LSSIP 2018 - CYPRUS
Local Single Sky ImPlementation

Level 1 - Implementation Overview

25 YEARS

of ATM
Implementation
Reporting
in Europe

EUROCONTROL

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), Air Navigation Service Providers and Airport Operators, towards the implementation of the European ATM Master Plan (Level 3). 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 and European aviation policies.

The Master Plan Level 3 and LSSIP Implementation Planning and Reporting are well-established and mature mechanisms, with a long history dating back more than 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 fourth consecutive year, for the information in the LSSIP documents to constitute the sole source of information for the development of ICAO's Aviation System Block Upgrades (ASBUs) Implementation Monitoring Report in the ICAO EUR Region. The Agency undertakes this work, on behalf of ICAO, for all 55 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 promotes efficient practices to avoid duplication of work by cooperating with the European Defence Agency (EDA) and collecting information on their behalf through the LSSIP process.

In this light, the Agency is also cooperating with the SESAR Deployment Manager and the European Aviation Safety Agency (EASA).

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

Philippe MERLO
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LSSIP Documents	https://www.eurocontrol.int/articles/lssip
LSSIP Guidance Material	https://www.eurocontrol.int/articles/lssip
Master Plan Level 3 – Plan Edition 2018	http://www.eurocontrol.int/articles/european-atm-master-plan-level-3-implementation-plan
Master Plan Level 3 – Report Year 2018	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	https://www.eurocontrol.int/statfor
Acronyms and abbreviations	https://www.eurocontrol.int/sites/default/files/content/documents/official-documents/guidance/Glossaries.pdf
National AIP	http://www.mcw.gov.cy/mcw/DCA/AIS/ais.nsf/index_en/index_en
FAB Performance Plan	http://www.bluemed.aero/index.php

APPROVAL SHEET

The following authorities have approved all parts of the LSSIP Year 2018 document and their signatures confirm the correctness of the reported information and reflect their commitment to implement the actions laid down in the European ATM Master Plan Level 3 Implementation Plan – Edition 2018

Stakeholder / Organisation	Name	Position	Signature
Department of Civil Aviation of Cyprus, DCAC	Panayiota Demetriou	Director	
DCAC (Air Navigation Services)	Nicos Nicolaou	Chief Operations Officer	
	Pers. Papadopoulou	Chief Operations Officer	
National Supervisory Authority	Michalis Agisilaou	Head of Unit	
Ministry of Defence (Military ANSP)	George Alexandrou	Lieutenant Colonel	
Larnaca Int'l Airport (HERMES)	Miltos Miltiadous	COO	

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National ATM Context

The regulatory context of the State remains as the previous year with the National Supervisory Authority and the Ministry of Transport Communications and Works being the main stakeholders in this perspective.

The increase in traffic (10%) in 2018 has an impact on the delay performance registering 1.0 min/flight The ANSP has implemented most of its actions listed in the capacity planning of 2018 but the increase in traffic and the operational constraints in Nicosia FIR (i.e. military activities) prevented any improvement in the delay performance.

The State is acting on the issue, and for 2019, allows the implementation of a performance scheme for ANS personnel from the beginning of the year as a reacting mitigation delay forecasts.

The project to privatize the provision of Air Navigation Services is ongoing. The reorganization of the ANSP concurrently runs with the reorganization of the regulatory context with the transformation of the DCAC into a well-balanced regulator.

In parallel with the privatization project, the DCA is progressing with a significant recruiting ATCO plan as a measure to delays but also for the upgrading of its services.

Traffic and Capacity

Traffic in Cyprus increased by 8.9% during Summer 2018 (May to October inclusive), when compared to Summer 2017. The EUROCONTROL Seven-Year Forecast predicts an average annual traffic growth between 2.8% and 7.3% throughout the planning cycle, with an average baseline growth of 4.8%.

The average en-route delay per flight increased from 1.46 minutes per flight in Summer 2017 to 1.69 minutes per flight in Summer 2018. 46% of the delays were due ATC staffing, 34% due to ATC capacity, 19% due to airspace management and 1% due to the reason "Other".

The ACC capacity baseline was measured with ACCESS/Reverse CASA at 69, **13% higher than in 2017**. During the measured period, the average peak 1 hour demand was 74 and the average peak 3-hour demand was 67.

For the 2019-2024 Planning Period, improvements are planned which are expected to provide capacity gains. The capacity gap in Cyprus will gradually close during the planning period. However, the plan is heavily sensitive to the crisis in the region around Cyprus.

Progress per SESAR Phase

The figure below shows the progress made so far in the implementation of the SESAR baseline and the PCP elements. The percentage is calculated as an average of the relevant objectives as shown in Chapter 6.1 (PCP objectives are marked as such, the rest are considered SESAR baseline); note that two objectives – AOM19.1 and FCM05 – are considered as both part of the SESAR baseline and PCP so their progress contributes to the percentage of both phases.

The objectives declared 'Achieved' in previous editions (up to, and including, ATM MP L3 Edition 2011-2017) 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.

Many of the SESRA objectives are linked to the procurement and operation of a new generation ATM system.

Pre-SESAR Implementation	2010 — 62% — 2019
PCP Implementation	2015 — 21% — 2023

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 Blocks 0 and 1. 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.

ATM Deployment Outlook

● **State objectives**

✔ **Deployed in 2017-2018:**

- **Direct Routing**
[AOM21.1] 100% progress
- **AMHS**
[COM10] 100% progress
- **RNAV 1 for TMA Operations**
[NAV03.1] 100% progress

By 12/2019	By 12/2020	By 12/2021	2022+
- **Runway excursions** [SAF11] 85% progress - **APV Procedures** [NAV10] 63% progress - **Surveillance Performance & Interoperability** [ITY-SPI] 62% progress - **OAT and GAT handling** [AOM13.1] 50% progress - **Aeronautical Information** [ITY-ADQ] 47% progress - **Collaborative Flight Planning** [FCM03] 43% progress - **eTOD** [INF07] 38% progress - **Coordination and transfer** [ATC17] 20% progress - **8,33 kHz below FL195** [ITY-AGVCS2] 18% progress	- **Aircraft Identification** [ITY-ACID] 25% progress - **Voice over IP** [COM11] 3% progress - **NewPENS** [COM12] 0% progress	- **MTCD & CORA** [ATC12.1] 25% progress - **ASM/ATFCM process** [AOM19.3] 5% progress - **Data Link** [ITY-AGDL] 1% progress - **Real-Time Airspace Data** [AOM19.2] 0% progress - **Free Route Airspace** [AOM21.2] 0% progress - **STAM Phase 2** [FCM04.2] 0% progress - **Interactive Rolling NOP** [FCM05] 0% progress - **Traffic Complexity** [FCM06] 0% progress - **Extended Flight Plan** [FCM08] 0% progress	- **RNP 1 for TMA Operations** [NAV03.2] 80% progress - **SWIM Yellow TI Profile** [INF08.1] 3% progress

● **Airport objectives - LCLK - Larnaca Airport**

✔ **Deployed in 2017-2018: /**

By 12/2019	By 12/2020	By 12/2021	2022+
			- **CCOs** [ENV03] 0% 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 2018, 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 2018, 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 2018. 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

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

Organisation		Since
ECAC	✓	1969
EUROCONTROL	✓	1991
European Union	✓	2004
EASA	✓	2004
ICAO	✓	1961
NATO	-	N/A
ITU	✓	1961

Geographical description of the FIR(s)

The geographical scope of this document addresses the Cyprus FIR, namely Nicosia FIR as delineated by ICAO.

Nicosia FIR is surrounded by FIRs of 6 States, namely Athinai FIR / Cairo FIR / Tel Aviv FIR/UIR / Beirut FIR / Damascus FIR / Ankara FIR/UIR. Four of these States, Egypt, Israel, Syria and Lebanon are non-ECAC States.

Airspace Classification and Organisation

The republic of Cyprus applies Commission Regulation (EC) No 730/2006 of 11 May 2006 "on airspace classification and access of flights operated under visual flight rules above flight level 195". Consequently, the Airspace above FL 195 has been categorised as Class "C".

Flight Level /Altitude Band	Republic of Cyprus (Nicosia FIR/UIR)	
Upper Limit of Controlled Airspace (CAS) - **FL 660**	**Class C**	
FL460-FL660		
FL245-FL460		
FL195-FL245		
9000FT-FL195	**Class G**	
3000 Ft- 9000Ft (transition altitude)		
SFC- 3000 Ft		
Major TMA	No TMAs Implemented yet.	
Minor TMA		
AWYs	**Class C** from GND/MSL – FL195)	
CTR	**Class B in ATZ**	**Class C**

The Cyprus Airspace classification chart

ATC Units

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

ATC Unit	Number of sectors		Associated FIR(s)	Remarks
	En-route	TMA		
Nicosia ACC	5[3]	-	Nicosia FIR	
Larnaca	-	1	LCA CTZ	
Pafos	-	1	PHA CTZ	

1.2. National Stakeholders

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

- The Department of Civil Aviation of Cyprus comprising the
  - o ANSP (supporting ATS, AIS and CNS service provision, and using MET Services provided by the Ministry of Agriculture, Environment and Natural Resources);
  - o Functionally separated NSA;
- The Ministry of Transport, Communications and Works with responsibility for the Regulation of ATM;
- The Ministry of Defence, comprising
  - o The ANS department which incorporates the Airspace Management Cell (AMC) staffed by both civil and military personnel (FUA arrangements).

    The AMC reports to the High Level Airspace Management Committee composed of:
  - o Department of Civil Aviation of Cyprus (DCAC);
  - o Ministry of Transport, Communications and Works (MCW);
  - o Ministry of Defence (MoD);
  - o Ministry of Foreign Affairs (MFA).
- The Cyprus Meteorological Service under the responsibility of the Ministry of Agriculture, Environment and Natural Resources.
- The Cyprus Telecommunications Agency (CYTA) under the responsibility of the Ministry of Finance.

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

Civil Regulator(s)

General Information

Civil Aviation in Cyprus is the responsibility of the Ministry of Transport, Communications and Works (MCW). The different national entities having regulatory responsibilities in ATM are summarised in the table below. The regulatory organisation is further detailed in the following sections.

Activity in ATM:	Organisation responsible	Legal Basis
Rule-making	Ministry of Transport, Communications and Works	Civil Aviation Law Art.8
Safety Oversight	National Supervisory Authority of Air Navigation Services (*)	Civil Aviation Law Art.8
Enforcement actions in case of non-compliance with safety regulatory requirements	Ministry of Transport, Communications and Works	In accordance with Chapter 27 (protection of civil aviation) on the civil aviation act
Airspace	Ministerial committee composed of Ministry of Transport, Communications and Works, MoD and MFA	Council of Ministers decision 67.662 (24.09.2008)
Economic	Ministry of Transport, Communications and Works	Civil Aviation Law Art.8
Environment	Ministry of Transport, Communications and Works	Civil Aviation Law Art.8
Security	Ministry of Transport, Communications and Works	Civil Aviation Law Art.8
Accident investigation	Ministry of Transport, Communications and Works, Air Accident and Incident Investigation Board (AAIIB)	Civil Aviation Law Art.217-230

(*) The National Supervisory Authority for Air Navigation Services (NSA) has been established in Cyprus following Reg. (EC) 550/2004 and under Art. 8B of the Civil Aviation Act 213 (I) 2008. There is functional separation from the ANSP as the NSA reports only to the Director and the Ministry. The NSAs' areas of responsibility include ATS, CNS, AIS, MET, ATCO Licensing, Engineering & Technical Staff, ANSPs accounts, Interoperability and Performance.

Department of Civil Aviation of Cyprus (DCAC)

The Department of Civil Aviation of Cyprus (DCAC) is a Governmental department of the Ministry of Transport, Communications and Works. It is an organisation encompassing both Service Provision and Safety Oversight. The responsibility for safety oversight rests within the National Supervisory Authority, which is an entity of the DCAC functionally separated from the ANSP, and linked only to the Director of the DCAC and the Ministry of Transport, Communications and Works. The NSAs' areas of responsibility include ATS, CNS, AIS, MET, ATCO Licensing, Engineering & Technical Staff, ANSPs accounts, Interoperability and Performance.

DCAC is responsible for the following services:

- Air Traffic Service (ATS);

- Aeronautical Information Service (AIS);

- Communication Navigation and Surveillance service (supported by CYTA for maintenance).

Annual Report published:	Y	http://www.mcw.gov.cy/dca

Further description of the DCAC organisation is provided on the following web site:

http://www.mcw.gov.cy/dca

The Organisation Chart of DCAC is available in Annexes.

Air Navigation Service Providers

Department of Civil Aviation of Cyprus - Air Traffic Services (DCAC - ATS)

In accordance to ICAO ANNEX 11 the objectives of the air traffic services shall be to:

1. Prevent collisions between aircraft

2. Prevent collisions between aircraft on the manoeuvring area and obstructions

3. Expedite and maintain an orderly flow of air traffic

4. Provide advice and information useful for the safe and efficient conduct of flight

5. Notify appropriate organizations regarding aircraft in need of search and rescue aid and assist such organizations as required

The objectives are achieved through the provision of Air Traffic Control, Flight Information and Alerting services by dedicated Air Traffic Control Units.

Nicosia Area Control Centre (ACC)

This unit is responsible for the provision of air traffic control within the limits of the Nicosia Flight Information Region (FIR) as defined in the diagram below. It provides air traffic control to all controlled flights (flights that are in contact with the air traffic controllers) within a controlled area (airways) that lie under its jurisdiction as to fulfil the objectives 1and 3 mentioned above.

The Air Traffic Control Units provides advice and information for the safe and efficient conduct of flight (objective 4) including light or training aircraft operating in the designated training areas, routes and agreed heights within the limits of each unit in the Cypriot airspace. They are also responsible for notifying appropriate organizations regarding aircraft in need of search and rescue aid, and assists such organizations as required (objective 5).

Larnaka and Pafos airports Aerodrome and Approach Control Units

Air traffic control service for aerodrome traffic at Larnaka and Pafos airports is provided from the Air Traffic Control towers to fulfil the objectives 1, 2 and 3 mentioned above. All traffic on the manoeuvring area of an aerodrome and all aircraft flying in the vicinity of an aerodrome is under their responsibility. They are also responsible for the provision of air traffic service to the aircraft in the control zone (an area in the near vicinity of the airport where departures and the final approach for the landing aircraft takes place).

Larnaka and Pafos Control towers work in close coordination with the Nicosia ACC.

In 2002 and 2003, new air traffic control towers were erected in Larnaca and Pafos respectively.

Service provided

Governance:	Department of a Government Ministry (Ministry of Transport, Communications and Works)	Ownership:	State Entity
Services provided	**Y/N**	**Comment**	
ATC en-route	Y		
ATC approach	Y		
ATC Aerodrome(s)	Y		
AIS	Y		
CNS	Y	The CNS maintenance is delegated to the Cyprus Telecommunications Agency (CYTA) through a Service Level agreement.	
MET	N	The Meteorological Services are under the responsibility of the Ministry of Agriculture, Environment and Natural Resources.	
ATCO training	Y		
Others	Y	Instrument Procedures Design	
Additional information:	-		
Provision of services in other State(s):	N	-	
Annual Report published:	Y	http://www.mcw.gov.cy/dca	

The website address of DCAC-ANSP is: http://www.mcw.gov.cy/dca

The Organisation Chart of DCAC-ANSP is available in Annexes.

ATC systems in use

Main ANSP part of any technology alliance[1]	N	

FDPS

Specify the manufacturer of the ATC system currently in use:	THALES - TopSky C ATC system
Upgrade[2] of the ATC system is performed or planned?	No
Replacement of the ATC system by the new one is planned?	Not planned as system was installed in 2013
ATC Unit	Nicosia ACC

SDPS

Specify the manufacturer of the ATC system currently in use:	THALES - TopSky C ATC system
Upgrade of the ATC system is performed or planned?	No
Replacement of the ATC system by the new one is planned?	Not planned as system was installed in 2013
ATC Unit	Nicosia ACC

A diagram of the basic technical infrastructure

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[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))

1. **Airspace management (ASM):**

   ASM in Cyprus comprises of two major pillars, the FUA and the ATFCM function. The FUA application is regulated via a Ministerial committee composed of Ministry of Transport, Communications and Works, Ministry of Defense and Ministry of Foreign Affairs, and applied via the Airspace Management Cell (AMC). All three FUA levels are applied. The ATFCM function is performed by the Flow Management Unit at Nicosia ACC. Both FUA and ATFCM functions are inputs to the operations in the ACC via sector configuration and capacity management. The AMC produces the Airspace Usage Plan (AUP) utilizing the EUROCONTROL CIAM tool.

2. **Air Traffic Flow and Capacity Management (ATFCM):**

   Performed at Nicosia ACC via a dedicated function. System used is the NMOC CHMI for the FMP.

3. **Air Traffic Control System:**

   System used is the THALES TopSky-C system, which has become operational in October 2013. The system comprises of a THALES Multi Radar Tracker (MRT), a THALES Flight Data Processor (FDP) and a THALES HMI.

4. **Communications:**

   G/A communications via VHF/UHF Tx/Rx at various sites in Cyprus. G/G communications via normal telephone lines. No datalink employed yet.

5. **Navigation:**

   Aircraft navigation via the AWYs network (RNP5). No free route airspace provided yet. The two local aerodromes rely on conventional SID/STARs based on VOR/DMW. The design of new PBN procedures has been initiated in cooperation with ICAO and Israel.

6. **Surveillance systems:**

   The surveillance function of the DCAC is served by a network of both PSR and SSR radars that are combined (through the MRT) to provide a radar picture at Nicosia ACC. The application of ADSB is being evaluated under the CRISTAL Med project currently ongoing.

7. **Aeronautical Information Services:**

   AIS is primarily using the European AIS Database (EAD) for the origination and the dissemination of information.

8. **Meteorological Information:**

   Meteorological info is disseminated via the AFTN to the ATC units. The information is fed into a digital VOLMET serving Nicosia FIR and a D-ATIS serving the two local aerodromes.

Airports

General Information

The two international airports of the Republic of Cyprus are Larnaca (LCLK) and Pafos (LCPH). Both are state owned, but operated by an international consortium Hermes Airports Ltd under a 25 year Build-Operate-Transfer (BOT) concession agreement with the Republic of Cyprus. ATC is provided by the DCAC.

Up to the time after which the management of the airports was granted to the company Hermes (12/05/2006), the Department of Civil Aviation was responsible for their operation. In light of the new state of play, the Department's role has been modified, and it now has a supervisory role in matters concerning Civil Aviation (Security) and licensing/certification of airports in accordance with Annex 14 (Aerodromes) of the Chicago Convention.

The size of the two terminal buildings is such that with respect to passenger convenience, and according to the specifications of the International Air Transport Association (IATA), the level of service provided is B and C, for Larnaca and Paphos respectively.

Airport(s) covered by the LSSIP

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

The airports covered by this LSSIP document are Larnaca International Airport and Paphos International Airport.

The EUROCONTROL Public Airport Corner also provides information for the following airport(s):

https://ext.eurocontrol.int/airport_corner_public/LCLK

Military Authorities

The Military Authorities involved in ATM in the Republic of Cyprus are composed of the Air Force Command which reports to the Ministry of Defence.

Their regulatory, service provision and user role in ATM are detailed below (the organisational chart can be found in the Annex).

Military Entities

The operation of the Armed Forces in the Republic of Cyprus is governed by the "National Guard Law" (1964-2003) and the executive power is exercised by the Minister of Defence.

The Chief of the National Guard is accountable to the Minister of Defence for the general command and supervision of the National Guard, its organization, training, readiness, discipline and order within, and he is also accountable to the Minister of Defence for all equipment provided to the National Guard and for carrying out the orders of the Minister of Defence or the Council of Ministers.

The Commander of the Air Force Command is accountable directly to the Chief of the National Guard. Under the authority of the Air Force Command are the, Military Air Control Centre (MACC), the Early Warning Radar squadrons, the Air-Defence Units and the Aircraft Squadrons. In addition to the above, a Joint Rescue Coordination Centre (JRCC) is manned and operated by personnel of the Ministry of Defence.

Airspace and Control

The Republic of Cyprus is included among those countries where the MACC does not have an ATM function hence it does not provide ATS to either civil or military aircraft flying as GAT. Air Traffic Management is provided by the DCAC.

Military flights are generally conducted below FL 195. In some cases military flights are conducted over FL 195, in Temporary Reserved Areas, within the Nicosia FIR. These areas are reserved in accordance with ICAO regulations and in cooperation with the DCAC.

Military authorities control or provide information, with simultaneous notification and coordination with the civil ATS providers (Larnaca - Paphos Towers and Nicosia ACC), to their own aircraft in the following cases:

When the aircraft fly operationally (OAT):

- Within predefined and limited time reserved areas of airspace. These areas are reserved for specific purposes and operational reasons and after cooperation with the DCAC for the release of the relevant NOTAMs;

- When the JRCC is conducting SAR operations within the Nicosia FIR.

The surveillance of airspace for Security and Defence purposes is conducted by the Air Force Command.

For the time being there is no military commitment for implementing ESARRs. However additional theoretical training relevant to air traffic control services is provided to military personnel by the DCAC.

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?	N/A
Level of such legal provision: Ministerial Decree		Level of such legal provision: N/A	
Authority signing such legal provision: Ministry of Defence		Authority signing such legal provision: N/A	
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	N/A
OAT/GAT Co-ordination	Y	OAT/GAT Co-ordination	N/A
ATCO Training	Y	ATCO Training	N/A
ATCO Licensing	Y	ATCO Licensing	N/A
ANSP Certification	N	ANSP Certification	N/A
ANSP Supervision	N	ANSP Supervision	N/A
Aircrew Training	Y	ESARR applicability	N/A
Aircrew Licensing	Y		
Additional Information: OAT is conducted within Nicosia FIR, in respect of the rules of the air for GAT. Military ATCO licensing and Aircrew licensing are certified by the Ministry of Defence.		Additional Information: MIL does not provide ANS to GAT but to OAT in segregated areas.	
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	Y	National AIP	N/A
National Military AIP	N	National Military AIP	N/A
EUROCONTROL eAIP	N	EUROCONTROL eAIP	N/A
Other: (Circulars)	Y	Other:	N/A

Oversight

OAT	GAT
National oversight body for OAT Air Force Command/ Military Air Control Centre	NSA (as per SES reg. 550/2004) for GAT services provided by the military: N/A
Additional information: -	N/A

Service Provision role

OAT			GAT	
Services Provided:			Services Provided:	
En-Route	N	DCAC-ANSP	En-Route	N
Approach/TMA	N	DCAC-ANSP	Approach/TMA	N
Airfield/TWR/GND	N	DCAC-ANSP	Airfield/TWR/GND	N
AIS	N	DCAC-ANSP	AIS	
MET	N	Cyprus Meteorological Service	MET	N
SAR	Y		SAR	Y
TSA/TRA monitoring	Y	Military in coordination with DCAC-ANSP	FIS	N
Other:	N/A		Other:	N/A
Additional Information:			N/A	

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

Additional Information:

The Cypriot National Guard does not have any ATM service provision role. Their aircraft fleet is intended only for coastal patrol and SAR activities. Any services to OAT are provided by DCAC-ANSP or, in the case of MET the by the Cyprus Meteorological Service. The European Commission was notified accordingly on 21/12/2011.

User role

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

If Military fly OAT-IFR inside controlled airspace, specify the available options:

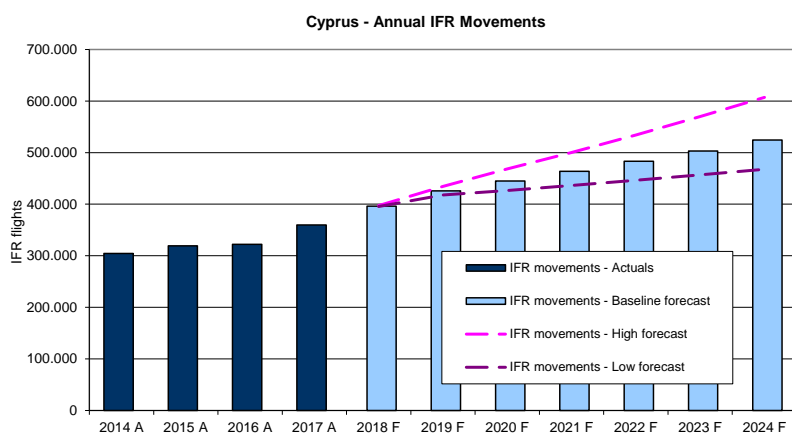|			
Free Routing	Y	Within specific corridors only	N
Within the regular (GAT) national route network	Y	Under radar control	Y
Within a special OAT route system	Y	Under radar advisory service	N

If Military fly GAT-IFR inside controlled airspace, specify existing special arrangements:

No special arrangements	✓		Exemption from Route Charges		✓
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)
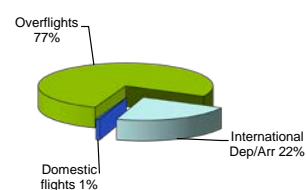
Military in Cyprus applies FUA requirements as specified in the Regulation No 2150/2005:   Y
FUA Level 1 implemented: Y
FUA Level 2 implemented: Y
FUA Level 3 implemented: Y

2. Traffic and Capacity

2.1. Evolution of traffic in Cyprus

Cyprus - Annual IFR Movements

- IFR movements - Actuals
- IFR movements - Baseline forecast
- IFR movements - High forecast
- IFR movements - Low forecast

A = Actual
F = Forecast

Cyprus - Distribution (Ref. year 2017)

Overflights 77%
International Dep/Arr 22%
Domestic flights 1%

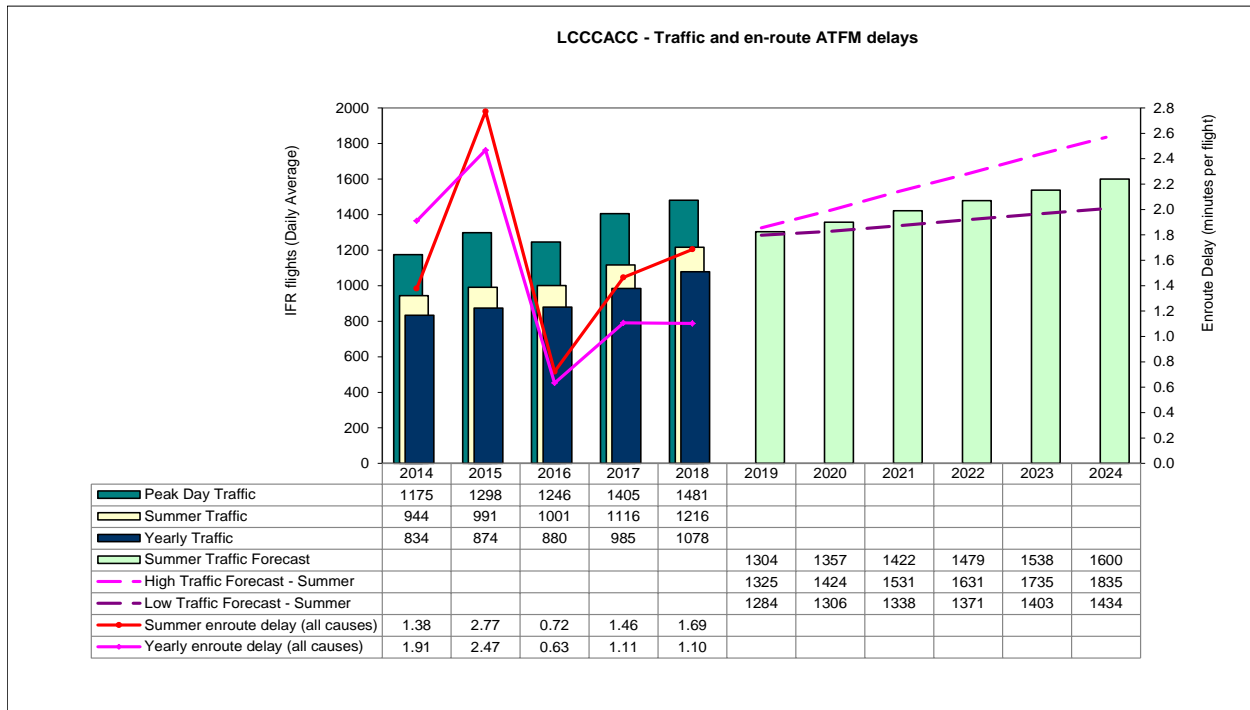| EUROCONTROL Seven-Year Forecast (September 2018)										
IFR flights yearly growth		2015 A	2016 A	2017 A	2018 F	2019 F	2020 F	2021 F	2022 F	2023 F	2024 F
Cyprus	H				10.4%	9.4%	7.9%	6.8%	6.8%	6.7%	6.5%
	B	4.8%	1.0%	11.6%	10.2%	7.4%	4.6%	4.2%	4.2%	4.1%	4.2%
	L				10.0%	5.6%	2.1%	2.3%	2.3%	2.3%	2.4%
ECAC	B	1.6%	2.8%	4.0%	3.7%	3.0%	2.6%	2.1%	1.9%	2.0%	2.1%

2018

Traffic in Cyprus **increased by 8.9%** during Summer 2018 (May to October inclusive), when compared to Summer 2017.

2019-2024

The EUROCONTROL Seven-Year Forecast predicts an average annual traffic growth between 2.8% and 7.3% throughout the planning cycle, with an average baseline growth of 4.8%.

2.2. ACC Nicosia

Traffic and en-route ATFM delays 2014-2024

LCCCACC - Traffic and en-route ATFM delays

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Peak Day Traffic	1175	1298	1246	1405	1481						
Summer Traffic	944	991	1001	1116	1216						
Yearly Traffic	834	874	880	985	1078						
Summer Traffic Forecast						1304	1357	1422	1479	1538	1600
High Traffic Forecast - Summer						1325	1424	1531	1631	1735	1835
Low Traffic Forecast - Summer						1284	1306	1338	1371	1403	1434
Summer enroute delay (all causes)	1.38	2.77	0.72	1.46	1.69						
Yearly enroute delay (all causes)	1.91	2.47	0.63	1.11	1.10						

Performance summer 2018

Traffic Evolution	2018 Capacity Baseline	En-route Delay (min/flight) - Summer		Capacity gap
		Ref value	Actual	
+8.9 %	69 (+13%)	0.31	1.69	Yes

The average en-route delay per flight increased from 1.46 minutes per flight in Summer 2017 to 1.69 minutes per flight in Summer 2018. 46% of the delays were due ATC staffing, 34% due to ATC capacity, 19% due to airspace management and 1% due to the reason Other.

Capacity Plan +5%	Achieved	Comments
Additional DCTs as from 1 February 2018 – Details in ERNIP Part 2	Yes	Two new DCTs have been implemented TOMBI – SOLIN – significant mileage savings VESAR- VELOX- facilitate traffic into LLBG from the north
Stepped implementation of A-FUA	Ongoing	
New low sector in Nicosia ACC	No	New additional configuration with the vertical split of the LCES0 at FL 305 ready for summer 2019
Improved ATFCM, including STAM	Ongoing	
Continuous improvement of route network	Yes	Two new DCTs have been implemented TOMBI – SOLIN – significant mileage savings VESAR- VELOX- facilitate traffic into LLBG from the north
Redesign of lower airspace	No	New additional configuration with the vertical split of the LCES0 at FL 305 ready for summer 2019
1 additional net ATCO	Yes	Replacement of a retired ATCO
Continuation of staff performance scheme until the creation of the new ANSP	Yes	
Datalink	Ongoing	
More flexibility in sector configuration openings	Yes	
Improve Civil-Military cooperation in the South-East part of the FIR	Yes	As far as it concerns the Cyprus national responsibility
Revision of sector capacities	Yes	Actual sector throughputs increased as it is shown by the increase of the capacity baseline in 2018.
Maximum configuration: 5 sectors	Yes	5 sectors opened
Summer 2018 performance assessment		

The ACC capacity baseline was measured with ACCESS/Reverse CASA at 69, 13% higher than in 2017. During the measured period, the average peak 1 hour demand was 74 and the average peak 3 hour demand was 67.

Planning Period 2019-2024

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

Following the inputs provided by the European Commission at the ad-hoc NMB on 25 October 2018, en-route delay reference values and capacity requirement profiles have been calculated for RP3 (2020-2024) based on the proposal made by the PRB to the European Commission.
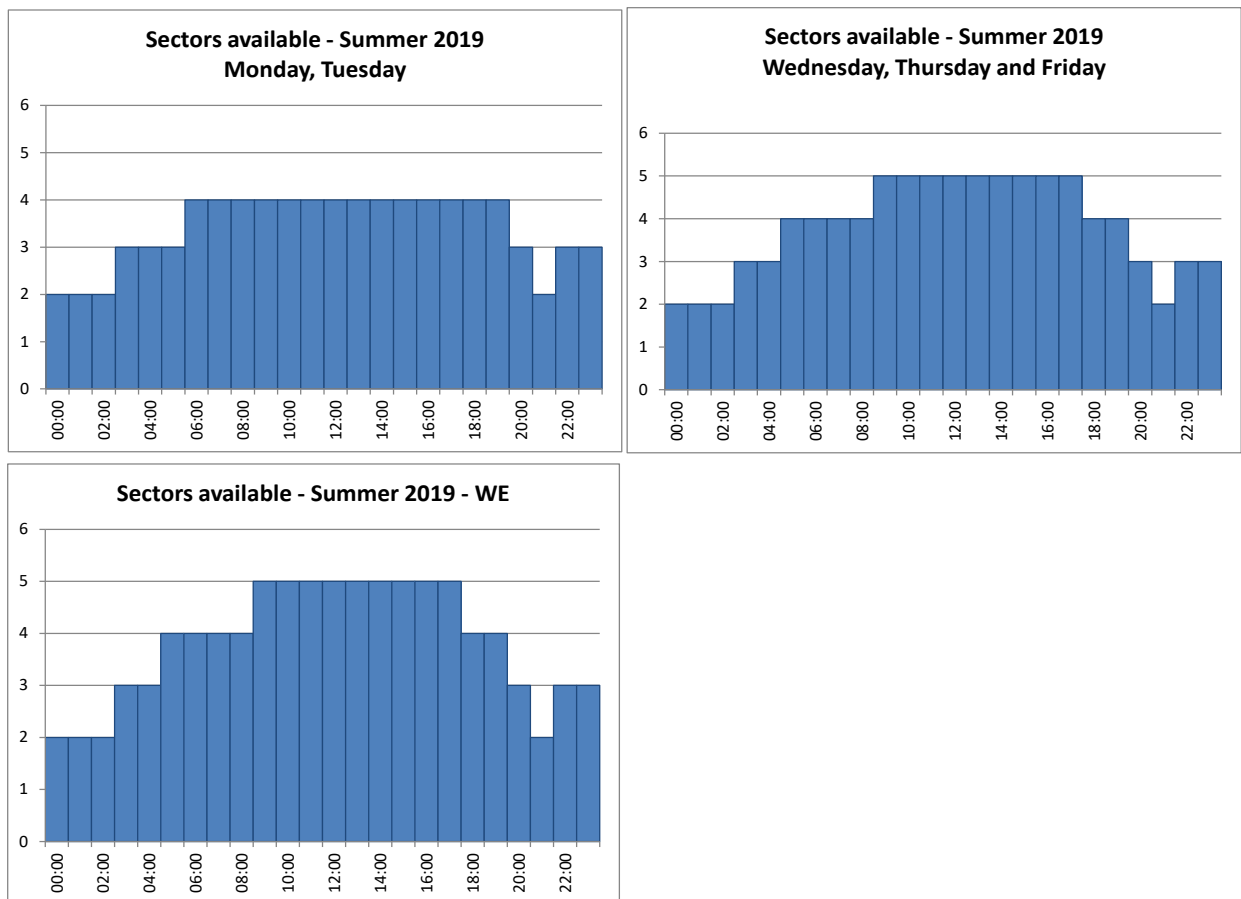
NETWORK	En-route ATFM delay breakdown RP2 Reference Values	En-route ATFM delay breakdown PRB proposal RP3 Reference Values				
	2019	2020	2021	2022	2023	2024
Annual	0.5	0.8	0.7	0.6	0.5	0.5

Final en-route delay reference values and capacity requirement profiles will be provided after the final decision on RP3 targets.
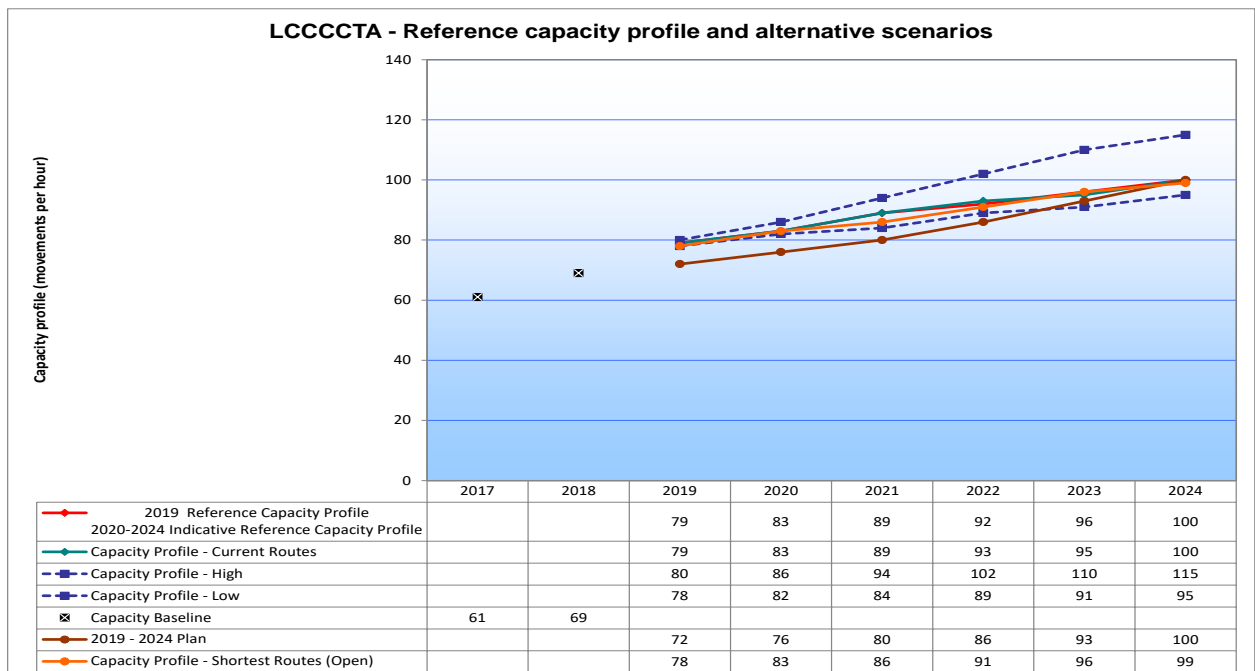
ACC	2018 baseline		RP2 Capacity Profiles		RP3 Indicative Capacity Profiles									
					Profiles (hourly movements and % increase over previous year)									
			2019		2020		2021		2022		2023		2024	
LCCC	69	H	80	16%	86	8%	94	9%	102	9%	110	8%	115	5%
		Ref.	79	14%	83	5%	89	7%	92	3%	96	4%	100	4%
		L	78	13%	82	5%	84	2%	89	6%	91	2%	95	4%
		Open	78	13%	83	6%	86	4%	91	6%	96	5%	99	3%
		C/R	79	14%	83	5%	89	7%	93	4%	95	2%	100	5%

Summer Capacity Plan						
	2019	2020	2021	2022	2023	2024
Free Route Airspace				Free Route implementation according to PCP		
Airspace Management Advanced FUA	Stepped implementation of A-FUA					
Airport & TMA Network Integration						
Cooperative Traffic Management*	Improved ATFCM, including STAM					
Airspace	Continuous improvement of route network					
	Stepped re-sectorisation of Nicosia ACC					
Procedures		Reduce Nicosia FIR separation standard from 10 to 5 NM				
Staffing	4 ATCOs less on the roster	2 ATCOs less on the roster due to retirement	7 additional ATCOs[1]	7 additional ATCOs		
	Continuation of staff performance scheme until the creation of the new ANSP					
Technical			Implementation of Approach Radar function at LCLK and LCPH airports			
	Datalink					
	ATM system upgrades				New ATM system	
Capacity	More flexibility in sector configuration openings					
	Improve Civil-Military cooperation in the South-East part of the FIR					
		Operation of a 6th en-route sector during peaks				
	Revision of sector capacities					
Significant Events	Transition to the new ACC (pending approvals)			Training for the new ATM system		
Max sectors	5	5/6	6	7	7	7
Planned Annual Capacity Increase	5%	5%	5%	8%	8%	8%
Reference profile Annual % Increase	14%	5%	7%	3%	4%	4%
Difference Capacity Plan v. Reference Profile	-8.9%	-8.4%	-10.1%	-6.5%	-3.1%	0.0%
Annual Reference Value (min)	0.25	0.35	0.30	0.24	0.16	0.16
Summer reference value (min)	0.31	0.39	0.33	0.30	0.20	0.20
Additional information	[1]Actual net balance is 1 additional controller due to retirements in 2019 and 2020					

2020-2024: Indicative RP3 Reference Values

Sectors available - Summer 2019
Monday, Tuesday

Sectors available - Summer 2019
Wednesday, Thursday and Friday

Sectors available - Summer 2019 - WE

The graphs above show an outline of available sector configurations for typical weekdays and a weekend day for summer 2019

LCCCCTA - Reference capacity profile and alternative scenarios

	2017	2018	2019	2020	2021	2022	2023	2024
2019 Reference Capacity Profile / 2020-2024 Indicative Reference Capacity Profile			79	83	89	92	96	100
Capacity Profile - Current Routes			79	83	89	93	95	100
Capacity Profile - High			80	86	94	102	110	115
Capacity Profile - Low			78	82	84	89	91	95
Capacity Baseline	61	69						
2019 - 2024 Plan			72	76	80	86	93	100
Capacity Profile - Shortest Routes (Open)			78	83	86	91	96	99

2019-2024 Planning Period Outlook
Improvements are planned which are expected to provide capacity gains. The capacity gap in Cyprus will gradually close during the planning period. The plan is heavily sensitive to the crisis situation in the region around Cyprus.

3. Master Plan Level 3 Implementation Report conclusions

Conclusion	Applicable to
COLLABORATIVE FLIGHT PLANNING IMPLEMENTATION DELAYS SHOULD BE ADDRESSED AND SUPPORT FOR IMPLEMENTATION FROM NM GIVEN TO THE LOCAL STAKEHOLDERS. (page 10 of the Report)	All States with delays in implementation of FCM03
State's action planned for this conclusion: YES **Description of the planned action:** ATM system planned to be upgraded with automatic AFP sending.	

Conclusion	Applicable to
AS THE ASM TOOLS AIMING FOR A FULL ROLLING ASM/ATFCM PROCESS ARE ON THE CRITICAL PATH FOR THE TRANSITION TOWARDS TRAJECTORY-BASED OPERATIONS, ALL CONCERNED STAKEHOLDERS SHOULD ACTIVATE AND/OR INVIGORATE THEIR IMPLEMENTATION PLANS SO AS TO ENSURE THAT THE DEADLINES FOR IMPLEMENTATION WILL BE MET AS APPROPRIATE. (page 14 of the Report)	All States with delays in implementation of AOM19.1, AOM19.2 and AOM19.3
State's action planned for this conclusion: Trajectory based on operations will be supported by the new ATM system. **Description of the planned action:** Currently the applicability of these objectives to Cyprus are limited.	

Conclusion	Applicable to
IMPLEMENTATION OF FRA IS VERY MUCH ENCOURAGED BELOW FL310 AND IN CROSS-BORDER AIRSPACE. (page 19 of the Report)	ECAC States
State's action planned for this conclusion: The State is pursuing such an effort. The process is slower in High Seas Airspace where non EU states are involved. **Description of the planned action:** Currently cross border DCTs are planned within the Blue Med FAB plans.	

Conclusion	Applicable to
DELAYS IN IMPLEMENTATION OF A-SMGCS SURVEILLANCE CAN POTENTIALLY IMPACT THE TIMELY IMPLEMENTATION OF OTHER SUBSEQUENT A-SMGCS FUNCTIONALITIES. (page 26 of the Report, same as in 2017 LSSIP)	All Airports with delays in implementation of AOP04.1 and AOP04.2 and in particular the PCP airports
State's action planned for this conclusion: NO (airports outside applicability area) **Description of the planned action:** N/A	

4. Implementation Projects

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

4.1. National projects

Name of project:	Organisation(s):	Schedule:	Status:	Links:
ATS Message Handling System (AMHS)	DCAC - Air Navigation Service Provider (CY)	2015-2017	The project has finished on 31/12/2017 and is in operation.	L3: COM10
Communication system (VCCS) upgrade and backup	DCAC - Air Navigation Service Provider (CY)	2018-2021	The CNS provider (CYTA) is planning to migrate to VoIP by 2020 in line with the FAB agreement. The project is heavily dependent on the implementation of a national IP network.	L3: COM11
TopSky ATM system upgrades	DCAC - Air Navigation Service Provider (CY)	31/12/2019	Already partially implemented in current system, but it will be fully implemented with the update roadmap of the ATM system by end 2019.	L3: FCM03

4.2. FAB projects

Name of project:	Organisation(s):	Schedule:	Status:	Links:
Air-to-ground Datalink services	DCAC - Air Navigation Service Provider (CY), ENAV (IT), HANSP (GR), MATS (MT)	2014-2021	The work for this objective is now under the scope of the IDP program of SESAR. The ANSP is planning the finalisation of the project by end 2021.	L3: ITY-AGDL
BLUE MED FAB Optimised ATS Route Network	DCAC - Air Navigation Service Provider (CY), ENAV (IT), HANSP (GR), MATS (MT)	2014- on-going	-	-
BLUE MED Free Route Airspace Implementation	DCAC - Air Navigation Service Provider (CY), ENAV (IT), HANSP (GR), MATS (MT)	2014-2021	The project is planned with the purchase of a new ATM system.	L3: AOM21.2
BLUEMED ADQ	DCAC - Air Navigation Service Provider (CY), ENAV (IT), HANSP (GR), MATS (MT)	2014-2019	Parts of the requirement are partially completed. Changes in the infrastructure and personnel training are under study. The project is expected to completed by end of 2019.	L3: ITY-ADQ

Name of project:	Organisation(s):	Schedule:	Status:	Links:
Migration to IPv6 Network	DCAC - Air Navigation Service Provider (CY), ENAV (IT), HANSP (GR), MATS (MT)	2014-2020	The CNS provider (CYTA) is planning to migrate to VoIP by 2020 in line with the FAB agreement. The project is heavily dependent on the implementation of a national IP network.	L3: COM11
RNP Approach Procedures with APV	DCAC - Air Navigation Service Provider (CY), ENAV (IT), HANSP (GR), MATS (MT)	2014-2019	A project for the Design and Publication of APV/Baro and/or APV/SBAS procedures is initiated and shall follow the completion of NAV03. The project is expected to be completed by end 2019.	L3: NAV10
Safety Management	DCAC - Air Navigation Service Provider (CY), ENAV (IT), HANSA (GR), MATS (MT)	31/12/2019	The process of airport certification has been initiated and its expected to cover the requirements emanating thought the excursion action plan.	L3: SAF11

4.3.   Regional projects

Name of project:	Organisation(s):	Schedule:	Status:	Links:
Redesign of the interface between Nicosia and Tel Aviv FIR	Civil Aviation Authority of Israel (IL), Israeli Air Force (IL)	2019	Project is still in the design phase	-

5. Cooperation activities

5.1. FAB Co-ordination

✓ All Blue Med ANSPs will implement AIXM 5.1 B2B data exchange with NM by 2017except GR (no plans yet)

✓ All Blue Med ANSPs implement COTR (in 2016 GR and MT, IT in 2017 and CY in 2019)

✓ The automatic exchange of the AFP messages will be implemented by the end of 2019 in all Blue Med ANSPs

✓ OLDI will be implemented in all ANSPs by 2018, and MONA by 2021

✓ Joint FAB project: Free Route Airspace, 3 steps implementation plan. Phase 1

✓ DCT routes night weekend implemented in 2015

✓ PRNAV to be implemented in 2016 (GR and MT), 2018 (IT) and 2023 (CY)

✓ APV procedures being implemented at number of airports in the FAB, estimated completion is 2016 (IT, CY and MT) and 2018 (GR)

✓ Italian Airports (Fiumicino and Malpensa) are implementing A-SMGCS in the PCP framework

✓ Thessaloniki and Athens are implementing A-SMGCS as well

✓ Airport CDM is fully implemented by Milan (Malpensa and Linate), Fiumicino and Venezia Airports. Athens and Iraklion to complete implementation in 2018

✓ Fiumicino and Malpensa are Airports from Blue Med FAB included in PCP

✓ Migration to AMHS in 2016 (IT, CY) and 2018 (GR and MT)

✓ AGDL implementation will be completed in 2018 for all ANSPs

✓ While Italy and Cyprus implemented FMTP provisions, Malta and Greece are late (plan to complete by end 2018)

The major projects include the Route Network Catalogue, Free Route Operations, ATFCM optimisation, Airport Collaborative Decision Making (ACDM), Air Ground Data Links, Ground/Ground IP Network implementation and Complementary OLDI Messages implementation.

Other activities some of which have to be implemented to meet SES requirements include Aeronautical Data Quality, FAB-wide Radar Maintenance Plan, ATM System upgrade and Common Strategy and Alignment with the SESAR Programme.

In addition, a number of initiatives will be undertaken in the Safety Domain, Human Resources and Social Dialogue, Performance Planning and Centralised Services.

All the above mentioned projects and initiatives have the objective of achieving the capacity, safety, efficiency, economic performance and environmental benefits that the European Commission desires to result from the implementation of the Single European Sky.

Safety	A dedicated Safety working group has been established in order to ensure the correct application of the Safety work plan as defined in BLUE MED Definition Phase.
Capacity	The Route Network Catalogue & Free Route Operations projects along with the PBN Implementation Roadmap will enhance capacity both in terminal and en route sectors.
Cost Effficiency	All the operational and technical projects aim at optimising cost-efficiency.
Security	ANSPs are committed to protect their organisations and systems from cyber threats.
Operational efficiency	A continuous efficiency in operations is ensured through, among others, a number of technical projects, such as AGDL, IP network, complementary OLDI messages, surveillance maintenance plan, ATM system upgrade.
Environment	The Flight Efficiency Plan developed by BLUE MED ANSPs allows for a reduction in flight time, fuel consumption and carbon dioxide emissions by aircrafts. This activity aims at developing a periodic report on the BLUE MED Flight Efficiency improvements, to be shared with the Airspace Users.

5.2. Regional cooperation

Regional cooperation initiatives

Cyprus, Israel and NM are engaged in a project for optimizing the interface between Nicosia and Tel-Aviv FIRs by redesigning the involved network. The project is expected to finish in 2019.

6. Implementation Objectives Progress

6.1. State View

Overall Objective Implementation

Progress distribution for applicable Implementation Objectives

Cyprus has initiated in 2018 a project for the implementation of an IP network in the State (project started under CEF funding) that will enable the timely completion of COM11 but also future SWIM requirements. Additionally IP communications will be implemented with the purchase of new IP Voice Communication Systems for both the ACC and the Towers.

Many objectives are not applicable to the State either because the two airports are outside the applicability are of Europe or because the State is not currently providing TMA control. The lateness of some objectives is due to the lack of resources and the prioritization given by the DCAC, since their completion does not affect significantly operational capability. An example of this is ITY-ADQ.

Another prominent example has been ITY-AGDL where the expenditure required did not seem to provide any scalable operational benefits (the project has now a definite PMP). Due to the installations of new radars that absorbed CNS HR effort, the ITY-SPI requirements are expected to be completed in 2019 based on a relevant purchase by the ATM system provider.

Some objectives depend on NM actions and with an implementation date after 2020 or are depended upon the implementation of a new ATM system.

Objective Progress per SESAR Key Feature

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

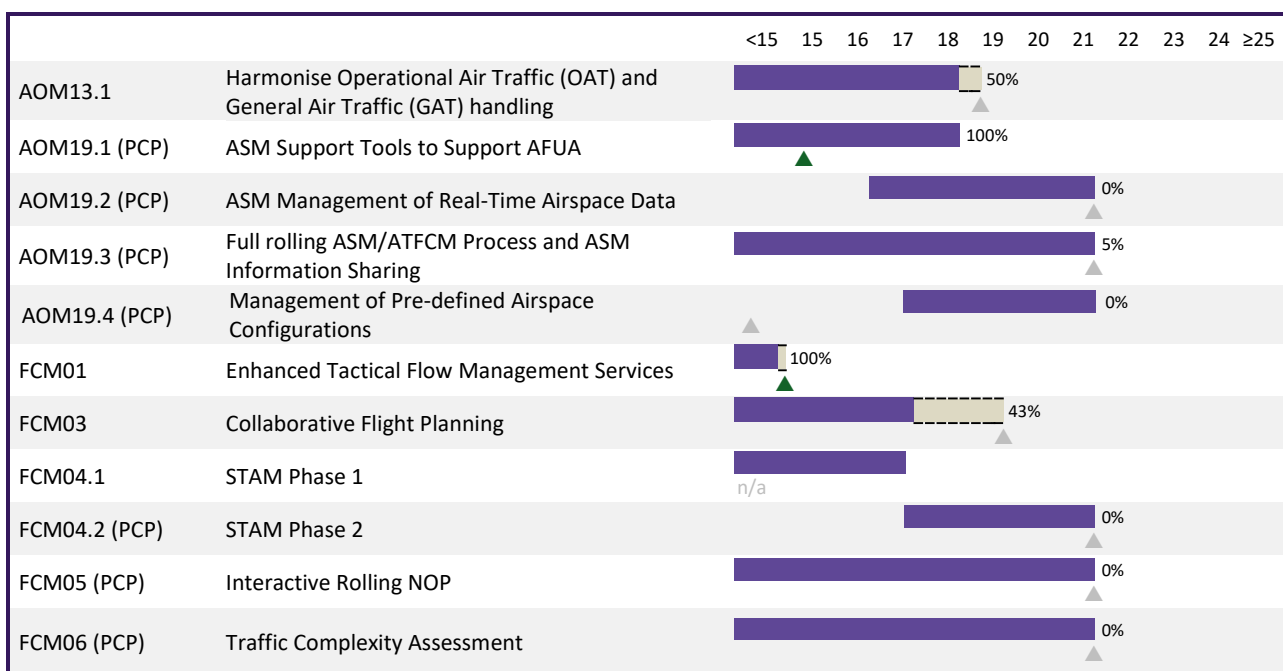Legend:
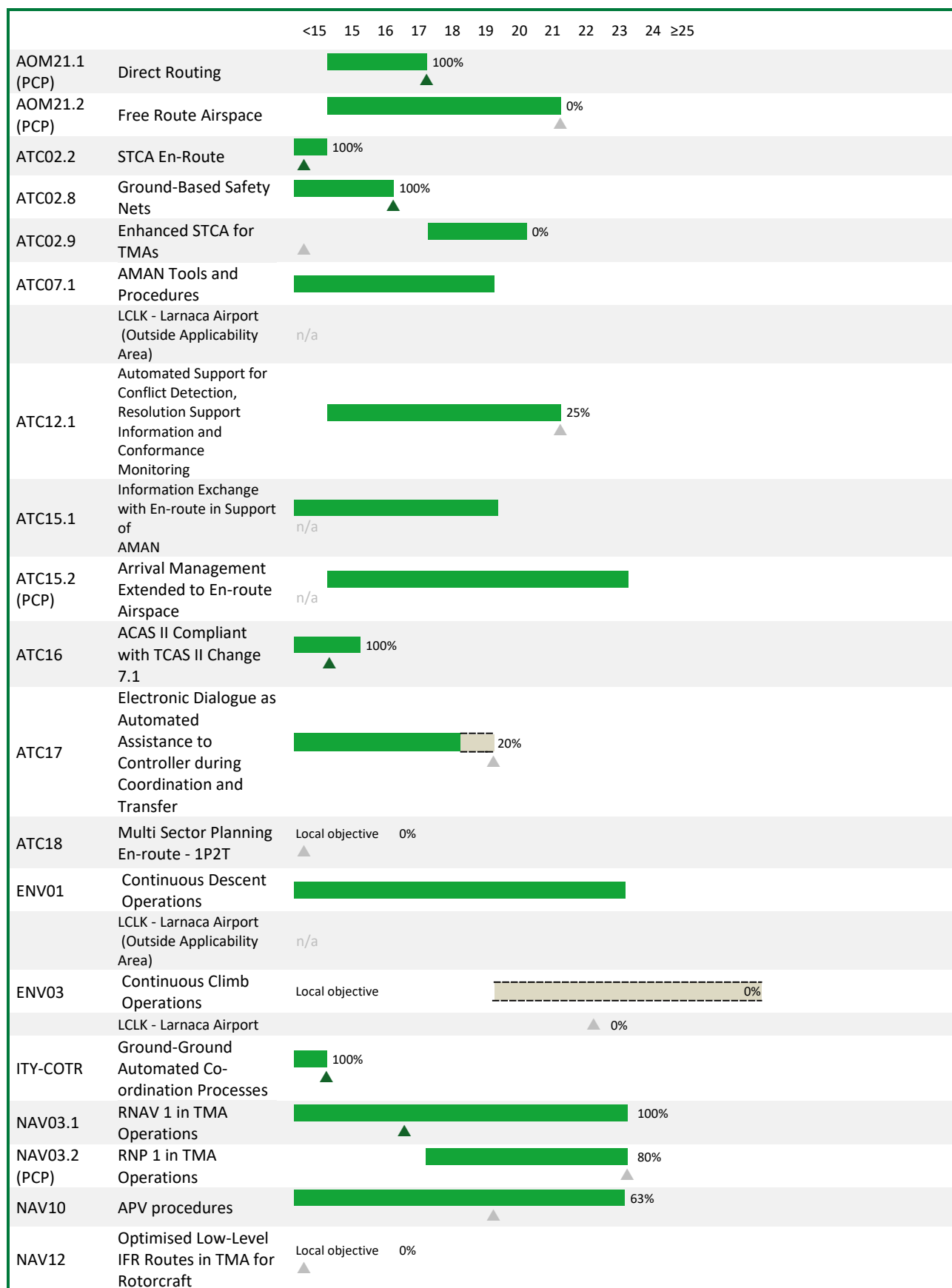
▲ ## % = Expected completion / % Progress   ███ = Implementation Objective timeline (different colour per KF)

▲ 100% = Objective completed   ┄┄┄┄ = 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						50%						
AOM19.1 (PCP)	ASM Support Tools to Support AFUA						100%						
AOM19.2 (PCP)	ASM Management of Real-Time Airspace Data								0%				
AOM19.3 (PCP)	Full rolling ASM/ATFCM Process and ASM Information Sharing								5%				
AOM19.4 (PCP)	Management of Pre-defined Airspace Configurations								0%				
FCM01	Enhanced Tactical Flow Management Services	100%											
FCM03	Collaborative Flight Planning						43%						
FCM04.1	STAM Phase 1	n/a											
FCM04.2 (PCP)	STAM Phase 2								0%				
FCM05 (PCP)	Interactive Rolling NOP								0%				
FCM06 (PCP)	Traffic Complexity Assessment								0%				

Advanced Air Traffic Services

		<15	15	16	17	18	19	20	21	22	23	24	≥25
AOM21.1 (PCP)	Direct Routing			100%									
AOM21.2 (PCP)	Free Route Airspace								0%				
ATC02.2	STCA En-Route	100%											
ATC02.8	Ground-Based Safety Nets			100%									
ATC02.9	Enhanced STCA for TMAs					0%							
ATC07.1	AMAN Tools and Procedures												
	LCLK - Larnaca Airport (Outside Applicability Area)	n/a											
ATC12.1	Automated Support for Conflict Detection, Resolution Support Information and Conformance Monitoring					25%							
ATC15.1	Information Exchange with En-route in Support of AMAN	n/a											
ATC15.2 (PCP)	Arrival Management Extended to En-route Airspace	n/a								0%			
ATC16	ACAS II Compliant with TCAS II Change 7.1	100%											
ATC17	Electronic Dialogue as Automated Assistance to Controller during Coordination and Transfer					20%							
ATC18	Multi Sector Planning En-route - 1P2T	Local objective 0%											
ENV01	Continuous Descent Operations												
	LCLK - Larnaca Airport (Outside Applicability Area)	n/a											
ENV03	Continuous Climb Operations	Local objective						0%					
	LCLK - Larnaca Airport	0%											
ITY-COTR	Ground-Ground Automated Co-ordination Processes	100%											
NAV03.1	RNAV 1 in TMA Operations			100%									
NAV03.2 (PCP)	RNP 1 in TMA Operations						80%						
NAV10	APV procedures			63%									
NAV12	Optimised Low-Level IFR Routes in TMA for Rotorcraft	Local objective 0%											

High Performing Airport Operations

		<15	15	16	17	18	19	20	21	22	23	24	≥25
AOP04.1	A-SMGCS Level 1	▰											
	LCLK - Larnaca Airport (Outside Applicability Area)	n/a											
AOP04.2	A-SMGCS Level 2	▰▰▰											
	LCLK - Larnaca Airport (Outside Applicability Area)	n/a											
AOP05	Airport CDM	▰▰											
	LCLK - Larnaca Airport (Outside Applicability Area)	n/a											
AOP10 (PCP)	Time-Based Separation		▰▰▰▰▰▰▰▰										
	LCLK - Larnaca Airport (Outside Applicability Area)	n/a											
AOP11 (PCP)	Initial Airport Operations Plan		▰▰▰▰▰▰										
	LCLK - Larnaca Airport (Outside Applicability Area)	n/a											
AOP12 (PCP)	Improve Runway and Airfield Safety with ATC Clearances Monitoring		▰▰▰▰▰										
	LCLK - Larnaca Airport (Outside Applicability Area)	n/a											
AOP13 (PCP)	Automated Assistance to Controller for Surface Movement Planning and Routing			▰▰▰▰▰▰▰									
	LCLK - Larnaca Airport (Outside Applicability Area)	n/a											
AOP14	Remote Tower Services	Local objective											
	LCLK - Larnaca Airport	▲ 0%											
ENV02	Collaborative Environmental Management	Local objective											
	LCLK - Larnaca Airport	n/a											
SAF11	Improve Runway Safety by Preventing Runway Excursions	▰▰▰ 85% ▲											

Enabling Aviation Infrastructure

		<15	15	16	17	18	19	20	21	22	23	24	≥25	
COM10	Migrate from AFTN to AMHS													100%
COM11	Voice over Internet Protocol (VoIP)													3%
COM12 (PCP)	NewPENS													0%
FCM08 (PCP)	Extended Flight Plan													0%
INF07	Electronic Terrain and Obstacle Data (eTOD)													38%
INF08.1 (PCP)	Information Exchanges using the SWIM Yellow TI Profile													3%
ITY-ACID	Aircraft Identification													25%
ITY-ADQ	Ensure Quality of Aeronautical Data and Aeronautical Information													47%
ITY-AGDL	Initial ATC Air-Ground Data Link Services													1%
ITY-AGVCS2	8,33 kHz Air-Ground Voice Channel Spacing below FL195													18%
ITY-FMTP	Common Flight Message Transfer Protocol													100%
ITY-SPI	Surveillance Performance and Interoperability													62%

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 2018 declared statuses and progress of the relevant Implementation objectives in accordance with the mapping approved by ICAO EUR EANPG/60 (European Air Navigation Planning Group).

Legend:

= Completed (during 2018 or before)	= Missing planning date
= Progress achieved in 2018	= Not applicable

		<16	16	17	18	19	20	21	22	23	24	≥25
B0-APTA	Optimization of Approach Procedures including vertical guidance					100% 63%						
B0-SURF	Safety and Efficiency of Surface Operations (A-SMGCS Level 1-2)											
B0-FICE	Increased Interoperability, Efficiency and Capacity through Ground-Ground Integration					100%						
B0-DATM	Service Improvement through Digital Aeronautical Information Management					100% 47%						
B0-ACAS	ACAS Improvements					100%						
B0-SNET	Increased Effectiveness of Ground-Based Safety Nets					100% 67%						
B0-ACDM	Improved Airport Operations through											
B0-RSEQ	Improved Traffic flow through Runway sequencing (AMAN/DMAN)											
B0-FRTO	Improved Operations through Enhanced En-Route Trajectories					100%						
B0-NOPS	Improved Flow Performance through Planning based on a Network-Wide view					100% 72%						
B0-ASUR	Initial capability for ground surveillance					100% 62%						
B0-CDO	Improved Flexibility and Efficiency in Descent Profiles (CDO)											
B0-TBO	Improved Safety and Efficiency through the initial application of Data Link En-Route					100% 1%						

6.2. Detailed Objectives Implementation progress

Objective/Stakeholder Progress Code:			
Completed	🟩	Not yet planned	🟧
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	50%	Late
	-		
	The airspace issue such as the harmonization of OAT and GAT is under the authority of the combined Civil-Military National Airspace Policy Body. Regulatory work shall be finalised and endorsed by the end of 2016 and the bulk amount of work has been completed. Due to the limited scope of military operations and due to local geography where most of the State is covered by controlled airspace, ATC for military traffic is provided by the Civilian ATC units.		30/06/2019
REG (By:12/2018)			
DCAC - Regulator	Regulatory work has been finalised and expected to be approved within 2019.	-	40% · Late · 30/06/2019
ASP (By:12/2018)			
DCAC - Air Navigation Service Provider	Military traffic is handled by Civil ATC where applicable. Due to the limited scope of military operations and due to local geography where most of the State is covered by controlled airspace, ATC for military traffic is provided by the Civilian ATC units.	-	5% · Late · 30/06/2019
MIL (By:12/2018)			
Military Authority	Military work in this area is aligned to the work of the DCAC and the combined Civil-Military National Airspace Policy Body. The requirement shall be fully completed after the completion of the relevant work by the DCAC. The Military has completed training in EUROAT procedures and is ready to apply EUROAT (with no national amendments) once the DCAC officially adopts it for implementation within Nicosia FIR.	-	100% · Completed · 31/12/2016

AOM19.1	**ASM Support Tools to Support Advanced FUA (AFUA)** _**Timescales:**_ Initial operational capability: 01/01/2011 Full operational capability: 31/12/2018	100%	**Completed**
	-		
Lara Tool has been installed and it connected to the NM providing the required updates.			**31/07/2015**
ASP (By:12/2018)			
DCAC - Air Navigation Service Provider	Lara Tool has been installed and it connected to the NM providing the required updates.	-	100% Completed 31/07/2015

AOM19.2	**ASM Management of Real-Time Airspace Data** _**Timescales:**_ Initial operational capability: 01/01/2017 Full operational capability: 31/12/2021	0%	**Planned**
	-		
The ANSP provider will have to evaluate the impact and expected benefit of this objective. The objective will be fulfilled via the implementation of a new ATM system.			**31/12/2021**
ASP (By:12/2021)			
Airspace Management Cell (Civil Military Coordination)	The AMC will implement in line with the ANSPs plans for a new ATM system	-	0% Planned 31/12/2021
DCAC - Air Navigation Service Provider	The ANSP will evaluate the impact and the necessary steps to fulfill the objective. The objective will be fulfilled via the implementation of a new ATM system.	-	0% Planned 31/12/2021

AOM19.3	**Full Rolling ASM/ATFCM Process and ASM Information Sharing** _**Timescales:**_ Initial operational capability: 01/01/2014 Full operational capability: 31/12/2021	5%	**Ongoing**
	-		
Objective under assessment. Currently the AMC is planning on the LARA tool for the real time notification of active areas to the units. Additionally the AMC issues daily the AUP/UUP.			**31/12/2021**
ASP (By:12/2021)			
Airspace Management Cell (Civil Military Coordination)	Objective under assessment. Currently the AMC is planning on the LARA tool for the real time notification of active areas to the units. Additionally the AMC issues daily the AUP/UUP.	-	5% Ongoing 31/12/2021

AOM19.4	**Management of Pre-defined Airspace Configurations** *Timescales:* Initial operational capability: 01/01/2018 Full operational capability: 31/12/2021		0%	**Not yet planned**
	-			
	The objective will be implemented under the scope of a new ATM system.			-
	ASP (By:12/2021)			
DCAC - Air Navigation Service Provider	Following AOM19.1 and 19.2 this objective will be considered with a new ATM system	-	0%	Not yet planned
				-

AOM21.2	**Free Route Airspace** *Timescales:* Initial operational capability: 01/01/2015 Full operational capability: 31/12/2021		0%	**Planned**
	-			
	The State supports the ANSP in this effort as this is a regulatory requirement. The State will strive to implement FRA by the set deadline and will make available any necessary budgeting.			**31/12/2021**
	ASP (By:12/2021)			
DCAC - Air Navigation Service Provider	The implementation of FRA independent of the current network is not supported by the current ATM system. The project is planned with the purchase of a new ATM system.	BLUE MED Free Route Airspace Implement ation	0%	Planned
				31/12/2021

AOP04.1	**Advanced Surface Movement Guidance and Control System A-SMGCS Surveillance (former Level 1)** *Timescales:* - not applicable -		%	**Not Applicable**
	LCLK - Larnaca Airport **(Outside Applicability Area)**			
	Larnaca is not in the applicability area			-
	REG (By:12/2010)			
National Supervisory Authority	Larnaca is not in the applicability area	-	%	Not Applicable
				-
	ASP (By:12/2011)			
DCAC - Air Navigation Service Provider	Larnaca is not in the applicability area	-	%	Not Applicable
				-
	APO (By:12/2010)			
LARNACA Airport	Larnaca is not in the applicability area	-	%	Not Applicable
				-

AOP04.2	**Advanced Surface Movement Guidance and Control System (A-SMGCS) Runway Monitoring and Conflict Alerting (RMCA) (former Level 2)** *Timescales:* - not applicable -	**%**	**Not Applicable**
	LCLK - Larnaca Airport **(Outside Applicability Area)**		
Larnaca is not in the applicability area			**-**

ASP (By:12/2017)				
DCAC - Air Navigation Service Provider	Larnaca is not in the applicability area	-	%	Not Applicable -

APO (By:12/2017)				
LARNACA Airport	Larnaca is not in the applicability area	-	%	Not Applicable -

AOP05	**Airport Collaborative Decision Making (A-CDM)** *Timescales:* - not applicable -	**%**	**Not Applicable**
	LCLK - Larnaca Airport **(Outside Applicability Area)**		
Larnaca is not in the applicability area			**-**

ASP (By:12/2016)				
DCAC - Air Navigation Service Provider	Larnaca is not in the applicability area	-	%	Not Applicable -

APO (By:12/2016)				
LARNACA Airport	Larnaca is not in the applicability area	-	%	Not Applicable -

AOP10	**Time-Based Separation** *Timescales:* - not applicable -	**%**	**Not Applicable**
	LCLK - Larnaca Airport **(Outside Applicability Area)**		
Larnaca is not in the applicability area			**-**

REG (By:12/2023)				
DCAC - Regulator	Larnaca is not in the applicability area	-	%	Not Applicable -

ASP (By:12/2023)				
DCAC - Air Navigation Service Provider	Larnaca is not in the applicability area	-	%	Not Applicable -

AOP11	Initial Airport Operations Plan *Timescales:* - not applicable -		%	**Not Applicable**
	LCLK - Larnaca Airport **(Outside Applicability Area)**			
Larnaca is outside the area of applicability				-
ASP (By:12/2021)				
DCAC - Air Navigation Service Provider	Cyprus is outside the area of applicability	-	%	Not Applicable
				-
APO (By:12/2021)				

AOP12	Improve Runway and Airfield Safety with Conflicting ATC Clearances (CATC) Detection and Conformance Monitoring Alerts for Controllers (CMAC) *Timescales:* - not applicable -		%	**Not Applicable**
	LCLK - Larnaca Airport **(Outside Applicability Area)**			
Larnaca Airport is not in the applicability area of this Objective.				-
ASP (By:12/2020)				
DCAC - Air Navigation Service Provider	Larnaca Airport is not in the applicability area of this Objective.	-	%	Not Applicable
				-
APO (By:12/2020)				
LARNACA Airport	Larnaca Airport is not in the applicability area of this Objective.	-	%	Not Applicable
				-

AOP13	Automated Assistance to Controller for Surface Movement Planning and Routing *Timescales:* - not applicable -		%	**Not Applicable**
	LCLK - Larnaca Airport **(Outside Applicability Area)**			
Objective is not applicable to LCLK airport				-
REG (By:12/2023)				
DCAC - Regulator	-	-	%	Not Applicable
				-
ASP (By:12/2023)				
DCAC - Air Navigation Service Provider	-	-	%	Not Applicable
				-

ATC02.8	**Ground-Based Safety Nets** ***Timescales:*** Initial operational capability: 01/01/2009 Full operational capability: 31/12/2016	**100%**	**Completed**
-			

APW is a functionality of the current ATM system and it's currently being used by ATCOs **The MSAW functionality is employed by the current ATM system and it's currently being used by ATCOs** **APM was integrated in the current system with the first upgrade of summer 2013. The APM is available on the system and will be used when the Approach radar function is implemented. ATCO training was based on the EUROCONTROL Specification for APM.**	**31/12/2016**

ASP (By:12/2016)

DCAC - Air Navigation Service Provider	APW is a functionality of the current ATM system and it's currently being used by ATCOs The MSAW was part of the set of functionalities of the new TopSKy-C system. The functionality was also part of the ATCO training for the introduction of the system into operations. The functionality is currently employed. APM was integrated with the 1st upgrade of the new ATM System in summer 2013. It will be used when the Approach radar function at LCLK is implemented	-	100%	Completed 31/12/2016

ATC02.9	**Enhanced Short Term Conflict Alert (STCA) for TMAs** ***Timescales:*** Initial operational capability: 01/01/2018 Full operational capability: 31/12/2020	**0%**	**Not yet planned**
-			

The State shall facilitate the DCAC in enhancing the provision of ANS at both airports. The objective shall be reassessed when TMA operations implemented based on safety and business needs.	**-**

ASP (By:12/2020)

DCAC - Air Navigation Service Provider	The DCAC is currently in the process of designing TMA operations at LCLK and LCPH. The requirement shall be reassessed once radar service will be provided at the airports and if the TMA traffic density necessitates the implementation of the functionality.	-	0%	Not yet planned -

ATC07.1	**AMAN Tools and Procedures** ***Timescales:*** - not applicable -	**%**	**Not Applicable**

LCLK - Larnaca Airport **(Outside Applicability Area)**		
Cyprus is not in the applicability area of this Objective.		-

ASP (By:12/2019)

DCAC - Air Navigation Service Provider	Cyprus is not in the applicability area of this Objective.	Terminal APP RADAR control	%	Not Applicable -

ATC12.1	**Automated Support for Conflict Detection, Resolution Support Information and Conformance Monitoring** *Timescales:* Initial operational capability: 01/01/2015 Full operational capability: 31/12/2021	25%	**Ongoing**
-			
The state fully supports the ANSP's efforts in implementing automated support for conflict detection, resolution support information and conformance monitoring.			**31/12/2021**
ASP (By:12/2021)			
DCAC - Air Navigation Service Provider	MTCD is available but other functions such as Resolution support information- Conflict Resolution Assistant (CORA), the Implementation of Conformance Monitoring (MONA) and the Implementation of Tactical Control Tools (TCT) will be implemented when a new ATM system will be purchased.	-	25%	Ongoing 31/12/2021

ATC15.1	**Information Exchange with En-route in Support of AMAN** **(Outside Applicability Area)** *Timescales:* - not applicable -	%	**Not Applicable**
-			
Cyprus is not in the applicability area of this Objective.			-
ASP (By:12/2019)			
DCAC - Air Navigation Service Provider	Cyprus is not in the applicability area of this Objective.	-	%	Not Applicable -

ATC15.2	**Arrival Management Extended to En-route Airspace** **(Outside Applicability Area)** *Timescales:* - not applicable -	%	**Not Applicable**
-			
Cyprus is not in the applicability area of this Objective.			-
ASP (By:12/2023)			
DCAC - Air Navigation Service Provider	Cyprus is not in the applicability area of this Objective.	-	%	Not Applicable -

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	20%	**Late**
	-		
Cyprus shall strive to implement this new ESSIP objective ATC17 to the maximum possible extend. In doing so the State shall ensure that the requirements of Commission Regulation (EC) 1032/2006 and ATC17 are fulfilled. The ANSP is implementing the electronic dialogue within the scope of the new ATM system. The NSA shall ensure that all safety aspects related to the changes are reviewed.		**31/12/2019**	
ASP (By:12/2018)			
DCAC - Air Navigation Service Provider	The ANSP has started partially implementing the requirements of ATC 17 under the scope of the upgrade of the ATM system. In doing so, the relevant safety studies shall be completed and the required training shall be developed and delivered to all concerned personnel.	-	20% / Late / 31/12/2019

COM10	**Migrate from AFTN to AMHS** *Timescales:* Initial operational capability: 01/12/2011 Full operational capability: 31/12/2018	100%	**Completed**
	-		
AMHS system is in operation since October 2016. The implementation of the AMHS links took place by End 2017.		**31/12/2017**	
ASP (By:12/2018)			
DCAC - Air Navigation Service Provider	AMHS system is in operation since October 2016. The implementation of the AMHS links took place by End 2017.	ATS Message Handling System (AMHS)	100% / Completed / 31/12/2017

COM11	**Voice over Internet Protocol (VoIP)** *Timescales:* Initial operational capability: 01/01/2013 Full operational capability: 31/12/2020	3%	**Ongoing**
	-		
The general intention of all Blue Med FAB partners is to implement COM11 Voice over IP.		**31/12/2020**	
ASP (By:12/2020)			
DCAC - Air Navigation Service Provider	The general intention of all Blue Med FAB partners was to rather concentrate on COM11 Voice over IP as this was seen as the technology of the future. The CNS provider (CYTA) is planning to migrate to VoIP by 2020 in line with the FAB agreement. The project is heavily dependent on the implementation of a national IP network.	Communication system (VCCS) upgrade and backup / Migration to IPv6 Network	3% / Ongoing / 31/12/2020

COM12	**New Pan-European Network Service (NewPENS)** **_Timescales:_** Initial operational capability: 01/01/2018 Full operational capability (33 ANSPs): 31/12/2020	**0%**	**Planned**
	-		
The Cyprus New PENS transition project has been launched in 2016 and it is ongoing. The project team in collaboration with other European Countries participates in PSSG, PUG and TFG meetings where the transition process all over Europe is discussed and approved.			**31/12/2020**
ASP (By:12/2024)			
DCAC - Air Navigation Service Provider	The Cyprus New PENS transition project has been launched in 2016 and it is ongoing. The project team in collaboration with other European Countries participates in PSSG, PUG and TFG meetings where the transition process all over Europe is discussed and approved.	-	**0%**	Planned 31/12/2020
APO (By:12/2024)			
LARNACA Airport	-	-	0%	Not yet planned -

ENV01	**Continuous Descent Operations (CDO)** **_Timescales:_** - not applicable -	**%**	**Not Applicable**
LCLK - Larnaca Airport **(Outside Applicability Area)**			
Larnaca is not in the applicability area			-
ASP (By:12/2023)			
DCAC - Air Navigation Service Provider	Larnaca is not in the applicability area	Terminal APP RADAR control	%	Not Applicable -
APO (By:12/2023)			
LARNACA Airport	Larnaca is not in the applicability area	Terminal APP RADAR control	%	Not Applicable -

FCM03	**Collaborative Flight Planning** **_Timescales:_** Initial operational capability: 01/01/2000 Full operational capability: 31/12/2017	**43%**	**Late**
	-		
The remaining SLoAs are planned to be implemented with the updated roadmap of the ATM system by end 2019.			**31/12/2019**
ASP (By:12/2017)			
DCAC - Air Navigation Service Provider	Already partially implemented in current system, but it will be fully implemented with the updated roadmap of the ATM system by end 2019.	TopSky ATM system upgrades	43%	Late 31/12/2019

FCM04.1	**Short Term ATFCM Measures (STAM) - Phase 1** **(Outside Applicability Area)** *Timescales:* - not applicable -	**%**	**Not Applicable**
	-		
Cyprus is not in the applicability area of this Objective.			-
ASP (By:10/2017)			
DCAC - Air Navigation Service Provider	Cyprus is not in the applicability area of this Objective.	-	%	Not Applicable -

FCM04.2	**Short Term ATFCM Measures (STAM) - Phase 2** *Timescales:* Initial operational capability: 01/11/2017 Full operational capability: 31/12/2021	**0%**	**Planned**
	-		
The Nicosia ACC-FMP shall assess the obligations and applicability of this objective. The FMP function will pursue the objective in coordination with NM			**31/12/2021**
ASP (By:12/2021)			
DCAC - Air Navigation Service Provider	The Nicosia ACC-FMP shall assess the obligations and applicability of this objective. The FMP function will pursue the objective in coordination with NM	-	0%	Planned 31/12/2021

FCM05	**Interactive Rolling NOP** *Timescales:* Initial operational capability: 01/09/2013 Full operational capability: 31/12/2021	**0%**	**Planned**
	-		
-			**31/12/2021**
ASP (By:12/2021)			
DCAC - Air Navigation Service Provider	-	-	0%	Planned 31/12/2021
APO (By:12/2021)			
LARNACA Airport	Larnaca and Pafos outside Coordinated Airports scope	-	%	Not Applicable -

FCM06	**Traffic Complexity Assessment** *Timescales:* Initial operational capability: 01/01/2015 Full operational capability: 31/12/2021	**0%**	**Planned**
	-		
The State will fulfil this requirement with the cooperation of the NM			**31/12/2021**
ASP (By:12/2021)			
DCAC - Air Navigation Service Provider	The implementation of this ESSIP objective depends on the initial implementation of the corresponding objectives of the Network Manager.	-	0%	Planned 31/12/2021

FCM08	**Extended Flight Plan** *Timescales:* Initial operational capability: 01/01/2016 Full operational capability: 31/12/2021	0%	**Planned**

-		
The objective shall be implemented in collaboration with NM. All system changes shall be assessed and implemented as needed.		**31/12/2021**

ASP (By:12/2021)

DCAC - Air Navigation Service Provider	The implementation of this functionality relies upon changes on the ATM system for the new data received by NM	-	0%	Planned
				31/12/2021

INF07	**Electronic Terrain and Obstacle Data (eTOD)** *Timescales:* Initial operational capability: 01/11/2014 Full operational capability: 31/05/2018	38%	**Late**

-		
The State has endorsed the process of drafting the national policy and regulatory framework.		**31/12/2019**

REG (By:05/2018)

DCAC - Regulator	The DCAC-REG has in its plan to include the oversight of the TOD implementation. Relevant AIC has been issued that partially addresses the regulatory requirements.	-	0%	Late
				31/12/2019

ASP (By:05/2018)

Aeronautical Information Service	The ASP (AIS) is actively involved in the drafting of both the policy and the implementation plan.	-	50%	Late
				31/12/2019

APO (By:05/2018)

PAFOS Airport	The required stakeholder actions have been completed.	-	100%	Completed
				30/11/2015
LARNACA Airport	The required stakeholder actions have been completed.	-	100%	Completed
				30/11/2015

INF08.1	**Information Exchanges using the SWIM Yellow TI Profile** *Timescales:* Initial operational capability: 01/01/2018 Full operational capability: 31/12/2024	3%	**Ongoing**

-		
The State has applied and was granted funding for the implementation of an IP network. The project is progressing according to plan.		**31/12/2024**

ASP (By:12/2024)

DCAC - Air Navigation Service Provider	-	-	3%	Ongoing
				31/12/2024

MIL (By:12/2024)

APO (By:12/2024)

ITY-ACID	**Aircraft Identification** _Timescales:_ Entry into force of the Regulation: 13/12/2011 System capability: 02/01/2020	**25%**	**Ongoing**
	-		
The State will support the DCAC for any plans for the upgrading of all radars and ATM system with the mode-S functionality. Additionally the State will facilitate the NSA in its oversight task			**02/01/2020**
ASP (By:01/2020)			
DCAC - Air Navigation Service Provider	The DCAC includes in its plans the upgrading of all radars with the mode-S functionality. The ATM system is currently utilizing mode-S data. The CNS Provider (CYTA) indicates that will be compliant with the provisions of this objective within the deadline.	-	25%	Ongoing 02/01/2020

ITY-ADQ	**Ensure Quality of Aeronautical Data and Aeronautical Information** _Timescales:_ Entry into force of the regulation: 16/02/2010 Article 5(4)(a), Article 5(4)(b) and Article 6 to 13 to be implemented by: 30/06/2013 Article 4, Article5(1) and Article 5(2), Article 5(3) and Article 5(4)(c) to be implemented by: 30/06/2014 All data requirements implemented by: 30/06/2017	**47%**	**Late**
	-		
The State has initiated its work on this objective. The main part of the work shall be completed by the AIS. All support shall be given to the AIS provider in terms of equipment and training.			**31/12/2019**
REG (By:06/2017)			
National Supervisory Authority	The NSA will oversee the implementation of this objective as per its normal audit activities. Any changes to procedures, training and equipment shall be the subject of an NSA review including the relevant safety assessment.	-	7%	Late 31/12/2019
ASP (By:06/2017)			
Aeronautical Information Service	Parts of the requirement are partially completed. Changes in the infrastructure and personnel training are under study. Most of the work is expected to be completed by end of 2016.	-	66%	Late 31/12/2019
APO (By:06/2017)			
LARNACA Airport	Work in progress in coordination with ASP and Regulator	-	44%	Late 31/12/2019
PAFOS Airport	Work in progress in coordination with ASP and Regulator	-	44%	Late 31/12/2019

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		1%	**Late**
	-			
The work for this objective is now under the scope of the IDP program of SESAR. The ANSP is planning the execution of the project. The objective is late and a new project plan has been discussed with SDM in January 2018.				**30/06/2021**
REG (By:02/2018)				
National Supervisory Authority	This introduction of this functionality will be accepted for operation according to the approved SMS procedures and oversight practices.	-	0%	Late
				30/06/2021
ASP (By:02/2018)				
DCAC - Air Navigation Service Provider	Planned with the entry into operations of the new ATM system. The DCAC CNS Section is in contact with Data Link services to prepare a plan within the Blue Med program.	Air-to-ground Datalink services	2%	Late
				30/06/2021
MIL (By:01/2019)				
Military Authority	The Cypriot National Guard does not possess any transport type state aircraft.	-	%	Not Applicable
				-

ITY-AGVCS2	**8,33 kHz Air-Ground Voice Channel Spacing below FL195** ***Timescales:*** Entry into force: 07/12/2012 New and upgraded radio equipment: 17/11/2013 New or upgraded radios on State aircraft: 01/01/2014 Interim target for freq. conversions: 31/12/2014 All radio equipment: 31/12/2017 All frequencies converted: 31/12/2018 State aircraft equipped, except those notified to EC: 31/12/2018 State aircraft equipped, except those exempted [Art 9(11)]: 31/12/2020		18%	**Late**

-				
The State has applied to the Commission for an exception of 8.33 due to operational requirements. This was done in coordination with NM. The objective shall be reassessed once a response is received.				**31/12/2019**

REG (By:12/2018)

Military Authority	The State has applied to the Commission for an exception of 8.33 due to operational requirements. This was done in coordination with NM	-	10%	Late
				31/12/2019
National Supervisory Authority	The State has applied to the Commission for an exception of 8.33 due to operational requirements. This was done in coordination with NM and the NSA	-	10%	Late
				31/12/2019

ASP (By:12/2018)

DCAC - Air Navigation Service Provider	The ANSP has recently put into operations new radio equipment with 8,33 kHz channel spacing capability. The change has been safety assessed. The State has applied to the Commission for an exception of 8.33 due to operational requirements. This was done in coordination with NM	-	24%	Late
				31/12/2019

MIL (By:12/2020)

Military Authority	The State has applied to the Commission for an exception of 8.33 due to operational requirements. This was done in coordination with NM	-	%	Not Applicable
				-

APO (By:12/2018)

Military Authority	The State has applied to the Commission for an exception of 8.33 due to operational requirements. This was done in coordination with NM	-	%	Not Applicable
				-
LARNACA Airport	Both Airports do not use radio frequencies within the applicable VHF band between 118 and 137 MHz.	-	%	Not Applicable
				-
PAFOS Airport	The State has applied to the Commission for an exception of 8.33 due to operational requirements. This was done in coordination with NM	-	%	Not Applicable
				-

ITY-FMTP	**Common Flight Message Transfer Protocol (FMTP)** ***Timescales:*** Entry into force of regulation: 28/06/2007 All EATMN systems put into service after 01/01/09: 01/01/2009 All EATMN systems in operation by 20/04/11: 20/04/2011 Transitional arrangements: 31/12/2012 Transitional arrangements when bilaterally agreed between ANSPs: 31/12/2014	**100%**	**Completed**
	-		
Technically completed with the new ATM system that uses OLDI over FMTP			**31/12/2013**
ASP (By:12/2014)			
DCAC - Air Navigation Service Provider	The new ATM system became operational in 2013 uses the FMTP protocol for information exchanges between flight data processing systems for the purpose of notification, coordination and transfer of flights. The system implements OLDI with FMTP.	-	100%	Completed 31/12/2013
MIL (By:12/2014)			
Military Authority	The Cypriot National Guard does not provide any GAT service, these are provided by DCAC. Therefore this Objective is not applicable.	-	%	Not Applicable -

ITY-SPI	**Surveillance Performance and Interoperability** ***Timescales:*** Entry into force of regulation: 13/12/2011 ATS unit operational capability: 12/12/2013 EHS and ADS-B Out in transport-type State aircraft : 07/06/2020 ELS in transport-type State aircraft : 07/06/2020 Ensure training of MIL personnel: 07/06/2020 Retrofit aircraft capability: 07/06/2020	**62%**	**Ongoing**
	-		
The Republic of Cyprus shall strive to be fully compliant with Regulation (EU) No 1207/2011 on the appropriate time scale.			**30/06/2019**
REG (By:02/2015)			
National Supervisory Authority	The NSA has established a well documented system on the oversight of CNS changes in the State and regularly reviews and approves the safety assessment of the ANSP. The review of the assessment is based on the methodology proposed by EUROCONTROL. The whole process is published for all providers in Cyprus. The process is currently being practiced extensively.	-	0%	Late 30/06/2019
ASP (By:02/2015)			
DCAC - Air Navigation Service Provider	The ANSP conducts a safety assessment process for all surveillance function related changes. The safety assessment process aim is to analyses the evidences and justify the arguments. This methodology shall be applied for any upcoming change. A vital part of the management of changes is the relevant training of the affected ATM personnel.	-	78%	Late 30/06/2019
MIL (By:06/2020)			
Military Authority	The Cyprus Military does not use or does not provide surveillance data for ATM purposes. Furthermore, the Cyprus National Guard does not operate any IFR/GAT.	-	%	Not Applicable -

NAV03.1	**RNAV 1 in TMA Operations** *Timescales:* Initial operational capability: 01/01/2001 Full operational capability: 31/12/2023	100%	**Completed**
	-		
The restructuring of the airspace around Larnaca airport in accordance with ICAO PANS OPS has been completed. **A Terminal Area has been designed, new fixed transition altitude has been implemented and new conventional STARS and SIDS and let down procedures are already been published.** **The same airspace design concept has been applied for Paphos. The process was completed in the second half of 2016.** **Cyprus will implement RNAV 1/RNP procedures to be supported through the use of GNSS.** **The RNAV 1 SIDS and STARS overlay the new conventional procedures.**			03/05/2017

ASP (By:12/2023)

DCAC - Air Navigation Service Provider	The restructuring of the airspace around Larnaca airport in accordance with ICAO PANS OPS has been completed. A Terminal Area has been designed, new fixed transition altitude has been implemented and new conventional STARS and SIDS and let down procedures are already been published. The same airspace design concept has been applied for Paphos. The process was completed in the second half of 2016. Cyprus will implement RNAV 1/RNP procedures to be supported through the use of GNSS. The RNAV 1 SIDS and STARS overlay the new conventional procedures.	RNP Approach Procedures with APV	100%	Completed 03/05/2017

NAV03.2	**RNP 1 in TMA Operations** *Timescales:* Initial operational capability: 01/01/2018 Full operational capability: 31/12/2023	80%	**Ongoing**
	-		
The State has assessed the need for RNP1 operations and has implemented the RNP to ILS with Radius to Fix (RF). An assessment will be made for Paphos airport			**31/12/2023**

ASP (By:12/2023)

DCAC - Air Navigation Service Provider	The DCAC has assessed the need for RNP1 operations and has implemented the RNP to ILS with Radius to Fix (RF).An assessment will be made for Paphos airport	-	80%	Ongoing 31/12/2023

NAV10	**RNP Approach Procedures with Vertical Guidance** **_Timescales:_** Initial operational capability: 01/06/2011 Full operational capability: 31/12/2023	**63%**	**Ongoing**
	-		
The EASA material for APV procedures is currently under review and projects for the Design and Publication of APV/Baro and/or APV/SBAS procedures and the development of a national safety case for APV/Baro operations and/or APV/SBAS operations are initiated.			**31/12/2019**
REG (By:12/2023)			
National Supervisory Authority	The NSA will accept the implementation of APV procedures in accordance with its normal auditing and change acceptance processes.	-	10%	Ongoing 31/12/2019
ASP (By:12/2023)			
DCAC - Air Navigation Service Provider	A project for the Design and Publication of APV/Baro and/or APV/SBAS procedures is initiated and shall follow the completion of NAV03. The Approach Procedures (RNAV GNSS) with vertical guidance (APV) shall use barometric inputs (APV Baro-VNAV). APV Baro-VNAV criteria is waiting for enhancements like offset criteria and Vertical Error Budget (VEB) methodology. The standard approach procedure will be GNSS based. This will significantly contribute to improving safety because it reduces pilot workload and prevents CFIT. ILS will be retained and ground based approaches are considered to be essential for contingency purposes. A project for the development of a national safety case for APV/Baro operations and/or APV/SBAS operations is initiated. For the time being only Baro/VNAV is considered, awaiting for the EGNOS coverage.	RNP Approach Procedures with APV	80%	Ongoing 31/12/2019

SAF11	**Improve Runway Safety by Preventing Runway Excursions** **_Timescales:_** Initial operational capability: 01/09/2013 Full operational capability: 31/01/2018	**85%**	**Late**
	-		
The State has established the necessary oversight activities in the form of audit plans, audit reports and subsequent corrective action plans. The process of airport certification has been initiated and is expected to cover the requirements emanating thought the excursion action plan. The State will follow the process closely.			**31/12/2019**
REG (By:01/2018)			
National Supervisory Authority	The DCAC-Airports Oversight section and the NSA will include the program under their audit scopes for the upcoming years.	-	25%	Late 31/12/2019
ASP (By:12/2014)			
DCAC - Air Navigation Service Provider	The ANSP is actively participating in the local safety teams and will adjust the Tower staff trailing accordingly to cover the aspects of the plan.	Safety Management	100%	Completed 31/12/2014
APO (By:12/2014)			
LARNACA Airport	The airport is under certification process which covers both the physical elements required and the procedure requirements. Participates also in the local safety teams.	-	100%	Completed 31/12/2014

Additional Objectives for ICAO ASBU Monitoring

AOM21.1	**Direct Routing** *Timescales:* Initial Operational Capability: 01/01/2015 Full Operational Capability: 31/12/2017	**100%**	**Completed**
	-		
	The Objective has been completed. Aircraft operators can plan their flight direct from all the entry to exit points in Nicosia FIR , thus close to user preferred trajectories.		**31/12/2017**
ASP (By:12/2017)			
DCAC - Air Navigation Service Provider	The work on the application of direct routing in Nicosia FIR has been completed. The DCT project is part of the IDP program of the TEN-T with a finite time limit.	-	100%	Completed 31/12/2017

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**
	-		
	ATC2.2 implemented with new TopSky-ATC system operation.		**30/06/2012**
ASP (By:01/2013)			
DCAC - Air Navigation Service Provider	ATC2.2 implemented with new TopSky-ATC system operation.	-	100%	Completed 30/06/2012

ATC16	**Implement ACAS II compliant with TCAS II change 7.1** *Timescales:* Initial operational capability: 01/03/2012 Full operational capability: 31/12/2015	**100%**	**Completed**
	-		
	The Republic of Cyprus was in collaboration with the Safety Regulation Unit of the DCAC for the completion of the requirement. The airline operator subject to the direct oversight regarding this requirement was Cyprus Airways, which has ceased operations. The DCAC Safety Regulatory Unit will ensure the fulfillment of the requirement for future aircraft registrations.		**31/01/2015**
REG (By:12/2015)			
DCAC - Regulator	Objective handled by the Safety Regulation Unit of the DCAC (SRU). As the State comment above. The SRU includes the ACAS II with TCAS II change 7.1 compliance verification in the SAFA program.	-	100%	Completed 31/01/2015
ASP (By:03/2012)			
DCAC - Air Navigation Service Provider	DCAC incorporates the training material in ATCO training.	-	100%	Completed 31/01/2015
MIL (By:12/2015)			
Military Authority	Not applicable for the Military authorities as military do not operate aircraft falling under this requirement.	-	%	Not Applicable -

FCM01	Implement enhanced tactical flow management services ***Timescales:*** Initial operational capability: 01/08/2001 Full operational capability: 31/12/2006		100%	Completed
	-			
Completed with the new ATM system.				28/02/2015
ASP (By:07/2014)				
DCAC - Air Navigation Service Provider	Completed with the new ATM system.	-	100%	Completed 28/02/2015

ITY-COTR	Implementation of ground-ground automated co-ordination processes ***Timescales:*** Entry into force of Regulation: 27/07/2006 For putting into service of EATMN systems in respect of notification and initial coordination processes: 27/07/2006 For putting into service of EATMN systems in respect of Revision of Coordination, Abrogation of Coordination, Basic Flight Data and Change to Basic Flight Data: 01/01/2009 To all EATMN systems in operation by 12/2012: 31/12/2012		100%	Completed
	-			
Current FDP currently supports most of these operations with OLDI. Operations of Cypriot National Guard OAT do not require any ground-to-ground automated co-ordination processes. Nevertheless, the DCAC has agreed and is transmitting basic flight data to military units.				31/12/2014
ASP (By:12/2012)				
DCAC - Air Navigation Service Provider	Current FDP currently supports most of these operations with OLDI operations.	-	100%	Completed 31/12/2014
MIL (By:12/2012)				
Military Authority	Operations of Cypriot National Guard OAT do not require any ground-to-ground automated co-ordination processes. Nevertheless the DCAC has agreed and is transmitting basic flight data to military units.	-	%	Not Applicable -

Local Objectives

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

AOP14	**Remote Tower Services** *Applicability and timescale: Local*	0%	**Not yet planned**
LCLK - Larnaca Airport		
Not yet planned at Larnaca Airport			-

ATC18	**Multi-Sector Planning En-route - 1P2T** *Applicability and timescale: Local*	0%	**Not yet planned**
	-		
Nicosia ACC is not implementing the 1P2T concept. The concept is not currently in our current nor short term future plans			-

ENV02	**Airport Collaborative Environmental Management** *Applicability and timescale: Local*	%	**Not Applicable**
	LCLK - Larnaca Airport		
Not applicable to Larnaca Airport			-

ENV03	**Continuous Climb Operations (CCO)** *Applicability and timescale: Local*	0%	**Planned**
	LCLK - Larnaca Airport		
Currently the DCAC does not provide Terminal Area Control Service. The provision is approach service is catered via conventional SIDs where designed for continuous climb. The provision of TMA control is under planning where special provision shall be made for CCOs.			31/12/2022

NAV12	**Optimised Low-Level IFR Routes in TMA for Rotorcraft** *Applicability and timescale: Local*	0%	**Not yet planned**
	-		
The DCAC is not facing any needs in this area			-

ANNEXES

Specialists involved in the ATM implementation reporting for Cyprus

LSSIP Co-ordination

LSSIP Focal Points	Organisation	Name
LSSIP National Focal Point	DCAC	Haris ANTONIADES
LSSIP Focal Point for NSA/CAA	DCAC/NSA	Michalis AGISILAOU
LSSIP Focal Point for ANSP	DCAC	Haris ANTONIADES
LSSIP Focal Point for Airport	DCAC	Nicolas MYTIDES
LSSIP Focal Point for Military	Cypriot National Guard	Pantelis PIERIDES

EUROCONTROL LSSIP Support

Function	Directorate	Name
LSSIP Contact Person	DECMA/ACS/PRM	Bernd HILL

National stakeholders' organisation charts

Organisation chart of DCAC:

Stakeholders Organisation Chart (arrows indicate interaction)

Organisation chart of Cyprus Air Command

Implementation Objectives' links with SESAR, ICAO and DP

Objective	SESAR Key Feature	ICAO ASBU B0 and B1	DP Family
AOM13.1		-	-
AOM19.1		B1-FRTO B1-NOPS	3.1.1 ASM Tool to support AFUA
AOM19.2		B1-FRTO B1-NOPS	3.1.2 ASM management of real time airspace data
AOM19.3		B1-FRTO B1-NOPS	3.1.3 Full rolling ASM/ATFCM process and ASM information sharing
AOM19.4		B1-FRTO B1-NOPS	3.1.4 Management of dynamic airspace configurations
AOM21.1		B0-FRTO	-
AOM21.2		B1-FRTO	3.2.1 Upgrade of ATM systems to support Direct Routing and Free Routing 3.2.4 Implement Free Route Airspace
AOP04.1		B0-SURF	2.2.1 A-SMGCS level 1 and 2
AOP04.2		B0-SURF	2.2.1 A-SMGCS level 1 and 2
AOP05		B0-ACDM B0-RSEQ	2.1.1 Initial DMAN 2.1.3 Basic A-CDM
AOP10		B1-RSEQ	2.3.1 Time Based Separation (TBS)
AOP11		B1-ACDM	2.1.4 Initial Airport Operations Plan (AOP)
AOP12		-	2.1.2 Electronic Flight Strips (EFS) 2.5.1 Airport Safety Nets associated with A-SMGCS level 2 2.5.2
AOP13		B1-ACDM B1-RSEQ	2.4.1 A-SMGCS Routing and Planning Functions
AOP14		B1-RATS	-
ATC02.2		B0-SNET	-
ATC02.8		B0-SNET B1-SNET	3.2.1 Upgrade of ATM systems to support Direct Routing and Free Routing
ATC02.9		B0-SNET B1-SNET	-
ATC07.1		B0-RSEQ	1.1.1 Basic AMAN
ATC12.1		B1-FRTO	3.2.1 Upgrade of ATM systems to support Direct Routing and Free Routing
ATC15.1		B1-RSEQ	1.1.2 AMAN upgrade to include Extended Horizon function
ATC15.2		B1-RSEQ	1.1.2 AMAN upgrade to include Extended Horizon function
ATC16		B0-ACAS	-
ATC17		-	3.2.1 Upgrade of ATM systems to support Direct Routing and Free Routing
ATC18		-	No direct link, although implementation is recommended in Family 3.2.1

Objective	SESAR Key Feature	ICAO ASBU B0 and B1	DP Family
COM10		-	-
COM11		-	3.1.4 Management of Dynamic Airspace Configurations 3.2.1 Upgrade of systems (NM, ANSPs, AUs) to support Direct Routings (DCTs) and Free Routing Airspace (FRA)
COM12		B1-SWIM	5.1.2 NewPENS: New Pan-European Network Service 5.2.1 Stakeholders Internet Protocol Compliance
ENV01		B0-CDO B1-CDO	-
ENV02		-	-
ENV03		B0-CCO	-
FCM01		B0-NOPS	-
FCM03		B0-NOPS	4.2.3 Interface ATM systems to NM systems
FCM04.1		-	4.1.1 STAM phase 1
FCM04.2		B0-NOPS	4.1.2 STAM phase 2
FCM05		B1-ACDM B1-NOPS	4.2.2 Interactive Rolling NOP 4.2.4 AOP/NOP Information Sharing
FCM06		B1-NOPS	4.4.2 Traffic Complexity tools
FCM07		B1-NOPS	4.3.1 - Target Time for ATFCM purposes 4.3.2 - Reconciled target times for ATFCM and arrival sequencing
FCM08		B1-FICE	4.2.3 Interface ATM systems to NM systems
FCM09		B1-NOPS	-
INF04		B0-DATM	-
INF07		-	1.2.2 Geographical database for procedure design
INF08.1		B1-DATM B1-SWIM	5.1.3, 5.1.4, 5.2.1, 5.2.2, 5.2.3, 5.3.1, 5.4.1, 5.5.1, 5.6.1
INF08.2		B1-DATM B1-SWIM	5.1.3, 5.1.4, 5.2.1, 5.2.2, 5.2.3, 5.6.2
ITY-ACID		-	-
ITY-ADQ		B0-DATM	1.2.2 Geographical database for procedure design
ITY-AGDL		B0-TBO	6.1.1 ATN B1 based services in ATSP domain 6.1.3 A/G and G/G Multi Frequency DL Network in defined European Service Areas 6.1.4 ATN B1 capability in Multi Frequency environment in Aircraft Domain
ITY-AGVCS2		-	-
ITY-COTR		B0-FICE	-
ITY-FMTP		B0-FICE B1-FICE	-

Objective	SESAR Key Feature	ICAO ASBU B0 and B1	DP Family
ITY-SPI		B0-ASUR	-
NAV03.1		B0-CDO B0-CCO B1-RSEQ	-
NAV03.2		B1-RSEQ	1.2.3 RNP 1 Operations in high density TMAs (ground capabilities) 1.2.4 RNP 1 Operations (aircraft capabilities)
NAV10		B0-APTA	1.2.1 RNP APCH with vertical guidance 1.2.2 Geographic Database for procedure design
NAV12		B1-APTA	-
SAF11		-	-

Legend:

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

Glossary of abbreviations

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

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

https://www.eurocontrol.int/sites/default/files/content/documents/official-documents/guidance/Glossaries.pdf

Term	Description
ACC	Area Control Center
ADS	Automatic Dependent Surveillance
AIS	Aeronautical Information Service
AMAN	Arrival Management
AF	ATM Functionality
ANS	Air navigation services
AOP	Airport operations
APP	Approach Control Service
ASM	Airspace Management Service
ATFM	Air Traffic Flow Management
ATS	Air Traffic Services
CNS/ATM	Communication Navigation Surveillance/Air Traffic Management
COM	Communication
CYTA	Cyprus Telecommunications Agency
DCAC	Department of Civil Aviation of Cyprus
ECAC	European Civil Aviation Conference
ENV	Environment
FIR	Flight Information Region
FT	Fast Track
FUA	Flexible Use of Airspace
GNSS	Global Navigation Satellite System
ICAO	International Civil Aviation Organisation
ILS	Instrument Landing System
MCW	Ministry of Transport, Communications and Works
MET	Meteorology
MFA	Ministry of Foreign Affairs
MoD	Ministry of Defense
MSAW	Minimum safe altitude warning
MTCD	Medium term conflict detection
OLDI	On Line Data Interface
PCP	Pilot common Project
PDP	Preliminary Deployment Programme
RNAV	Area Navigation
S-AF	Sub ATM Functionality