Software upgrade
ATC Unit	ACC/APP

SDPS

Specify the manufacturer of the ATC system currently in use:	Thales
Upgrade of the ATC system is performed or planned?	Performed in 2016
Replacement of the ATC system by the new one is planned?	Software upgrade
ATC Unit	ACC/APP

Airports

General information

The main airports of Estonia: Tallinn, Tartu, Kuressaare, Kärdla, Pärnu airports, and Kihnu, Ruhnu airfields are operated by Tallinn Airport Ltd. It is a 100% State owned stock company under the supervision of the Ministry of Economic Affairs and Communications. It was established with the assets of RE Eesti Lennujaamad (State Enterprise Estonian Airports). Tallinn Airport Ltd was entered in the Estonian Commercial Register on 31st December 1997. Tallinn Airport is the main international airport of Estonia.

Airport(s) covered by the LSSIP

Referring to the List of Airports in the European ATM Master Plan Level 3 Implementation Plan Edition 2018 – Annex 2, it is up to the individual State to decide which additional airports will be reported through LSSIP for those Objectives

The airport that is covered in this LSSIP is Tallinn Airport.

The EUROCONTROL Public Airport Corner also provides information for Tallinn Airport: https://ext.eurocontrol.int/airport_corner_public/EETN.

[1] Technology alliance is an alliance with another service provider for joint procurement of technology from a particular supplier (e.g. COOPANS alliance)

[2] Upgrade is defined as any modification that changes the operational characteristics of the system (SES Framework Regulation 549/2004, Article 2 (40))

Military Authorities

The Military Authorities in Estonia concerned with ATM are:

- Ministry of Defence;

- Defence Forces Air Force Staff;

- Ämari Airbase.

They report to the Ministry of Defence.

Their regulatory, service provision and user role in ATM are detailed below.

Estonian Defence Forces Air Force Staff is responsible for the safety, monitoring of military aviation tasks and participation in decision making progress concerning airspace management.

Ämari Airbase is responsible for air navigation service at Ämari military airfield and within Ämari control zone.

Co-ordination between civil air navigation service providers and the military authorities is ensured through Letters of Agreements (LoAs).

Further information is available on the Estonian Defence Forces website: http://www.mil.ee.

Regulatory role

Regulatory framework and rule-making

OAT		GAT	
OAT and provision of service for OAT governed by national legal provisions?	Y	Provision of service for GAT by the Military governed by national legal provisions?	Y
Level of such legal provision: Ministry of Defence		Level of such legal provision: Ministry of Defence, ECAA	
Authority signing such legal provision: Minister of Defence		Authority signing such legal provision: Ministry of Defence	
These provisions cover:		These provisions cover:	
Rules of the Air for OAT	Y		
Organisation of military ATS for OAT	Y	Organisation of military ATS for GAT	Y
OAT/GAT Co-ordination	Y	OAT/GAT Co-ordination	Y
ATCO Training	Y	ATCO Training	Y
ATCO Licensing	Y	ATCO Licensing	Y
ANSP Certification	NA	ANSP Certification	Y
ANSP Supervision	NA	ANSP Supervision	Y
Aircrew Training	Y	ESARR applicability	NA
Aircrew Licensing	Y		
Additional Information: -		Additional Information: -	
Means used to inform airspace users (other than military) about these provisions:		Means used to inform airspace users (other than military) about these provisions:	
National AIP	NA	National AIP	Y
National Military AIP	NA	National Military AIP	NA
EUROCONTROL eAIP	NA	EUROCONTROL eAIP	NA
Other:	Y	Other:	-

Oversight

OAT	GAT
NSA (as per SES reg. 550/2004) for GAT services provided by the military is CAA. NSA for OAT is MoD	NSA (as per SES reg. 550/2004) for GAT services provided by the military is ECAA.
Additional information: -	ECAA is responsible for the certification for GAT.

Service Provision role

OAT			GAT	
Services Provided:			Services Provided:	
En-Route	N	En-Route Military fly GAT, the service is provided by EANS	En-Route	N
Approach/TMA	N	EANS	Approach/TMA	N
Airfield/TWR/GND	Y		Airfield/TWR/GND	Y
AIS	Y		AIS	N
MET	Y		MET	Y
SAR	Y		SAR	Y
TSA/TRA monitoring	Y		FIS	Y
Other:		-	Other:	-
Additional Information:			Additional Information:	

Military ANSP providing GAT services SES certified?	Y	If YES, since:	01.05.2017	Duration of the Certificate:	6 years
Certificate issued by:	ECAA		If NO, is this fact reported to the EC in accordance with SES regulations?		NA
Additional Information: Military provides service to GAT in Ämari CTR.					

User role

IFR inside controlled airspace, Military aircraft can fly?	OAT only	N	GAT only	Y	Both OAT and GAT	N

If Military fly OAT-IFR inside controlled airspace, specify the available options:			
Free Routing		Within specific corridors only	
Within the regular (GAT) national route network		Under radar control	
Within a special OAT route system		Under radar advisory service	

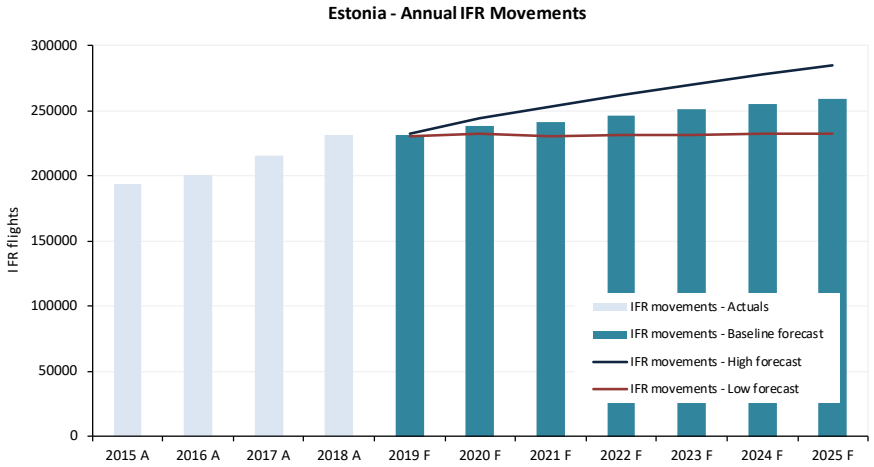
If Military fly GAT-IFR inside controlled airspace, specify existing special arrangements:								
No special arrangements				Y	Exemption from Route Charges			N
Exemption from flow and capacity (ATFCM) measures				N	Provision of ATC in UHF			N
CNS exemptions:	RVSM	N	8.33	N	Mode S	N	ACAS	N
Others:	Provision of ATC in UHF available only by Ämari TWR.							

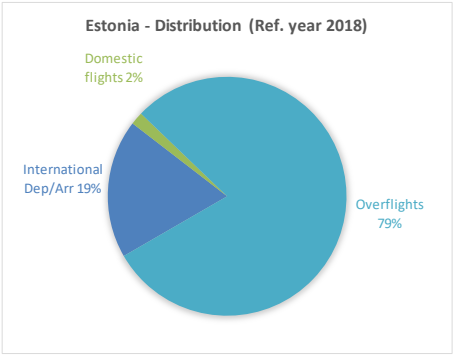
Flexible Use of Airspace (FUA)

Military in Estonia applies FUA requirements as specified in the Regulation No 2150/2005: Y
FUA Level 1 implemented: Y
FUA Level 2 implemented: Y
FUA Level 3 implemented: Y

2. Traffic and Capacity

2.1. Evolution of traffic in Estonia





A = Actual

F = Forecast

EUROCONTROL Seven-Year Forecast (Autumn 2019)											
IFR flights yearly growth		2016 A	2017 A	2018 A	2019 F	2020 F	2021 F	2022 F	2023 F	2024 F	2025 F
Estonia	H				0.4%	4.9%	3.8%	3.4%	3.1%	3.0%	2.6%
	B	3.4%	7.5%	7.5%	0.0%	2.8%	1.5%	1.9%	1.8%	1.9%	1.3%
	L				-0.4%	0.8%	-0.7%	0.1%	0.2%	0.4%	-0.3%
ECAC	B	2.8%	4.0%	3.8%	1.1%	2.3%	1.9%	2.2%	1.8%	1.9%	1.4%

2019

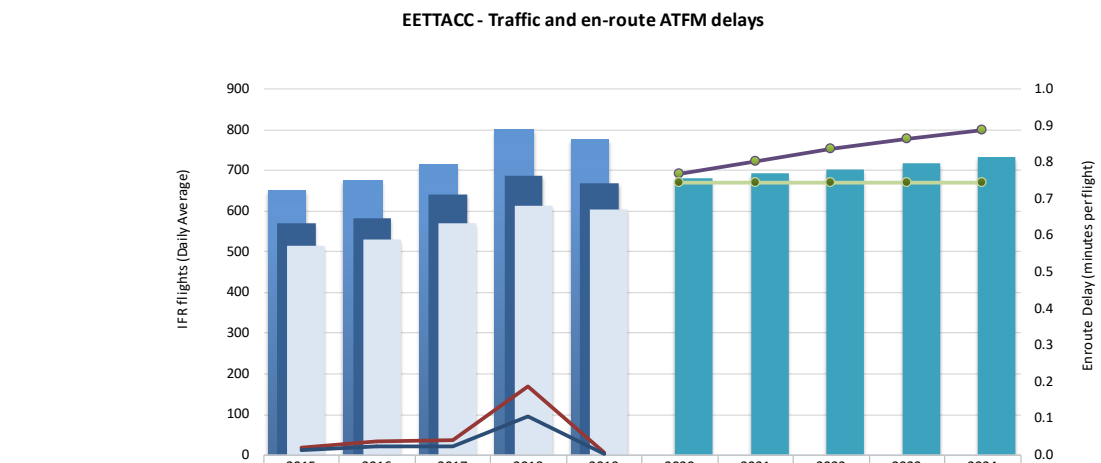
Traffic in Estonia decreased by 1.3% in 2019 compared to 2018.

2020-2024

The EUROCONTROL Seven-Year forecast predicts an average annual traffic growth between 0.1% and 3.5% throughout the planning cycle, with a baseline growth of 1.9%.

2.2. ACC TALLINN

Traffic and en-route ATFM delays 2015-2024



	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Peak Day Traffic	649	674	715	801	777					
Summer Traffic	569	583	642	687	669					
Yearly Traffic	516	530	570	613	605					
Summer Traffic Forecast						680	692	704	719	734
High Traffic Forecast - Summer						693	722	754	779	800
Low Traffic Forecast - Summer						669	669	671	670	671
Summer enroute delay (all causes)	0.02	0.04	0.04	0.19	0.01					
Yearly enroute delay (all causes)	0.01	0.03	0.02	0.11	0.00					

Performance summer 2019

Tallinn ACC	Traffic evolution (2019 vs 2018)			En-route Delay (min. per flight)		Capacity (2019 vs 2018)		
	Traffic Forecast		Actual Traffic	All reasons	ACC Reference Value	Planned	Achieved	Capacity gap?
	Current Routes	Shortest Routes						
Year	**H:** 5.8% **B:** 5.0% **L:** 2.8%	-5%	-1.3%	0.00	0.03			
Summer			-2.7%	0.01		77 (+15%)	67 (+0%)	No

Summer 2019 performance assessment

The average en-route delay per flight decreased from 0.19 minutes per flight in summer 2018 to 0.01 minutes per flight in summer 2019.

49% of the delays were for the reason ATC capacity, and 51% due to Weather.

The capacity baseline was estimated with ACCESS to be 67. During the measured period, the average peak 1 hour demand was 62 and the average peak 3 hour demand was 55.

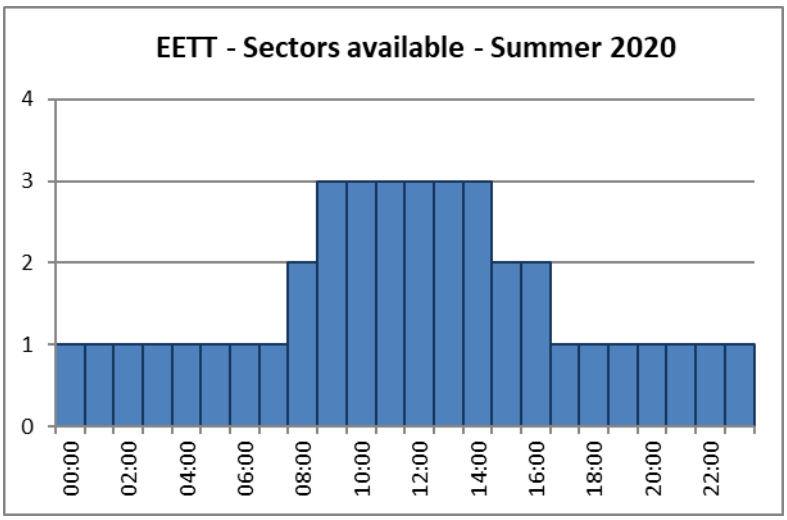
Operational actions	Achieved	Comments
Kept in current level of staffing	Yes	
Surveillance service in EETU TMA	Yes	
Adaptation of sector opening times	Yes	
3rd sector to be open in Summer 2019	Yes	
Maximum configuration: 3 (+1 FEEDER)	Yes	

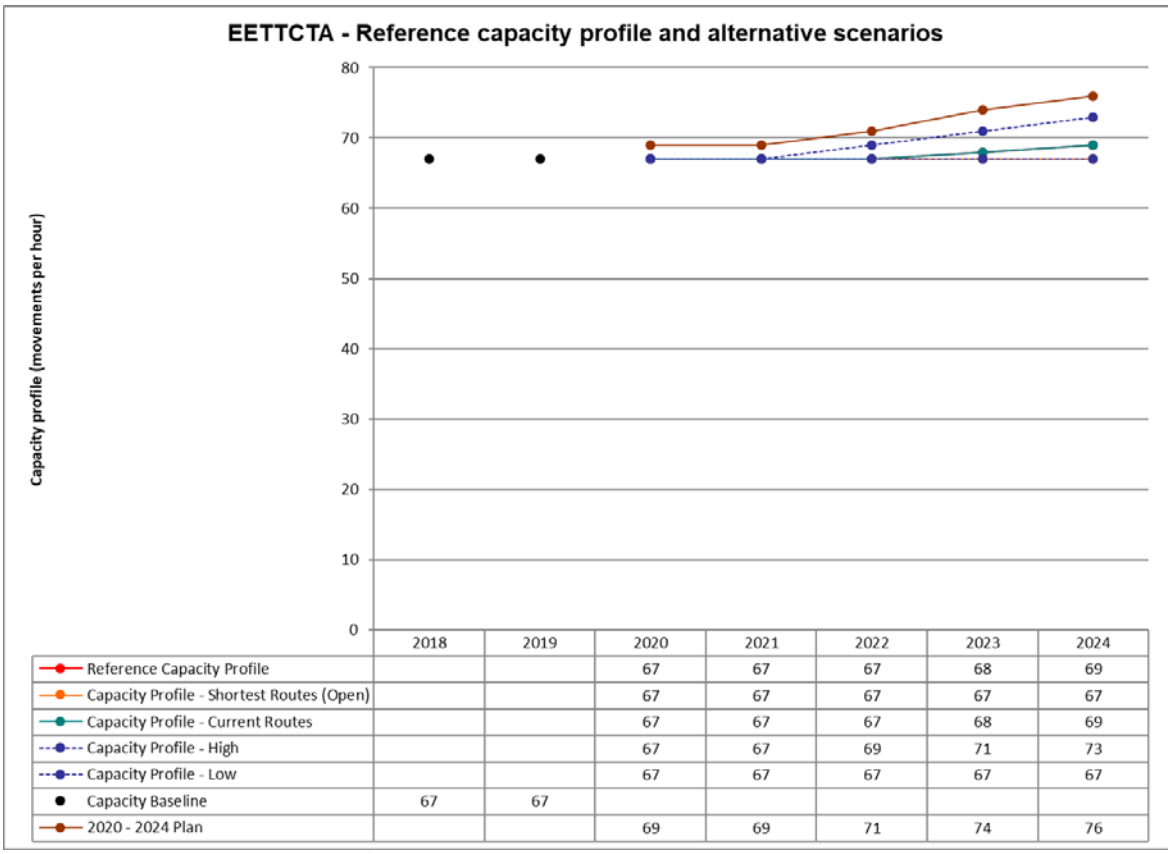
Planning Period 2020-2024

The planning focuses on the summer season to reflect the most demanding period of the year from a capacity perspective. This approach ensures consistency with the previous planning cycles.

The measures for each year are the measures that will be implemented before the summer season.

Summer Capacity Plan					
	2020	2021	2022	2023	2024
Free Route Airspace					
Airspace Management Advanced FUA					
Airport & TMA Network Integration					
Cooperative Traffic Management					
Airspace	Deletion of ATS routes		Dynamic Cross-border sectorisation Estonia, Finland		
Procedures					
Staffing	Kept in current level	Kept in current level	ATCO sharing with Finland		
Technical	8.33 KHz				
Capacity	Adaptation of sector opening times	Adaptation of sector opening times	Adaptation of sector opening times		
	Dedicated FIS position		Capacity sharing with Finland		
Significant Events			FINEST 21 04 2022		
Max sectors	4 (+1 FEEDER)	4 (+1 FEEDER)	FINEST sectoring schemes	FINEST sectoring schemes	FINEST sectoring schemes
Planned Annual Capacity Increase	3%	0%	3%	4%	3%
Reference profile Annual % Increase	0%	0%	0%	1%	1%
Difference Capacity Plan v. Reference Profile	3.0%	3.0%	6.0%	8.8%	10.1%
Annual Reference Value (min)	0.05	0.05	0.04	0.03	0.03
Additional information					





	2018	2019	2020	2021	2022	2023	2024
Reference Capacity Profile			67	67	67	68	69
Capacity Profile - Shortest Routes (Open)			67	67	67	67	67
Capacity Profile - Current Routes			67	67	67	68	69
Capacity Profile - High			67	67	69	71	73
Capacity Profile - Low			67	67	67	67	67
Capacity Baseline	67	67					
2020 - 2024 Plan			69	69	71	74	76

2020-2024 Planning Period Outlook
To ensure the required delivery of capacity in the medium-term, Estonian ANS is able to deploy an additional sector from the 1st of May 2020 for the summertime peak period. Dedicated FIS position is planned to be opened during 2020 within Tallinn ACC in order to increase capacity in summer period. This will increase capacity by approximately 3%. ATS routes will be partially deleted in spring 2020. Dynamic cross border sectorisation between Finland and Estonia is planned to be launched in or after 2022. This will continue capacity increase within the area.

3. Implementation Projects

The tables below presents the high-level information about the main projects currently ongoing in Estonia. The details of each project are available in Chapter 2 of the Level 2 - Detailed Implementation Status document.

3.1. National projects

Name of project	Organisation(s):	Schedule:	Status:	Links
EETN aerodrome modernisation	EANS (EE), TALLINN AIRPORT Ltd. (EE)	1st stage 2016-2017. 2nd stage summer 2018 - end of 2020.	1st stage is completed. From mid of 2018 -summer 2019 drafting of aerodrome design layout; in 2019/2020 planned procurement and building phases.	-
Navigation Infrastructure Rationalisation	EANS (EE), Estonian CAA (EE)	2021	The procurement has started.	L3: NAV03.1
Tallinn Airport A-CDM implementation project	EANS (EE), TALLINN AIRPORT Ltd. (EE)	-	Delayed. The start of the work will be discussed at a later stage not earlier 2020.	L3: AOP05
Remote TWR Implementation	EANS (EE), Estonian CAA (EE), TALLINN AIRPORT Ltd. (EE)	December 2022	The first remote tower is operational at Tartu Aerodrome. The integration of Kuressaare aerodrome is ongoing.	-

3.2. FAB projects

Name of project	Organisation(s):	Schedule:	Status:	Links
CNS Infrastructure Rationalisation: Mapping the Situation	ANS Finland (FI), AVINOR AS (NO), EANS (EE), LGS (LV)	2018 - 2020	Work in progress	-
SMS Harmonisation	ANS Finland (FI), AVINOR AS (NO), EANS (EE), LGS (LV)	2016 - 2020	Work in progress	-

3.3. Multinational projects

Name of project	Organisation(s):	Schedule:	Status:	Links
Borealis FRA Implementation (Part 2) (2015_227_AF3_A; 2015_227_AF3_B)	ANS Finland (FI), AVINOR AS (NO), EANS (EE), IAA-ATS Provider (IE), LFV (SE), LGS (LV), NATS (UK), Naviair (DK)	2015 - 2024	Work in progress	L3: AOM21.2

4. Cooperation activities

4.1. FAB Co-ordination

SMS Harmonisation

SMS Harmonisation project was initiated in 2016 with pilot study to specify the concrete proposals, risks and mitigation for areas of possible harmonisation on short and long term.

The overall objective of the SMS Harmonisation is to provide the appropriate support to:

- improve the total efficiency of the Safety Management Systems,
- enable SMS functionalities and processes supporting cross border services,
- enable for improved cost efficiency,
- enable for future integration of SMS functionalities and processes.

The further harmonization process is being aligned with the implementation of the Commission IR (EU) 2017/373.

The NEFAB SMS harmonization is considered to support the FAB-wide safety data exchange, aimed at systematic safety data sharing, processing and disseminating between FAB partners.

NEFAB NAV strategy

Based on the NEFAB ANSPs' 5-year strategy, the NEFAB NAV domain mapping was done in 2018, including:

- the brief description of developments and timeline in the national NAV domains;
- the status of national Navigation Strategies and PBN Implementation Plans;
- the estimate on possible areas of cooperation/coordination on FAB level.

The NEFAB Finance and Performance Committee agreed to include harmonisation of CNS/NAV strategies into the NEFAB Strategy Implementation Plan and to recommend the States taking leading role in drafting national NAV strategies and implementing PBN, also governing the implementation in cooperation between all stakeholders.

4.2. Multinational cooperation initiatives

Borealis FRA

The Borealis Alliance is the industrial partnership between 9 European ANSPs - LFV (Sweden), ANS Finland (Finland), Avinor (Norway), ISAVIA (Iceland), Naviair (Denmark), EANS (Estonia), IAA (Ireland), LGS (Latvia) and NATS (UK). The objective of the Alliance is to enable joint initiatives to improve flight efficiency and reduce environmental impact, delivered across the whole area in a move that will also streamline cost of services and operational/technical infrastructure.

In 2015, Borealis Alliance initiated the Free Route Airspace (FRA) Programme to create a multi-FAB FRA by establishing interfaces between FRA areas in 3 FABs (NEFAB, DK-SE FAB and UK-IRL FAB) and Iceland. The Borealis FRA concept of operation is based on the NEFRA concept, i.e. to connect the FRA volumes of 9 States seamlessly, so that these appear as one continuous FRA to airspace users. In 2019 the Borealis Alliance commenced cross-border FRA between the Maastricht UAC area of responsibility, the DK/SE FAB and the northern part of Germany; and remains open to considering other cross-border proposals should they arise.

FINEST

FINEST programme supports the Single European Sky concept being a bi-lateral cooperation programme between Estonian ANS and ANS Finland with the main aim to provide cross-border services in adjacent airspace, ensuring the business contingency, increasing cost efficiency and sustainability of the services provided.

The prepared during 2017-2018 programme concept of operations, cost-benefit analysis and detailed explanation from EANS and ANS Finland Management Boards gave enough assurance to go further with programme plans. Both EANS Supervisory Board and ANS Finland Board of Directors agree to support the investments needed to be made for the FINEST programme.

FINEST is expected to become operational in 2022.

Events in NEFAB area relevant to Network Operations Plan (NOP)

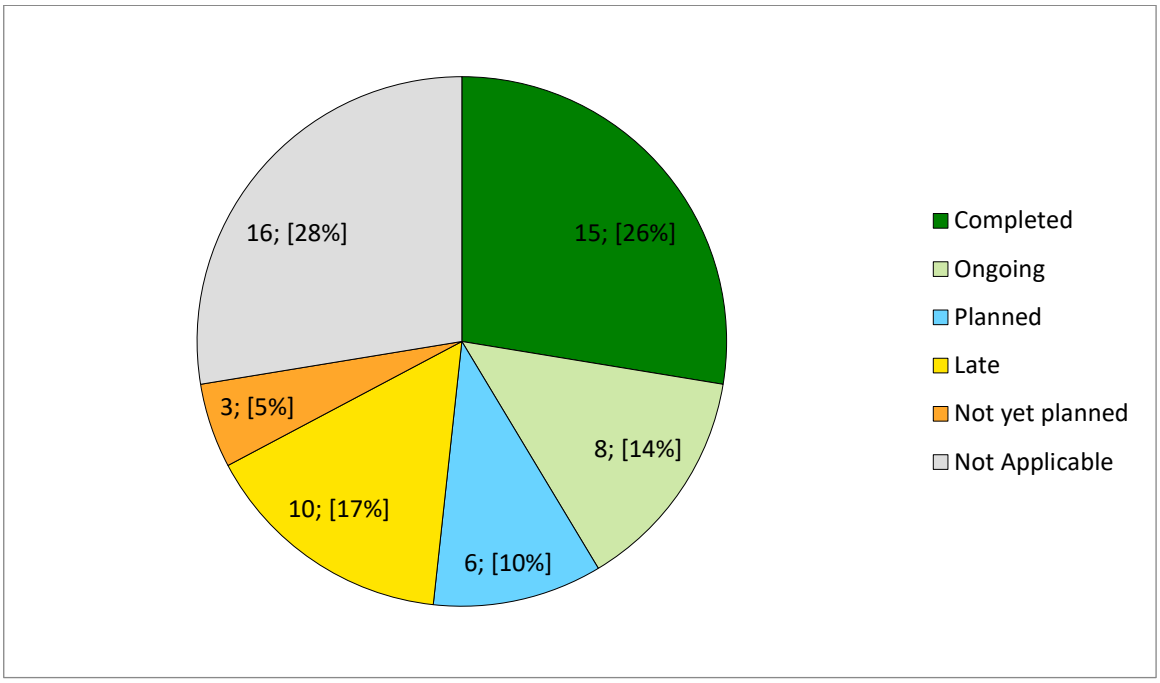
The NEFAB Management Board emphasised that the special events which could bring more traffic should be considered in the NOP. Furthermore, projects that have impact on the traffic flow should be indicated on respective ANSPs' NOPs.

The list of such events was drafted as follows:

- FINEST for EST & FIN: 2022
- NOR ATM system upgrade (iTEC): 2023 (South) and 2024 (North)
- Data Link Services in Norway FIR: 2023
- ATS routes removal:
  - EST & FIN 2020

5. Implementation Objectives Progress

5.1. State View: Overall Objective Implementation Progress



Estonian national military aviation regulations are in force from 25.10.2019. Review of IFR OAT harmonization procedures are ongoing.

CPDLC is implemented since 2018. In the framework of the implementation of ITY-AGDL, LogOn Forward (LOF) and Next Authority Notified (NAN) messages will be implemented on 06/2020.

Implementation of A-CDM at Tallinn aerodrome is postponed to the end of 2020 due to Tallinn Aerodrome phase 2. reconstruction and ATM systems upgrades.

The objective ITY-ADQ is postponed to the end of 2020.

Objective ITY-AGVCS2 (8,33 kHz Air-Ground Voice Channel Spacing below FL195) is implemented (since 02 January 2020).

5.2. Objective Progress per SESAR Key Feature

The Implementation objectives progress charts per Key Feature below show progress only for Implementation Objectives applicable to Estonia/Tallinn airport and which are not local objectives.

Note: The detailed table of links between Implementation Objectives and SESAR Key Features is available in Annex C: Implementation Objectives' links with SESAR, ICAO and DP.

Legend:

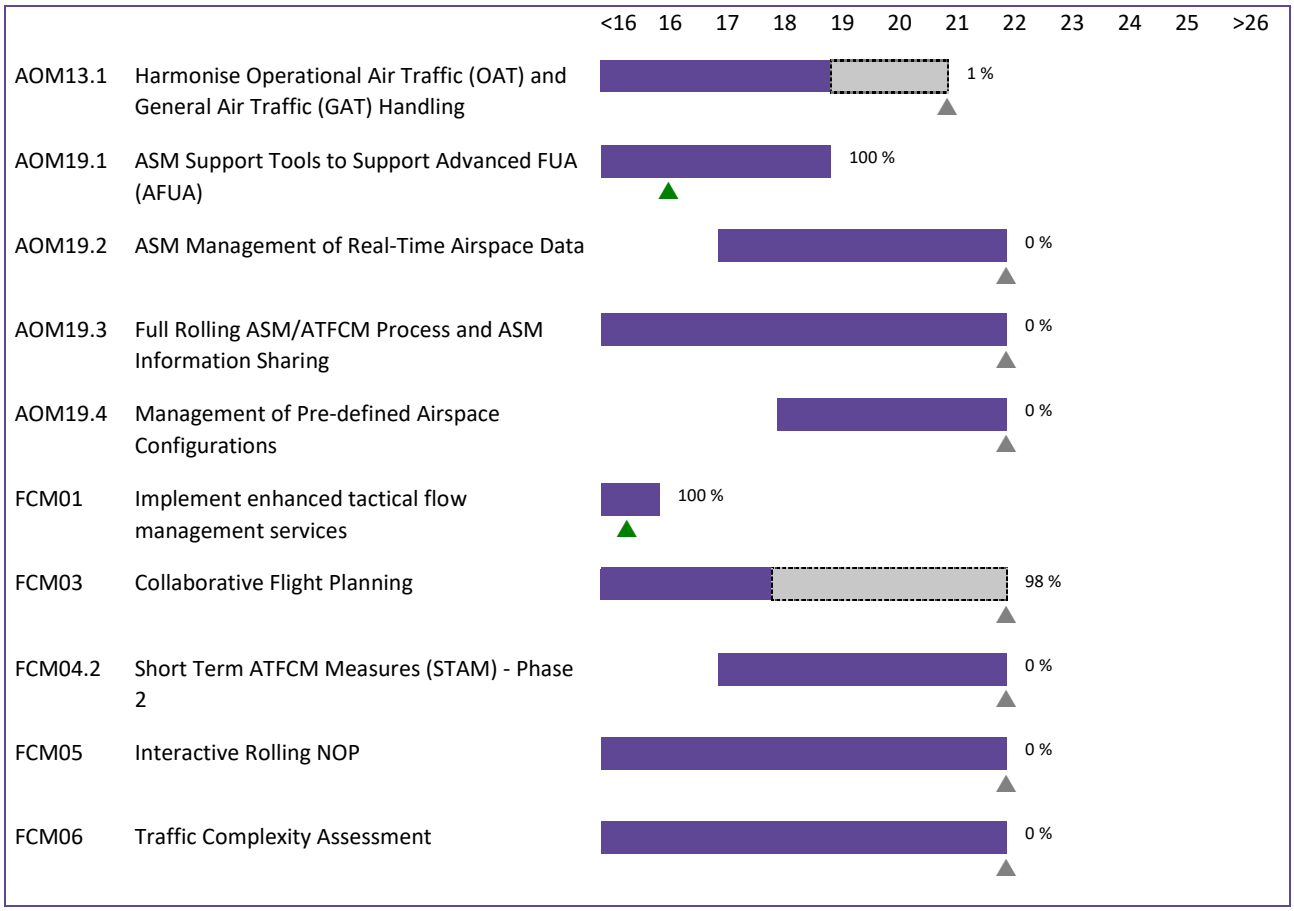
▲ ## % = Expected completion / % Progress

▲ 100% = Objective completed

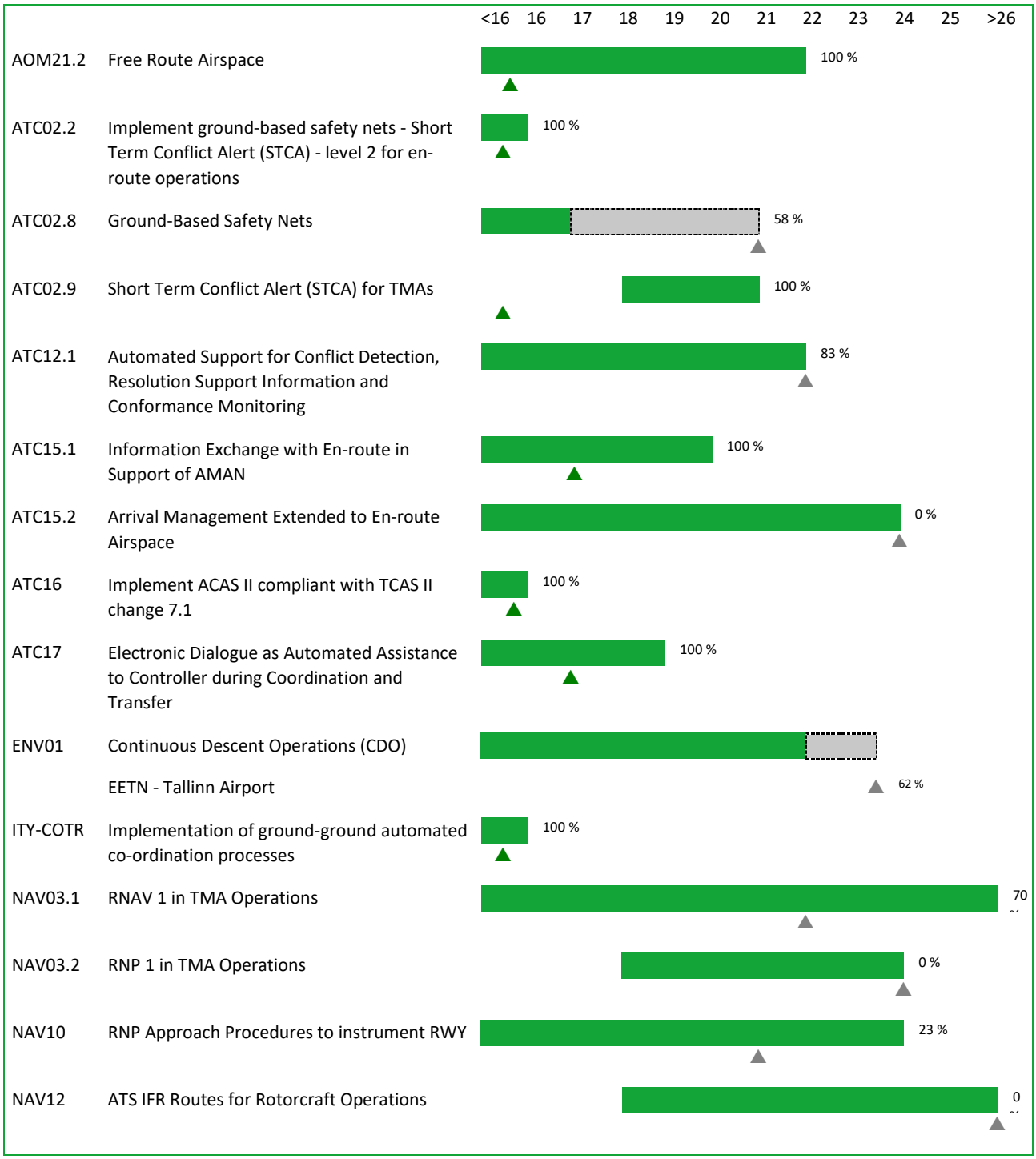
= Implementation Objective timeline (different colour per KF)

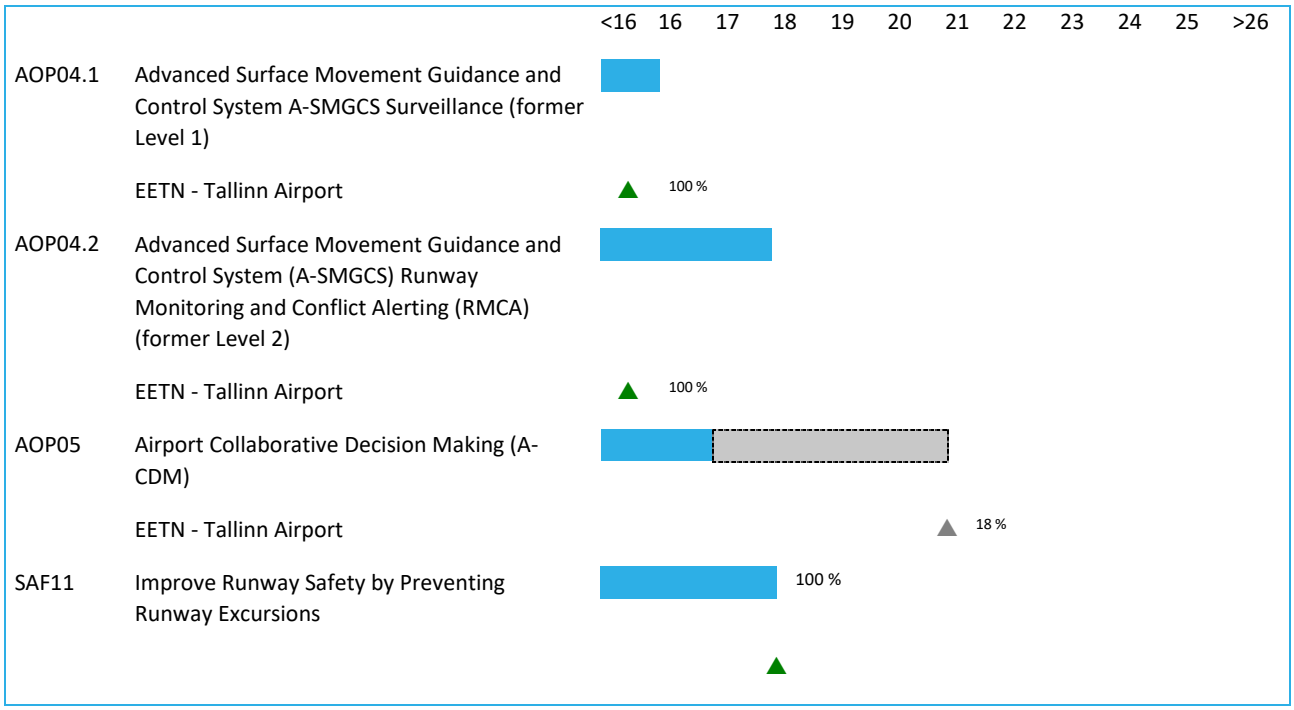
= Completion beyond Implementation Objective timeline

Optimised ATM Network Services



Advanced Air Traffic Services

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AOP04.1
Advanced Surface Movement Guidance and Control System A-SMGCS Surveillance (former Level 1)
EETN - Tallinn Airport
100 %
AOP04.2
Advanced Surface Movement Guidance and Control System (A-SMGCS) Runway Monitoring and Conflict Alerting (RMCA) (former Level 2)
EETN - Tallinn Airport
100 %
AOP05
Airport Collaborative Decision Making (A-CDM)
EETN - Tallinn Airport
18 %
SAF11
Improve Runway Safety by Preventing Runway Excursions
100 %


<16 16 17 18 19 20 21 22 23 24 25 >26
COM10 Migrate from AFTN to AMHS
96 %
COM11.1 Voice over Internet Protocol (VoIP) in En-Route
27 %
COM11.2 Voice over Internet Protocol (VoIP) in Airport/Terminal
27 %
COM12 New Pan-European Network Service (NewPENS)
80 %
FCM08 Extended Flight Plan
0 %
INF07 Electronic Terrain and Obstacle Data (eTOD)
6 %
INF08.1 Information Exchanges using the SWIM Yellow TI Profile
10 %
ITY-ACID Aircraft Identification
92 %
ITY-ADQ Ensure Quality of Aeronautical Data and Aeronautical Information
74 %
ITY-AGDL Initial ATC Air-Ground Data Link Services
94 %
ITY-AGVCS2 8,33 kHz Air-Ground Voice Channel Spacing below FL195
100 %
ITY-FMTP Common Flight Message Transfer Protocol (FMTP)
100 %
ITY-SPI Surveillance Performance and Interoperability
88 %

5.3. ICAO ASBU Implementation Progress

The following table shows, for each of the ASBU Block 0 modules, the overall status, the final date foreseen for completion and the percentage of progress achieved in the current cycle.

These results were determined using the LSSIP Year 2019 declared statuses and progress of the relevant Implementation objectives in accordance with the mapping approved by the ICAO EUR EASPG/1 meeting (European Aviation System Planning Group).

Legend:

= Completed (during 2019 or before)
= Progress achieved in 2019
= Missing planning date
= Not applicable

5.4. Detailed Objectives Implementation progress

Objective/Stakeholder Progress Code:			
Completed		Not yet planned	
Ongoing		Not Applicable	
Planned		Missing Data	
Late			

Main Objectives

AOM13.1	**harmonize Operational Air Traffic (OAT) and General Air Traffic (GAT) Handling** ***Timescales:*** Initial operational capability: 01/01/2012 Full operational capability: 31/12/2018		**1%**	**Late**
Key Feature: Optimized ATM Network Services				
-				
Estonia will apply common principles, rules and procedures for OAT handling by the end 2019 (FOC).				**31/12/2020**
REG (By:12/2018)				
Estonian Air Force	Estonian national military aviation regulations are in force. Review of IFR OAT harmonization procedures is planned for 2020.	-	10%	Late 31/12/2020
Estonian CAA	ECAA will revise national legislation as required and inform Eurocontrol on time.	-	0%	Late 31/12/2020
ASP (By:12/2018)				
Estonian Air Force	Estonian national military aviation regulations are in force. Review of IFR OAT harmonization procedures is planned for 2020.	-	0%	Late 31/12/2020
EANS	The implementation of the procedures is postponed until Estonian Air Force Military regulations are published.	-	0%	Late 31/12/2020
MIL (By:12/2018)				
Estonian Air Force	Estonian AF will connect national route structures and arrangements to form a flexible system facilitating OAT-IFR cross-border flights across Europe and implement harmonized military flight planning for OAT cross-border operations.	-	0%	Late 31/12/2020

AOM19.1	**ASM Support Tools to Support Advanced FUA (AFUA)** ***Timescales:*** Initial operational capability: 01/01/2011 Full operational capability: 31/12/2018		**100%**	**Completed**
Links: B1-FRTO, B1-NOPS | Key Feature: Optimized ATM Network Services				
-				
ASM tool is implemented and integrated with NM systems.				**31/03/2016**
ASP (By:12/2018)				
EANS	ASM tool is implemented and integrated with NM systems.	-	100%	Completed 31/03/2016

AOM19.2	**ASM Management of Real-Time Airspace Data** ***Timescales:*** Initial operational capability: 01/01/2017 Full operational capability: 31/12/2021		**0%**	**Planned**
Links: B1-FRTO, B1-NOPS | Key Feature: Optimized ATM Network Services				
-				
EANS plans to implement ASM Management of Real-Time Airspace Data by the end of 2021.				**31/12/2021**
ASP (By:12/2021)				
EANS	EANS plans to implement ASM Management of Real-Time Airspace Data by the end of 2021.	-	0%	Planned 31/12/2021

AOM19.3	**Full Rolling ASM/ATFCM Process and ASM Information Sharing** ***Timescales:*** Initial operational capability: 01/01/2014 Full operational capability: 31/12/2021		**0%**	**Planned**
Links: B0-FRTO, B1-FRTO, B1-NOPS, B2-NOPS | Key Feature: Optimized ATM Network Services				
-				
EANS plans to implement Full rolling ASM/ATFCM process and ASM information management by the end of 2021.				**31/12/2021**
ASP (By:12/2021)				
EANS	EANS plans to implement Full rolling ASM/ATFCM process and ASM information management by the end of 2021.	-	0%	Planned 31/12/2021

AOM19.4	**Management of Pre-defined Airspace Configurations** ***Timescales:*** Initial operational capability: 01/01/2018 Full operational capability: 31/12/2021		**0%**	**Planned**
Links: B1-FRTO, B1-NOPS | Key Feature: Optimized ATM Network Services				
-				
No progress so far.				**31/12/2021**
ASP (By:12/2021)				
EANS	-	-	0%	Planned 31/12/2021

AOM21.2	**Free Route Airspace** ***Timescales:*** Initial operational capability: 01/01/2015 Full operational capability: 31/12/2021		**100%**	**Completed**
Links: B0-FRTO, B1-FRTO | Key Feature: Advanced Air Traffic Services				
-				
Free Route Airspace was implemented within NEFAB area on 12 November 2015.				**12/11/2015**
ASP (By:12/2021)				
EANS	NEFAB Free Route Airspace was implemented on 12 November 2015.	Borealis FRA Implementation (Part 2)	100%	Completed 12/11/2015

AOP04.1	**Advanced Surface Movement Guidance and Control System A-SMGCS Surveillance (former Level 1)** ***Timescales:*** Initial operational capability: 01/01/2007 Full operational capability: 31/12/2011		**100%**	**Completed**
Links: B0-SURF | Key Feature: High Performing Airport Operations				
EETN - Tallinn Airport				
A-SMGCS Level 1 system is implemented on 10 February 2011.				**31/12/2013**
REG (By:12/2010)				
Estonian CAA	Transponder operating procedures are published in the AIP.	-	100%	Completed 31/12/2013
ASP (By:12/2011)				
EANS	A-SMGCS system on the Tallinn airport is implemented on February, 10 2011.	-	100%	Completed 28/02/2011
APO (By:12/2010)				
TALLINN AIRPORT Ltd.	A-SMGCS system on the Tallinn airport is implemented on February, 10 2011.	-	100%	Completed 28/02/2011

AOP04.2	**Advanced Surface Movement Guidance and Control System (A-SMGCS) Runway Monitoring and Conflict Alerting (RMCA) (former Level 2)** ***Timescales:*** Initial operational capability: 01/01/2007 Full operational capability: 31/12/2017		**100%**	**Completed**
Links: B0-SURF | Key Feature: High Performing Airport Operations				
EETN - Tallinn Airport				
A-SMGCS Level II system at Tallinn Airport is implemented on 10 February 2011.				**28/02/2011**
ASP (By:12/2017)				
EANS	A-SMGCS Level II system at the Tallinn airport is implemented on 10 February 2011.	-	100%	Completed 28/02/2011
APO (By:12/2017)				
TALLINN AIRPORT Ltd.	A-SMGCS Level II system at Tallinn Airport is implemented on 10 February 2011.	-	100%	Completed 28/02/2011

AOP05	**Airport Collaborative Decision Making (A-CDM)** ***Timescales:*** Initial operational capability: 01/01/2004 Full operational capability: 31/12/2016		**18%**	**Late**
Links: B0-ACDM, B0-RSEQ | Key Feature: High Performing Airport Operations				
EETN - Tallinn Airport				
EANS and Tallinn airport postponed implementation of A-CDM at Tallinn aerodrome to the end of 2020 due to Tallinn Aerodrome phase 2. reconstruction and ATM systems upgrades.				**31/12/2020**
ASP (By:12/2016)				
EANS	EANS plans to define and implement A-CDM procedures not before 2020 due to other planned activities with higher priority.	Tallinn Airport A-CDM implementation project	0%	Late 31/12/2020
APO (By:12/2016)				
TALLINN AIRPORT Ltd.	Parts of CDM have been implemented at Tallinn Airport.	Tallinn Airport A-CDM implementation project	35%	Late 31/12/2020

AOP10	Time-Based Separation *Timescales:* - not applicable	%	Not Applicable
Links: B1-RSEQ, B2-WAKE | Key Feature: High Performing Airport Operations			
EETN - Tallinn Airport **(Outside Applicability Area)**			
Not Applicable as EETN is not in the mandatory applicability area of the PCP IR (716/2014)			-
REG (By:12/2023)			
ASP (By:12/2023)			

AOP11	Initial Airport Operations Plan *Timescales:* - not applicable	%	Not Applicable
Links: B1-ACDM | Key Feature: High Performing Airport Operations			
EETN - Tallinn Airport **(Outside Applicability Area)**			
PCP-related, no Applicability Area specified in the PCP IR for this functionality.			-
ASP (By:12/2021)			
EANS	-	- %	Not Applicable -
APO (By:12/2021)			
TALLINN AIRPORT Ltd.	-	- %	Not Applicable -

AOP12	Improve Runway and Airfield Safety with Conflicting ATC Clearances (CATC) Detection and Conformance Monitoring Alerts for Controllers (CMAC) *Timescales:* - not applicable	%	Not Applicable
Links: B2-SURF | Key Feature: High Performing Airport Operations			
EETN - Tallinn Airport **(Outside Applicability Area)**			
PCP-related. N/A as EETN is not in the mandatory applicability area for this functionality (PCP IR; 716/2014).			-
ASP (By:12/2020)			
APO (By:12/2020)			

AOP13	Automated Assistance to Controller for Surface Movement Planning and Routing *Timescales:* - not applicable -	%	Not Applicable
Links: B1-ACDM, B1-RSEQ, B2-SURF | Key Feature: High Performing Airport Operations			
EETN - Tallinn Airport **(Outside Applicability Area)**			
Not applicable			-
REG (By:12/2023)			
Estonian CAA	-	- %	Not Applicable -
ASP (By:12/2023)			
EANS	-	- %	Not Applicable -

ATC02.8	**Ground-Based Safety Nets** ***Timescales:*** Initial operational capability: 01/01/2009 Full operational capability: 31/12/2016		**58%**	**Late**
Links: B0-SNET, B1-SNET | Key Feature: Advanced Air Traffic Services				
-				
APW has been implemented. Plans for other functions to be reassessed.				**31/12/2020**
ASP (By:12/2016)				
EANS	MSAW and APM functionalities are technically available in ATM system, however, due to lack of operational demand is not fine-tuned yet and activated.	-	58%	Late 31/12/2020

ATC02.9	**Short Term Conflict Alert (STCA) for TMAs** ***Timescales:*** Initial operational capability: 01/01/2018 Full operational capability: 31/12/2020		**100%**	**Completed**
Links: B0-SNET, B1-SNET | Key Feature: Advanced Air Traffic Services				
-				
STCA function is implemented.				**31/12/2012**
ASP (By:12/2020)				
EANS	STCA function is implemented.	-	100%	Completed 31/12/2012

ATC07.1	**AMAN Tools and Procedures** ***Timescales:*** - not applicable -		**%**	**Not Applicable**
Links: B0-RSEQ | Key Feature: Advanced Air Traffic Services				
EETN - Tallinn Airport **(Outside Applicability Area)**				
There is no operational need for basic AMAN. No forecast indicating the need. However, EANS is using AMAN for Helsinki inbound traffic and affected by ESSA extended AMAN plans.				**-**
ASP (By:12/2019)				
EANS	There is no operational need for basic AMAN. No forecast indicating the need. However, we are using AMAN for Helsinki inbound traffic and affected by ESSA extended AMAN plans.	-	%	Not Applicable -

ATC12.1	**Automated Support for Conflict Detection, Resolution Support Information and Conformance Monitoring** ***Timescales:*** Initial operational capability: 01/01/2015 Full operational capability: 31/12/2021		**83%**	**Ongoing**
Links: B1-FRTO | Key Feature: Advanced Air Traffic Services				
-				
MTCD, resolution support function and MONA are available since 2012. Implementing TCT and associated procedures is planned for 2021.				**31/12/2021**
ASP (By:12/2021)				
EANS	-	-	83%	Ongoing 31/12/2021

ATC15.1	**Information Exchange with En-route in Support of AMAN** ***Timescales:*** Initial operational capability: 01/01/2012 Full operational capability: 31/12/2019		**100%**	**Completed**
Links: B1-RSEQ | Key Feature: Advanced Air Traffic Services				
-				
In En-Route operations, information exchange mechanisms, tools and procedures are implemented.				**31/01/2017**
ASP (By:12/2019)				
EANS	In En-Route operations, information exchange mechanisms, tools and procedures are implemented.	-	100%	Completed 31/01/2017

ATC15.2	**Arrival Management Extended to En-route Airspace** ***Timescales:*** Initial operational capability: 01/01/2015 Full operational capability: 31/12/2023		**0%**	**Not yet planned**
Links: B1-RSEQ | Key Feature: Advanced Air Traffic Services				
-				
No plan				**-**
ASP (By:12/2023)				
EANS	No plan	-	0%	Not yet planned -

ATC17	**Electronic Dialogue as Automated Assistance to Controller during Coordination and Transfer** ***Timescales:*** Initial operational capability: 01/01/2013 Full operational capability: 31/12/2018		**100%**	**Completed**
Key Feature: Advanced Air Traffic Services				
-				
The ground systems have been upgraded and the functions implemented. The staff has been trained.				**31/12/2016**
ASP (By:12/2018)				
EANS	The ground systems have been upgraded and the functions implemented. The staff has been trained.	-	100%	Completed 31/12/2016

ATC18	**Multi-Sector Planning En-route - 1P2T** ***Applicability and timescale: Local***		**%**	**Not Applicable**
Key Feature: Advanced Air Traffic Services				
-				
This activity is outside of area of applicability.				**-**
COM10	**Migrate from AFTN to AMHS** ***Timescales:*** Initial operational capability: 01/12/2011 Full operational capability: 31/12/2018		**96%**	**Late**
Key Feature: Enabling the Aviation Infrastructure				
-				
The migration took place in August 2016. No plan for Extended ATSMHS yet.				**31/12/2020**
ASP (By:12/2018)				
EANS	The migration took place in August 2016. No plan for Extended ATSMHS yet.	-	96%	Late 31/12/2020

COM11.1	**Voice over Internet Protocol (VoIP) in En-Route** ***Timescales:*** Initial operational capability: 01/01/2013 Full operational capability: 31/12/2021		**27%**	**Ongoing**
Key Feature: Enabling the Aviation Infrastructure				
-				
Full VoIP VCS system will be deployed and ready for operational use by 30 June 2021 to support VoIP.				**30/06/2021**
ASP (By:12/2021)				
EANS	Full VoIP VCS system will be deployed and ready for operational use by 30 June 2021 to support VoIP.	-	27%	Ongoing 30/06/2021

COM11.2	**Voice over Internet Protocol (VoIP) in Airport/Terminal** ***Timescales:*** Initial operational capability: 01/01/2013 Full operational capability: 31/12/2023		**27%**	**Ongoing**
Key Feature: Enabling the Aviation Infrastructure				
-				
Full VoIP VCS system will be deployed and ready for operational use by 30 June 2021 to support VoIP.				**30/06/2021**
ASP (By:12/2023)				
EANS	Full VoIP VCS system will be deployed and ready for operational use by 30 June 2021 to support VoIP.	-	27%	Ongoing 30/06/2021

COM12	**New Pan-European Network Service (NewPENS)** ***Timescales:*** Initial operational capability: 01/01/2018 Full operational capability (33 ANSPs): 31/12/2020		**80%**	**Ongoing**
Links: B1-SWIM | Key Feature: Enabling the Aviation Infrastructure				
-				
CPA has been signed. EANS migrated to NewPENS in July 2019. Airport is planning to migrate NOV 2020.				**30/11/2020**
ASP (By:12/2024)				
EANS	-	-	100%	Completed 31/07/2019
APO (By:12/2024)				
TALLINN AIRPORT Ltd.	-	-	40%	Ongoing 30/11/2020

ENV01	**Continuous Descent Operations (CDO)** ***Timescales:*** Initial operational capability: 01/07/2007 Full operational capability: 31/12/2023		**62%**	**Ongoing**
Links: B0-CDO, B1-CDO | Key Feature: Advanced Air Traffic Services				
EETN - Tallinn Airport				
CDA and P-RNAV procedures were implemented in Tallinn TMA 30 May 2013. Performance monitoring is not in place yet. The new implementation date is end of 2020.				**30/06/2023**
ASP (By:12/2023)				
EANS	EANS implemented P-RNAV and CDA techniques on May 2013.	-	53%	Ongoing 30/06/2023
APO (By:12/2023)				
TALLINN AIRPORT Ltd.	Monitoring of performance is established, data received from EANS	-	100%	Completed 31/12/2017

FCM03	**Collaborative Flight Planning** ***Timescales:*** Initial operational capability: 01/01/2000 Full operational capability: 31/12/2017		**98%**	**Late**
Links: B0-NOPS | Key Feature: Optimized ATM Network Services				
-				
Functionality installed and available but problems so far at NM within automatically processing and firmly specifying the use of AFP-messages in the Free Route Airspace environment, causes that full implementation of collaborative flight planning is now planned for the year 2019. Interoperability between Thales TopSky and NM system has not been achieved due to complicated FRA operations environment, not fully covered at NM.				**31/12/2021**
ASP (By:12/2017)				
EANS	Functionality installed and available but problems so far at NM within automatically processing and firmly specifying the use of AFP-messages in the Free Route Airspace environment causes that full FoC implementation of collaborative flight planning is estimated to take place not before year 2021. Though all functionality has been installed according to spec, the interoperability between Thales TopSky and NM system has not been achieved due to complicated FRA operations environment.	-	98%	Late 31/12/2021

FCM04.2	**Short Term ATFCM Measures (STAM) - Phase 2** ***Timescales:*** Initial operational capability: 01/11/2017 Full operational capability: 31/12/2021		**0%**	**Planned**
Key Feature: Optimized ATM Network Services				
-				
EANS plans to introduce Short Term ATFCM Measures.				**31/12/2021**
ASP (By:12/2021)				
EANS	EANS plans to introduce Short Term ATFCM Measures.	-	0%	Planned 31/12/2021

FCM05	**Interactive Rolling NOP** ***Timescales:*** Initial operational capability: 01/09/2013 Full operational capability: 31/12/2021		**0%**	**Planned**
Links: B1-ACDM, B1-NOPS | Key Feature: Optimized ATM Network Services				
-				
Interactive rolling is implemented in 2016. Intention is to implement the full integration of AOP with the NOP by 31/12/2021.				**31/12/2021**
ASP (By:12/2021)				
EANS	No progress so far.	-	0%	Planned 31/12/2021
APO (By:12/2021)				
TALLINN AIRPORT Ltd.	Airport slot information will be provided to DDR.	-	0%	Planned 31/12/2021

FCM06	**Traffic Complexity Assessment** ***Timescales:*** Initial operational capability: 01/01/2015 Full operational capability: 31/12/2021		**0%**	**Planned**
Links: B1-NOPS | Key Feature: Optimized ATM Network Services				
-				
-				**31/12/2021**
ASP (By:12/2021)				
EANS	The tools supporting local traffic load management will be implemented by 2021.	-	0%	Planned 31/12/2021

FCM08	**Extended Flight Plan** ***Timescales:*** Initial operational capability: 01/01/2016 Full operational capability: 31/12/2021		**0%**	**Not yet planned**
Links: B1-FICE | Key Feature: Enabling the Aviation Infrastructure				
-				
No plan				**-**
ASP (By:12/2021)				
EANS	No plan	-	0%	Not yet planned -

INF07	**Electronic Terrain and Obstacle Data (eTOD)** ***Timescales:*** Initial operational capability: 01/11/2014 Full operational capability: 31/05/2018		**6%**	**Late**
Key Feature: Enabling the Aviation Infrastructure				
-				
Electronic TOD will be established by 31 December 2020.				**31/12/2020**
REG (By:05/2018)				
Estonian CAA	All ECAA related activities will be performed by the end of 2020.	-	8%	Late 31/12/2020
ASP (By:05/2018)				
EANS	EANS related activities will be performed after National TOD Policy is available.	-	5%	Late 31/12/2020
APO (By:05/2018)				
TALLINN AIRPORT Ltd.	All AO related activities will be performed after National TOD Policy is available.	-	5%	Late 31/12/2020

INF08.1	**Information Exchanges using the SWIM Yellow TI Profile** ***Timescales:*** Initial operational capability: 01/01/2018 Full operational capability: 31/12/2024		**10%**	**Ongoing**
Links: B1-DATM, B1-SWIM | Key Feature: Enabling the Aviation Infrastructure				
-				
Information Exchanges using the SWIM Yellow TI Profile is planned for 31/12/2024.				**31/12/2024**
ASP (By:12/2024)				
EANS	-	-	10%	Ongoing 31/12/2024
MIL (By:12/2024)				
Estonian Air Force	-	-	%	Not yet planned -
APO (By:12/2024)				
TALLINN AIRPORT Ltd.	-	-	%	Planned 31/12/2024

ITY-ACID	**Aircraft Identification** ***Timescales:*** Entry into force of the Regulation: 13/12/2011 System capability: 02/01/2020		**92%**	**Late**
Key Feature: Enabling the Aviation Infrastructure				
-				
EANS have sent template for Mode S Declaration to NM on 30/01/2020, confirming that Mode S is implemented in Tallinn FIR above FL95.				**31/12/2020**
ASP (By:01/2020)				
EANS	EANS have sent template for Mode S Declaration to NM on 30/01/2020, confirming that Mode S is implemented in Tallinn FIR above FL95.	-	92%	Late 31/12/2020

ITY-ADQ	**Ensure Quality of Aeronautical Data and Aeronautical Information** ***Timescales:*** Entry into force of the regulation: 16/02/2010 Article 5(4)(a), Article 5(4)(b) and Article 6 to 13 to be implemented by: 30/06/2013 Article 4, Article5(1) and Article 5(2), Article 5(3) and Article 5(4)(c) to be implemented by: 30/06/2014 All data requirements implemented by: 30/06/2017		**74%**	**Late**
Links: B0-DATM | Key Feature: Enabling the Aviation Infrastructure				
-				
Estonia plans to implement all aeronautical data and aeronautical information quality requirements by the end of 2020.				**31/12/2020**
REG (By:06/2017)				
Estonian CAA	All ECAA related activities will be performed by the end of 2020.	-	62%	Late 31/12/2020
ASP (By:06/2017)				
EANS	All ANSP related activities will be performed by the end of 2020.	-	74%	Late 31/12/2020
APO (By:06/2017)				
TALLINN AIRPORT Ltd.	All Airport related activities will be performed in 2020.	-	80%	Late 31/12/2020

ITY-AGDL	**Initial ATC Air-Ground Data Link Services** ***Timescales:*** Entry into force: 06/02/2009 ATS unit operational capability: 05/02/2018 Aircraft capability: 05/02/2020		**94%**	**Late**
Links: B0-TBO | Key Feature: Enabling the Aviation Infrastructure				
-				
Estonia implemented CPDLC in Tallinn FIR in June 2018. LOF and NAN will be implemented on 06/2020.				**30/06/2020**
REG (By:02/2018)				
Estonian CAA	ECAA will ensure the processing and the distribution of the information on the data link capability by the IFPS.	-	100%	Completed 30/04/2018
ASP (By:02/2018)				
EANS	Implementation was finished in June 2018 (SITA 06.04.2018, ARINC 28.06.2018).	Air-ground data link implementation	92%	Late 30/06/2020
MIL (By:01/2019)				
Estonian Air Force	-	-	%	Not Applicable -

ITY-AGVCS2	**8,33 kHz Air-Ground Voice Channel Spacing below FL195** ***Timescales:*** Entry into force: 07/12/2012 New and upgraded radio equipment: 17/11/2013 New or upgraded radios on State aircraft: 01/01/2014 Interim target for freq. conversions: 31/12/2014 All radio equipment: 31/12/2017 All frequencies converted: 31/12/2018 State aircraft equipped, except those notified to EC: 31/12/2018 State aircraft equipped, except those exempted [Art 9(11)]: 31/12/2020		**100%**	**Completed**
Key Feature: Enabling the Aviation Infrastructure				
-				
Tallinn FIR radio renewed according to Implementing Regulation (EU) No 1079/2012 in December 2015. 31 frequencies converted on 02/01/2020. Estonia has 61 frequencies, from which 49 are converted as of 03/01/2020 (was reported to SAFIRE Data base). 9 frequencies are exempted, 3 are international frequencies, which should not be converted.				**02/01/2020**
REG (By:12/2018)				
Estonian CAA	Tallinn FIR radio renewed according to Implementing Regulation (EU) No 1079/2012 in December 2015. Frequency converted on 02/01/2020.	-	100%	Completed 02/01/2020
ASP (By:12/2018)				
EANS	Frequency converted on 02/01/2020.	-	100%	Completed 02/01/2020
MIL (By:12/2020)				
Estonian Air Force	All the State aircraft are equipped with 8,33 kHz radios.	-	100%	Completed 31/12/2018
APO (By:12/2018)				
Estonian Air Force	-	-	%	Not Applicable -
TALLINN AIRPORT Ltd.	-	-	%	Not Applicable -

ITY-FMTP	**Common Flight Message Transfer Protocol (FMTP)** ***Timescales:*** Entry into force of regulation: 28/06/2007 All EATMN systems put into service after 01/01/09: 01/01/2009 All EATMN systems in operation by 20/04/11: 20/04/2011 Transitional arrangements: 31/12/2012 Transitional arrangements when bilaterally agreed between ANSPs: 31/12/2014		**100%**	**Completed**
Links: B0-FICE, B1-FICE | Key Feature: Enabling the Aviation Infrastructure				
-				
A common flight message transfer protocol (FMTP) is implemented during a major system upgrade. However, IPver6 is not fully implemented. Connections with Malmöe and Stockholm of Sweden are operational since August 2015.				**31/12/2018**
ASP (By:12/2014)				
EANS	-	-	100%	Completed 31/12/2018
MIL (By:12/2014)				
Estonian Air Force	Military ATC do not provide RADAR services	-	%	Not Applicable -

ITY-SPI	**Surveillance Performance and Interoperability** ***Timescales:*** Entry into force of regulation: 13/12/2011 ATS unit operational capability: 12/12/2013 EHS and ADS-B Out in transport-type State aircraft: 07/06/2020 ELS in transport-type State aircraft: 07/06/2020 Ensure training of MIL personnel: 07/06/2020 Retrofit aircraft capability: 07/06/2020		**88%**	**Late**
Links: B0-ASUR | Key Feature: Enabling the Aviation Infrastructure				
-				
Surveillance data interoperability is already ensured. Safety assessment to all existing systems (see SLoA description) has been developed and delivered to the NSA. Except MIL ITY-SPI-MIL02 part-this will have a delay.				**31/12/2020**
REG (By:02/2015)				
Estonian CAA	Formal acceptance of the ANSPs safety assessment reports communicated to the ANSP.	-	100%	Completed 31/12/2015
ASP (By:02/2015)				
EANS	Surveillance data interoperability is already ensured. Safety assessment to all existing systems (see SLoA description) has been developed and delivered to the NSA.	-	100%	Completed 30/10/2017
MIL (By:06/2020)				
Estonian Air Force	All a/c equipped with transponders capable with Mode S. Further upgrade for mil a/c is undergoing assessment.	-	67%	Late 31/12/2020

NAV03.1	**RNAV 1 in TMA Operations** ***Timescales:*** Initial operational capability: 01/01/2001 One SID and STAR per instrument RWY, where established: 25/01/2024 All SIDs and STARs per instrument RWY, where established: 06/06/2030		**70%**	**Ongoing**
Links: B0-CCO, B0-CDO, B1-RSEQ | Key Feature: Advanced Air Traffic Services				
-				
RNAV 1 procedures and CDA in Tallinn TMA implemented on 30 May 2013.				**31/12/2021**
REG (By:06/2030)				
Estonian CAA	CAA will verify the transition plan for PBN in ANS provision by DEC 2020.	Navigation Infrastructure Rationalisation	10%	Ongoing 03/12/2020
ASP (By:06/2030)				
EANS	-	Navigation Infrastructure Rationalisation	79%	Ongoing 31/12/2021

NAV03.2	**RNP 1 in TMA Operations** ***Timescales:*** Start: 07/08/2018 All SIDs and STARs per instrument RWY, at PCP airports: 25/01/2024 One SID and STAR per instrument RWY, where established: 25/01/2024 All SIDs and STARs per instrument RWY, where established: 06/06/2030		**%**	**Not Applicable**
Links: B1-RSEQ | Key Feature: Advanced Air Traffic Services				
-				
There is no intention to Implement it because it is not justified particularly in terms of the cost/benefit ratio as RNAV1 is considered to be sufficient.				-
REG (By:06/2030)				
Estonian CAA	There is no intention to Implement it because it is not justified particularly in terms of the cost/benefit ratio as RNAV1 is considered to be sufficient.	-	%	Not Applicable -
ASP (By:06/2030)				
EANS	There is no intention to Implement it because it is not justified particularly in terms of the cost/benefit ratio as RNAV1 is considered to be sufficient.	-	%	Not Applicable -

NAV10	**RNP Approach Procedures to instrument RWY** ***Timescales:*** Initial operational capability: 01/06/2011 Instrument RWY ends without precision approach in EU SES States, at Non-PCP airports: 03/12/2020 Instrument RWY ends served by precision approach (including PCP airports): 25/01/2024 Instrument RWY ends without precision approach in EU SES States, at PCP airports: 25/01/2024		**23%**	**Ongoing**
Links: B0-APTA | Key Feature: Advanced Air Traffic Services				
-				
RNP APCH procedures are published and implemented at EETN, EEKE, EEKA and EETU aerodromes. EEPU is planned for 2020. EANS PBN Transition plan has been drafted and submitted to CAA and MIL. The transition to PBN operations is planned for 2024.				**31/12/2020**
REG (By:01/2024)				
Estonian CAA	The national PBN plan is still under development. New deadline: 31/12/2020.	-	10%	Ongoing 31/12/2020
ASP (By:01/2024)				
EANS	RNP APCH procedures are published and implemented at EETN, EEKE, EEKA and EETU aerodromes. EEPU is planned for 2020. EANS PBN Transition plan has been drafted and submitted to CAA and MIL. The transition to PBN operations is planned for 2024.	RNP APCH procedures implementation on EETN aerodrome	28%	Ongoing 31/12/2020

NAV12	**ATS IFR Routes for Rotorcraft Operations** ***Timescales:*** Rotorcraft RNP0.3, RNP1 or RNAV1 ATS routes above FL150, where established.: 03/12/2020 One rotorcraft RNP0.3, RNP01 or RNAV1 SID and STAR per instrument RWY, where established.: 25/01/2024 Rotorcraft RNP0.3, RNP1 or RNAV1 ATS routes below FL150, where established.: 25/01/2024 All rotorcraft RNP0.3, RNP01 or RNAV1 SIDs and STARs per instrument RWY, where established.: 06/06/2030		**0%**	**Not yet planned**
Links: B1-APTA | Key Feature: Advanced Air Traffic Services				
-				
ATS IFR routes for rotorcraft operation implementation is not planned yet.				**-**
REG (By:06/2030)				
Estonian CAA	-	-	0%	Not yet planned -
ASP (By:06/2030)				
EANS	-	-	%	Not yet planned -

SAF11	**Improve Runway Safety by Preventing Runway Excursions** ***Timescales:*** Initial operational capability: 01/09/2013 Full operational capability: 31/01/2018		**100%**	**Completed**
Key Feature: High Performing Airport Operations				
		-		
Appropriate parts of the European Action Plan for the Prevention of Runway Excursions will be implemented.				**31/01/2018**
REG (By:01/2018)				
Estonian CAA	Appropriate parts of the European Action Plan for the Prevention of Runway Excursions are implemented. Recommendations made by European Action Plan for the Prevention of Runway Excursions, part 3.6 "Regulatory and Oversight" have been taken into account.	-	100%	Completed 31/01/2018
ASP (By:12/2014)				
EANS	Action plan part 3.1, 3.2 and 3.3 completed. Digital ATIS is implemented.	-	100%	Completed 31/12/2016
Estonian Air Force		-	%	Not Applicable -
APO (By:12/2014)				
Estonian Air Force	-	-	%	Not Applicable -
TALLINN AIRPORT Ltd.	-	-	100%	Completed -

Additional Objectives for ICAO ASBU Monitoring

AOM21.1	**Direct Routing** **(Outside Applicability Area)** ***Timescales:*** - not applicable -		**%**	**Not Applicable**
Links: B0-FRTO, B1-FRTO | Key Feature: Advanced Air Traffic Services				
-				
Not applicable				**-**
ASP (By:12/2017)				
EANS	-	-	%	Not Applicable -

ATC02.2	**Implement ground-based safety nets - Short Term Conflict Alert (STCA) - level 2 for en-route operations** ***Timescales:*** Initial operational capability: 01/01/2008 Full operational capability: 31/01/2013		**100%**	**Completed**
Links: B0-SNET | Key Feature: Advanced Air Traffic Services				
-				
STCA Level II function was implemented in 2012 and safety assessment was performed. Safety oversight was conducted on time.				**31/12/2012**
ASP (By:01/2013)				
EANS	The EUROCAT 2000 System has STCA implemented and operational (Initial Operational Capability). The STCA Level 2 was implemented and operational since 2002. FOC was implemented in March 2012.	-	100%	Completed 31/12/2012

ATC16	**Implement ACAS II compliant with TCAS II change 7.1** ***Timescales:*** Initial operational capability: 01/03/2012 Full operational capability: 31/12/2015		**100%**	**Completed**
Links: B0-ACAS | Key Feature: Advanced Air Traffic Services				
-				
ACAS II compliant with TCAS II change 7.1 is implemented on time.				**31/12/2015**
REG (By:12/2015)				
Estonian CAA	ECAA has supervised compliance with regulatory provisions for ACAS II (TCAS II version 7.1).	-	100%	Completed 31/12/2015
ASP (By:03/2012)				
EANS	The ATC staff was trained in December 2015.	-	100%	Completed 31/12/2015
MIL (By:12/2015)				
Estonian Air Force	Estonian Air Force do not operate fixed wing aircraft applicable to the objective.	-	%	Not Applicable -

FCM01	**Implement enhanced tactical flow management services** ***Timescales:*** Initial operational capability: 01/08/2001 Full operational capability: 31/12/2006		**100%**	**Completed**
Links: B0-NOPS | Key Feature: Optimized ATM Network Services				
-				
Since May 2008, Estonia is in the IFPS zone. Currently only the FMP is connected to NM. During the major system upgrade, all the requirements were implemented in 2012. FSA, CPR format tuning and testing completed. NM/ETFMS supplies with flight plan related updates that are only available shortly before departure.				**30/06/2015**
ASP (By:07/2014)				
EANS	All necessary functionalities are installed during system upgrade. Tuning, testing and LoA revision completed.	-	100%	Completed 30/06/2015

ITY-COTR	**Implementation of ground-ground automated co-ordination processes** ***Timescales:*** Entry into force of Regulation: 27/07/2006 For putting into service of EATMN systems in respect of notification and initial coordination processes: 27/07/2006 For putting into service of EATMN systems in respect of Revision of Coordination, Abrogation of Coordination, Basic Flight Data and Change to Basic Flight Data: 01/01/2009 To all EATMN systems in operation by 12/2012: 31/12/2012		**100%**	**Completed**
Links: B0-FICE | Key Feature: Advanced Air Traffic Services				
-				
Implementation of G-G automated co-ordination has been finalized within Eurocat 2000 upgrade project in 2012.				**31/12/2012**
ASP (By:12/2012)				
EANS	OLDI basic messages exchange is implemented. Other ground-ground automated co-ordination processes and the training of ATC personnel have been performed.	-	100%	Completed 31/12/2012
MIL (By:12/2012)				
Estonian Air Force	Currently military do not provide service to civil flights.	-	%	Not Applicable -

Local Objectives

Note: Local Objectives are addressing solutions that are considered beneficial for specific operating environments, therefore for which a clear widespread commitment has not been expressed yet. They are characterised with no deadline and voluntary applicability area.

AOP14	Remote Tower Services *Applicability and timescale: Local*	%	Not Applicable
Links: B1-RATS | Key Feature: High Performing Airport Operations			
EETN - Tallinn Airport			
Not applicable at State level. However, EANS runs rTWR implementation project. Prototype for Tartu airport has been tested and certification is ongoing.			-

AOP15	Enhanced traffic situational awareness and airport safety nets for the vehicle drivers *Applicability and timescale: Local*	%	Not Applicable
Links: B2-SURF | Key Feature: High Performing Airport Operations			
EETN - Tallinn Airport			
N/A			-

AOP16	Guidance assistance through airfield ground lighting *Applicability and timescale: Local*	%	Not Applicable
Links: B1-RSEQ, B2-SURF | Key Feature: High Performing Airport Operations			
EETN - Tallinn Airport			
N/A			-

AOP17	Provision/integration of departure planning information to NMOC *Applicability and timescale: Local*	%	Not Applicable
Links: B1-ACDM, B1-NOPS | Key Feature: High Performing Airport Operations			
EETN - Tallinn Airport			
N/A			-

AOP18	Runway Status Lights (RWSL) *Applicability and timescale: Local*	%	Not Applicable
Links: B2-SURF | Key Feature: High Performing Airport Operations			
EETN - Tallinn Airport			
N/A			-

ATC19	Enhanced AMAN-DMAN integration *Applicability and timescale: Local*	%	Not Applicable
Links: B2-RSEQ | Key Feature: Advanced Air Traffic Services			
-			
N/A			-

ATC20	Enhanced STCA with down-linked parameters via Mode S EHS *Applicability and timescale: Local*	%	Not Applicable
Links: B1-SNET | Key Feature: Advanced Air Traffic Services			
-			
SFL via Mode S EHS is implemented. No need for enhancement of STCA with selected flight level is identified.			-

ENV02	Airport Collaborative Environmental Management *Applicability and timescale: Local*	%	Completed
Key Feature: High Performing Airport Operations			
EETN - Tallinn Airport			
Tallinn Airport has implemented CEM.			31/12/2016

ENV03	Continuous Climb Operations (CCO) *Applicability and timescale: Local*	%	Not Applicable
Links: B0-CCO | Key Feature: Advanced Air Traffic Services			
EETN - Tallinn Airport			
Not applicable at State level.			-

6. Annexes

A. Specialists involved in the ATM implementation reporting for Estonia

LSSIP Co-ordination

LSSIP Focal Points	Organisation	Name
LSSIP National Focal Point	Estonian CAA	Moonika KÄST
LSSIP Focal Point for NSA/CAA	Estonian CAA	Moonika KÄST
LSSIP Focal Point for ANSP	Estonian ANS	Evija LEITLANDE-RAUTITS
LSSIP Focal Point for Airport	Tallinn Airport	Silja MESILA
LSSIP Focal Point for Military	Estonian Defence Forces Air Force	David-Andreas MELLOV

Other Focal Points	Organisation	Name
Focal Point for U-space	Estonian CAA	Olga PETRJASHEVA
Focal Point for NETSYS	EANS	Evija LEITLANDE-RAUTITS

B. National stakeholder's organisation charts

Structure of ECAA

Structure of EANS

C. Implementation Objectives' links with SESAR KF, ASBU blocks and more

The table below (extracted from the MPL3 Progress Plan 2019) shows for each implementation objective, the links with the SESAR Key Features, Major ATM Changes, SESAR 1 Solutions, Deployment Program families, ICAO ASBU, EASA EPAS and AAS TP milestones.

Level 3 Implementation Objectives	SESAR Key Feature	Major ATM change	SESAR Solution	DP family	ICAO ASBU B0, B1, B2	EPAS	AAS TP
AOM13.1 - Harmonise OAT and GAT handling		FRA & A-FUA	-	-	-	-	-
AOM19.1 - ASM tools to support A-FUA		FRA & A-FUA	#31	3.1.1	B1-FRTO B1-NOPS	-	AM-1.8
AOM19.2 - ASM management of real-time airspace data		FRA & A-FUA	#31	3.1.2	B1-FRTO B1-NOPS	-	AM-1.8
AOM19.3 - Full rolling ASM/ATFCM process and ASM information sharing		FRA & A-FUA	#31	3.1.3	B1-FRTO B1-NOPS B2-NOPS	-	AM-1.8
AOM19.4 – Management of Pre-defined Airspace Configurations		FRA & A-FUA	#31	3.1.4	B1-FRTO B1-NOPS	-	-
FCM03 - Collaborative flight planning		ATFCM	-	4.2.3	B0-NOPS	-	AM-1.14
*FCM04.1 – STAM phase 1		ATFCM	-	4.1.1	-	-	-
FCM04.2 - STAM phase 2		ATFCM	#17	4.1.2	-	-	AM-1.11
FCM05 - Interactive rolling NOP		NOP	#20, #21	4.2.2 4.2.4	B1-ACDM B1-NOPS	-	AM-1.12
FCM06 - Traffic Complexity Assessment		ATFCM	#19	4.4.2	B1-NOPS	-	AM-1.13
FCM07 - Calculated Take-off Time (CTOT) to Target Times for ATFCM Purposes		ATFCM	#18	4.3.1 4.3.2	B1-NOPS	-	AM-1.9
FCM09 - Enhanced ATFM Slot swapping		ATFCM	#56	-	B1-NOPS	-	-

Level 3 Implementation Objectives	SESAR Key Feature	Major ATM change	SESAR Solution	DP family	ICAO ASBU B0, B1, B2	EPAS	AAS TP
*AOM21.1 - Direct Routing		Free Route	#32	3.2.1 3.2.3	B0-FRTO B1-FRTO	-	-
AOM21.2 - Free Route Airspace		Free route	#33, #66	3.2.1 3.2.4	B1-FRTO	-	AM-1.6 AM-1.10 AM-5.1
ATC02.8 - Ground based safety nets		ATM Systems	-	3.2.1	B0-SNET B1-SNET	-	-
ATC02.9 – Enhanced STCA for TMAs		ATM Systems	#60	-	B0-SNET B1-SNET	MST.030	-
ATC07.1 - Arrival management tools		Enhanced Arrival Seq	-	1.1.1	B0-RSEQ	-	-
ATC12.1 - MONA, TCT and MTCD		ATM Systems	#27, #104	3.2.1	B1-FRTO	-	AM-1.15 AM-5.1
ATC15.1 – Initial extension of AMAN to En-route		Enhanced Arrival Seq	-	1.1.2	B1-RSEQ	-	-
ATC15.2 - Extension of AMAN to En-route		Enhanced Arrival Seq	#05	1.1.2	B1-RSEQ	-	AM-1.3
ATC17 - Electronic Dialog supporting COTR		Free Route	-	3.2.1	-	-	AM-1.3
ATC18 – Multi Sector Planning En-route – 1P2T		Free Route	#63	-	-	-	AM-4.3 AM-5.1
ATC19 - Enhanced AMAN-DMAN integration		Enhanced Arrival Seq	#54	-	B2-RSEQ	-	-
ATC20- Enhanced STCA with down-linked parameters via Mode S EHS		ATM Systems	#69	-	B1-SNET	-	-
ENV01 – Continuous Descent Operations		PBN	-	-	B0-CDO B1-CDO	-	-
ENV03 – Continuous Climb Operations		PBN	-	-	B0-CCO	-	-
NAV03.1 – RNAV1 in TMA Operations		PBN	#62	-	B0-CDO B0-CCO B1-RSEQ	RMT.0639 RMT.0445	-

Level 3 Implementation Objectives	SESAR Key Feature	Major ATM change	SESAR Solution	DP family	ICAO ASBU B0, B1, B2	EPAS	AAS TP
NAV03.2 – RNP1 in TMA Operations		PBN	#09, #51	1.2.3 1.2.4	B1-RSEQ	RMT.0639 RMT.0445	-
NAV10 - RNP Approach Procedures to instrument RWY		PBN	#103	1.2.1 1.2.2	B0-APTA	RMT.0639 RMT.0445 RMT.0643	-
NAV12 – ATS IFR Routes for Rotorcraft Operations		PBN	#113	-	B1-APTA	MST.031	-
AOP04.1 - A-SMGCS Surveillance (former Level 1)		Surface mgt	#70	2.2.1	B0-SURF	-	-
AOP04.2 - A-SMGCS RMCA (former Level 2)		Surface mgt	-	2.2.1	B0-SURF	-	-
AOP05 - Airport CDM		Collaborative Apt	#106	2.1.1 2.1.3	B0-ACDM B0-RSEQ	-	-
AOP10 - Time Based Separation		Enhanced ops in vicinity of rwy	#64	2.3.1	B1-RSEQ B2-WAKE	-	-
AOP11 - Initial Airport Operations Plan		Collaborative Apt	#21	2.1.4	B1-ACDM	-	-
AOP12 - Improve RWY and Airfield safety with CATC detection and CMAC		Surface mgt	#02	2.1.2 2.5.1	B2-SURF	-	-
AOP13 – Automated assistance to Controller for Surface Movement planning and routing		Surface mgt	#22 #53	2.4.1	B1-ACDM B1-RSEQ B2-SURF	-	-
AOP14 – Remote Tower Services		Remote Tower	#12, #71, #52, #13	-	B1-RATS	RMT.0624	-
AOP15 - Enhanced traffic situational awareness and airport SNET for the vehicle drivers		Surface mgt	#04	-	B2-SURF	-	-
AOP16 - Guidance assistance through airfield ground lighting		Surface mgt	#47	-	B1-RSEQ B2-DURF	-	-
AOP17 - Provision/integration of departure planning information to NMOC		Collaborative Apt	#61	-	B1-ACDM B1-NOPS	-	-

Level 3 Implementation Objectives	SESAR Key Feature	Major ATM change	SESAR Solution	DP family	ICAO ASBU B0, B1, B2	EPAS	AAS TP
AOP18 - Runway Status Lights (RWSL)		Surface mgt	#01	-	B2-SURF	-	-
ENV02 – Airport Collaborative Environemental Management		Collaborative Apt	-	-	-	-	-
NAV11 - Implement precision approach using GBAS CAT II/III based on GPS L1		Enhanced ops in vicinity of rwy	#55	-	B1-APTA	-	-
SAF11 - Improve runway safety by preventing runway excursions		Surface mgt	-	-	-	MST.007 RMT.0570 RMT.0703	-
COM10 - Migration from AFTN to AMHS		CNS rat.	-	-	-	-	-
COM11.1 - Voice over Internet Protocol (VoIP) in En-Route		CNS rat.	-	3.1.4	-	-	AM-1.3
COM11.2 - Voice over Internet Protocol (VoIP) in Airport/Terminal		CNS rat.	-	-	-	-	-
COM12 - NewPENS		Pre-SWIM & SWIM	-	5.1.2 5.2.1	B1-SWIM	-	-
FCM08 – Extended Flight Plan		Pre-SWIM & SWIM	#37	4.2.3	B1-FICE	-	AM-1.4
INF07 - Electronic Terrain and Obstacle Data (e-TOD)		Pre-SWIM & SWIM	-	1.2.2	-	RMT.0703 RMT.0704 RMT.0722	-
INF08.1 - Information Exchanges using the SWIM Yellow TI Profile		Pre-SWIM & SWIM	#35, #46	5.1.3, 5.1.4, 5.2.1, 5.2.2, 5.2.3, 5.3.1, 5.4.1, 5.5.1, 5.6.1	B1-DATM B1-SWIM	-	AM-1.5

Level 3 Implementation Objectives	SESAR Key Feature	Major ATM change	SESAR Solution	DP family	ICAO ASBU B0, B1, B2	EPAS	AAS TP
INF08.2 - Information Exchanges using the SWIM Blue TI Profile		Pre-SWIM & SWIM	#28, #46	5.1.3, 5.1.4, 5.2.1, 5.2.2, 5.2.3, 5.6.2	B1-DATM B1-SWIM	-	AM-9.1
INF09 - Digital Integrated Briefing		Pre-SWIM & SWIM	#34	-	B1-DATM B1-SWIM	-	-
ITY-ACID - Aircraft identification		CNS rat.	-	-	-	-	-
ITY-ADQ - Ensure quality of aeronautical data and aeronautical information		Pre-SWIM & SWIM	-	1.2.2	B0-DATM	RMT.0722 RMT.0477	-
ITY-AGDL - Initial ATC air-ground data link services		Data link	-	6.1.1 6.1.3 6.1.4	B0-TBO	RMT.0524	AM-1.1
ITY-AGVCS2 – 8.33 kHz Air-Ground Voice Channel Spacing below FL195		CNS rat.	-	-	-	-	-
ITY-FMTP - Apply a common flight message transfer protocol (FMTP)		Pre-SWIM & SWIM	-	-	B0-FICE B1-FICE	-	AM-1.3
ITY-SPI - Surveillance performance and interoperability		CNS rat.	-	-	B0-ASUR	RMT.0679 RMT.0519	-

* *AOM21.1 was achieved in 2017 and FCM04.1 was achieved in 2018, therefore they were removed from the Implementation Plan 2018/2019. They are kept in this table for traceability purposes.*

Legend:

Objective's link to SESAR Key Feature:			
	Optimised ATM Network Services		High Performing Airport Operations
	Advanced Air Traffic Services		Enabling Aviation Infrastructure

D. Implementation of U-Space Services

This annex is considered as not applicable to Estonia.

E. SESAR Solutions implemented in a voluntary way[3]

These SESAR Solutions are not included yet in the ATM MP L3 Plan.

EUROCONTROL is tasked by the SJU to identify the implementation progress of functionalities corresponding to validated SESAR Solutions published in the SJU Solutions Catalogue (https://www.sesarju.eu/newsroom/brochures-publications/sesar-solutions-catalogue), for which there is no implementation Objective (yet) in the ATM MP L3 Plan. This will allow to identify early movers and to gauge the interest generated by some of these functionalities, with the view of potentially addressing them with new Implementation Objectives in the ATM MPL3 Plan.

A facilitated questionnaire using the existing ATM MP L3 / LSSIP methodology is added to capture information on non-committed SESAR solutions. For practical reasons, since the LSSIP 2017 cycle the questionnaire is included in the LSSIP Annex.

SESAR Solution Code	SESAR Solution Title	Solution Description	Has the SESAR Solution been implemented in your State? (Y-N) - if "Yes" please report where	Are there implementation plans in your State for the SESAR Solution? (Y-N-N/A) - If "Yes" please report when and where implementation is planned - If "N/A" please provide justification
		High Performing Airport Operations		
#23	D-TAXI service for controller-pilot datalink communications (CPDLC) application	Use of data link communications between the Tower Controllers and the flight crew during surface movement. It is based on the D-TAXI service from the CPDLC application, as standardised by RTCA SC214/EUROCAE WG78 (DO-350 & DO-351). It also includes the access to this service for end users, through the Tower CWP for the ATCO and through the aircraft DCDU for the flight crew.	N	N
#48	Virtual block control in low visibility procedures (LVPs)	In low visibility conditions, the tower controller working positions are provided with Virtual Stop Bars (VSB) to improve low visibility operations and enhance controllers¿ situational awareness. Virtual Stop Bars can be used by the controller to reduce block-sizes once procedural control applies. Additional controller safety nets will be available to indicate violations of Stop Bars (including Virtual Stop Bars) and to monitor aircraft for any kind of unauthorised movement (Watch Dog).	N	N

[3] Referred as 'Non-committed' SESAR solutions in the MP L3 Report.

SESAR Solution Code	SESAR Solution Title	Solution Description	Has the SESAR Solution been implemented in your State? (Y-N) - if "Yes" please report where	Are there implementation plans in your State for the SESAR Solution? (Y-N-N/A) - If "Yes" please report when and where implementation is planned - If "N/A" please provide justification
#116	De-icing management tool	The solution increases the accuracy of information related to when the procedure is going to take place, how long it will take and when the aircraft will be ready to taxi for departure, which is currently calculated by predetermined estimates. The solution means that air traffic controllers no longer need to work without situational awareness of de-icing activities and needing to make their own estimates of when aircraft are ready for departure. The solution envisages that de-icing operations are no longer characterised by the A-CDM concept as 'adverse conditions', i.e. a state that is in need of collaborative recovery procedures, but rather a part of normal operations in the winter period. The DIMT allows for the scheduling and monitoring of de-icing operations. It is an internet browser-based tool that addresses three distinct procedures for de-icing: - Remote de-icing, which occurs at a specific location on the airport away from the parking stand; - On-stand de-icing, which occurs just before the aircraft leaves its stand; and - After-push de-icing, which occurs after the aircraft has pushed back from the stand and is positioned to start taxiing after de-icing.	N	Y 2020, Tallinn Airport
#117	Reducing Landing Minima in Low Visibility Conditions using Enhanced Flight Vision Systems (EFVS)	The SESAR Solution "Reducing landing minima in low visibility conditions using enhanced Flight vision systems (EFVS)" is intended for flight crews and corresponds to the use of EFVS visual based technologies displayed in HUD or an equivalent display system. The objective is to provide operational credit in approach as permitted per EASA EU 965/2012 and its coming amendments (NPA 2018-06 AWO) to face to Low visibility conditions. Enabling EFVS operations with operational credits provides a greater availability of suitable destination and alternate aerodromes during periods of reduced visibility. This effectively reduces the number of weather-related delays, cancellations or diversions of flights to CAT II/III		

SESAR Solution Code	SESAR Solution Title	Solution Description	Has the SESAR Solution been implemented in your State? (Y-N) - if "Yes" please report where	Are there implementation plans in your State for the SESAR Solution? (Y-N-N/A) - If "Yes" please report when and where implementation is planned - If "N/A" please provide justification
		aerodromes, permits shorter routings and reduced fuel costs, a faster return to scheduled operations, and less passenger inconveniences. A unique advantage of the EFVS on board solution is that it is mainly supported by the aircraft system instead of airports and the need of complex and costly ground infrastructures as those implemented in CATII/III airports. From a global ATM network standpoint, the EFVS operation allows to retain traffic at most of secondary aerodromes by providing operational credit at most of runway ends with precision or non-precision landing minima (LPV, LNAV/ VNAV, ILS CAT1,…). The operational credit provided by EFVS is particularly important regarding secondary aerodromes because they usually have CAT1 or higher than CAT 1 RVR ¿ DA/DH minima and are therefore potentially more frequently impacted by adverse weather conditions. In addition, EFVS capability is a key operational advantage more especially for the business aviation community that is mainly composed of small/ medium operators with limited resources and operating frequently at small/ medium airports. Beyond operational credit, the Vision Systems such as the EFVS improves situational awareness in all weather conditions for all operators at all airports contributing supporting decision-making and increasing safety margin all the time.		
		**Advanced Air Traffic Services**		
#06	Controlled time of arrival (CTA) in medium-density/ medium-complexity environments	The CTA (Controlled Time of Arrival) is an ATM imposed time constraint on a defined point associated with an arrival runway, using airborne capabilities to improve arrival management. When a time constraint is needed for a flight, the ground system may calculate a CTA as part of the arrival management process, and then it may be proposed to the flight for achievement by avionics within	N	N

SESAR Solution Code	SESAR Solution Title	Solution Description	Has the SESAR Solution been implemented in your State? (Y-N) - if "Yes" please report where	Are there implementation plans in your State for the SESAR Solution? (Y-N-N/A) - If "Yes" please report when and where implementation is planned - If "N/A" please provide justification
		required accuracy. Airborne information may be used by the ground system in determining the CTA (e.g. ETA min/max) and in monitoring the implementation of the CTA.		
#08	Arrival management into multiple airports	The system provides support to coordination of traffic flows into multiple airports to enable a smooth delivery to the runways. The 'Center Manager' (CMAN) which accompanies the AMANs of the airports generates a combined planning for several arrival streams into different airports by calculating the sequence of aircraft flying towards an area where their routes intersect. By imposing an adequate spacing of the aircraft in that area, a Time To Lose (TTL) for the appropriate upstream E-TMA sector is calculated to meet this constraint. Both AMAN-TTL for the runway and TTL for the E-TMA sector are superimposed and presented to the upstream en-route sector controllers.	N	N
#10	Optimised route network using advanced RNP	Based on Advanced-RNP navigation specification, design of optimised routes e.g. spaced parallel routes, Fixed Radius Transition (FRT) and Tactical Parallel Offset (TPO) further enhanced by onboard performance monitoring and alerting and the execution of more predictable aircraft behaviour.	N	N
#11	Continuous descent operations (CDO) using point merge	Progressive implementation of procedures for Continuous Descent Operations (CDO) and Continuous Climb Operations (CCO) in higher density traffic or to higher levels, optimised for each airport arrival/departure procedure.	N	N
#105	Enhanced airborne collision avoidance system (ACAS) operations using the autoflight system	New altitude capture laws aim to reduce unnecessary ACAS alarms and reduce the risk of mid-air or near mid-air collisions between aircraft as a last-resort safety net, by automatically reducing the vertical rate at the approach of the selected flight level (only when a Traffic Advisories-TA occurs), leading to less traffic perturbation, while not increasing flight crew workload.	N	N

SESAR Solution Code	SESAR Solution Title	Solution Description	Has the SESAR Solution been implemented in your State? (Y-N) - if "Yes" please report where	Are there implementation plans in your State for the SESAR Solution? (Y-N-N/A) - If "Yes" please report when and where implementation is planned - If "N/A" please provide justification
#107	Point merge in complex terminal airspace	This new procedure design builds upon precision navigation technology (P-RNAV concept) for merging traffic into a single-entry point, which allows efficient integration and sequencing of inbound traffic together with Continuous Descent Approaches (CDA).	N	N
#108	Arrival Management (AMAN) and Point Merge	Point Merge in high density environment and complex Extended TMA (E-TMA) sectors replaces radar vectoring with a more efficient and simplified traffic synchronisation mechanism that reduces communication workload and increases collective traffic predictability.	N	N
#118	Basic EAP (Extended ATC Planning) function	The basic Extended ATC Planner aims at bridging the gap between Air Traffic Flow and Capacity Management (ATFCM) and Air Traffic Control (ATC) providing real-time and fine-tuning measures to solve ATFCM hotspots, and to perform early measures to alleviate complexity closest to ATC activities. The solution consists of an automated tool and associated procedures supporting the basic communication between the Local DCB position and the Controllers' Work Positions allowing the EAP and the ATC team in identifying, assessing and resolving local complexity situations. The basic EAP relies on a real time integrated process for managing the complexity of the traffic with capability to reduce traffic peaks through early implementation of fine-tuned solutions to solve workload imbalances at the local level, compatible with the short-term timeframe of execution phase of the flights.		
		**Optimised ATM Network Services**		
#57	User-driven prioritisation process (UDPP) departure	Airspace Users are allowed to change among themselves (via the pre-departure management process in CDM airports) the priority order of flights in the pre-departure sequence. The departure time will be automatically communicated/coordinated with the Network Management Function (NMF) via the DPI message as described in the A-CDM concept.	N	N

SESAR Solution Code	SESAR Solution Title	Solution Description	Has the SESAR Solution been implemented in your State? (Y-N) - if "Yes" please report where	Are there implementation plans in your State for the SESAR Solution? (Y-N-N/A) - If "Yes" please report when and where implementation is planned - If "N/A" please provide justification
		Enabling Aviation Infrastructure		
#67	AOC data increasing trajectory prediction accuracy	Europe's vision to achieve high-performing aviation by 2035 builds on the idea of trajectory-based operations – meaning that aircraft can fly their preferred trajectory while minimising constraints due to airspace and service configurations. SESAR has introduced an early version, which makes use of flight planning data sourced from airline operational control (AOC) to help controllers optimise aircraft flight paths. This solution represents an initial step towards the extended flight plan solution and flight and flow information for a collaborative environment (FF-ICE).	N	N
#100	ACAS Ground Monitoring and Presentation System	The ACAS provides resolution advisories (RAs) to pilots in order to avoid collisions. Controllers rely on pilots to report RAs by radio as they occur in accordance with ICAO regulations. However, these reports can come late, incomplete or are, absent in some instances. This solution consists of a set of monitoring stations and a server system, which enable the continuous monitoring and analysis of ACAS RAs and coordination messages between airborne units from the ground.	N	N
#101	Extended hybrid surveillance	This solution consists of an enhanced TCAS capability, adding passive surveillance methods and reducing the need for active Mode-S interrogations. By making fewer active interrogations, this solution allows the aircraft to significantly reduce the usage of the 1090 MHz frequency.	N	N
#102	Aeronautical mobile airport communi-cation system (AeroMACS)	The aeronautical mobile airport communication system (AeroMACS) offers a solution to offload the saturated VHF datalink communications in the airport environment and support new services. The technical solution AeroMACS is based on commercial 4G technology and uses the IEEE 802.16 (WiMAX) standard. Designed to operate in reserved (aeronautical) frequency bands, AeroMACS can be used for ANSPs, airspace users and airport authority communications, in compliance with SESAR's future communication infrastructure (FCI) concept. AeroMACS is an international standard and supports	N	N

SESAR Solution Code	SESAR Solution Title	Solution Description	Has the SESAR Solution been implemented in your State? (Y-N) - if "Yes" please report where	Are there implementation plans in your State for the SESAR Solution? (Y-N-N/A) - If "Yes" please report when and where implementation is planned - If "N/A" please provide justification
		globally harmonised and available capabilities according to ICAO Global Air Navigation Plan (GANP).		
#109	Air traffic services (ATS) datalink using Iris Precursor	The Iris Precursor offers a viable option for ATS datalink using existing satellite technology systems to support initial four-dimensional (i4D) datalink capability. The technology can be used to provide end-to-end air–ground communications for i4D operations, connecting aircraft and air traffic management ground systems.	N	N
#110	ADS-B surveillance of aircraft in flight and on the surface	The SESAR solution consists of the ADS-B ground station and the surveillance data processing and distribution (SDPD) functionality. The solution also offers mitigation techniques against deliberate spoofing of the ground system by outside agents. These techniques can also be used to cope with malfunctioning of avionics equipment. SESAR has contributed to the relevant standards, such as EUROCAE technical specifications, incorporating new functionalities developed for the ADS-B ground station, ASTERIX interface specifications as well as to the SDPD specifications.	N	Y
#114	Composite Surveillance ADS-B / WAM	By allowing the use of ADS-B data that has been validated against data derived in parallel by a WAM system, the system can help to reduce the number of interrogations and number of replies and therefore reduce the 1030/1090 MHz RF load and improve spectrum efficiency. It achieves this through the integration of validated data items into the WAM channel, thereby preventing a need to re-interrogate the data item. Since the two surveillance layers share hardware components, the system offers improved cost efficiency. Furthermore, the use of the system contributes to an improved security by successfully mitigating associated ADS-B threats. SESAR has contributed to the relevant standards, such as EUROCAE technical specifications for WAM and ADS-B that are implementing this "composite" concept.	N	Y In 2019

F. Military Organisations Infrastructure

This Annex is not produced in 2019. It will be updated every second year, therefore it will be produced as part of the LSSIP 2020 document.

In case information is sought on military infrastructure, previous LSSIP may be made available upon request to the respective Focal Point and/or Contact Person.

G. Glossary of abbreviations

This Annex mainly shows the abbreviations that are specific to the LSSIP Document for Estonia.

Other general abbreviations are in the Acronyms and Abbreviations document in:

https://www.eurocontrol.int/airial/

Term	Description
AF	ATM Functionality
FT	Fast Track
LOF	Log-On Forwarding message
NAN	Next Authority Notified message
NEFAB	North European Functional Airspace Block
NEFRA	North European Free Route Airspace
PDP	Preliminary Deployment Programme
S-AF	Sub ATM Functionality