EUROCONTROL

Local Single Sky ImPlementation
LSSIP 2017 - BELGIUM

Level 1 - Implementation Overview

FOREWORD

The Local Single Sky ImPlementation (LSSIP) documents are the yearly expression of commitment of civil and military National Organisations (Regulators and National Supervisory Authorities), Service Providers and Airport Operators, towards the implementation of the European ATM Master Plan. They provide an extensive view, 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.

The Master Plan Level 3 and LSSIP Implementation Planning and Reporting are well-established and mature mechanisms, with a long history dating back 25 years. They continue to provide a well-recognised stable platform for ATM implementation planning, monitoring and reporting, while continuously adapting to the changing environment.

The reliability and quality of data provided by national stakeholders allowed, for the third 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. The Agency undertakes this work, on behalf of ICAO, for all ICAO/EUR States in accordance with the Global Air Navigation Plan (GANP). This ASBUs Implementation Monitoring Report is a formal companion document and integral part of the ICAO European Air Navigation Plan.

The Agency continues to ensure to avoid unnecessary duplications of work, hence some parts of the information in the LSSIP documents will be used by the European Defence Agency (EDA) in order to be able to report to the SESAR Deployment Manager (SDM). Also the Agency's cooperation with regard to the ICAO State Letter requesting environment related information on the ASBU Block 1 should be seen in the light of this. And finally, through the NSA Cooperation Platform SESAR Deployment Working Group, further ways will be explored to optimise reporting by relevant stakeholders.

As always, I would like again to thank you for the substantial effort spent on your contribution to this LSSIP document. I see this as a proof of your commitment to the principles of transparency and partnership, to the benefit of the entire ATM community!

Philippe MERLO
Director
Directorate European Civil-Military Aviation
EUROCONTROL

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Reference Documents	
LSSIP Documents	http://www.eurocontrol.int/articles/lssip
LSSIP Guidance Material	http://www.eurocontrol.int/articles/lssip
Master Plan Level 3 – Plan Edition 2017	http://www.eurocontrol.int/articles/european-atm-master-plan-level-3-implementation-plan
Master Plan Level 3 – Report Year 2016	http://www.eurocontrol.int/articles/european-atm-master-plan-level-3-implementation-report
European ATM Portal	https://www.eatmportal.eu and http://www.atmmasterplan.eu/
STATFOR Forecasts	http://www.eurocontrol.int/statfor
Acronyms and abbreviations	http://www.eurocontrol.int/articles/glossaries
FAB Performance Plan	http://www.fabec.eu/fabec_homepage/en/Performance/Performance%20Plan/

APPROVAL SHEET

The following authorities have approved all parts of the LSSIP Year 2017 document and their signature confirms the correctness of the reported information and reflects their commitment to implement the actions laid down in the European ATM Master Plan Level 3 Implementation Plan – Edition 2017 (also known as the ESSIP Plan).

Stakeholder / Organisation	Name	Position	Signature
BCAA	P. Vanheyste	Director General a.i.	
Belgocontrol	Johan Decuyper	Chief Executive Officer	
Defence	M. Compernol General	Chief of Defence	
Brussels Airport Company	A. Feist	Chief Executive Office	

CONTENTS

1. National ATM Environment 6
1.1. Geographical Scope 6
1.2. National Stakeholders 8
2. Traffic and Capacity 18
2.1. Evolution of traffic in Belgium 18
2.2. Brussels ACC 19
3. Master Plan Level 3 Implementation Report conclusions 22
4. Implementation Projects 23
4.1. National projects 23
4.2. FAB projects 24
5. Cooperation activities 26
5.1. FAB Co-ordination 26
5.2. Regional cooperation 26
6. Implementation Objectives Progress 28
6.1. State View 28
6.2. Detailed Objectives Implementation progress 33

Annexes

Executive Summary

National ATM Context

The main national stakeholders involved in Air Traffic Management (ATM) in Belgium are the Federal Public Service (FPS) Mobility and Transport, Belgocontrol, the Ministry of Defence and Brussels Airport Company. The Maastricht Upper Area Control Centre is providing ANS in the upper airspace of Belgium above FL 245 and is subject to a dedicated LSSIP document. FPS Mobility and Transport is responsible for civil aviation in Belgium through the (Belgian) Civil Aviation Authority (BCAA), which is the Belgian Regulatory Authority. The National Supervisory Authority (NSA), as per Single European Sky (SES) Service Provision Regulation, is the Belgian Supervisory Authority – Air Navigation Service (BSA-ANS), a service within the BCAA. Belgocontrol is the Air Navigation Service (ANS) Provider in the Brussels Flight Information Region / Upper Flight Information Region (FIR/UIR) below FL 245. There is a full separation between Belgocontrol and the BCAA.

Since March 2005, a 5 year management contract between Belgocontrol and the Belgian State lays down the obligations of Belgocontrol. The 3rd management contract is enforced by the Royal decree of 25 April 2014. The Ministry of Defence (MoD) is responsible for the military aviation in Belgium. The MoD plays a major role in managing and controlling parts of the airspace and acts as a Regulatory Authority as well as an airspace user and an Air Navigation Service (ANS) Provider. The separation of Regulatory Authority Service Provision is assured within the separate functions in the organization. Airspace matters, in particular, are dealt with in the Belgian Airspace and Navigation Committee (BELANC). Co-ordination between the MoD (Air Component), Belgocontrol and BCAA is mainly dealt within the BELANC and the Committee of Directors (DIRCOM). The principal Airports in Belgium, besides Brussels Airport (EBBR), are Antwerp (EBAW), Liège (EBLG), Charleroi (EBCI), Oostende (EBOS) and Kortrijk (EBKT). The main Belgian airport is EBBR, operated by Brussels Airport Company.

Traffic and Capacity

Traffic in Belgium increased by 5.6% during Summer 2017 (May to October), when compared to the same period during 2016.

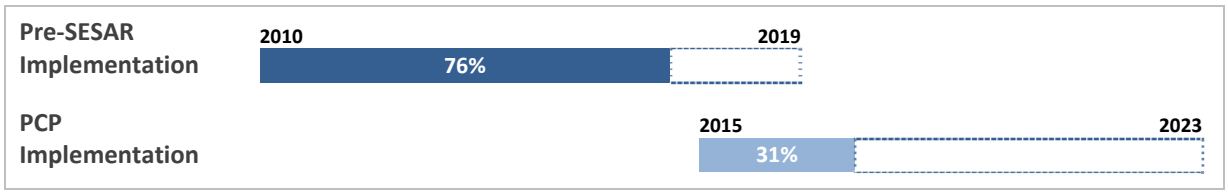
For the period 2018-2022, the EUROCONTROL Seven-Year Forecast predicts an average annual increase between 0.3% and 3.3%, with a baseline growth of 1.9% during the planning cycle.

Progress per SESAR Phase

The figure below shows the progress made so far in the implementation of the pre-SESAR and PCP elements. The percentage is calculated as an average of the relevant objectives as shown in Chapter 6.1.2 - PCP objectives are marked as such, the rest except AOP14, ATC02.9, ATC18 and NAV12 are considered pre-SESAR. The four aforementioned objectives are neither pre-SESAR nor PCP and will be part of an overall future indicator covering the SESAR 1 phase.

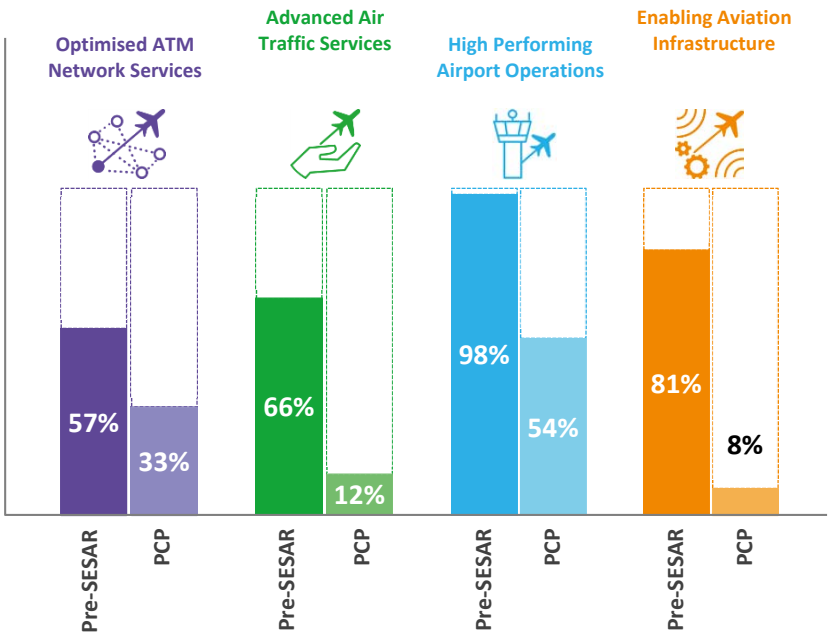
Note that two objectives – AOM19.1 and FCM05 – are considered as both part of the pre-SESAR and PCP so their progress contributes to the percentage of both phases.

The objectives declared 'Achieved' in previous editions (up to, and including, ESSIP Edition 2011-2015) are also taken into account for as long as they were linked to the Level 2 of the ATM Master Plan and implemented by the State.



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 6.1.3.

ATM Deployment Outlook

- **State objectives**

✓ **Deployed in 2016-2017:**	**- TCAS II v7.1** [ATC16] 100% progress **- Runway excursions** [SAF11] 100% progress

By 12/2018	By 12/2019	By 12/2020	2021+
- OAT and GAT handling [AOM13.1] 91% progress **- APV Procedures** [NAV10] 90% progress **- 8,33 kHz below FL195** [ITY-AGVCS2] 41% progress **- Direct Routing** [AOM21.1] 35% progress **- STAM Phase 1** [FCM04.1] 33% progress **- Traffic Complexity** [FCM06] 10% progress	**- Aeronautical Information** [ITY-ADQ] 81% progress **- Real-Time Airspace Data** [AOM19.2] 63% progress **- eTOD** [INF07] 33% progress **- AMAN to en-route** [ATC15.1] 0% progress	**- Surveillance Performance & Interoperability** [ITY-SPI] 89% progress **- Aircraft Identification** [ITY-ACID] 52% progress **- Voice over IP** [COM11] 39% progress **- NewPENS** [COM12] 3% progress	**- RNAV 1 for TMA Operations** [NAV03.1] 91% progress **- Interactive Rolling NOP** [FCM05] 24% progress

- **Airport objectives - EBBR - Brussels Airport**

Deployed in 2016-2017:	**- A-SMGCS RMCA (former Level 2)** [AOP04.2] 100% progress

By 12/2018	By 12/2019	By 12/2020	2021+
- Collaborative Env. Mgt. [ENV02] 84% progress **- AMAN** [ATC07.1] 50% progress		**- Initial Airport Operations Plan** [AOP11] 63% progress	

- **Airport objectives - EBCI - Charleroi Airport**

Deployed in 2016-2017:	**- CDOs** [ENV01] 100% progress

By 12/2018	By 12/2019	By 12/2020	2021+

- **Airport objectives - EBLG - Liege Airport**

Deployed in 2016-2017:	**- CDOs** [ENV01] 100% progress

By 12/2018	By 12/2019	By 12/2020	2021+

- **Airport objectives - EBOS - Oostende Airport**

Deployed in 2016-2017:

By 12/2018	By 12/2019	By 12/2020	2021+
	- CDOs [ENV01] 20% 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 2017, 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, an overview of the Airspace Organisation and Classification, the ATC Units, the ATM systems operated by the main ANSP are also provided;

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 gives also 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 a set of conclusions extracted from the MP L3 Implementation Report 2016 which are relevant to the State/stakeholders concerned. The State reports how they have handled those conclusions and the actions taken during the year to address the concerns expressed by those conclusions;

Chapter 4 provides the main Implementation Projects (at national, FAB and regional level) which contribute directly to the implementation of the MP Operational Improvements and/or Enablers and Implementation Objectives. Level 1 document covers 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 Level 2 document;

Chapter 5 deals with other cooperation activities beyond Implementation Projects. It provides an overview of the FAB cooperation and also all other regional 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 6 contains aggregated information at State level covering the overall level of implementation, implementation per SESAR Key Feature and implementation of ICAO ASBUs. In addition the high-level information on progress and plans of each Implementation Objective is presented. 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.

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 to achieve their respective Stakeholder Lines of Action (SLoAs) as established in the European ATM Master Plan L3 Implementation Plan Edition 2017. In addition it covers detailed description of the Implementation Projects for the State as extracted from the LSSIP Data Base.

The information contained in Chapter 6 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

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

Organisation		Since
ECAC	✓	1955
EUROCONTROL	✓	1960
European Union	✓	1957
EASA	✓	2003
ICAO	✓	1947
NATO	✓	1949
ITU	✓	1945
JAA	✓	1970

Geographical description of the FIR

On the civil side, the geographical scope of this LSSIP document addresses the Brussels FIR/UIR at and below FL 245, excluding the G.D. of Luxembourg airspace below FL 165 in the Southern Part and FL145 in the Northern Part.

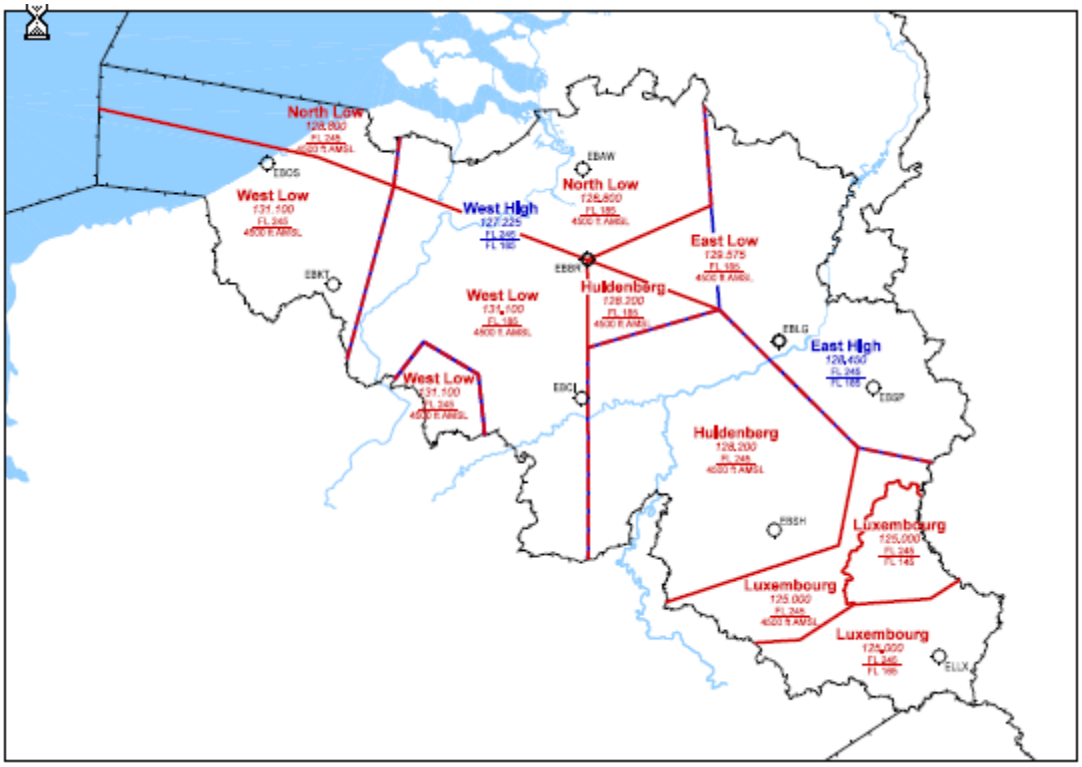
On the military side, the geographical scope of this LSSIP document addresses the entire Brussels FIR/UIR.

The Division Flight Level (DFL) separating upper from lower ATS airspace is FL 195. The responsibility for the provision of civil ATS in the Airspace above FL 245 has been delegated to MUAC, for which a separate LSSIP is developed.

Brussels ACC also controls the airspace over the G.D. of Luxemburg between FL 165 and FL 245 in the Southern Part and between FL145 and FL 245 in the Northern Part.

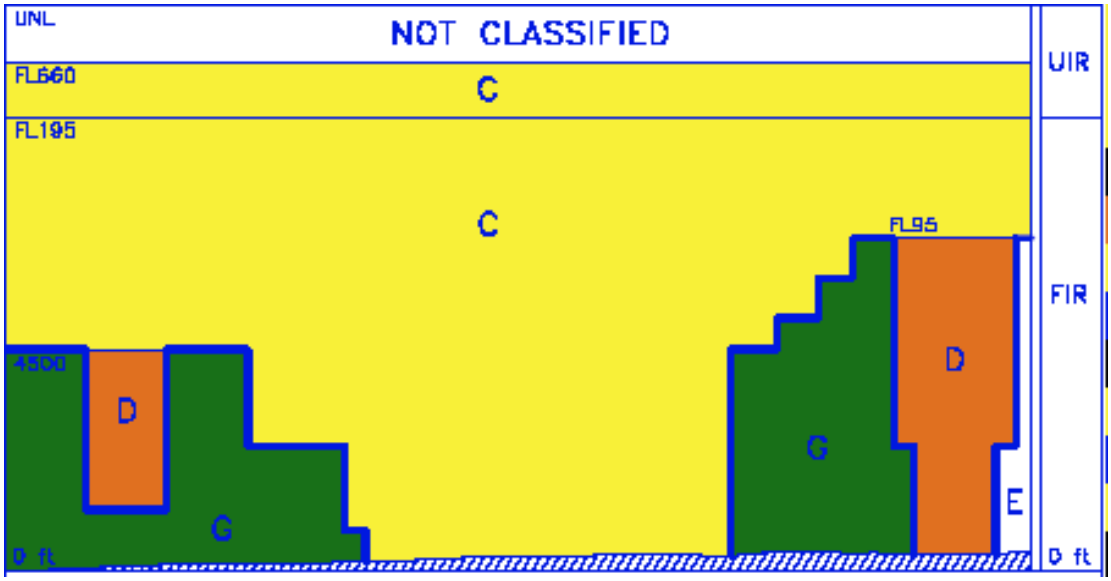
The military ANSP provides ATS services in the entire Brussels FIR/UIR to OAT.

Brussels FIR/UIR is surrounded by FIRs of 4 States, namely France, United Kingdom, The Netherlands and Germany.



Airspace Classification and Organisation

The airspace above FL 195 (until FL 660) is designated as Brussels Upper Control Area (UTA). Controlled airspace below FL 195 is divided into CTRs, TMAs, Control Areas (CTAs) Airways (AWYs) and Prohibited, Restricted and Danger areas (PDR's). The airspace outside these permanent structures below FL 195 is called the Lower CTA (LCTA). The airspace at and below 4500 ft AMSL outside controlled airspace and outside Prohibited, Restricted and Danger areas, is uncontrolled airspace. A number of Temporary Restricted Areas (TRAs) (TRA South, TRA North and TRA West) and other AMC manageable areas (e.g. Helicopter Training Areas, Low Flying Areas, Danger and Restricted areas…) can be reserved by Belgian Defence for military activities. Transition altitude in Brussels FIR is 4500 ft AMSL. In April 2015, a RMZ was created around the AD of Kortrijk/Wevelgem and FIR Brussels, outside regulated airspace, did get a RMZ and TMZ status during night. In March 2016, an ATZ was created around the aerodrome of Sint-Truiden/Bevingen.



1.2. National Stakeholders

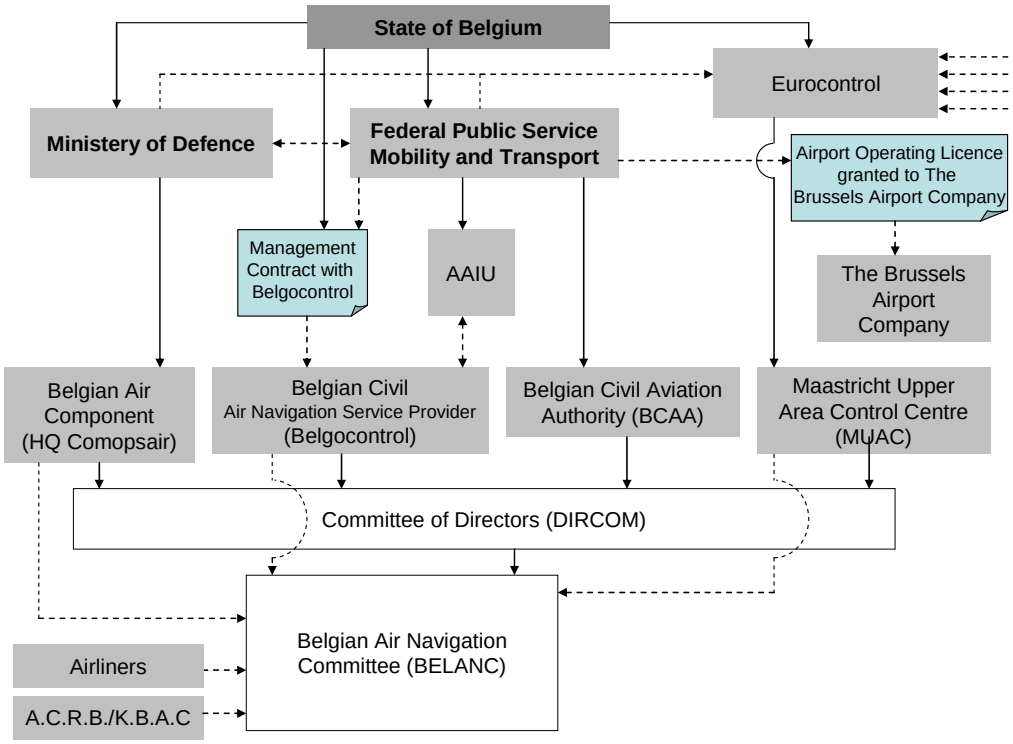
The airspace within Brussels FIR/UIR is subdivided into 4 classifications (C, D, E and G) according to ICAO specifications.

Class	Airspace type	Remarks
C	CTR	Maastricht CTR (within the Brussels FIR)
	TMA	Military and Civil (except Luxemburg TMA below FL 95)
	AWY	Except AWY within the Luxemburg TMA below FL 95
	CTA	All CTA's
	LCTA	
	UTA	In line with the objectives for airspace simplification throughout ECAC airspace
D	CTR	All CTR's (except portion of Maastricht CTR within Belgian FIR)
	TMA	Luxemburg TMA One A and One B and TMA Five below FL95
		Lille TMA 2 Part 1
		Maastricht TMA 1
E	TMA	Luxembourg TMA Two A, Two B, Two D and Two F below FL100 and TMA Two C and Two E, TMA Three; TMA Four
		Lille TMA 9 Part 1
G	Uncontrolled airspace	
Unclassified	Above Brussels UTA (i.e. above FL660)	

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

- The Federal Public Service (FPS) Mobility and Transport, through the Belgian Civil Aviation Authority (BCAA)
- Belgocontrol
- MUAC
- The Ministry of Defence (MoD), through the Air Component
- Brussels Airport Company.

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



Civil aviation in Belgium is the responsibility of the Federal Public Service (FPS) Mobility and Transport through the Belgian Civil Aviation Authority (BCAA), which is the Belgian GAT Regulatory Authority. The National Supervisory Authority (NSA), as per Single European Sky (SES) Service Provision Regulation is the Belgian Supervising Authority - Air Navigation Services (BSA-ANS), a department within the BCAA.

Belgocontrol is the Civil Air Navigation Service (ANS) Provider in the Brussels Flight Information Region / Upper Flight Information Region (FIR/UIR) at and below FL 245. There is a full separation between Belgocontrol and BCAA. Since April 2014 a third 5-year management contract between Belgocontrol and the Belgian State lays down the obligations of Belgocontrol. The responsibility for the provision of civil ATS in the Airspace above FL 245 has been delegated to Maastricht UAC (MUAC).

Military aviation in Belgium is the responsibility of the Ministry of Defence (MoD). The MoD plays a major role in managing and controlling parts of the airspace and acts as a Regulatory Authority for OAT as well as an airspace user and an OAT Air Traffic Service (ATS) provider. The separation of Regulatory Authority and Service Provision is assured within the separate functions in the organization. Airspace matters, in particular, are dealt within the Belgian Airspace and Navigation Committee (BELANC), recognized as the Belgian HLAPB.

Co-ordination between the MoD (Air Component), Belgocontrol and BCAA is mainly dealt with in the BELANC and the Committee of Directors (DIRCOM).

The main Belgian airport is EBBR, operated by Brussels Airport Company. The other principal Airports in Belgium are Antwerp (EBAW), Charleroi (EBCI), Liège (EBLG), Oostende (EBOS) and Kortrijk (EBKT).

Civil Regulator

General Information

Civil aviation in Belgium is the responsibility of the FPS Mobility and Transport through the BCAA, which is the Belgian Civil Aviation Authority. The various national entities having regulatory or supervisory responsibilities in ATM are summarized in the table below. BCAA is further detailed in the following sections.

Activity in ATM:	Organisation responsible	Legal Basis
Rule-making	BCAA (Airspace department)	Royal Decree of 15 March 1954 Royal Decree of 19 December 2014 COMMISSION IR (EU) No 923/2012 of 26 SEP 2012 (SERA)
Safety Oversight	BCAA	Royal Decree of 14 February 2006
Enforcement actions in case of non-compliance with safety regulatory requirements	BCAA (BSA-ANS)	Law of 20 July 2005
Airspace	BCAA (Airspace department and BSA-ANS) *	Law of 27 June 1937
Economic	BCAA	Law of 27 June 1937
Environment	BCAA (Airspace Department)	Law of 27 June 1937
Security	BCAA (Aviation Inspectorate)	Law of 27 June 1937
Accident investigation	Air Accident Investigation Unit –AAIU(be)	For the issues not covered by new REG (EU) No. 996/2010, Royal decree of 09 December 1998

* The BCAA Airspace department and the BSA-ANS are the two organizations in charge of the Belgian airspace, the first on rulemaking and the second on supervision.

In Belgium, the Parliament is competent with respect to the making of laws. In 1937, it gave authority to the King to regulate on certain matters, including air transport. In some well-defined cases, the King has given authority to the Minister. For some rules, the Director General of the BCAA is competent by virtue of a delegation by the Minister. This applies to the regulation aspect, so the general rule for air transport is that it is a competence of the King.

The King bestows ranks within the army. He appoints individuals to general administrative functions and to foreign affairs, but for those exceptions established by law. He appoints individuals to other functions only by virtue of specific provisions of a law.

As regards to the management of air transport and the functioning of the department, the Minister is competent on the basis of the Royal Decree on government composition and portfolio allocation. The BCAA is a functional division of his administration. It does not have its own powers as administration.

BCAA

The BCAA is the civil aviation authority depending from the FPS Mobility and Transport under the jurisdiction of the Minister of Mobility. It is responsible for the certification of civil aircraft and equipment, supervises the safety of aviation in the national airspace, and acts as economic regulator.

Since 2 March 2005, a 5-year management contract between Belgocontrol and the Belgian State lays down the obligations of the national ANSP and clearly identifies the organisational, functional and institutional separation. The 3rd management contract is actually enforced by the Royal decree of 25 April 2014.

Annual Report published:	Y	The 2017 Update of the Belgian Plan for Aviation Safety (2016-2020) is available here: https://mobilit.belgium.be/sites/default/files/DGLV/aviation_safety_plan_2017_en_update.pdf?language=nl

See also http://mobilit.belgium.be/fr/transport_aerien/ and http://mobilit.belgium.be/nl/luchtvaart/.

The organisational chart of BCAA is available in Annex B.

Belgocontrol

Service provided

Governance:	Autonomous governmental company (corporatized since October 1998) (Public Business Entity)	Ownership:	100% state-owned

Services provided	Y/N	Comment
ATC en-route	Y	At and below FL 245. The responsibility for the provision of civil ATS in the Airspace above FL 245 has been delegated to Maastricht UAC (MUAC)
ATC approach		
ATC Aerodrome(s)		ATC provided in EBAW, EBBR, EBCI, EBLG and EBOS
AIS		
CNS		
MET		
ATCO training		The Belgocontrol training centre offers training, especially for ATCOs, meteorological and technical staff.
Others		Belgocontrol provides AFIS services at EBKT airport since November 2017. Belgocontrol also provides radio trunking services at EBBR.
Additional information:	Since April 2014 a third management contract between the Belgian State and Belgocontrol lays down the obligations of Belgocontrol for the 5 coming years.	
Provision of services in other State(s):		ATC between FL 165 and FL 245 in the Southern Part and between FL145 and FL 245 in the Northern Part in the G.D. of Luxemburg
Annual Report published:		https://www.belgocontrol.be/documents/10180/11113/AR-2015_FR.pdf/2859f4b6-22eb-4ac3-acf3-0c0152987e93 This is the annual report covering yearly activities of the ANSP.

See also www.belgocontrol.be

The organisational chart of Belgocontrol is available in Annex B.

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?	Mid-life upgrade foreseen in 2017-2018
Replacement of the ATC system by the new one is planned?	Under study
ATC Unit	EBBU ACC/APP, Towers

[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))

SDPS

Specify the manufacturer of the ATC system currently in use:	EUROCONTROL
Upgrade of the ATC system is performed or planned?	No
Replacement of the ATC system by the new one is planned?	Planned 2018 (HW replacement)
ATC Unit	EBBU ACC/APP, Towers

ATC Units

The only ACC of concern to this LSSIP is Brussels ACC, operating a maximum of 7 elementary en-route sectors (ES) which can be combined in a flexible and dynamic way. 16 different sector configurations are defined and can be easily changed pending to traffic demand, traffic complexity and available staffing.

The en-route sectors are responsible for the provision of ATS in the route structure of the Brussels FIR/UIR from 4500 ft to FL 245, which includes parts of the G.D. of Luxemburg airspace in the southern part between FL 165 and FL 245, in the Northern part between FL145 and FL245.

In addition to the en-route sectors the CANAC 2 operations room also houses 3 APP sectors, which are responsible for the provision of ATS within the Brussels Terminal Area.

The handling of OAT (and some GAT) in Brussels FIR/UIR (at all Flight Levels), including delegated airspace, is the responsibility of the military area ATS unit Military ATC Centre (ATCC).

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

ATC Unit	Number of sectors		Associated FIR(s)	Remarks
	En-route	TMA		
EBBUACC	7	0	EBBU FIR	Limited to the en-route part
EBBUAPP	0	3	EBBUFIR	Limited to the EBBR TMA & CTA
EBCIAPP	0	1	EBBUFIR	Limited to EBCI TMA
EBLGAPP	0	1	EBBUFIR	Limited to EBLG TMA
EBOS APP	0	1	EBBUFIR	Limited to EBOS TMA

Airports

General information

Brussels Airport Company is the limited company to which the Belgian State has granted the license to operate Brussels Airport. 75% of the company's shares are held by a consortium of private investors. The Belgian State has an interest of 25% of the shares.

The SOWAER (“Société wallonne des aéroports”) was incorporated in July 2001, at the initiative of the Walloon Region, sole shareholder of the company.It carries out on the airports of Charleroi/Gosselies and Liège/Bierset the following activities:

1. management of financial participations on behalf of the Walloon Region;
2. infrastructure - in terms of operational capability of the sites, provide services for the benefit of management companies;
3. development of economic zones around airports;
4. management of environmental programs on behalf of the Walloon Region;
5. financing security missions;
6. legal support.

The S.P.W. ("Service Public de Wallonie") carries out on the airports Charleroi/Gosselies and Liège/Bierset the oversight of safety activities and delivers access badges.

The S.P.W. is also responsible for:

1. the development of the safety management system;
2. the airport certification (Annex 14 of ICAO - S.P.W. is the certificate holder).

B.S.C.A. s.a. and B.S.C.A. security s.a. (Brussels South Charleroi Airport) / L.A. s.a. and L.A. security s.a.(Liège Airport) are in charge of all operational and commercial activities.

Airports covered by the LSSIP

Referring to the List of Airports in the Annex 2 of the European ATM Master Plan Level 3 Implementation Plan – Edition 2017, it is up to the individual State to decide which additional airports will be reported through LSSIP for those objectives.

So the following airports are covered in this LSSIP: EBBR (Brussels Airport), EBAW (Antwerp), EBCI (Charleroi), EBLG (Liège) and EBOS (Oostende).

The EUROCONTROL Public Airport Corner also provides information for the following airport(s):
https://ext.eurocontrol.int/airport_corner_public/EBBR

Military Authorithies

Military aviation in Belgium is the responsibility of the MoD. The Military Authorities play a major role in managing and controlling parts of the airspace and act as an OAT Regulatory Authority as well as an airspace user and an OAT ATS provider. The separation of Regulatory Authority and Service Provision is assured within the separate functions in the organisation. Airspace matters, in particular, are dealt with in the BELANC.

Co-ordination between the MoD (Air Component), Belgocontrol and BCAA is mainly dealt with in the BELANC and the DIRCOM.

The Air Component Commander has responsibilities for Operational Air Traffic (OAT) as Regulatory Authority, ATS Provider, Airspace User and Aircraft and Airbase Operator and reports to the Chief of Defence (CHOD) and MoD via Commander Operations and Training.

The Aviation Safety Directorate (ASD) ensures all the safety related functions, and is settled as an independent body within the Air Component. It has been put under the direct authority of the Air Component Commander. In case of major accident ASD reports directly to the CHOD instead of the Air Component Commander. Their regulatory, service provision and user role in ATM are detailed below.

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: Civ/Mil AIP Belgium & Luxemburg , ATM Instructions		Level of such legal provision: EC Regulations, Royal Decrees, Civ/Mil AIP Belgium & Luxemburg, LoAs (Letters of Agreement)	
Authority signing such legal provision: Air Component Commander		Authority signing such legal provision: Minister/Secretary of State for Mobility, King of Belgium	
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	Y	ANSP Certification	Y
ANSP Supervision	Y	ANSP Supervision	Y
Aircrew Training	Y	ESARR applicability	Y
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		National AIP	Y
EUROCONTROL eAIP		EUROCONTROL eAIP	Y
Other: LoAs		Other: LoAs	

Oversight

OAT	GAT
National oversight body for OAT: ComOpsAir	NSA (as per SES reg. 550/2004) for GAT services provided by the military: BSA-ANS
Additional information:	Additional information:

Service Provision role

OAT			GAT	
Services Provided:			Services Provided:	
En-Route	Y		En-Route	-
Approach/TMA	Y		Approach/TMA	Y
Airfield/TWR/GND	Y		Airfield/TWR/GND	Y
AIS	Y		AIS	-
MET	Y		MET	-
SAR	Y		SAR	Y
TSA/TRA monitoring	Y		FIS	Y
Other:			Other:	
Additional Information:			Additional Information:	

Military ANSP providing GAT services SES certified?	N	If YES, since:	-	Duration of the Certificate:	
Certificate issued by:	-		If NO, is this fact reported to the EC in accordance with SES regulations?		Y
Additional Information:					

User role

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

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

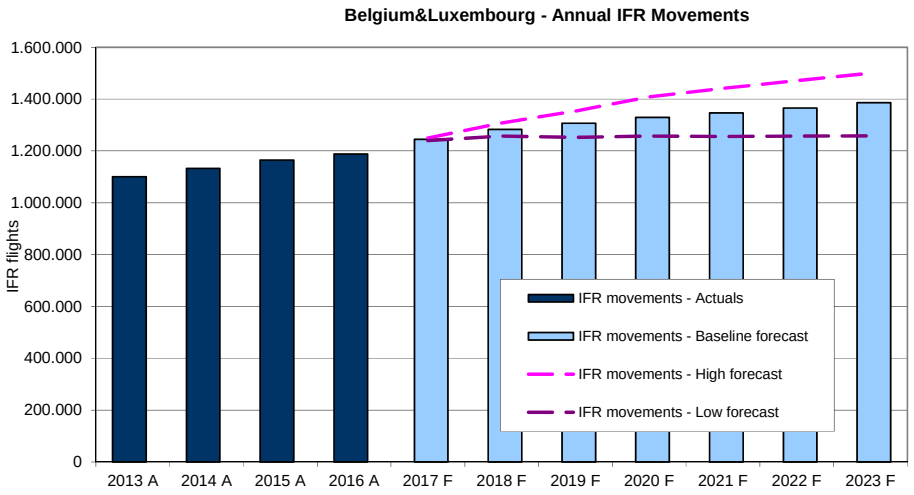
If Military fly GAT-IFR inside controlled airspace, specify existing special arrangements:								
No special arrangements				Exemption from Route Charges	Y			
Exemption from flow and capacity (ATFCM) measures				Provision of ATC in UHF				
CNS exemptions:	RVSM		8.33	Mode S		ACAS		
Others:								

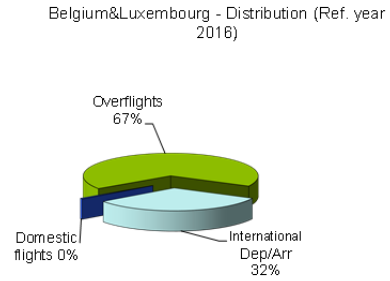
Flexible Use of Airspace (FUA)

Military in Belgium applies FUA requirements as specified in the Regulation No 2150/2005:
FUA Level 1 implemented: : Y ASM Level 1 is dealt with by BELANC . In case of disagreement or unsolved issues, BELANC reports to the DIRCOM.
FUA Level 2 implemented: Y The AMC is manned 24/7 and is responsible for all pre-tactical aspects of national and where applicable (Lead AMC) cross border Airspace Management. The civil and military airspace requests are the basis for the AUP/UUP publication. The publication of the AUP/UUP will be based on the priority rules and a CDM process between the Begian Defence, Belgocontrol and MUAC. The AMC publishes the daily Airspace Use Plans (AUP/UUP).
FUA Level 3 implemented: Y For some areas an Improved Level 3 is applied between the operational supervisors of ATCC Semmerzake, Brussels ACC and MUAC.

2. Traffic and Capacity

2.1. Evolution of traffic in Belgium





A = Actual
F = Forecast

EUROCONTROL Seven-Year Forecast (September 2017)											
IFR flights yearly growth		**2014 A**	**2015 A**	**2016 A**	**2017 F**	**2018 F**	**2019 F**	**2020 F**	**2021 F**	**2022 F**	**2023 F**
Belgium&Luxembourg	H				5.2%	4.6%	3.6%	4.0%	2.4%	2.0%	2.0%
	B	2.9%	2.8%	2.0%	4.8%	3.1%	1.9%	1.7%	1.3%	1.5%	1.5%
	L				4.4%	1.4%	-0.4%	0.4%	-0.1%	0.1%	0.1%
ECAC	B	1.7%	1.6%	2.8%	4.5%	2.8%	2.1%	1.9%	1.5%	1.7%	1.7%

2017

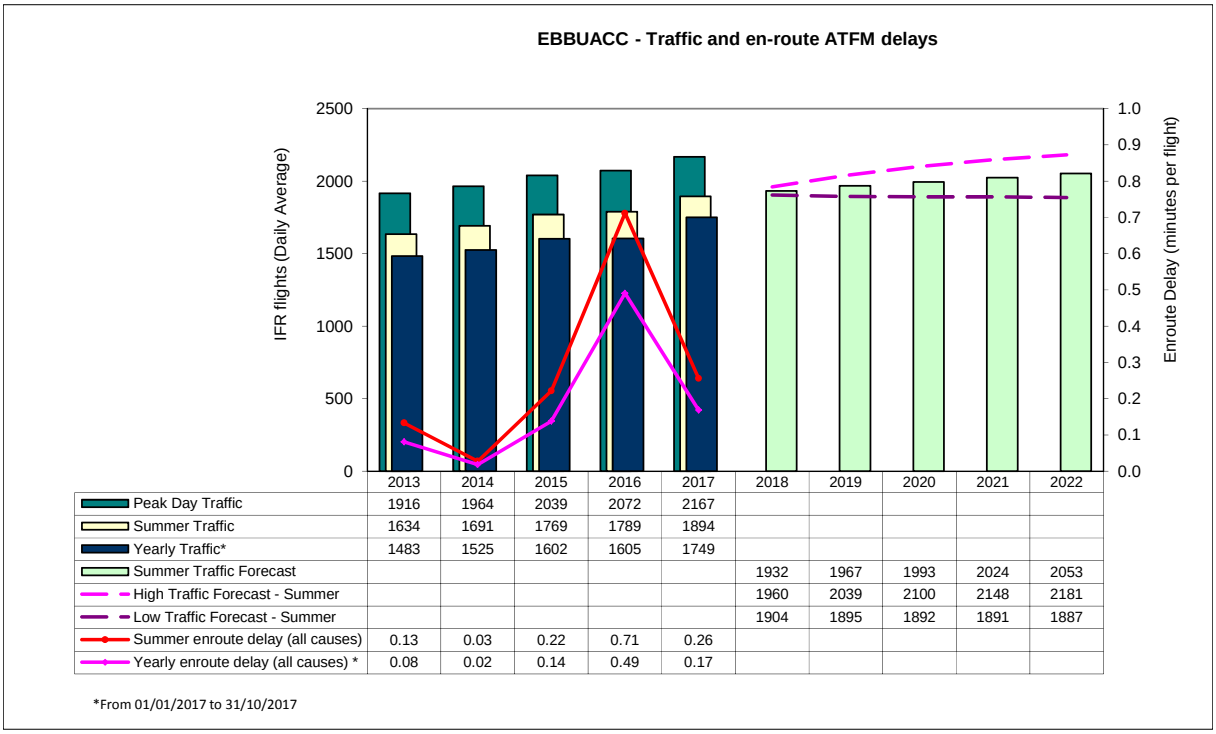
Traffic in Belgium increased by 5.6% during Summer 2017 (May to October), when compared to the same period during 2016.

2018-2022

The EUROCONTROL Seven-Year Forecast predicts an average annual increase between 0.3% and 3.3%, with a baseline growth of 1.9% during the planning cycle.

2.2. Brussels ACC

Traffic and en-route ATFM delays 2013-2022



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Peak Day Traffic	1916	1964	2039	2072	2167					
Summer Traffic	1634	1691	1769	1789	1894					
Yearly Traffic*	1483	1525	1602	1605	1749					
Summer Traffic Forecast						1932	1967	1993	2024	2053
High Traffic Forecast - Summer						1960	2039	2100	2148	2181
Low Traffic Forecast - Summer						1904	1895	1892	1891	1887
Summer enroute delay (all causes)	0.13	0.03	0.22	0.71	0.26					
Yearly enroute delay (all causes) *	0.08	0.02	0.14	0.49	0.17					

*From 01/01/2017 to 31/10/2017

Performance summer 2017

Traffic Evolution	2017 Capacity Baseline	En-route Delay (min/flight) - Summer		Capacity gap
		Ref value	Actual	
+5.9 %	133 (+13%)	0.05	0.26	Yes

The average en-route delay per flight decreased from 0.71 minutes per flight in Summer 2016 to 0.26 minutes per flight in 2017. 39% of the delays were due to Weather, 30% due to ATC staffing, 27% due to ATC capacity and 4% due to equipment.

Capacity Plan +6%	Achieved	Comments
Enhanced Civ/Mil ASM procedures	No	
Improved use of the route network as a result of FUA enhancement	No	
Enhancement of ATFCM procedures, including STAM	Yes	
ATFCM 2.0 Project (enhanced Pre-Tact)	Yes	
Segregation of EBCI and EBBR flows	No	Postponed to end of 2018
Recruitment of new ATCOs to maintain level of staffing	Yes	
Requalification of operational experts	Yes	
New rostering tool	Partially	
Dynamic roster	Partially	
Reassessment of sector capacities following CAPAN	Ongoing	
Maximum configuration: 6 sectors	Yes	6 sectors opened

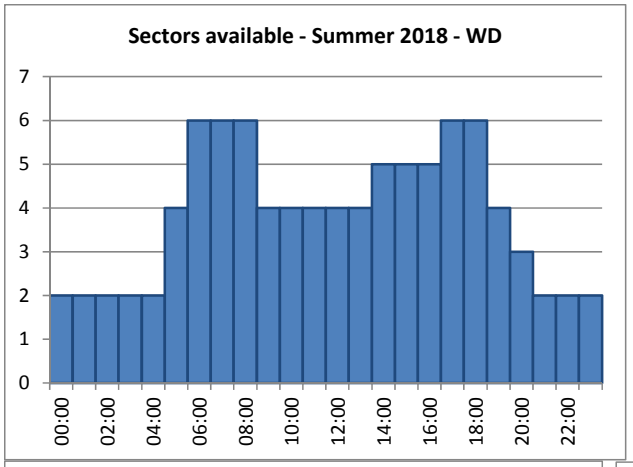
Summer 2017 performance assessment
The ACC capacity baseline was estimated to be at 133 in summer 2017. During the measured period, the average peak 1 hour demand was 129 and the average peak 3 hour demand was 119.

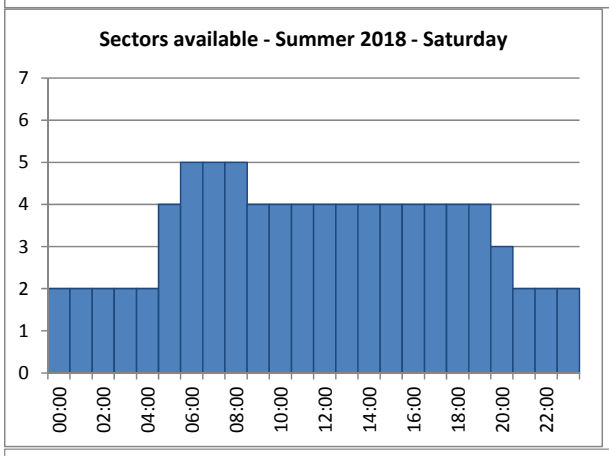
Planning Period 2018-2022

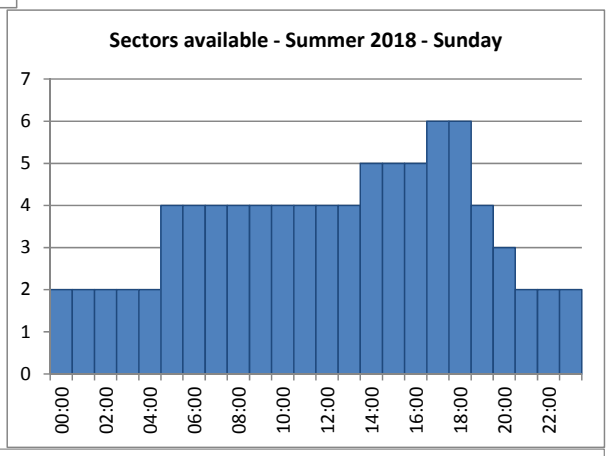
The planning focuses on the Summer season to reflect the most demanding period of the year from a capacity perspective. This approach ensures consistency with the previous planning cycles.

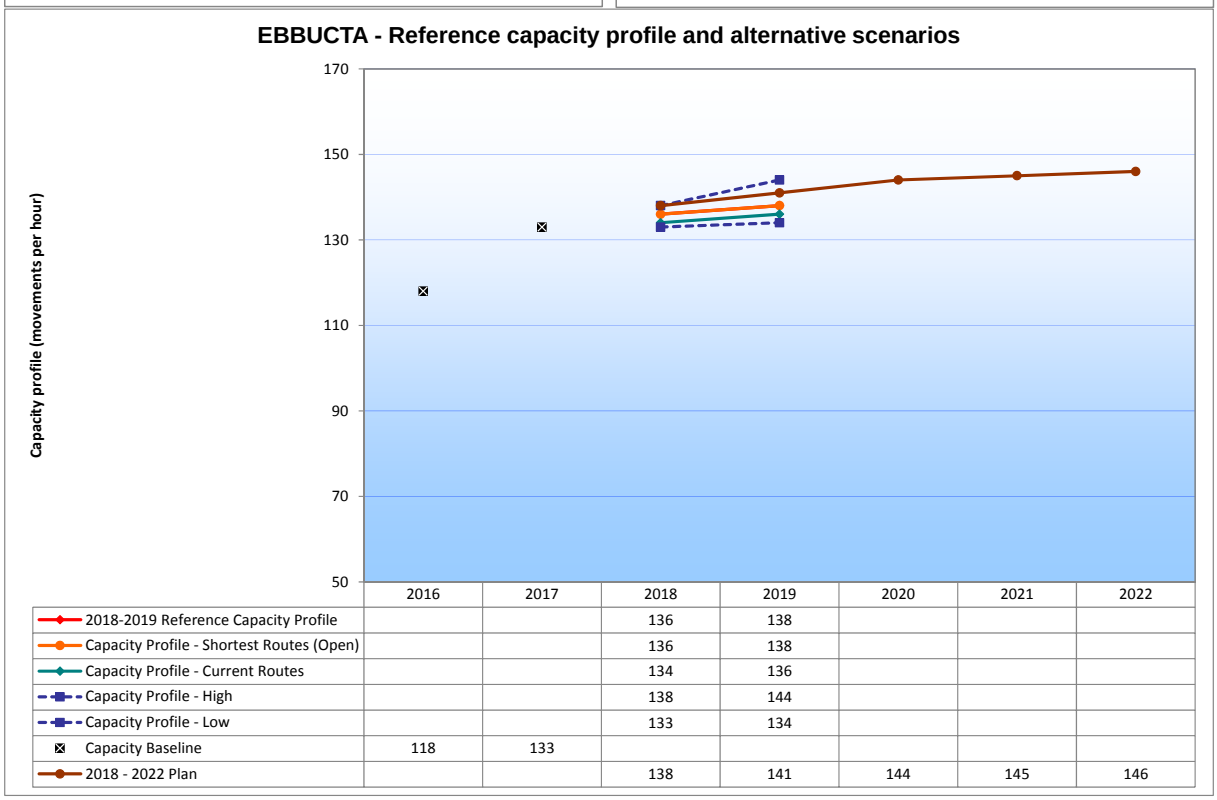
			Capacity Profiles			
ACC	2017 baseline		Profiles (hourly movements and % increase over previous year)			
			2018		2019	
EBBU	133	H	138	4%	144	4%
		Ref.	136	2%	138	1%
		L	133	0%	134	1%
		Open	136	2%	138	1%
		C/R	134	1%	136	1%

Summer Capacity Plan					
	2018	2019	2020	2021	2022
Free Route Airspace					
Airspace Management Advanced FUA	Enhanced Civ/Mil ASM procedures				
	Improved use of the route network as a result of FUA enhancement				
Airport & TMA Network Integration			Enhanced AMAN		Enhanced XMAN
Cooperative Traffic Management	Enhancement of ATFCM procedures, including STAM				
		ATFCM 2.0 Project (use of complexity assessment tools)			
Airspace		Segregation of EBCI and EBBR flows			
Procedures		Segregation of EBCI and EBBR flows			
Staffing	Recruitment of new ATCOs to maintain level of staffing				
	New ATCOs available				
	New rostering tool				
	Dynamic rostering				
Technical		CANAC2 hardware upgrade			
Capacity	Reassessment of sector capacities following CAPAN				
Significant Events			Runway works at EBBR (25R)		
Max sectors	6	6/7	6/7	6/7	6/7
Planned Annual Capacity Increase	4%	2%	2%	1%	1%
Reference profile Annual % Increase	2%	1%	N/A	N/A	N/A
Difference Capacity Plan v. Reference Profile	1.5%	2.2%	N/A	N/A	N/A
Annual Reference Value (min)	0.08	0.10	N/A	N/A	N/A
Summer reference value (min)	0.08	0.10	N/A	N/A	N/A









2018-2022 Planning Period Outlook

The performance is expected to remain close to the requirements for the planning period.

3. Master Plan Level 3 Implementation Report conclusions

Conclusions issued from the European ATM Master Plan Level 3 Implementation Report 2016 applicable to Belgium for all items that require corrective actions and improvements.

Conclusion	Applicable to
VERY GOOD PROGRESS IN IMPLEMENTATION OF BOTH FREE ROUTE AND DIRECT ROUTING. THIS MOMENTUM SHOULD BE KEPT AND SUPPORTED BY ALL INVOLVED STAKEHOLDERS. (page 14 of the Report)	All State that are implementing AOM21.1 and AOM21.2
State's action planned for this conclusion: NO **Description of the planned action:** Actions defined in objective AOM21.1 are assessed to be sufficient.	

Conclusion	Applicable to
ADQ IMPLEMENTATION ISSUES HAVE TO BE ADDRESSED AS SOON AS POSSIBLE AS THEY CAN IMPACT ON SWIM IMPLEMENTATION. (page 25 of the Report)	All States + EC
State's action planned for this conclusion: NO **Description of the planned action:** Actions defined in objective ITY-ADQ are assessed to be sufficient.	

4. Implementation Projects

4.1. National projects

Name of project:	Organisation(s):	Schedule:	Status:	ATM MP Links:
Implementation of VoIP	Belgocontrol (BE)	01/12/2016 - 31/12/2020	Belgocontrol plans the full integration of VoIP to its current main voice chain and its future fallback chain in 2020.	L3: COM11 DP2016: 3.1.4 Management of Dynamic airspace configurations RP2 PP: CAPEX 11: Voice Communication Switch: IP upgrade and hardware replacement
Renewal of part of air-ground-air Radio infrastructure	Belgocontrol (BE)	01/11/2015 - 31/12/2018	The renewal of radio equipment project is On-going. The purchase process is done. The installation of the new radio is planned from Q1/2018. Operational conversion to 8.33 is planned from Q4/2018.	L3: ITY-AGVCS2 RP2 PP: CAPEX 10: Renewal of part of the air-ground-air radio infrastructure
Traffic Complexity Tool	Belgocontrol (BE)	01/01/2017-01/07/2018	Belgocontrol launched a project in 2017 for the implementation of a traffic complexity assessment tool. Expected to be implemented in 2018. Project will run till 2019.	L3: FCM06

4.2. FAB projects

There are two main FABEC projects ongoing:

- XMAN (Extended Arrival Manager)
- FRA (Free Route Airspace)

Name of project:	Organisation(s):	Schedule:	Status:	ATM MP Links:
Extended Arrival Management (XMAN)	Belgocontrol (BE), DFS (DE), DSNA (FR), LVNL - Luchtverkeersleiding Nederland (NL), MUAC ANSP (MAS), Skyguide (CH)	The XMAN project envisages three development and implementation steps: 1. Basic Step - From 2012 to 2024 The Basic Step uses the currently available systems and technologies in order to establish cross-centre arrival management in the airspace controlled by Belgocontrol, DFS, DSNA, LVNL, MUAC and skyguide. 2. Advanced Step - From 2013 to 2024 The Advanced Step takes into account validated SESAR results in order to improve the en-route part of cross-centre arrival management in the overall FABEC airspace. This step requires enhanced data exchange between ACC/UAC in order to support a delay sharing strategy. Additional planning information related to departures and airborne flights will be provided by Airport-CDM and Network Management. This step has an impact on all FABEC ACCs. 3. Optimised Step - From 2018 to 2024 The Optimised Step will take into account further validated SESAR results and will optimise the cooperation between arrival management and Airport-CDM, Aircraft Operators and Network Management in order to widely share Arrival Management (AM) information between all partners and to process and to apply Arrival Management information where needed. This Optimised Step has been put on hold until needs beyond the Advanced Step become more apparent.	The FABEC XMAN Basic Step has already been implemented at several ACCs for several airports. The implementation phase of the Basic Step will continue until 2024. The Milestone 3 (solution design) of the Advanced Step was formally approved in September 2017. The first operational implementations are expected in the second half of 2018. The Optimised Step is planned to start in July 2018.	L3: ATC07.1, ATC15.1 L2: TS-0102, TS-0305

Name of project:	Organisation(s):	Schedule:	Status:	ATM MP Links:
Free Route Airspace (FRA)	Belgocontrol (BE), DFS (DE), DSNA (FR), LVNL - Luchtverkeersleiding Nederland (NL), MIL (DE), MUAC ANSP (MAS), Mil. Authority (BE), Mil. Authority (FR), Militaire Luchtvaart Autoriteit (NL), Skyguide (CH), Swiss Air Force (CH)	The FABEC FRA project was launched in 2011 with the objective of setting up a FABEC Free Route Airspace with Advanced Flexible Use of Airspace (A-FUA) at FL 365 (and lower when and where possible) in a stepped approach by the end of RP2. In 2015, the project has been aligned with the requirements of the Pilot Common Project requirements. This induced an implementation of FABEC Free Route Airspace at FL310+ by 2022. In 2016, the project was organised into two work streams 1. National and cross-border Direct Routes (DCT) including Long Range Direct Routings; 2. Free Routing. All Free Route initiatives conducted locally, bilaterally or within a FABEC framework are under the FABEC FRA umbrella. Implementation activities are managed at ACC or national level using local management processes and are monitored at FABEC level. In December 2017 the Project Management Plan version 4.0 has been approved. The project is now further supporting and monitoring the direct routing implementations and full FRA implementations. Next to this, the project team is also working on specific tasks like e.g. horizontal flight efficiency improvement of most-penalized city pairs.	DFS, DSNA, MUAC and skyguide have already implemented several direct routes and will continue to implement further direct routes in the coming years. On 7 December 2017, MUAC has achieved its first FRA implementation successfully (Full FRA at night).	L3: AOM21.1, AOM21.2 L2: AOM-0401, AOM-0402, AOM-0500, AOM-0501, AOM-0505, AOM-0506, CM-0102-A

5. Cooperation activities

5.1. FAB Co-ordination

FAB Europe Central (FABEC) consists of the following states: Belgium, France, Germany, Luxembourg, the Netherlands and Switzerland.

The FABEC Feasibility Phase (2006-2008) led to the conclusion that FABEC is feasible. The Implementation Phase (2008-2013) demonstrated that the FABEC structure was compliant with SES regulations.

After the ratification of the FABEC Treaty by all FABEC States, FABEC formally entered into force on the 1st of June 2013. This means that FABEC is now operational.

FABEC intends to deliver on the goals set by SES II and as laid down in the FABEC Performance Plan. FABEC intends to provide capacity, solve bottlenecks, reduce costs and emissions, make flying more efficient and ensure military mission effectiveness, while maintaining the high safety standards that exist over Europe.

5.2. Regional cooperation

Regional cooperation initiatives

Where deemed necessary, Belgian Defence relies on identical co-ordination arrangements with adjacent ANSPs. In addition, when deemed necessary, joint BELANC - LVC meetings are organised in order to improve and to harmonise all airspace projects.

UK is developing a Concept of Operations developing a transition altitude of 18,000ft in the UK-IRELAND FAB for implementation in winter 2017/18. Multi-lateral discussions between UK and the involved ANSPs & CAAs are on-going in order to revise and update all existing Memoranda of Understanding and Letters of Agreement as necessary.

At state level, a BEL-NLD ATM Cooperation has been established with the aim further improving bilateral cooperation in identified ATM-related domains. Involved in this initiative are CAA's, ANSP's (including MUAC) and Military Authorities.

Coordination with the 4-States / EUROCONTROL

BCAA, Belgocontrol and Belgian Defence have representatives within the Maastricht Coordination Group (MCG).

Belgocontrol participates in the 4-States WGs, the SURNET Board and the Common Network Group and participates in the RAPNET Network Management.

Certification and supervisory function on ANS provision in BENELUX and German airspace

The DGCAs of Belgium, The Netherlands, Luxembourg and Germany (the 4 States) have agreed that the NSAs of the 4 States will co-operate in the certification and supervision of MUAC, which is providing ANS in the airspace falling under their responsibility.

To accomplish this cooperation, an NSA Committee of the 4 States has been established. The certification of MUAC took place in 2007 and ongoing supervision on behalf of the four NSAs is performed by audits and surveys on a regular basis.

Co-operation between Defence, Belgocontrol and MUAC

Defence, MUAC and Belgocontrol co-operate very closely in different operational and technical working arrangements. Of special importance is the co-operation between the MIL ATCC Semmerzake, MUAC and Belgocontrol since all provide ATS in Brussels FIR/UIR. Flight and radar data is exchanged between the units on GAT in Brussels FIR/UIR. The feasibility to provide OAT flight data to MUAC and Belgocontrol will be investigated.

On 22nd December 2016, the BEL Military Authority has signed an agreement with Eurocontrol MUAC on the development and implementation of the Shared ATS System 2 (SAS2), a direct development of the ATS system in use at MUAC. By the end of 2019, this SAS2 system will be operational in all BEL military ATC units (en-route, approach and tower), enhancing interoperability and coordination between these ANSP's.

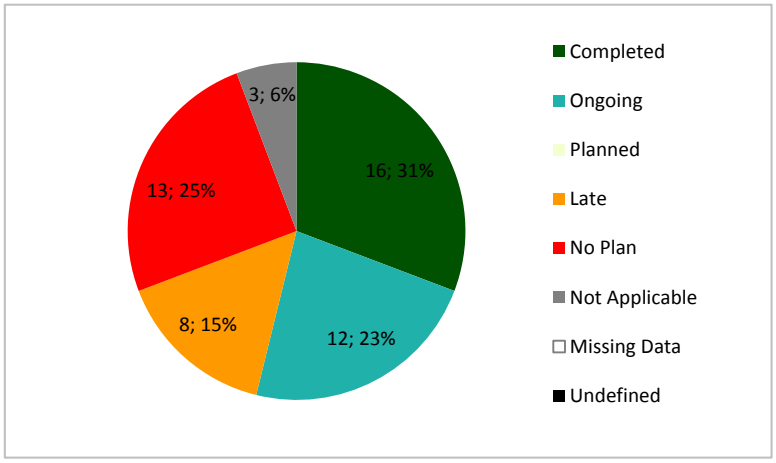
On 19th May 2017, MoD and MoT have reached a political agreement on the synergy project which aims for a co-location of the Civ and Mil en-route centers at the Belgocontrol premises at Steenokkerzeel in 2019.

6. Implementation Objectives Progress

6.1. State View

Overall Objective Implementation

Progress distribution for applicable Implementation Objectives



In 2017, a significant effort was made towards the completion of objective ENV01 with the implementation of CDO procedures at EBLG and EBCI airport.

For 2018, completion of the objective ITY-AVGCS2 by the end of the year will require sustained efforts from the ANSP (installation and testing of radio equipment) as well as from the BCAA (especially tracking users of non-compliant radio equipment). Efforts to get the full aeronautical data chain compliant to the ADQ regulation (objective ITY-ADQ) will continue in 2018.

Objective Progress per SESAR Key Feature

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

Legend:

▲ ## % = Expected completion / % Progress

▲ 100% = Objective completed

= Implementation Objective timeline (different colour per KF)

= Completion beyond Implementation Objective timeline

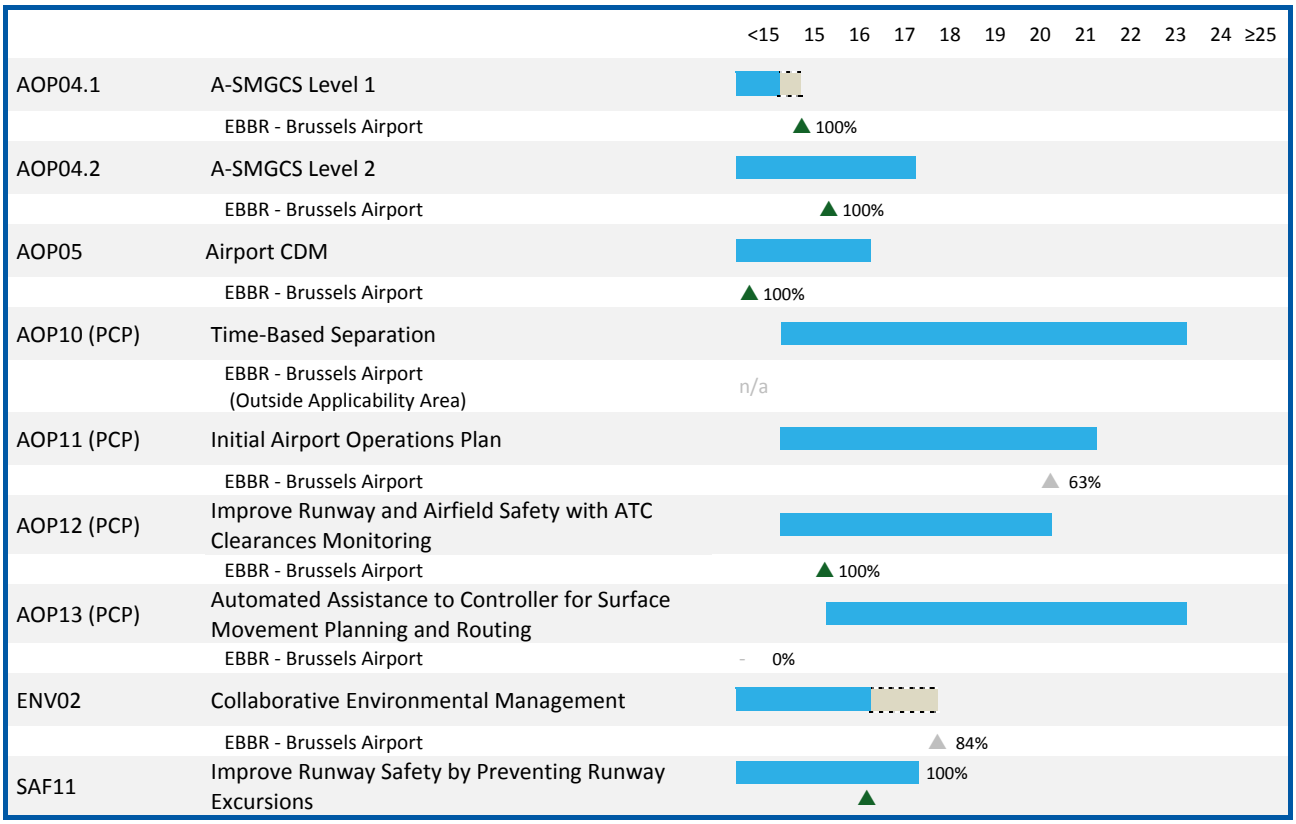
Optimised ATM Network Services

		<15 15 16 17 18 19 20 21 22 23 24 ≥25
AOM13.1	Harmonise Operational Air Traffic (OAT) and General Air Traffic (GAT) handling	91%
AOM19.1 (PCP)	ASM Support Tools to Support AFUA	83%
AOM19.2 (PCP)	ASM Management of Real-Time Airspace Data	63%
AOM19.3 (PCP)	Full rolling ASM/ATFCM Process and ASM Information Sharing	50%
FCM01	Enhanced Tactical Flow Management Services	67%
FCM03	Collaborative Flight Planning	45%
FCM04.1	STAM Phase 1	33%
FCM04.2 (PCP)	STAM Phase 2	0%
FCM05 (PCP)	Interactive Rolling NOP	24%
FCM06 (PCP)	Traffic Complexity Assessment	10%

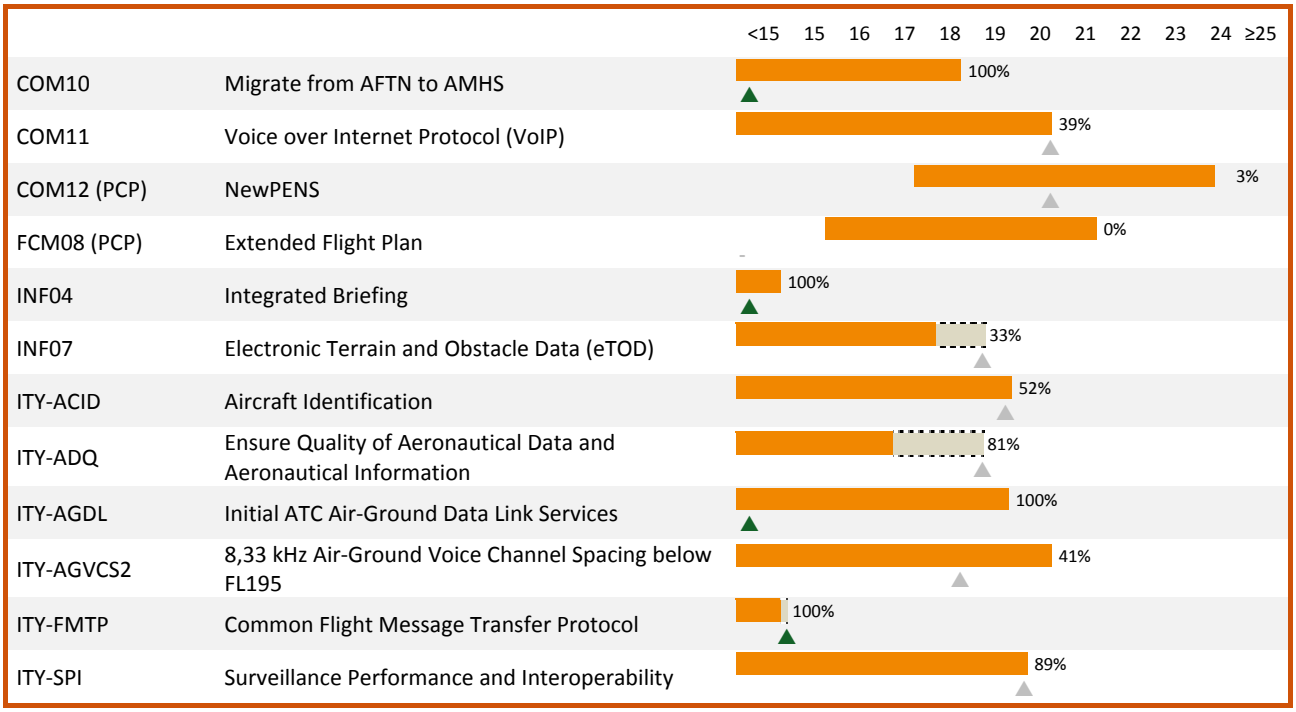
Advanced Air Traffic Services

		<15 15 16 17 18 19 20 21 22 23 24 ≥25
AOM21.1 (PCP)	Direct Routing	35%
AOM21.2 (PCP)	Free Route Airspace	n/a
AOP14	Remote Tower Services	Local objective
	EBBB - BRUSSELS (COM CENTRE)	n/a
ATC02.2	STCA En-Route	100%
ATC02.8	Ground-Based Safety Nets	100%
ATC02.9	Enhanced STCA for TMAs	100%
ATC07.1	AMAN Tools and Procedures	
	EBBR - Brussels Airport	50%
ATC12.1	Automated Support for Conflict Detection, Resolution Support Information and Conformance Monitoring	0% -
ATC15.1	Information Exchange with En-route in Support of AMAN	0%
ATC15.2 (PCP)	Arrival Management Extended to En-route Airspace	0% -
ATC16	ACAS II Compliant with TCAS II Change 7.1	100%
ATC17	Electronic Dialogue as Automated Assistance to Controller during Coordination and Transfer	24% -
ATC18	Multi Sector Planning En-route - 1P2T	Local objective n/a
ENV01	Continuous Descent Operations	
	EBAW - Antwerp Airport (Outside Applicability Area)	25%
	EBBR - Brussels Airport	100%
	EBCI - Charleroi Airport	100%
	EBLG - Liege Airport	100%
	EBOS - Oostende Airport	20%
ENV03	Continuous Climb Operations	Local objective
	EBVA - BELGOCONTROL/HQ	n/a
ITY-COTR	Ground-Ground Automated Co-ordination Processes	73% -
NAV03.1	RNAV 1 in TMA Operations	91%
NAV03.2 (PCP)	RNP 1 in TMA Operations	0% -
NAV10	APV procedures	90%
NAV12	Optimised Low-Level IFR Routes in TMA for Rotorcraft	Local objective 0% -

High Performing Airport Operations



Enabling Aviation Infrastructure



ICAO ASBU Implementation

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 2017 declared statuses and progress of the relevant Implementation objectives in accordance with the mapping approved by ICAO EUR EANPG/59 (European Air Navigation Planning Group).

Legend:

= Completed (during 2017 or before)

= Progress achieved in 2017

= Missing planning date

= Not applicable

		<16 16 17 18 19 20 21 22 23 24 ≥25
B0-APTA	Optimization of Approach Procedures including vertical guidance	90% → 100%
B0-SURF	Safety and Efficiency of Surface Operations (A-SMGCS Level 1-2)	100%
B0-FICE	Increased Interoperability, Efficiency and Capacity through Ground-Ground Integration	66% → 100%
B0-DATM	Service Improvement through Digital Aeronautical Information Management	90% → 100%
B0-ACAS	ACAS Improvements	100%
B0-SNET	Increased Effectiveness of Ground-Based Safety Nets	100%
B0-ACDM	Improved Airport Operations through	100%
B0-RSEQ	Improved Traffic flow through Runway sequencing (AMAN/DMAN)	25% → 100%
B0-FRTO	Improved Operations through Enhanced En-Route Trajectories	73% → 100%
B0-NOPS	Improved Flow Performance through Planning based on a Network-Wide view	56% → 100%
B0-ASUR	Initial capability for ground surveillance	89% → 100%
B0-CDO	Improved Flexibility and Efficiency in Descent Profiles (CDO)	69% → 100%
B0-TBO	Improved Safety and Efficiency through the initial application of Data Link En-Route	100%

6.2. Detailed Objectives Implementation progress

Note: The detailed table of applicability area for the Implementation Objectives is available in Annex C.

Objective/Stakeholder Progress Code:			
Completed		No Plan	
Ongoing		Not Applicable	
Planned		Missing Data	
Late			

Main Objectives

AOM13.1	**Harmonise Operational Air Traffic (OAT) and General Air Traffic (GAT) Handling** ***Timescales:*** Initial operational capability: 01/01/2012 Full operational capability: 31/12/2018		**91%**	**Ongoing**
	-			
Refer to REG, ASP and Mil Authority comments				**31/12/2018**
REG (By:12/2018)				
Mil. Authority	-	-	100%	Completed 31/12/2011
BCAA	The annual FUA report describes the status of the Belgian implementation. No addtional actions are considered as necessary.	-	100%	Completed 31/12/2011
ASP (By:12/2018)				
Mil. Authority	-	-	100%	Completed 31/12/2011
Belgocontrol	Currently there is no requirement at Belgocontrol for OAT handling. The planning will depend on the completion of the actions of the regulator.	-	%	Not Applicable -
MIL (By:12/2018)				
Mil. Authority	The Belgian Air Force has implemented the EUROAT rules in 2011. The exceptions to these EUROAT rules are published via the "National Chapter" and published in the AIP Belgium & Luxembourg. The TA COMMON AIP has been signed in APRIL 2016: migration to EAD for SDO and PAMS is effective as from SEPT 2016. NOTAM provision by means of EAD is expected during the year 2018 to be ready before the synergy with Belgocontrol.	-	85%	Ongoing 31/12/2018

AOM19.1 (PCP)	**ASM Support Tools to Support Advanced FUA (AFUA)** ***Timescales:*** Initial operational capability: 01/01/2011 Full operational capability: 31/12/2018		**83%**	**No Plan**
	-			
LARA tool implemented and used to introduce civil booking since 07 March 2013.				**-**
ASP (By:12/2018)				
Belgocontrol	-	-	67%	No Plan -
Mil. Authority	The Belgian Air Force implemented LARA as client of the Belgian cluster in April 2012, LARA being an airspace management tool that allows visualisation of MIL airspace bookings between not only the military users and service providers, but also towards the civil ANSP's to enhance FUA level 2 and 3. The FUA LOA describing working arrangements between the military and civil ANSP's and the working procedures for FUA L 2 and 3 was signed in June 2012, and applied since. On 1 December 2013 an update of this FUA LOA was signed by the Civil and Military ANSP's allowing an improvement for pre-tactical FUA Level 2 by promulgating on a daily basis on working days a AUP and a UUP 1. On the days were a military night flight is planned, also a UUP 2 will be published on the day of operations at 1400 L. 1. In 2016 the LARA V3 has been released and accepted. This new version includes the following improvements: - HMI and housekeeping ameliorations - New functionalities for the drafting of AUP/UUP - B2B service with the NM 2. As from the 13th of October 2016 a live trial is conducted between Belgocontrol and Defense on the interface to connect the LARA tool to the ADIDS and EUROCAT system. This in order to automate the data input in the EUROCAT TSA window and the ADIDS interface, which in their turn can trigger an automated display of selected active military areas on the Belgocontrol Controller Working Positions (CWPs) and provide airspace data on the ADIDS application (Aeronautical Data Information Display System). The trial is currently planned until 30 Jun 17. 3. As from the 25th of July 2016 a live trial is conducted between MUAC and Defense to release TRAS above FL365, for non-booked Mil airspace, at D-1 1700L, to MUAC for vectoring airspace (step 1). In step 2, the context of step 1 will be extended also to Reims UAC within its AoR. In a final step (step 3), the AMC Belgian can open routes to GAT, except if otherwise requested by the ANSPs. This trial is planned until 31 Mar 17.	-	100%	Completed 31/12/2015

AOM19.2 (PCP)	**ASM Management of Real-Time Airspace Data** ***Timescales:*** Initial operational capability: 01/01/2017 Full operational capability: 31/12/2021		**63%**	**Ongoing**
-				
Refer to ASP and Mil Authority comments				**31/12/2019**
ASP (By:12/2021)				
Belgocontrol	-	-	65%	Ongoing 31/12/2018
Mil. Authority	Belgian Defence implemented LARA as client of the Belgian cluster in April 2012. Currently using LARA V.3.078. Implementation of SAS2 in 2019 will augment ASM Management of Real-Time Airspace Data.	-	60%	Ongoing 31/12/2019

AOM19.3 (PCP)	**Full Rolling ASM/ATFCM Process and ASM Information Sharing** ***Timescales:*** Initial operational capability: 01/01/2014 Full operational capability: 31/12/2021		**50%**	**No Plan**
-				
Refer to ASP and Mil Authority comments				**-**
ASP (By:12/2021)				
Belgocontrol	Belgocontrol is using the LARA tool as client of the BE LARA cluster. LARA supports a full rolling ASM/ATFCM process.	-	50%	No Plan -
Mil. Authority	Belgian Defence implemented LARA as client of the Belgian cluster in April 2012, LARA being an airspace management tool that allows visualization of MIL airspace bookings between not only the military users and service providers, but also towards the civil ANSP's to enhance FUA level 2 and 3. In 2016 the LARA V3 has been released and accepted. This new version includes the following improvements: - HMI and housekeeping ameliorations - New functionalities for the drafting of AUP/UUP - B2B service with the NMOC The FUA LOA between Defense, Belgocontrol and MUAC, describing working arrangements between the military and civil ANSP's and the working procedures for FUA L 2 and 3 was signed in June 2012, and applied since. On 1 December 2013 an update of this FUA LOA was signed by the Civil and Military ANSP's allowing an improvement for pre-tactical FUA Level 2 by promulgating on a daily basis on working days a AUP and a UUP 1. On the days were a military night flight is planned, also a UUP 2 will be published on the day of operations at 1400 L. As from the 25th of July 2016 a live trial is conducted between MUAC and Defense to release TRAS above FL365, for non-booked Mil airspace, at D-1 1700L, to MUAC for vectoring airspace (step 1). In step 2, the context of step 1 will be extended also to Reims UAC within its AoR. In a final step (step 3), the AMC Belgian can open routes to GAT, except if otherwise requested by the ANSPs. As from step 3 (route opening), the airspace release will be translated in the relevant UUP.	-	50%	No Plan -

AOM21.1 (PCP)	**Direct Routing** ***Timescales:*** Initial Operational Capability: 01/01/2015 Full Operational Capability: 31/12/2017		**35%**	**Not Applicable**
		-		
Refer to ASP and Mil Authority comments				**31/12/2018**
ASP (By:12/2017)				
Mil. Authority	The Military Authority is not implemented in provision of Direct Routing to GAT; the ANSP and Air Defence systems do allow direct routings of OAT.	Free Route Airspace	%	Not Applicable -
Belgocontrol	First package of DCTs have been implemented on Dec 2015. ATCOs have received E-learning module to get acquainted with these DCT routes LOAs have been updated accordingly were applicable. Other initiatives are being investigated for further development. Current CII system has been updated to support these DCT routes.	Free Route Airspace	24%	Late 31/12/2018

AOM21.2 (PCP)	**Free Route Airspace** **(Outside Applicability Area)** ***Timescales:*** - not applicable -		**%**	**Not Applicable**
		-		
Refer to ASP and Mil Authority comments				-
ASP (By:12/2021)				
Belgocontrol	Some initiatives have been taken and implemented at national and FABEC level, but there is up to now no overall FRA concept.	Free Route Airspace	%	Not Applicable -
Mil. Authority	Some initiatives have been taken and implemented at national and FABEC level, but there is up to now no overall BEL FRA concept. Defence participates to the FABEC FRA project especially for the discussions regarding FRA during Mil activities. The Military authority, as a member of the HLAPB can be consulted by the civil partners (CAA and ANSP's), in order to participate in the realisation of FRA. The Military authority does not take the initiative for the implementation of FRA.	Free Route Airspace	100%	Completed 31/12/2013

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**
EBBR - Brussels Airport				
All surveillance equipment (SMRs and multilateration) is installed and operating. Vehicle tracking is fully operational since June 2015. Personnel has been trained on the installed SMR and multilateration equipment. Training for maintenance personnel of vehicle transponders and operational staff has been finalised. Verification by the BCAA takes place as part of the on-going oversight since June 2015. All MIL transport aircraft are Mode S equipped.				**30/06/2015**
REG (By:12/2010)				
BCAA	BCAA considers that an official mandating does not appear to be necessary. Verification by the BCAA takes place as part of the on-going oversight since June 2015.	-	100%	Completed 30/06/2015
Mil. Authority	All transport aircraft are Mode S equipped	-	100%	Completed 31/12/2014
ASP (By:12/2011)				
Belgocontrol	All surveillance equipment (SMRs and multilateration) is installed and operating. Vehicle tracking is fully operational since June 2015. Personnel has been trained on the installed SMR and multilateration equipment. Training for maintenance personnel of vehicle transponders and operational staff has been finalised.	-	100%	Completed 25/06/2015
APO (By:12/2010)				
Belgocontrol	Installation of required surveillance equipment is done by Belgocontrol. For vehicle tracking, the training (technical use and maintenance of transponder) will be handled by Belgocontrol. Vehicle tracking is fully operational since June 2015.	-	100%	Completed 30/06/2015
Mil. Authority	Bel Defence ground vehicles operating on civil side of EBBR airport have been equipped by Belgocontrol mid 2015.	-	100%	Completed 30/06/2015
Brussels Airport Company	Training of vehicle drivers is under the control of Brussels Airport Company.	-	100%	Completed 30/06/2015

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**
EBBR - Brussels Airport				
-				**01/02/2016**
ASP (By:12/2017)				
Belgocontrol	The initial runway conflict detection was based on stopbar control and triggered by ground radar data and flight plan clearance information. These tools have been gradually implemented in the Airport Movement System (AMS) system for use in EBBR Tower operations. The development and validation of a more advanced runway safety net by Electronic Flight Strips, in line with the related SESAR work packages, has been developed in 2011-2012 as a major AMS development project activity for EBBR. Runway Safety Net evaluation tools were made available for operational use in January 2013. Vehicle tracking is fully operational since Q2 2015 (see AOP04.1). All aerodrome controllers are trained on the use of the new Belgocontrol A-SMGCS Level 2 systems. Operational procedures were implemented together with the new tools.	-	100%	Completed 01/02/2016
APO (By:12/2017)				
Brussels Airport Company	Issue handled by and coordinated with Belgocontrol.	-	%	Not Applicable -

AOP05	**Airport Collaborative Decision Making (A-CDM)** ***Timescales:*** Initial operational capability: 01/01/2004 Full operational capability: 31/12/2016		**100%**	**Completed**
EBBR - Brussels Airport				
KPIs have been agreed. EBBR is a pilot project for A-CDM and local airport operations procedures have been implemented. A MoU has been signed in June 2008. Target-Off Block Time (TOBT) procedure is implemented and running on full scale locally. Airport performance is reviewed and measured every 6 months. Flight Update Messages (FUM) and Departure Planning Information (DPI) are operational. Adverse Conditions are implemented since 22 November 2013 where all stakeholders are involved in the process with clearly defined responsabilities for each partner. Adverse Conditions are evaluated and will be optimized in the frame objective AOP 11 Initial Aiport Operations Plans.				**30/11/2013**
ASP (By:12/2016)				
Belgocontrol	EBBR was the second European airport to implement A-CDM and local airport operations in that respect. Target-Off Block Time (TOBT) procedure is implemented and running on full scale locally. Airport performance is reviewed and measured every 6 months. Flight Update Messages (FUM) are received from CFMU and shared with the other airport stakeholders. Departure Planning Information Messages (DPI) are sent from the AMS system since 29 June 2010. The CDM MoU was signed in May 2008. From 2004 to 2009, A-CDM implementation activities at EBBR have been mainly realized by the ANSP (Belgocontrol). From 2009 onwards, the airport authority (BAC) started integrating additional functions within their domain of responsibility (turn-around process) on the existing CDM platform. Adverse Conditions are implemented since 22 November 2013 where all stakeholders are involved in the process with clearly defined responsabilities for each partner. Adverse Conditions are evaluated and will be optimized in the frame objective AOP 11 Initial Aiport Operations Plans.	-	100%	Completed 30/11/2013
APO (By:12/2016)				
Brussels Airport Company	KPIs have been agreed. EBBR is a pilot project for A-CDM and local airport operations procedures have been implemented. A MoU has been signed in June 2008. Target-Off Block Time (TOBT) procedure is implemented and running on full scale locally. Airport performance is reviewed and measured every 6 months. Flight Update Messages (FUM) and Departure Planning Information (DPI) are operational. Adverse Conditions are implemented since 22 November 2013 where all stakeholders are involved in the process with clearly defined responsabilities for each partner. Adverse Conditions are evaluated and will be optimized in the frame objective AOP 11 Initial Aiport Operations Plans.	-	100%	Completed 30/11/2013

AOP10 (PCP)	**Time-Based Separation** ***Timescales:*** - not applicable -		%	Not Applicable
EBBR - Brussels Airport **(Outside Applicability Area)**				
Brussels National airport is outside the applicability area of this objective.				-
REG (By:12/2023)				
BCAA	-	-	%	Not Applicable -
ASP (By:12/2023)				

AOP11 (PCP)	**Initial Airport Operations Plan** ***Timescales:*** Initial Operational Capability: 01/01/2015 Full Operational Capability: 31/12/2021		**63%**	**Ongoing**
EBBR - Brussels Airport				
Refer to ANSP and APO comments.				**31/12/2020**
ASP (By:12/2021)				
Belgocontrol	Belgocontrol launched a study with BAC in 2017 on the implementation of an AOP at Brussels Airport.	-	75%	Ongoing 31/12/2018
APO (By:12/2021)				
Regional Airports	-	-	58%	Ongoing 31/12/2020
Brussels Airport Company	The AOP is managed in a complete programme. Some projects of this programme have already been completed, some are on-going, others need to be started. Close collaboration between Belgocontrol, Brussels Airlines and Brussels Airport Company is required	-	58%	Ongoing 31/12/2020

AOP12 (PCP)	**Improve Runway and Airfield Safety with Conflicting ATC Clearances (CATC) Detection and Conformance Monitoring Alerts for Controllers (CMAC)** ***Timescales:*** Initial operational capability: 01/01/2015 Full operational capability: 31/12/2020		**100%**	**Completed**
EBBR - Brussels Airport				
Refer to ASP and APO comments				**31/12/2015**
ASP (By:12/2020)				
Belgocontrol	Airport Safety nets as foreseen in the PCP for 01/01/2021 were finalized in Feb 2016 (see also AOP04.2). Controllers have been trained for the usage of the safety nets in May 2014 and Nov 2015. Electronic strips have been in operational use since the early 2000s. ATC clearance monitoring has been developed over the years (LND or T/O clearance with pending runway clearance). ATC clearances have also been included in the safety nets between Aug 2014 and Dec 2015. A feasibility study is being conducted in 2016-2017 to declare the cleared taxi route on the EFS in the frame of the PCP (due date 01/01/2024). The routing function is addressed in AOP13 so this objective can be closed.	-	100%	Completed 31/12/2015
APO (By:12/2020)				
Mil. Authority	All 15W pilots (using Brussels National Airport) are trained according to ATPL or equivalent.	-	100%	Completed 31/12/2015
Brussels Airport Company	-	-	100%	Completed 31/12/2013

AOP13 (PCP)	**Automated Assistance to Controller for Surface Movement Planning and Routing** ***Timescales:*** Initial operational capability: 01/01/2016 Full operational capability: 31/12/2023		**0%**	**No Plan**
EBBR - Brussels Airport				
-				**-**
REG (By:12/2023)				
BCAA	-	-	0%	No Plan -
ASP (By:12/2023)				
Belgocontrol	A feasibility study has been performed and completed in April 2017 (see INEA IP call 2014-#018AF2), to declare the cleared taxi route on the EFS in the frame of the PCP (due date 01/01/2024). This includes an extension of the safety nets to the movement area (route deviation alerts and restricted area infringements). However the latter seems not part of this objective. Eurocontrol standards are under development. Operational implementation shall be done in the coming years taking on board this new standard.	-	0%	No Plan -

ATC02.8	**Ground-Based Safety Nets** ***Timescales:*** Initial operational capability: 01/01/2009 Full operational capability: 31/12/2016		**100%**	**Completed**
-				
Refer to ASP and Mil. Authority comments				**30/11/2009**
ASP (By:12/2016)				
Mil. Authority	APW and MSAW are implemented in SEROS II and ATCOs are trained.	-	100%	Completed 31/12/2008
Belgocontrol	-	-	100%	Completed 30/11/2009

ATC02.9	**Enhanced Short Term Conflict Alert (STCA) for TMAs** ***Timescales:*** Initial operational capability: 01/01/2018 Full operational capability: 31/12/2020		**100%**	**Completed**
-				
Refer to ASP input				**-**
ASP (By:12/2020)				
Belgocontrol	Belgocontrol has already a STCA function implemented that technically complies with the Eurocontrol standard referred to in this objective. Further analysis is required to determine whether this specific objective applies to Belgocontrol and in which regard it does impact our current STCA. No plan for "enhancement".	-	100%	Completed -

ATC07.1	**AMAN Tools and Procedures** ***Timescales:*** Initial operational capability: 01/01/2007 Full operational capability: 31/12/2019		**50%**	**Ongoing**
EBBR - Brussels Airport				
An AMAN (Maestro) was implemented with the new CANAC 2 system in November 2009. In November 2010 the Maestro software has been upgraded. The AMAN is currently used as an information tool. Belgocontrol will set up a follow-on project in 2018 aiming at fully implementing this objective.				**31/12/2018**
ASP (By:12/2019)				
Belgocontrol	An AMAN (Maestro) was implemented with the new CANAC 2 system in November 2009. In November 2010 the Maestro software has been upgraded. The AMAN is currently used as an information tool. Belgocontrol will set up a follow-on project in 2018 aiming at fully implementing this objective.	Extended Arrival Management	50%	Ongoing 31/12/2018

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		**0%**	**No Plan**
-				
Belgocontrol has implemented MTCD tool in the CANAC 2 Eurocat system. This function is however inhibited by default but can be put into operation. Currently no precise planning exists.				**-**
ASP (By:12/2021)				
Belgocontrol	Belgocontrol has implemented MTCD tool in the CANAC 2 Eurocat system. This function is however inhibited by default but can be put into operation. Currently no precise planning exists.	-	0%	No Plan -

ATC15.1	**Information Exchange with En-route in Support of AMAN** ***Timescales:*** Initial operational capability: 01/01/2012 Full operational capability: 31/12/2017		**0%**	**Late**
-				
The Eurocat system is partially compliant. System evolutions are required in the concerned ANSPs to comply with the required system level. Procedures to be developed, standard working methods to be adapted.				**30/06/2019**
ASP (By:12/2017)				
Belgocontrol	The AMAN present in the Eurocat system (Maestro) faces several (technical) shortcomings and needs to be upgraded. The upgrade constitutes a necessary pre-requisite for LSSIP objectives ATC15.1 & ATC15.2. Belgocontrol plans to initiate a study in 2018. Implementation will not occur prior 2019.	Extended Arrival Management	0%	Late 30/06/2019

ATC15.2 (PCP)	**Arrival Management Extended to En-route Airspace** ***Timescales:*** Initial operational capability: 01/01/2015 Full operational capability: 31/12/2023		**0%**	**No Plan**
-				
Refer to ASP comments				**-**
ASP (By:12/2023)				
Belgocontrol	At this stage, no plan has been elaborated.	-	0%	No Plan -

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		**24%**	**No Plan**
-				
-				**-**
ASP (By:12/2018)				
Belgocontrol	All messages have been technically implemented in the Eurocat system but not yet tested operationally. Following such tests adaptations could be necessary. The planning needs to be discussed at FABEC level. No firm planning exists however.	-	24%	No Plan -

COM10	**Migrate from AFTN to AMHS** ***Timescales:*** Initial operational capability: 01/12/2011 Full operational capability: 31/12/2018		**100%**	**Completed**
-				
-				**31/12/2013**
ASP (By:12/2018)				
Mil. Authority	Defence has no plans to directly use AMHS End user systems. Currently Defence interconnects to ISAAC system of Belgocontrol which offers translation between the legacy AFTN connection and the AMHS. With the roll-out of EAD(2018) and SAS2(2020) this translation will deprecate.	-	100%	Completed 31/01/2011
Belgocontrol	AMHS capability is implemented with the new ISAAC switch (AFTN/CIDIN/AMHS switch) operational since January 2011. A technical file and a EC declaration of verification for the new COM centre was provided to the Belgian NSA before its start-up. Awareness and training has also been performed in the framework of the new COM Centre. Extended AMHS capability has been implemented in the ISAAC switch in 2012. Belgocontrol is participating in the AMC activities. Belgocontrol is also participating in ATS messaging management activities as a co-operating COM centre (CCC) in the EUR/NAT Region.	-	100%	Completed 31/12/2013

COM11	**Voice over Internet Protocol (VoIP)** ***Timescales:*** Initial operational capability: 01/01/2013 Full operational capability: 31/12/2020		**39%**	**Ongoing**
-				
-				**31/12/2020**
ASP (By:12/2020)				
Belgocontrol	Belgocontrol plans the full integration of VoIP to its current main voice chain and its future fallback chain in 2020. A safety assessment, a technical file and a EC declaration of verification will be delivered to the BSA before the implementation of VoIP will become operational. The Belgocontrol VoIP project encompasses the telephony lines and the ground radio stations .	Implementation of VoIP	7%	Ongoing 31/12/2020
Mil. Authority	Procurement of VoIP-capable VCS is completed Installation of VoIP-capable VCS is ongoing Putting into service of VoIP-capable VCS is ongoing	-	70%	Ongoing 31/12/2019

COM12 (PCP)	**New Pan-European Network Service (NewPENS)** ***Timescales:*** Initial operational capability: 01/01/2018 Full operational capability (33 ANSPs): 31/12/2020		**3%**	**Ongoing**
-				
Refer to ANSP and APO input				**31/12/2020**
ASP (By:12/2024)				
Belgocontrol	Comment: Belgocontrol is part of INEA project 2015_174_AF5_A : New PENS stakeholders contribution for the procurement and deployment of new PENS - Part A : general call. All follow up can be tracked at the level of this IP project.	-	5%	Ongoing 31/12/2020
APO (By:12/2024)				
Regional Airports	-	-	0%	No Plan -
Brussels Airport Company	Project not started, to be investigated if beneficial or not.	-	0%	No Plan -

ENV01	**Continuous Descent Operations (CDO)** ***Timescales:*** - not applicable -		**25%**	**Ongoing**
EBAW - Antwerp Airport **(Outside Applicability Area)**				
EBAW is not in the applicability area for this objective. **An initial scan of possibilities for CDO at the 5 airports where Belgocontrol delivers ATS services, revealed no clear and significant potential to improve CDO for EBAW. For reasons of cost-efficiency, it was therefore decided to start projects on CDO for airports with a higher potential for CDO-improvement. The CDO concept is integrated in the initial training for ATCOs. Implementation of CDO on EBAW is part of the Belgocontrol 5-year strategic plan. The project will start in January 2018 according to 1-y strategic plan.**				**31/12/2019**
ASP (By:12/2013)				
Belgocontrol	An initial scan of possibilities for CDO at the 5 airports where Belgocontrol delivers ATS services, revealed no clear and significant potential to improve CDO for EBAW. For reasons of cost-efficiency, it was therefore decided to start projects on CDO for airports with a higher potential for CDO-improvement. The CDO concept is integrated in the initial training for ATCOs. Implementation of CDO on EBAW is part of the Belgocontrol 5-year strategic plan. The project will start in January 2018 according to 1-y strategic plan.	-	25%	Ongoing 31/12/2019
APO (By:12/2013)				
Brussels Airport Company	Currently no support required since the potential for CDO for EBAW will be re-assessed at a later stage.	-	%	Not Applicable -

ENV01	**Continuous Descent Operations (CDO)** ***Timescales:*** Initial operational capability: 01/07/2007 Full operational capability: 31/12/2013		**100%**	**Completed**
EBBR - Brussels Airport				
Refer to ASP & APO comments				**21/06/2015**
ASP (By:12/2013)				
Belgocontrol	Following the initial assessment of possibilities for CDO at the 5 airports where Belgocontrol delivers ATS services, a dedicated project was started for EBBR. The EBBR project is performed in close cooperation with aircraft operators, Brussels Airport and other partners. The CDO concept is integrated in the initial training for ATCOs. CDO procedures were published in BE AIP on June 26th 2014 on PRS runways. Publication in BE AIP for all runways.	-	100%	Completed 21/06/2015
APO (By:12/2013)				
Brussels Airport Company	-	-	100%	Completed 31/12/2012

ENV01	**Continuous Descent Operations (CDO)** ***Timescales:*** Initial operational capability: 01/07/2007 Full operational capability: 31/12/2013		**100%**	**Completed**
EBCI - Charleroi Airport				
Refer to ASP & APO comments				**31/12/2017**
ASP (By:12/2013)				
Belgocontrol	CDO procedure has been published on 9/11/2017 in the BE AIP.	-	100%	Completed 31/12/2017
APO (By:12/2013)				
Brussels Airport Company	SOWAER has performed an analysis for CDOs.	-	100%	Completed 31/12/2013

ENV01	**Continuous Descent Operations (CDO)** ***Timescales:*** Initial operational capability: 01/07/2007 Full operational capability: 31/12/2013		**100%**	**Completed**
EBLG - Liege Airport				
Refer to ASP & APO comments				**31/12/2017**
ASP (By:12/2013)				
Belgocontrol	CDO procedure has been published on 9/11/2017 in the BE AIP.	-	100%	Completed 31/12/2017
APO (By:12/2013)				
Brussels Airport Company	SOWAER has performed an analysis of CDOs in 2013.	-	100%	Completed 31/12/2013

ENV01	**Continuous Descent Operations (CDO)** ***Timescales:*** Initial operational capability: 01/07/2007 Full operational capability: 31/12/2013		**20%**	**Late**
EBOS - Oostende Airport				
-				**31/12/2019**
ASP (By:12/2013)				
Belgocontrol	An initial scan of possibilities for CDO at the 5 airports where Belgocontrol delivers ATS services, revealed no clear and significant potential to improve CDO for EBOS. For reasons of cost-efficiency, it was therefore decided to start projects on CDO for airports with a higher potential for CDO-improvement. The CDO concept is integrated in the initial training for ATCOs. Implementation of CDO on EBOS is part of the Belgocontrol 5-year strategic plan. The project will start in January 2018 according to 1-y strategic plan.	-	25%	Late 31/12/2019
APO (By:12/2013)				
Brussels Airport Company	An initial assessment was performed in collaboration with Belgocontrol. Further steps will be taken when required.	-	10%	Late 31/12/2019

ENV02	**Airport Collaborative Environmental Management** ***Timescales:*** Initial operational capability: 01/09/2004 Full operational capability: 31/12/2016		**84%**	**Late**
EBBR - Brussels Airport				
Starting March 2011 Belgocontrol and Brussels Airport agreed to have bilateral meetings on environment each quarter. A noise monitoring system is in place which provides relevant performance information. Infrastructure and procedures are in place to mitigate pollution due to de-icing activities. **The vision strategy of CEM implementation in EBBR has been drafted and agreed in November 2017. The development of the working agreement is ongoing. The airlines need to be involved to finalise the working agreement.**				**30/06/2018**
ASP (By:12/2016)				
Belgocontrol	Belgocontrol recognises the importance of collaboration with the airport operator and airlines in the field of environment and is actively involved in this. To date however the airport operator has not the intention to initiate CEM cfr. The EUROCONTROL specifications for CEM, because the costs are considered non-proportional to the benefits. Alternative solutions are operated. Starting March 2011 Belgocontrol and Brussels Airport agreed to have bilateral meetings on environment each quarter. These meetings are still organized. Brussels airport and Belgocontrol have decided to start a CEM implementation in EBBR in 2018. The vision strategy of CEM implementation in EBBR has been drafted and agreed in November 2017. The development of the working agreement is ongoing. The airlines need to be involved to finalise the working agreement.	-	65%	Late 30/06/2018
APO (By:12/2016)				
Brussels Airport Company	Starting March 2011 Belgocontrol and Brussels Airport agreed to have bilateral meetings on environment each quarter. A noise monitoring system is in place which provides relevant performance information. Infrastructure and procedures are in place to mitigate pollution due to de-icing activities.	-	94%	Late 30/06/2018
Mil. Authority	-	-	100%	Completed 31/12/2011

FCM03	**Collaborative Flight Planning** ***Timescales:*** Initial operational capability: 01/01/2000 Full operational capability: 31/12/2017		**45%**	**No Plan**
-				
-				**-**
ASP (By:12/2017)				
Belgocontrol	The processing of APL and ACH messages, and the transmission to IFPS of updates on airborne flights (AFP messages) has been implemented already since 2001. Provision of flight plan message processing in ICAO format, automatic processing of FPLs derived from RPLs and AFP messages in ADEXP format is also completed. Flight plan message processing in ADEXP format is implemented with the new CANAC 2 Eurocat system. The provision of AFP messages for change of route, diversion, change of flight rules/type, change of requested cruise level and change of aircraft type and equipment, might be part of the list of the system evolutions for the CANAC 2 Eurocat system. The amount of GAT/IFR traffic does not justify the inclusion of the IFPLID in all messages to ETFMS.	-	45%	No Plan -

FCM04.1	**Short Term ATFCM Measures (STAM) - Phase 1** ***Timescales:*** Initial operational capability: 01/09/2013 Full operational capability: 31/10/2017		**33%**	**Late**
-				
-				**31/10/2018**
ASP (By:10/2017)				
Belgocontrol	CHMI is in operational use at Belgocontrol. Current demand-capacity balancing is not based on occupancy counts. Belgocontrol launched a project in 2017 to determine the procedures for the use of occupancy counts (based on the use of the CHMI).	-	33%	Late 31/10/2018

FCM04.2 (PCP)	**Short Term ATFCM Measures (STAM) - Phase 2** ***Timescales:*** Initial operational capability: 01/11/2017 Full operational capability: 31/12/2021		**0%**	**No Plan**
-				
Belgocontrol depends on evolutions of NM.				**-**
ASP (By:12/2021)				
Belgocontrol	Belgocontrol depends on evolutions of NM.	-	0%	No Plan -

FCM05 (PCP)	**Interactive Rolling NOP** ***Timescales:*** Initial operational capability: 01/09/2013 Full operational capability: 31/12/2021		**24%**	**Ongoing**
-				
Refer to ANSP and APO input.				**31/12/2021**
ASP (By:12/2021)				
Belgocontrol	The activities are ongoing.	-	38%	Ongoing 31/12/2021
APO (By:12/2021)				
Brussels Airport Company	-	-	10%	Ongoing 31/12/2021

FCM06 (PCP)	**Traffic Complexity Assessment** ***Timescales:*** Initial operational capability: 01/01/2015 Full operational capability: 31/12/2021		**10%**	**Ongoing**
-				
Belgocontrol launched a project in 2017 for the implementation of a traffic complexity assessment tool. Expected to be implemented in 2018. Project will run till 2019.				**31/12/2018**
ASP (By:12/2021)				
Belgocontrol	Belgocontrol launched a project in 2017 for the implementation of a traffic complexity assessment tool. Expected to be implemented in 2018. Project will run till 2019.	Traffic Complexity Tool	10%	Ongoing 31/12/2018

FCM08 (PCP)	**Extended Flight Plan** ***Timescales:*** Initial operational capability: 01/01/2016 Full operational capability: 31/12/2021		**0%**	**No Plan**
-				
Belgocontrol will contribute to the FPFDE project of the NM and will elaborate its internal roadmap based on the outcome of this study.				**-**
ASP (By:12/2021)				
Belgocontrol	Belgocontrol will contribute to the FPFDE project of the NM and will elaborate its internal roadmap based on the outcome of this study.	-	0%	No Plan -
Mil. Authority	Military Authority awaits the outcome of the FPFDE project to set out its roadmap.	-	0%	No Plan -

INF07	**Electronic Terrain and Obstacle Data (eTOD)** ***Timescales:*** Initial operational capability: 01/11/2014 Full operational capability: 31/05/2018		**33%**	**Late**
-				
National Policy and Implementation Programme was approved early 2017, but corresponding national regulations still need to be published.				**30/06/2019**
REG (By:05/2018)				
BCAA	National TOD Policy and Implementation Programme in final stage of Approval.	-	23%	Late 30/06/2019
ASP (By:05/2018)				
Mil. Authority	This topic is handled in collaboration between the BCAA and Belgian Defence. The final area 1 product is expected to be available as from 2018. Although not necessary for military use, the added value of having high quality data is recognized by Belgian Defence, which is why a collaboration between BCAA and Belgian Defence will be put in place in order to comply with this objective.	-	%	Not Applicable -
Belgocontrol	According the plan of the BCAA, the role of Belgocontrol is limited to the publication of the information where and how datasets can be retrieved. The plan considers area 1 eTOD.	-	55%	Ongoing 31/05/2018
APO (By:05/2018)				
Mil. Authority	This topic is handled in collaboration between the BCAA and Belgian Defence. The final area 1 product is expected to be available as from 2018. Although not necessary for military use, the added value of having high quality data is recognized by Belgian Defence, which is why a collaboration between BCAA and Belgian Defence will be put in place in order to comply with this objective.	-	%	Not Applicable -

ITY-ACID	**Aircraft Identification** ***Timescales:*** Entry into force of the Regulation: 13/12/2011 System capability: 02/01/2020		**52%**	**Ongoing**
-				
Refer to ASP and MIL input				**02/01/2020**
ASP (By:01/2020)				
Belgocontrol	FDP (Eurocat-E has been upgraded (2013). Tracker (ARTAS) has been upgraded (2013). Radar coverage: Multi Mode S coverage is ensured above 4500ft in Brussels FIR/UIR and in EBBR airspace volume below 4500ft. The objective is partly completed. Additional Mode S Radar is required at EBLG to ensure full Mode S coverage below 4500ft in the FIR. Actions towards objective completion are planned. As requested by IR 1206/2011, the system capability must cover the whole UIR/FIR (i.e. UNL to GND).	-	33%	Ongoing 02/01/2020
Mil. Authority	Multiple military radars are Mode S capable. Mode S data (from Civ and Mil radars) is available and can be used in all Mil ATC units via the Civ-Mil radar data network. All ATCOs and pilots have been trained in Mode S handling.	-	100%	Completed 31/12/2014

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		**81%**	**Late**
-				
-				**30/06/2019**
REG (By:06/2017)				
BCAA	A status of the implementation of this regulation have been made in 2017 through an AIS audit of the civil ANSPs by the NSA, and through the certification of civil airports.	-	70%	Late 31/12/2018
ASP (By:06/2017)				
Belgocontrol	Some actions (e.g. the implementation of a quality management system) are implemented.	AIM Task Force	73%	Late 30/06/2018
Mil. Authority	Defence has integrated the AIS services within the AIS services of Belgocontrol. All SLoA's of this objective, except for ITY-ADQ-ASP02 concerning formal arrangements with DGMR, follows the ASP inputs from Belgocontrol. SLA AIS has been signed in Apr 2015, the implementation of TA COMMON AIP is in force since 15 SEP 2016.	AIM Task Force	85%	Late 30/06/2019
APO (By:06/2017)				
Brussels Airport Company	Some actions (e.g. the implementation of a quality management system) are already implemented. The others are planned for implementation in the required time frame.	-	95%	Late 31/12/2018

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		**100%**	**Completed**
-				
-				**31/12/2013**
REG (By:02/2018)				
BCAA	Not in the scope of this LSSIPD (for Maastricht, see MUAC LSSIPD)	-	%	Not Applicable -
ASP (By:02/2018)				
Belgocontrol	Not applicable for Belgocontrol since Belgocontrol only controls airspace up to FL 245.	-	%	Not Applicable -
MIL (By:01/2019)				
Mil. Authority	The new A400M aircraft as the replacement for the C130H, will enter into operation around 2019-2020 and will be VDL M2 equipped. Replacement of other transport-type aircraft is not yet planned , but when the replacement involves new aircraft these will be equipped to meet the requirements of civil aviation for operations in civil airspace. Of the current fleet, C130s are equipped, the rest of the transport fleet is exempted.	-	100%	Completed 01/12/2013

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		**41%**	**Ongoing**
	-			
The BCAA issued the letter related to conversion of frequencies to the European Commission on 15 December 2017.				**31/12/2018**
REG (By:12/2018)				
Mil. Authority	-	-	55%	Ongoing 31/12/2018
BCAA	A national circular (CIRC EQUIP-05) was revised (06/05/2014) to advise the operators and other users on the applicability of the Regulation. All aircraft owners/pilots and radio owners have been reminded of their obligations by a joint letter from the Belgian CAA and the Telecom Regulator and via a web page (letter dated December 2016). Same letter was also sent to aerodromes, heliports, ulmodromes and so on. A reminder letter was sent by the Belgian CAA and the Telecom Regulator in October 2017 to all radio owners. Radio upgrades by ANSP are monitored by the NSA as part of the change process. Inspection of airfields and radio operators are planned in 2018 to ensure compliance.	-	41%	Ongoing 31/12/2018
ASP (By:12/2018)				
Belgocontrol	The renewal of radio equipment project is On-going. The purchase process is done. The installation of the new radio is planned from Q1/2018. Operational conversion to 8.33 is planned from Q4/2018.	Renewal of part of air-ground-air Radio infrastructure	33%	Ongoing 31/12/2018
Mil. Authority	-	-	50%	Ongoing 31/12/2018
MIL (By:12/2020)				
Mil. Authority	All aircraft (except exemptions) are planned to be 8.33kHz- capable in due time. Military Authority will be ready for the planned conversion to 8.33kHz channel spacing by end-2018.	-	65%	Ongoing 31/12/2018
APO (By:12/2018)				
Regional Airports	-	-	10%	Ongoing 31/12/2018
Brussels Airport Company	Action plan in collaboration with Belgocontrol and BAC has been agreed by the BCAA.	-	10%	Ongoing 31/12/2018

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**
	-			
Refer to ASP and MIL input				**28/02/2015**
ASP (By:12/2014)				
Belgocontrol	The objective is completed. IPv6 connections operational with all ANSPs except DSNA (not ready yet).	-	100%	Completed 30/06/2011
Mil. Authority	FMTP FOC achieved end Feb 2015.	-	100%	Completed 28/02/2015
MIL (By:12/2014)				
Mil. Authority	FMTP FOC achieved end Feb 2015.	-	100%	Completed 28/02/2015

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		**89%**	**Ongoing**
	-			
-				**01/06/2020**
REG (By:02/2015)				
BCAA	-	-	100%	Completed 31/12/2012
ASP (By:02/2015)				
Belgocontrol	All data exchanged with other ANSPs use the Eurocontrol Asterix format. For all new systems, including new radar sensors, the Eurocat ATC system, etc. safety assessments were developed and delivered to the NSA. Belgocontrol does however need to check whether all legacy systems are also covered by these assessments. For each change a safety assessment is made and the change is only taken into operation after the approval of the BSA. IR1207/2011 is taken into account for these safety assessments. The requirements on training expressed in IR 1207/2011 are already covered by the existing Belgocontrol training plan and an update is therefore not required. During the development of changes, training needs are analyzed and included in the Belgocontrol training plan.	-	100%	Completed 04/06/2014
MIL (By:06/2020)				
Mil. Authority	Modifications of the transport fleet are ongoing and the timescales will be met.	-	70%	Ongoing 01/06/2020

NAV03.1	**RNAV 1 in TMA Operations** ***Timescales:*** Initial operational capability: 01/01/2001 Full operational capability: 31/12/2023		**91%**	**Ongoing**
-				
Refer to ASP and MIL input				**31/12/2023**
ASP (By:12/2023)				
Belgocontrol	A phased introduction of RNAV1 procedures is planned for EBBR and regional airports starting after finalization of the national PBN implementation plan for Belgium. It is estimated that there is no need for additional terrestrial navigation infrastructure as it is considered to have sufficient DME coverage for RNAV1 procedures. Every new RNAV procedure is verified against PANS-OPS infrastructure requirements. General RNAV procedures are instructed at the ATC Training Centre supplemented with specific ad-hoc lessons planned prior to implementation of RNAV arrival and departure procedures. Procedure designers are trained in RNAV capabilities. The execution of a WGS-84 survey according to the EUROCONTROL standard 006 is not found necessary and not planned. Adaptation of ATS automated systems is covered by CANAC 2. The safety case is an integral part of the development and implementation of each new RNAV1 procedure. Therefore the Safety Case will be developed for each airport application during the development of the local RNAV1 procedures.	-	86%	Ongoing 31/12/2023
Mil. Authority	RNAV arrival procedures are completed, while RNAV departure procedures have not due to lack of military need.	-	100%	Completed 31/12/2015

NAV03.2 (PCP)	**RNP 1 in TMA Operations** ***Timescales:*** Initial operational capability: 01/01/2018 Full operational capability: 31/12/2023		**0%**	**No Plan**
-				
-				**-**
ASP (By:12/2023)				
Belgocontrol	Belgocontrol has received no instruction from MoT to develop and implement RNP1 procedures.	-	0%	No Plan -

NAV10	**APV Procedures** ***Timescales:*** Initial operational capability: 01/06/2011 Full operational capability: 31/12/2016		**90%**	**Late**
		-		
Refer to BCAA and ASP input				**31/12/2018**
REG (By:04/2016)				
BCAA	BCAA issued the PBN Implementation Strategy for Belgium (PBNISB) in March 2011.The PBN Implemetation Group (PBNIG) allocated the priorities and plan for implementation. RNAV procedures inbound EBAW are implemented at EBAW since DEC 2015. Since 13 October 2016 RNP approach procedures are available for runway 23L/23R at Liege airport. The RNP approach procedures for Charleroi runways 07/25 are available as of 16 November 2016.The RNP procedures for runways 25R/L and 01 at Brussels National have been approved are published since 19 January 2017 to become effective on 2 March 2017. Status remains "Ongoing" because all RWYs are not yet compliant. Since 09 NOV 2017 an RNAV 1 operations approval or equivalent authorization are required according to AIC 001/2016 for all IFR GAT flights inbound and outbound to/from the following aerodromes:• Brussels Airport (EBBR),• Charleroi/Brussels South Airport (EBCI) and Liège Airport (EBLG). From winter 2019 onwards, Belgocontrol, and the aerodromes referenced above, will establish an RNAV1-only route network consisting of STARs, transitions to Final Approach and SIDs. The currently existing conventional routes and procedures associated with the introduction of RNAV1 will be progressively phased out to complete the transition to a PBN-compliant environment.	-	83%	Late 31/12/2018
ASP (By:12/2016)				
Mil. Authority	APV/Baro procedures have been developed and published.	-	100%	Completed 31/12/2015
Belgocontrol	-	-	85%	Late 31/12/2018

SAF11	**Improve Runway Safety by Preventing Runway Excursions** ***Timescales:*** Initial operational capability: 01/09/2013 Full operational capability: 31/01/2018		**100%**	**Completed**
-				
Refer to REG, APO and MIL input				**05/12/2016**
REG (By:01/2018)				
BCAA	Monitoring of runway excursions is carried out in particular via the Flight Data Monitoring Program (FDM), part of the Belgian Plan for Aviation Safety (Systematic Action SA03). No runway excursion for Commercial Air Transport has been reported in the last 5 years.	-	100%	Completed 05/12/2016
ASP (By:12/2014)				
Belgocontrol	-	-	100%	Completed 30/06/2016
Mil. Authority	Implemented at EBBR/EBMB for Mil Tpt aircraft	-	%	Not Applicable -
APO (By:12/2014)				
Mil. Authority	Implemented at EBBR/EBMB for Mil Tpt aircraft	-	%	Not Applicable -
Brussels Airport Company	Applicable recommendations of the Action Plan have been implemented by the Belgian Defence Air Component.	-	100%	Completed 01/01/2013

Additional Objectives for ICAO ASBU Monitoring

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**
-			
-			**31/05/2009**
ASP (By:01/2013)			
Belgocontrol	The STCA of the Eurocat system is in line with the current (valid since May 2009) EUROCONTROL requirements on STCA. ATCOs are informed, and the operational training is done on the job. For Belgocontrol, all is Completed. For the military, STCA is currently deactivated in SEROS II as it cannot handle high manoeuvring OAT traffic. A study has been made by Eurocontrol to verify if STCA can be tuned to handle this kind of traffic (EUROCONTROL GuidanceMaterial for Short Term ConflictAlert Appendix D-1: Optimisation of STCA for ATCC Semmerzake, but this project has finally been cancelled.	-	100% Completed 31/05/2009

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**
-			
-			**31/12/2016**
REG (By:12/2015)			
BCAA	Activity is considered as an on-going one.	-	100% Completed 31/12/2012
ASP (By:03/2012)			
Belgocontrol	The development of the training plan and package and the training of all concerned personnel has been completed.	-	100% Completed 30/04/2014
MIL (By:12/2015)			
Mil. Authority	The theoretical training of pilots, ATCO's and Air Defense controllers is part of the basic instruction at the Royal Military Academy. All transport aircraft are ACAS II upgraded.	-	100% Completed 31/12/2016

FCM01	**Implement enhanced tactical flow management services** ***Timescales:*** Initial operational capability: 01/08/2001 Full operational capability: 31/12/2006		**67%**	**No Plan**
-				
-				**-**
ASP (By:07/2014)				
Belgocontrol	CANAC is sending the FSA (First System Activation) message and standard correlated position data. Also receiving and processing ATFM data from CFMU as well as the transmission of Departure Planning Information to the CFMU is completed. For re-routings and aircraft holding this is part of the list of the system evolutions for the CANAC 2 Eurocat system to be realized (Eurocat software version V3 to be implemented). For the remaining ASP (No Plan) : part of the list of the system evolutions for the CANAC 2 Eurocat system to be realized.	-	67%	No Plan -

INF04	**Implement integrated briefing** ***Timescales:*** Initial operational capability: 01/07/2002 Full operational capability: 31/12/2012		**100%**	**Completed**
-				
Level 5 integration of AIS, ARO and MET is available at Belgocontrol, and integrated briefing function level 5 via internet is completed.				**-**
ASP (By:12/2012)				
Belgocontrol	Level 5 integration of AIS, ARO and MET is available at Belgocontrol, and integrated briefing function level 5 via internet is completed.	-	100%	Completed -

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		**73%**	**No Plan**
-				
Refer to ASP & Mil comments				**-**
ASP (By:12/2012)				
Belgocontrol	Flight data processing and exchange systems are implemented at Belgocontrol. The notification and initial coordination process are implemented and operational. Revision of coordination and abrogation of coordination have been implemented in the Eurocat system but are not yet operational. Tests have been performed with Maastricht UAC in 2011. With the other neighbouring centres a planning has been defined within the FABEC OLDI coordination body. The basic and change to basic flight data processes are implemented in CANAC 2. Their operational use depends however on the neighbouring centres. Similar flight data exchange processes (sending of CPL, CHG) are currently implemented with the military centre at Semmerzake.	-	67%	No Plan -
MIL (By:12/2012)				
Mil. Authority	Basic Flight Data as well as changes to Basic Flight Data are implemented in SEROS II in ICAO format (CPL, CHG). CPL and CHG messages are received from MUAC and Brussels ACC. Military CPLs and CHG messages on military CPLs can be sent but are not activated.	-	100%	Completed 31/12/2012

Local Objectives

AOP14	Remote Tower Services *Applicability and timescale: Local*	%	Not Applicable
EBBB - BRUSSELS (COM CENTRE)			
No current plans to implement this functionality.			-

ATC18	Multi-Sector Planning En-route - 1P2T *Applicability and timescale: Local*	%	Not Applicable
-			
No current plans to implement this functionality			-

ENV03	Continuous Climb Operations (CCO) *Applicability and timescale: Local*	%	Not Applicable
EBVA - BELGOCONTROL/HQ			
Not relevant because CCO are not measured at EBBR.			-

NAV12	Optimised Low-Level IFR Routes in TMA for Rotorcraft *Applicability and timescale: Local*	%	No Plan
-			
No instruction received from MoT.			-

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.

ANNEXES

ANNEX A - Specialists involved in the LSSIP Process

LSSIP Co-ordination

LSSIP Focal Points	Organisation	Name
LSSIP National Focal Point for Belgium	BCAA/ BSA-ANS	A. Vincent
LSSIP Focal Point for NSA/CAA	BCAA/ BSA-ANS	A. Vincent
LSSIP Focal Point for ANSP	Belgocontrol	B. Gallez
LSSIP Focal Point for Airport	Brussels Airport Company	D. Van Hyfte
LSSIP Focal Point for Military	Belgian Defence	J. Platteau

EUROCONTROL LSSIP Support

Function	Directorate	Name
LSSIP Contact Person for Belgium	DECMA/PEPR	V. Oblin

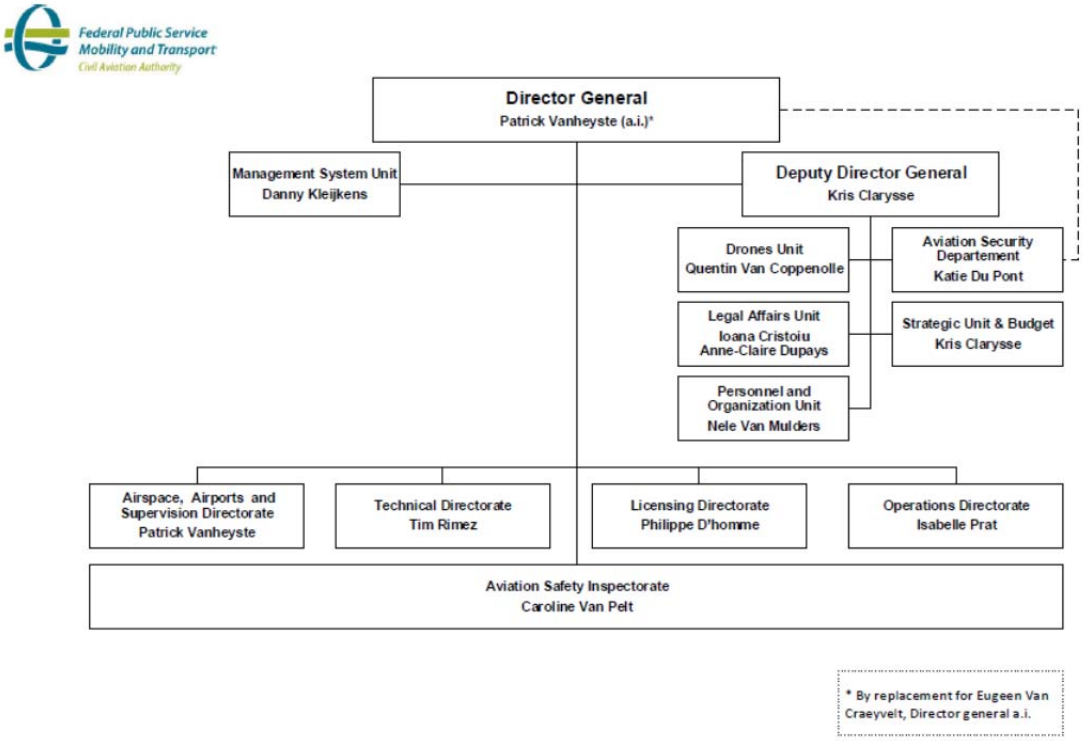
Implementation Objectives

Implementation Objective	EUROCONTROL PEPR Objective Coordinator	EUROCONTROL Objective Owners	National Stakeholder Specialist
AOM13.1	A. DYBOWSKA	O. MROWICKI/ C. LUCCIOLI	Hendrik-Jan Van Der Gucht (Belgocontrol) K. Elias (BAC)
AOM19.1	O. ALFARO	G. ACAMPORA / O. MROWICKI	Hendrik-Jan Van Der Gucht (Belgocontrol) N. Lesire (BAC)
AOM19.2	O. ALFARO	G. ACAMPORA / O. MROWICKI	Hendrik-Jan Van Der Gucht (Belgocontrol) N. Lesire (BAC)
AOM19.3	O. ALFARO	G. ACAMPORA / O. MROWICKI	Hendrik-Jan Van Der Gucht (Belgocontrol) N. Lesire (BAC)
AOM21.1	A. DYBOWSKA	C. BRAIN	Hendrik-Jan Van Der Gucht (Belgocontrol) N. Lesire (BAC)
AOM21.2	A. DYBOWSKA	C. BRAIN	Hendrik-Jan Van Der Gucht (Belgocontrol) N. Lesire (BAC)
AOP04.1	P. VRANJKOVIC	R. GRAHAM	Keum-Ja Undorf (Belgocontrol)
AOP04.2	P. VRANJKOVIC	R. GRAHAM	Keum-Ja Undorf (Belgocontrol)
AOP05	F. ROOSELEER	M. BIRENHEIDE	Hendrik-Jan Van Der Gucht (Belgocontrol)
AOP10	F. ROOSELEER	R. GRAHAM	N/A
AOP11	F. ROOSELEER	M. BIRENHEIDE	Hendrik-Jan Van Der Gucht (Belgocontrol), S. Delfosse (BCAA/A-POR)
AOP12	P. VRANJKOVIC	R. GRAHAM	Keum-Ja Undorf (Belgocontrol)
AOP13	P. VRANJKOVIC	R. GRAHAM	Keum-Ja Undorf (Belgocontrol)
AOP14	A. DYBOWSKA	R. GRAHAM / G. ASSIRE	Hendrik-Jan Van Der Gucht (Belgocontrol)
ATC02.8	F. ROOSELEER	S. DROZDOWSKI	H-J Van Der Gucht (Belgocontrol) S. Haverals (BAC)
ATC02.9	F. ROOSELEER	S. DROZDOWSKI	Hendrik-Jan Van Der Gucht (Belgocontrol) S. Haverals (BAC)
ATC07.1	L. DELL'ORTO	pending	H-J Van Der Gucht (Belgocontrol)
ATC12.1	L. DELL'ORTO	pending	H-J Van Der Gucht (Belgocontrol)
ATC15.1	L. DELL'ORTO	pending	H-J Van Der Gucht (Belgocontrol)
ATC15.2	L. DELL'ORTO	P. HOP	H-J Van Der Gucht (Belgocontrol)
ATC17	L. DELL'ORTO	S. MORTON	H-J Van Der Gucht (Belgocontrol)
ATC18	L. DELL'ORTO	I. PENDACHANSKI	H-J Van Der Gucht (Belgocontrol)
COM10	J. PINTO	Y. EYUBOGLU	Keum-Ja Undorf (Belgocontrol) K. Gladiné (BAC)

COM11	J. PINTO	L. POPESCU	Keum-Ja Undorf (Belgocontrol) K. Gladiné (BAC)
COM12	J. PINTO	W. JANSSENS	Keum-Ja Undorf (Belgocontrol)
ENV01	B. HILL	D. BRAIN	M. Bastin (Belgocontrol) Davy Van Hyfte (Brussels Airport Company)
ENV02	B. HILL	S. MAHONY	M. Bastin (Belgocontrol)
ENV03	A-P. FRANGOLHO	D. BRAIN	M. Bastin (Belgocontrol)
FCM03	O. CIOARA	C. BOUMAN/I. PENDACHANSKI	H-J Van Der Gucht (Belgocontrol)
FCM04.1	I. MARCETIC	P. HOP/I. PENDACHANSKI	Hendrik-Jan Van Der Gucht (Belgocontrol)
FCM04.2	I. MARCETIC	P. HOP/I. PENDACHANSKI	Hendrik-Jan Van Der Gucht (Belgocontrol)
FCM05	O. CIOARA	I. MENDES VIDEIRA/I. PENDACHANSKI	Hendrik-Jan Van Der Gucht (Belgocontrol) Davy Van Hyfte (Brussels Airport Company)
FCM06	F. ROOSELEER	P. HOP/I. PENDACHANSKI	Hendrik-Jan Van Der Gucht (Belgocontrol)
FCM08	O. CIOARA	K. BREIVIK/I. PENDACHANSKI	H-J Van Der Gucht (Belgocontrol) S. Haverals (BAC)
INF07	A-P. FRANGOLHO	A. PETROVSKY	E. Bomba (BCAA/A-POR) Hendrik-Jan Van Der Gucht (Belgocontrol) K. Elias (BAC)
ITY-ACID	O. CIOARA	pending	Keum-Ja Undorf (Belgocontrol) K. Gladiné (BAC)
ITY-ADQ	A-P. FRANGOLHO	M. UNTERREINER	A. Vincent (BCAA/BSA-ANS) Hendrik-Jan Van Der Gucht (Belgocontrol) K. Elias (BAC)
ITY-AGDL	B. HILL	D. ISAAC	Keum-Ja Undorf (Belgocontrol) J-P Brück (BAC)
ATY-AGVCS2	B. HILL	J. POUZET	M. Haest (BCAA/BSA-ANS) Keum-Ja Undorf (Belgocontrol) K. Gladiné (BAC)
ITY-FMTP	O. ALFARO	L. POPESCU	Keum-Ja Undorf (Belgocontrol) K. Gladiné (BAC)
ITY-SPI	O. CIOARA	M. BORELY	Keum-Ja Undorf (Belgocontrol) J-P Brück (BAC)
NAV03.1	I. MARCETIC	F. PAVLICEVIC	M. Bastin (Belgocontrol) K. Elias (BAC)
NAV03.2	I. MARCETIC	F. PAVLICEVIC	M. Bastin (Belgocontrol) K. Elias (BAC)
NAV10	I. MARCETIC	R. FARNWORTH	M. Bastin (Belgocontrol) K. Elias (BAC)
NAV12	I. MARCETIC	B. RABILLER / F. RIQUET	M. Bastin (Belgocontrol) K. Elias (BAC)
SAF11	F. ROOSELEER	pending	D. Kleijkens (BCAA) A. Du Bois (Belgocontrol) Davy Van Hyfte (BAC)

ANNEX B - National Stakeholders Organisation charts

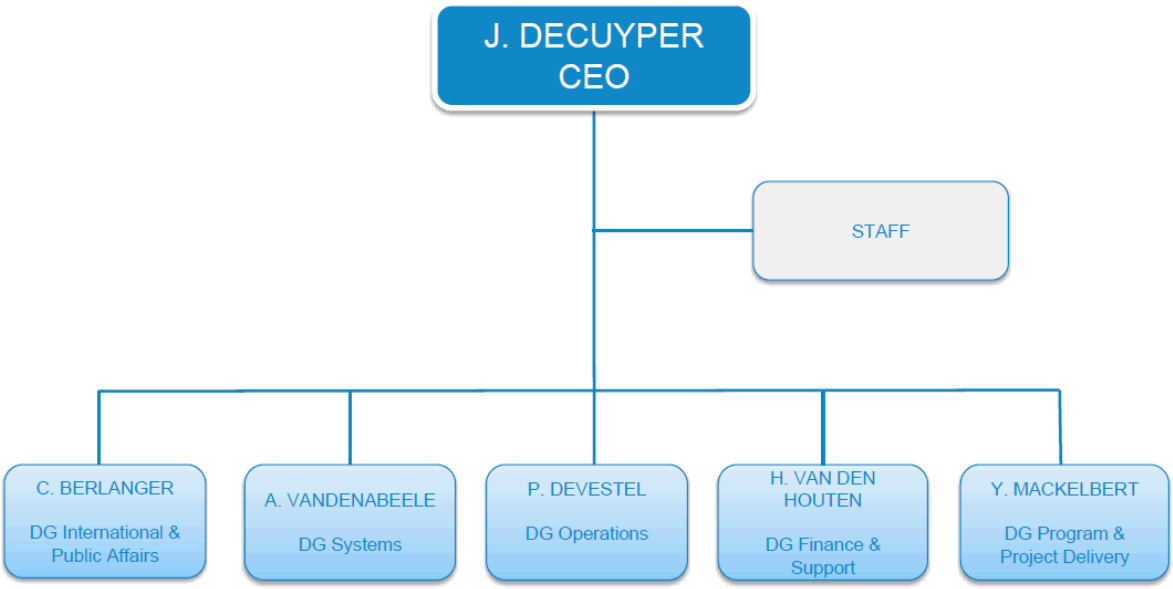
BCAA Organisation Chart



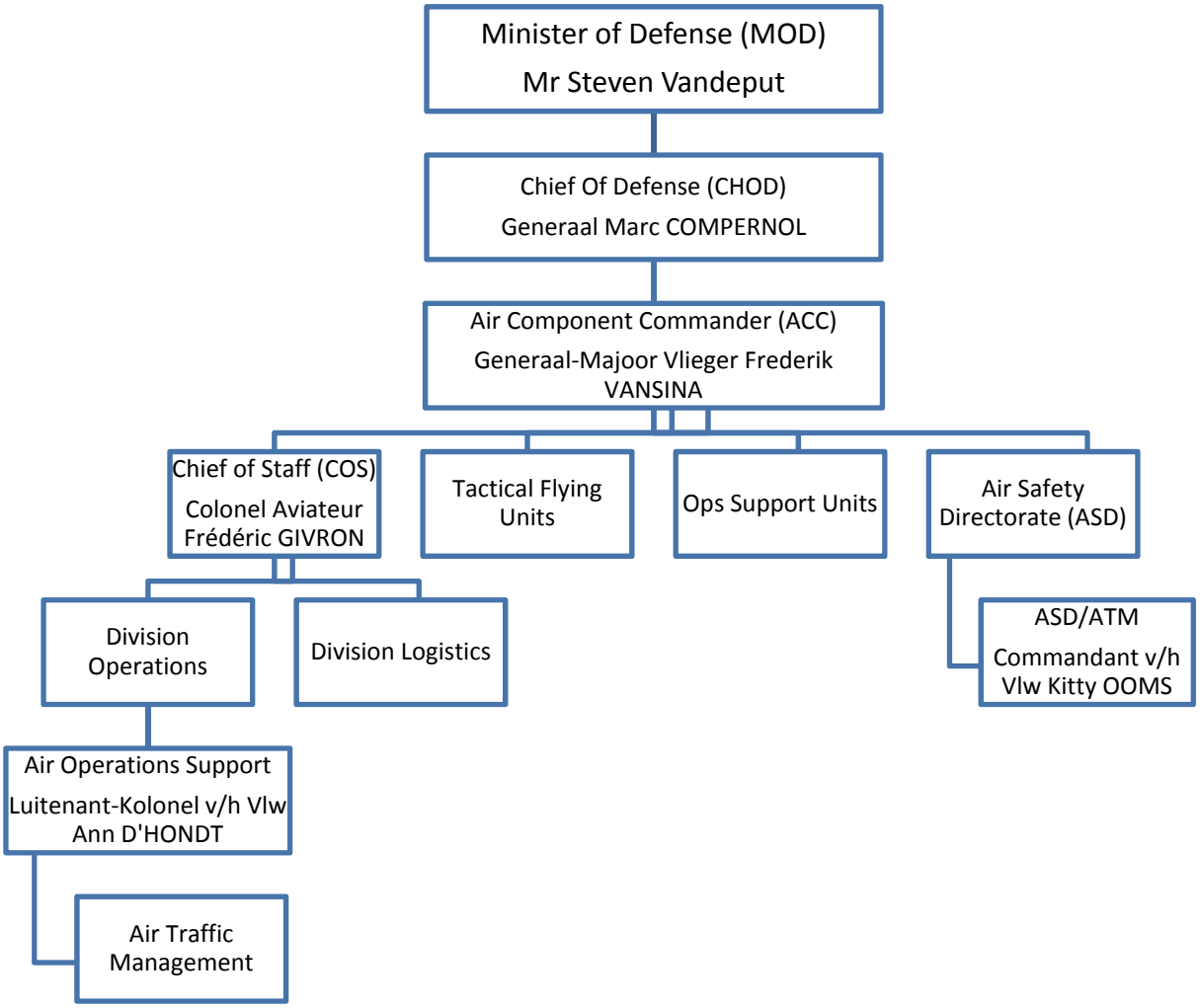
See also http://www.mobilit.belgium.be/fr/aproposSPF/organisation/ and
http://www.mobilit.belgium.be/nl/overfod/organisatie/

Belgocontrol Organisation Chart

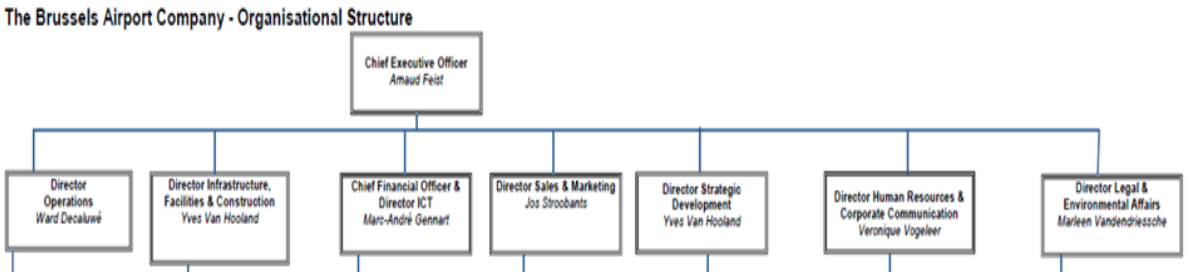
The corporate governance structure of Belgocontrol is as follows:



Belgian Defence / Air Component Organisation Chart



Brussels Airport Company Organisation Chart



ANNEX C – Implementation Objectives' Applicability

Objective	SESAR Key Feature	ICAO ASBU B0	European ATM Masterplan Level 3 Applicability area
AOM13.1		-	All ECAC States except Albania, Latvia, Luxembourg, Maastricht UAC and Moldova.
AOM19.1		B0-FRTO	All ECAC States except Armenia, FYROM, Malta, Luxembourg, and Moldova
AOM19.2		-	All ECAC States except Armenia, Luxembourg and Moldova
AOM19.3		-	All ECAC States except Armenia, Luxembourg and Moldova
AOM21.1		B0-FRTO	25 ECAC States
AOM21.2		-	All ECAC States except Azerbaijan, Belgium, Luxembourg and the Netherlands
AOP04.1		B0-SURF	25 PCP airports, 22 non-PCP airports
AOP04.2		B0-SURF	25 PCP airports, 22 non-PCP airports
AOP05		B0-ACDM	25 PCP airports, 21 non-PCP airports
AOP10		-	16 PCP Airports
AOP11		-	24 PCP airports, 15 non-PCP airports
AOP12		-	25 PCP airports
AOP13		-	25 PCP airports
AOP14		-	Local: Low to medium complexity aerodromes, subject to local needs
ATC02.2		B0-SNET	Additional for ICAO ASBU monitoring: applicable all ECAC States that did not yet implement it
ATC02.8		B0-SNET	All ECAC States except the Netherlands
ATC02.9		B0-SNET	TMAs, according to local business needs
ATC07.1		B0-RSEQ	23 PCP Airports, 8 non-PCP airports
ATC12.1		-	All ECAC States except Luxembourg
ATC15.1		B0-RSEQ	EU States except Cyprus, Greece, Lithuania, Luxembourg, Malta, Slovak Republic, Slovenia. Plus: Bosnia and Herzegovina, Maastricht UAC, Norway, Switzerland, Turkey
ATC15.2		-	ACCs within the extended AMAN horizon, including those adjacent to TMAs serving/associated to PCP airports
ATC16		B0-ACAS	Additional for ICAO ASBU monitoring: applicable to all ECAC States that did not yet implement it
ATC17		B0-FICE	All ECAC States except Ireland, Slovak Republic and Ukraine
ATC18		-	Local: Subject to local needs and complexity
COM10		-	All ECAC States
COM11		-	All ECAC States

COM12		-	- Area 1 (ANSPs signatories of the NewPENS Common Procurement Agreement): 33 ANSPs - Area 2 (Other stakeholders): Stakeholders from all ECAC States not part of Area 1
ENV01		B0-CDO	59 Airports
ENV02		-	47 Airports
ENV03		B0-CCO	Local: Aerodromes subject to local needs and complexity
FCM01		B0-NOPS	Additional for ICAO ASBU monitoring: applicable to all ECAC States that did not yet implement it
FCM03		B0-NOPS	All ECAC States
FCM04.1		B0-NOPS	Austria, Belgium, Croatia, Czech Republic, France, Germany, Italy, Poland, Spain, Switzerland
FCM04.2		B0-NOPS	All EU+ States
FCM05		B0-NOPS	All ECAC States except Armenia, FYROM, Luxembourg, Maastricht UAC and Moldova
FCM06		B0-NOPS	All EU+ States
FCM07		-	All EU+ States
FCM08		-	All ECAC States
FCM09		-	All ECAC States
INF04		B0-DATM	Additional for ICAO ASBU monitoring: applicable to all ECAC States that did not yet implement it
INF07		-	All ECAC States except Maastricht UAC
INF08.1		-	All EU+ States
INF08.2		-	All EU+ States
ITY-ACID		-	All EU+ States
ITY-ADQ		B0-DATM	All EU+ States except FYROM, Georgia and Maastricht UAC
ITY-AGDL		B0-TBO	All EU+ States except Georgia, Luxembourg and Netherlands
ITY-AGVCS2		-	All EU+ States except Georgia and Moldova
ITY-COTR		B0-FICE	Additional for ICAO ASBU monitoring: applicable all EU+ States that did not yet implement it
ITY-FMTP		B0-FICE	All ECAC States
ITY-SPI		B0-ASUR	All EU+ States
NAV03.1		B0-CDO, B0-CCO	All ECAC States except Luxembourg, Maastricht UAC and Slovak Republic
NAV03.2		-	Mandatory for TMAs listed in section 1.2.1 of the Annex of the PCP Regulation. For all other ECAC TMAs, according to local business needs
NAV10		B0-APTA	All ECAC States except Maastricht UAC
NAV12		-	Local: TMAs subject to local needs and complexity
SAF11		-	All ECAC States except Malta

Legend:

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

ANNEX D - Glossary of Abbreviations

This Annex mostly shows only the Abbreviations that are specific to the LSSIP Belgium.

Other general abbreviations are in the Acronyms and Abbreviations document in http://www.eurocontrol.int/articles/glossaries

Term	Description
AAIU (be)	Air Accident Investigation Unit (Belgium)
A-ENV	Environment unit
AF	ATM Functionality
A-POR	BCAA airport department
AMS	Airport Movement System
ARSA	Areas Requiring Special Attention
ASD	Aviation Safety Directorate
A-SPA	BCAA airspace department
AUP	Airspace Use Plan
BAC	Belgian Air Component
BATA	Belgian Air Transport Association
BCAA	(Belgian) Civil Aviation Authority
BELANC	Belgian Air Navigation Committee
BEMILFLIPs	Belgian Military Flight Information Publications
BSA-ANS	Belgian Supervisory Authority for Air Navigation Services
CANAC	Computer Assisted National ATC Centre
CISM	Critical Incident Stress Management
CBT	Computer Based Training
CADF	Central Airspace Data Function
CDR	Conditional Route
CHOD	Chief of Defence
DIRCOM	Committee of Directors
EBAW	Antwerp Airport
EBBR	Brussels Airport
EBCI	Charleroi Airport
EBKT	Kortrijk Airport
EBLG	Liège Airport
EBOS	Oostende Airport
ECCAIRS	European Co-ordination Centre for Aviation Incidents Reporting System
FPS Mobility and Transport	Federal Public Service Mobility and Transport
FT	Fast Track
LVC	Luchtverkeerscommissie of The Netherlands = the “BELANC” of The Netherlands)

MCG	Maastricht Co-ordination Group
MIL ATCC (Semmerzake)	Military ATC Centre (Semmerzake)
MoD	Ministry of Defence
PCP	Pilot Common Project
PDP	Preliminary Deployment Programme
RIMCAS	Runway Incursion Module
S-AF	Sub ATM Functionality