EUROCONTROL

2019

LSSIP 2019 - ISRAEL
LOCAL SINGLE SKY IMPLEMENTATION

Level 1 - Implementation Overview

FOREWORD

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

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

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

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

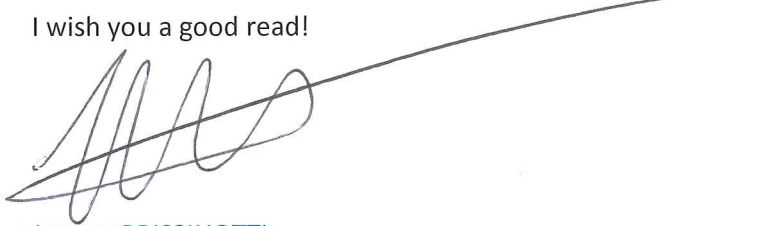
These documents provide an extensive and harmonised picture, for the benefit of the ATM community at large, of how all ECAC States as well as States having a Comprehensive Agreement with EUROCONTROL, and stakeholders concerned, are progressing in planning and deploying the mature elements of the European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

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

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

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

I wish you a good read!



Iacopo PRISSINOTTI
Director NM – Network Manager
EUROCONTROL

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Reference Documents	
LSSIP Documents	https://www.eurocontrol.int/service/local-single-sky-implementation-monitoring
Master Plan Level 3 – Plan Edition 2019	https://www.eurocontrol.int/publication/european-atm-master-plan-implementation-plan-level-3-2019
Master Plan Level 3 – Report Year 2019	https://www.eurocontrol.int/publication/european-atm-master-plan-implementation-report-level-3-2019
European ATM Portal	https://www.atmmasterplan.eu/
STATFOR Forecasts	https://www.eurocontrol.int/statfor
National AIP	http://en.caa.gov.il/index.php?option=com_content&view=article&id=404&Itemid=268

APPROVAL SHEET

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

Stakeholder / Organisation	Name	Position	Signature and date
Civil Aviation Authority Of Israel	Joel FELDSCHUH	Director General CAA	Joel Feldschuh 15.3.2020

TABLE OF CONTENTS

Executive Summary

National ATM Context

Member State of:

EUROCONTROL[1] [2] [3]

Main national stakeholders:

- The Civil Aviation Authority (CAA) - Civil Aviation Authority of Israel (CAAI)
- The Navigation Services Agency - Israel Airports Authority (IAA)
- The Air Force – Israeli Air Force (IAF)
- The Airports – Israel Airports Authority (IAA)

Main airport covered by LSSIP: Tel Aviv Ben-Gurion (LLBG)

Traffic and Capacity

Summer Forecast (May to October inclusive)

Per ACC

Number of national projects: 3
Number of multinational projects: 1

[1] Comprehensive agreement

[2] Observer

[3] Partner

Summary of 2019 developments:

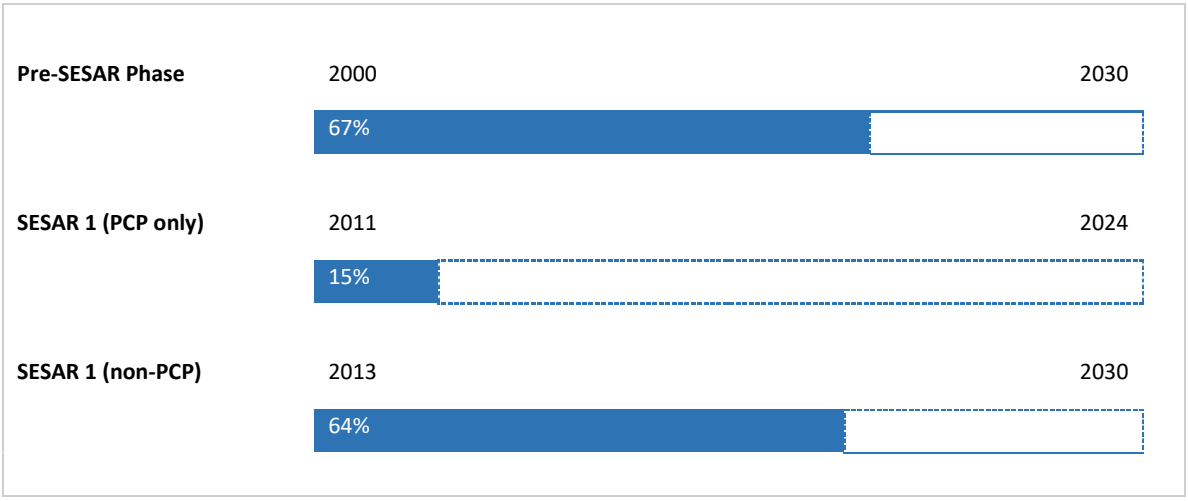
- The new international airport at Eilat, named "Eilat/ Ilan and Assaf Ramon airport, opened during April 2019, replacing the old "Eilat" and "Ovda" airports.
- CAAI organisational structure changed, with the retirement of the COO, see Annex "National stakeholders' organisation charts".

Progress per SESAR Phase

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

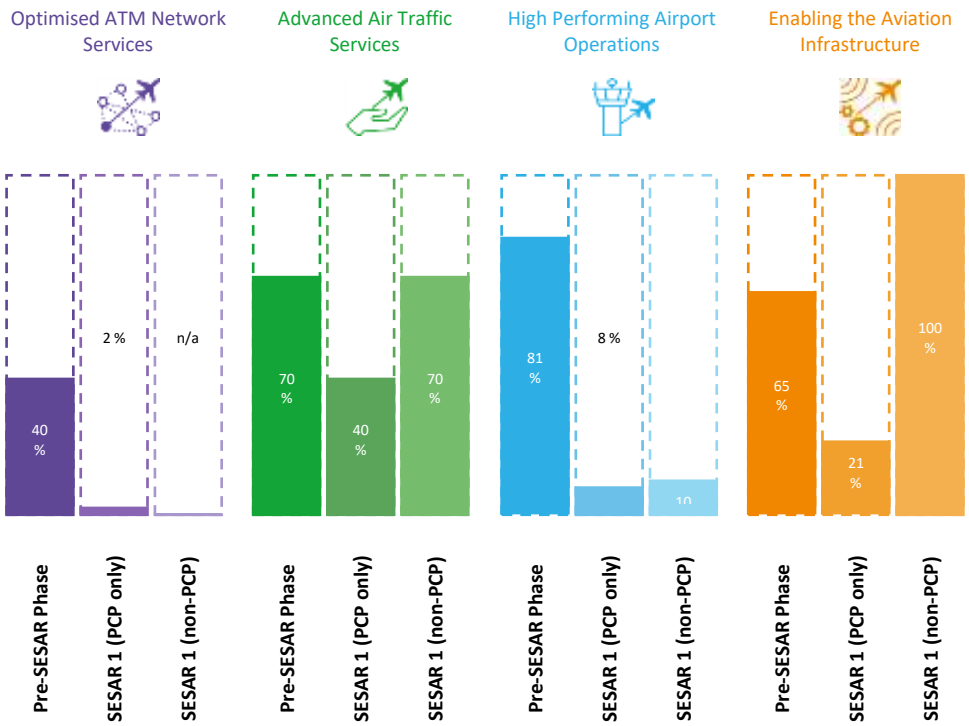
It shows the average implementation progress for all objectives grouped by SESAR Phases, excluding those for which the State is outside the applicability area as defined on a yearly basis in the European ATM Master Plan (Level 3) 2019, i.e. disregarding the declared "NOT APPLICABLE" LSSIP progress status.

The SESAR 1 (non-PCP) progress in the graphics below for Israel is based on the following objectives: AOP15, ATC02.9, ATC18, ATC20 and COM11.2.



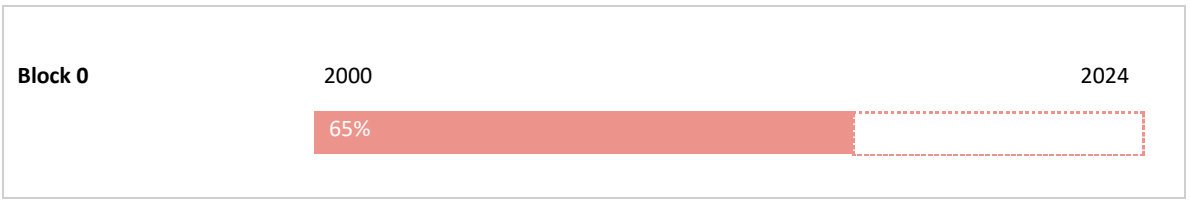
Progress per SESAR Key Feature and Phase

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



ICAO ASBUs Progress Implementation

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



ATM Deployment Outlook

State Objectives

✓	**Deployed in 2018 - 2019**	**- Harmonise Operational Air Traffic (OAT) and General Air Traffic (GAT) Handling** AOM13.1 - 100 % progress **- Electronic Terrain and Obstacle Data (eTOD)** INF07 - 100 % progress **- Improve Runway Safety by Preventing Runway Excursions** SAF11 - 100 % progress

By 2020	By 2021	By 2022	By 2023+
- New Pan-European Network Service (NewPENS) COM12 - 75 % progress			**- Ground-Based Safety Nets** ATC02.8 - 37 % progress **- Voice over Internet Protocol (VoIP) in En-Route** COM11.1 - 10 % progress **- Implement enhanced tactical flow management services** FCM01 - 10 % progress **- Common Flight Message Transfer Protocol (FMTP)** ITY-FMTP - 10 % progress **- Traffic Complexity Assessment** FCM06 - 10 % progress **- Surveillance Performance and Interoperability** ITY-SPI - 72 % progress **- Arrival Management Extended to En-route Airspace** ATC15.2 - 10 % progress **- Automated Support for Conflict Detection, Resolution Support Information and Conformance Monitoring** ATC12.1 - 10 % progress **- Electronic Dialogue as Automated Assistance to Controller during Coordination and Transfer** ATC17 - 10 % progress **- Collaborative Flight Planning** FCM03 - 10 % progress **- Aircraft Identification** ITY-ACID - 10 % progress **- Information Exchange with En-route in Support of AMAN** ATC15.1 - 10 % progress

Airport Objectives - Tel Aviv - Ben-Gurion Airport

✓	**Deployed in 2018 - 2019**	None

By 2020	By 2021	By 2022	By 2023+
	- Airport Collaborative Decision Making (A-CDM) AOP05 - 06 % progress		**- AMAN Tools and Procedures** ATC07.1 - 10 % progress **- Initial Airport Operations Plan** AOP11 - 08 % progress

Introduction

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

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

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

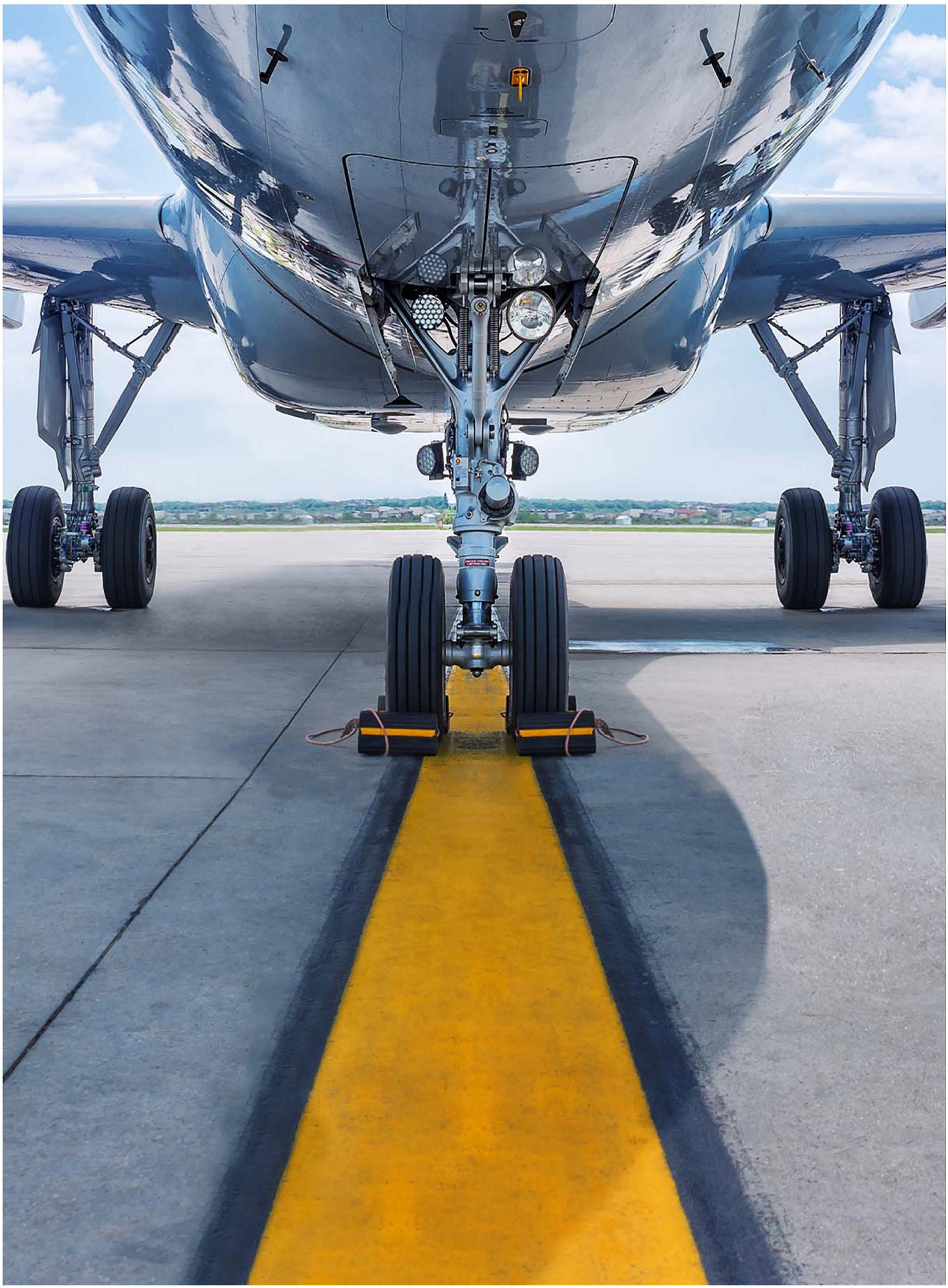
Chapter 3 provides the main Implementation Projects (at national, FAB and multinational level) which contribute directly to the implementation of the MP Operational Improvements and/or Enablers and Implementation Objectives;

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

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

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

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



1. National ATM Environment

1.1. Geographical Scope

International Membership

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

Organisation		Since
ECAC	✓	2017 - Observer
EUROCONTROL	✓	2016 - Comprehensive agreement
European Union	-	
EASA	-	
ICAO	✓	1949
NATO	✓	2016 - Partner
ITU	✓	1948

Geographical description of the FIR(s)

The geographical scope of this document addresses the Israeli FIR: Tel-Aviv FIR.

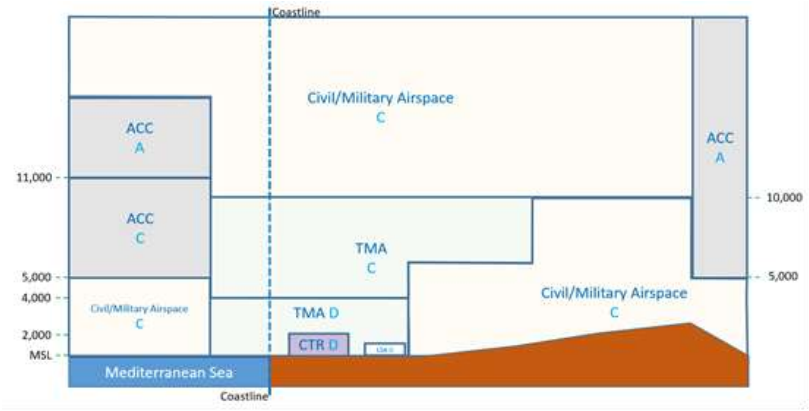
Israel FIR is surrounded by FIRs of 5 States, namely Cyprus – Nicosia FIR, Jordan – Amman FIR, Egypt – Cairo FIR, Lebanon – Beirut FIR and Syria – Damascus FIR.

Airspace Classification and Organisation

Reference: AIP Israel, ENR 1.4 -
http://en.caa.gov.il/index.php?option=com_content&view=article&id=408&Itemid=272

ATS airspace in Tel-Aviv FIR is classified and designated in accordance with the requirement of ICAO (Annex 11), and is composed of Class A, C, D & G.

Classes B, E & F are not used in Tel-Aviv FIR.



ATC Units

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

ATC Unit	Number of sectors		Associated FIR(s)	Remarks
	En-route	TMA		
Tel Aviv ACC - North	3	-	Tel-Aviv FIR (LLLL) - North	
Tel Aviv ACC - South	1	-	Tel-Aviv FIR (LLLL) - South	
Ben-Gurion APP	-	2	LLBG TMA	

Note: The number of sectors as indicated in this table is the number of technically existing sectors, some of those sectors are operationally used in combined sector formats.

U-Space services

An overview of the current implementation progress and short to medium term planning information on the main elements underlying the provision of the U-Space services enabling Very Low Level drones operations is provided in Annex D to this document.

The following table contains a list of the 16 services expected to be available in phases U1 (2019) to U3 (2025), as described in the European ATM Master Plan add-on: Roadmap for the safe integration of drones into all classes of airspace.

Phase		Service	
U1	Foundation Services	U1.1	e-Registration
		U1.2	e-Identification
		U1.3	Pre-tactical Geo-fencing
U2	Initial Services	U2.1	Tactical Geo-fencing
		U2.2	Flight Planning Management
		U2.3	Weather Information
		U2.4	Tracking
		U2.5	Monitoring
		U2.6	Drone Aeronautical Information Management
		U2.7	Procedural Interface with ATC
		U2.8	Emergency Management
		U2.9	Strategic De-confliction
U3	Advanced Services	U3.1	Dynamic Geo-fencing
		U3.2	Collaborative Interface with ATC
		U3.3	Tactical De-confliction
		U3.4	Dynamic Capacity Management

1.2. National Stakeholders

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

- Ministry of Transport and Road Safety,

- Civil Aviation Authority of Israel,

- Ministry of Defence: Israeli Air Force,

- Israel Airports Authority

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 the State of Israel is under the ministerial responsibility of the Ministry of Transport and road safety. The different national entities having regulatory responsibilities in ATM are summarised in the table below:

Rule-making	Israeli Parliament (Knesset) Ministry of Transport and Road Safety CAAI	Air Navigation Law (ANL), 2011 Civil Aviation Authority Law, 2005
Safety Oversight	CAAI	Article 4 to the CAA Law, 2005 Chapter F to the ANL
Enforcement actions in case of non-compliance with safety regulatory requirements	CAAI Israel Police	Article 38, 79 and chapter J to the ANL chapter I to the ANL
Airspace	Ministry of Transport and Road Safety CAAI The Minister of Defence	chapter D and Article 179 to the ANL
Economic	Ministry of Transport and Road Safety CAAI	LASR - Licensing of Aviation Services Law, 1963 (Charter Flights), 1982
Environment	Ministry of Transport and Road Safety CAAI Ministry of Environmental protection	Article 34, 50-54, 64, 73, 82 to ANL ANR (Operation of Aircraft and Rules of Flight), 1981 - Regulation 85A ANR (Aircraft Noise), 1977 ANR (Procedures for Certification of Aircraft and Aircraft Parts), 1977

Security	Israeli Security Agency Israeli Police Ministry of Transport and Road Safety (ASOC)	The Law for Arrangement of Security in Public Organizations Air Navigation Law (Offences and Jurisdiction), 1971 Air Navigation Law (Security in Civil Aviation), 1977
Accident investigation	Chief Investigator Office	Chapter G to the ANL

Rulemaking

Israeli Parliament ("Knesset") is authorized to -

- promulgate the primary legislation;
- approve part of the secondary legislation (regulations) not derived from ICAO SARPs.

Ministry of Transport and Road Safety is authorized to promulgate all secondary legislation (regulations).

CAAI is authorized to :

- Prepare proposals for new regulations or amendment of existing regulations;
- Promulgate the AIP;
- Issue urgent safety orders with limited duration.

Enforcement

CAAI is authorized to :

- limit , revoke or suspend licenses and certificates;
- ground aircraft for safety or non-compliance reasons;
- impose monetary penalty.

The Israeli police is authorized to conduct criminal proceeding (focuses on severe violations).

Airspace

Ministry of Transport and Road Safety and ministry of defence are authorized to allocate the Tel Aviv FIR for civil aviation and for military aviation

CAAI is authorized :

- to plan and develop the Tel Aviv FIR allocated for civil aviation use (civil airspace) ;
- to issue ATS directives concerning the use of civil airspace and
- in consultation with the Airforce – to issue ATS directives concerning the use of civil aircraft in military airspace.

The Ministry of defence is authorized to issue ATS directives for urgent security purpose.

Economic

The Ministry of Transport and Road Safety is authorized:

- to issue commercial license for Israeli air operators engaged in commercial air transport;
- for the general oversight of IAA (ANSP) budget.

CAAI is authorized to issue operating authorizations for Israeli and foreign air operators engaged in commercial air transport (in scheduled and charter flights).

Environment

Ministry of Transport and Road Safety is authorized to :

- promulgate regulations for the implementation of annex 16 to the Chicago convention (aircraft noise/ aircraft engine emissions);
- limit the operational hours at a particular airport;
- set noise level and noise quota for aircraft operations.

CAAI is obliged to consider environmental impact while issuing ANS directives.

Ministry of environmental protection is to be consulted with, on those issues.

CAA

The main "actors" in the ATM regulation domain are the Ministry of Transport and Road Safety, the CAAI and the IAA.

The ANL authorizes the Ministry of Transport and Road Safety to issue air navigation regulations in the ATM domain, based on the CAAI proposal or after consultation with the CAAI.

CAAI is an independent agency, in terms of budget and human resources, within the Ministry of transport and road safety, established by the Civil Aviation Authority Law, 2005. CAAI employees are civil servants.

According to the ANL the CAAI is the safety regulator of all services providers in the civil aviation of Israel, and the IAA as the ANSP amongst them:

The Air Navigation Law, 2011 and the Civil Aviation Authority Law, 2005, provide a clear separation of responsibilities between the CAAI and aeronautical service providers, including Aerodrome Operators and Air navigation service providers.

CAAI general roles and responsibilities are described in Article 4 of the Civil Aviation Authority Law, 2005 and includes, mainly: rule making, certification, surveillance and enforcement.

CAAI authorities regarding safety issues are granted in the ANL as follows:

- According to chapter B to the ANL, the CAAI Director General ("DGCAA") is empowered to issue, amongst all: Personnel licensing (sub-chapter A), ATM Unit Operating Licenses (sub-chapter E) and approval for Air Navigation Aids (sub-chapter G).
- According to chapter F of the ANL, the CAAI inspectors have surveillance and investigation powers that enable them to investigate effectively each violation of the ANL and the Air Navigation Regulations (ANRs).
- Article 38 of the ANL empowers the DGCAA to restrict, suspend, revoke or refuse to renew all licenses and certificates for the causes detailed in article 38.
- According to Chapter J of the ANL, the DGCAA is empowered to impose civil (financial) penalties for violations of the ANL and ANRs.

The CAAI Inspectorate carries out surveillance and inspections. The DGCAA or management personnel empowered by him execute the enforcement actions.

In addition, according to article 82 to the ANL, the CAAI Director General is responsible for the development and design of the Israeli civil airspace. In this framework the DGCAA is authorized to :

- Issue directives concerning the use of said airspace, for the purpose of ensuring air traffic safety, regularity and efficiency and protecting public welfare and the environment.
- Approve flight procedures designed and proposed by the ANSP.

The IAA – the ANSP - is a public corporation established by the Airports Authority Law, 1977 (AAL). Its role as the Israeli ANSP is not defined in the AAL, but formed by a license, to that purpose, issued by the DGCAA in accordance with the ANL.

The service provider's responsibility is to carry out their privileges in a safely manner, in accordance with the ANL, the applicable ANRs and the provisions set in their respective licenses.

According to Article 47 of the AAL, the IAA is subject to the general supervision of the Ministry of Transport and road safety. This supervision is focused on IAA budget, charges and financial arrangements, and the nomination and function of its board and key post holders.

Annual Report published:	N	

National Civil Aviation Master Plan (CAMP):	Y	Israel Aviation Infrastructure Masterplan for 2020 and beyond – Status Report (Ref: 00241620) CAAI Biannual Rulemaking Plan 2020 (Ref: 00091720) Both documents available in Hebrew version only.

The address of CAAI website is the following http://en.caa.gov.il/

The organisation chart is available in Annex "National stakeholders' organisation charts".

Air Navigation Service Provider(s)

ANSP – Israel Airports Authority (IAA)

Service provided

Governance:	public corporation established by the Airports Authority Law, 1977 (AAL)	**Ownership:**	public corporation

Services provided	**Y/N**	**Comment**
ATC en-route	Y	
ATC approach	Y	
ATC Aerodrome(s)	Y	
AIS	Y	AIP is maintained and published by CAAI
CNS	Y	
MET	Y	Together with the Israel Meteorological Service (IMS)
ATCO training	Y	
Others		
Additional information:		
Provision of services in other State(s):	N	
Annual Report published:	Y	http://www.iaa.gov.il/he-IL/rashot/Pages/about.aspx

The address of ANSP website is the following: http://www.iaa.gov.il/en-us/rashot/pages/default.aspx

The organisation chart is available in Annex "National stakeholders' organisation charts".

ATC Systems in use

Main ANSP part of any technology alliance[4]	N	

FDPS

Specify the manufacturer of the ATC system currently in use:	Frequentis and Israel
Upgrade of the ATC system is performed or planned?	2022 - At "Ben-Gurion APP & TMA"
Replacement of the ATC system by the new one is planned?	2024 – New ATM system
ATC Unit	"Tel-Aviv ACC", "South ACC", "Ben-Gurion APP", "Ben-Gurion TMA"

SDPS

Specify the manufacturer of the ATC system currently in use:	FAA and Israel
Upgrade[5] of the ATC system is performed or planned?	2022 - At "Ben-Gurion APP & TMA"
Replacement of the ATC system by the new one is planned?	2024 – New ATM system
ATC Unit	"Tel-Aviv ACC", "South ACC", "Ben-Gurion APP", "Ben-Gurion TMA"

Airports

General information

Israel Airports Authority (IAA), the only Airport operator in Israel, is a public corporation. IAA is operating and maintaining 6 airports in Israel (International and domestic). The main international airport in Israel is "Tel-Aviv Ben-Gurion" (LLBG), ATC is also provided by IAA

Airport(s) covered by the LSSIP

Referring to the List of Airports in the European ATM Master Plan Level 3 Implementation Plan Edition 2019 – Annex 2, it is up to the individual State to decide which additional airports will be reported through LSSIP for those Objectives.

Therefore only LLBG is covered in LSSIP Year 2019.

Military Authorities

The Military Authority involved in ATM in Israel is the Israeli Air Force (IAF), a part of the Israel Defence Forces (IDF).

They report to the Ministry of Defence. Their regulatory, service provision and user role in ATM are detailed below. The organisation chart is available in Annex “National stakeholders’ organisation charts”.

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

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

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?	NA
Level of such legal provision: Ministerial Decree, IDF orders and IAF orders		Level of such legal provision: NA	
Authority signing such legal provision: Minister of Defence IDF Chief of the General Staff , The IAF Commander		Authority signing such legal provision: NA	
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	NA
OAT/GAT Co-ordination	Y	OAT/GAT Co-ordination	NA
ATCO Training	Y	ATCO Training	NA
ATCO Licensing	Y	ATCO Licensing	NA
ANSP Certification	N	ANSP Certification	NA
ANSP Supervision	Y	ANSP Supervision	NA
Aircrew Training	Y	ESARR applicability	NA
Aircrew Licensing	Y		
Additional Information:		Additional Information	
Means used to inform airspace users (other than military) about these provisions:		Means used to inform airspace users (other than military) about these provisions:	
National AIP	Y	National AIP	NA
National Military AIP	Y	National Military AIP	NA
EUROCONTROL eAIP	N	EUROCONTROL eAIP	NA
Other:	-	Other:	NA

Oversight

OAT	GAT
National oversight body for OAT: Airforce command/ Airforce HQ	NSA (as per SES reg. 550/2004) for GAT services provided by the military: NA
Additional information:	Additional information:

Service Provision role

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

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

User role

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

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

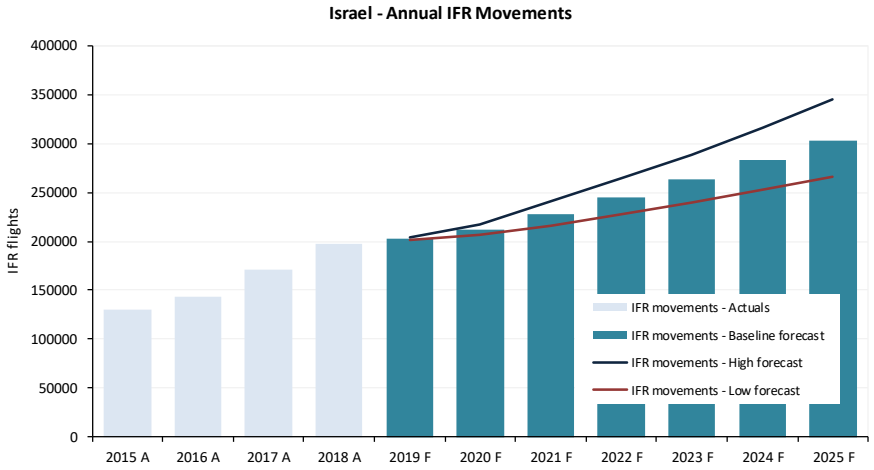
If Military fly GAT-IFR inside controlled airspace, specify existing special arrangements:								
No special arrangements				Y	Exemption from Route Charges			Y
Exemption from flow and capacity (ATFCM) measures				N	Provision of ATC in UHF			Y
CNS exemptions:	RVSM	Y	8.33	Y	Mode S	Y	ACAS	Y
Others:								

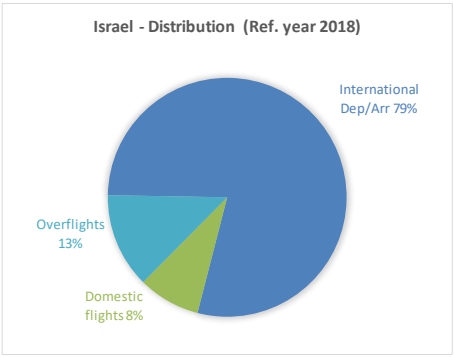
Flexible Use of Airspace (FUA

Military in Israel applies FUA requirements as specified in the Regulation No 2150/2005: N (Reg. does not apply)
FUA Level 1 implemented: Y
FUA Level 2 implemented: N
FUA Level 3 implemented: Y

2. Traffic and Capacity

2.1. Evolution of traffic in Israel





A = Actual

F = Forecast

EUROCONTROL Seven-Year Forecast (Autumn 2019)											
IFR flights yearly growth		2016 A	2017 A	2018 A	2019 F	2020 F	2021 F	2022 F	2023 F	2024 F	2025 F
Israel	H				3.2%	6.8%	10.7%	9.7%	9.5%	9.5%	8.8%
	B	9.9%	18.9%	15.7%	2.8%	4.5%	7.5%	7.7%	7.4%	7.5%	6.7%
	L				2.3%	2.3%	4.6%	5.5%	5.5%	5.5%	4.7%
ECAC	B	2.8%	4.0%	3.8%	1.1%	2.3%	1.9%	2.2%	1.8%	1.9%	1.4%

2019

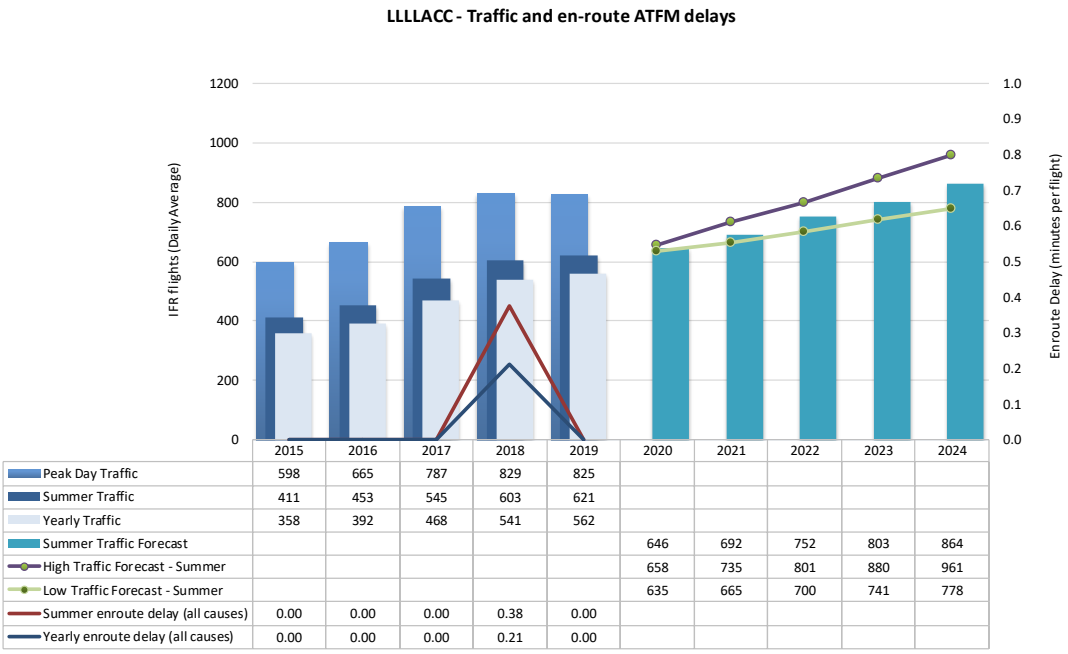
Traffic in Israel increased by 3.8% in 2019 compared to 2018.

2020-2024

The EUROCONTROL Seven-Year Forecast predicts an average annual traffic growth between 4.7% and 9.2% throughout the planning cycle, with an average baseline growth of 6.9%.

2.2.Tel Aviv ACC

2.2.1. Traffic and en-route ATFM delays 2015-2024



	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Peak Day Traffic	598	665	787	829	825					
Summer Traffic	411	453	545	603	621					
Yearly Traffic	358	392	468	541	562					
Summer Traffic Forecast						646	692	752	803	864
High Traffic Forecast - Summer						658	735	801	880	961
Low Traffic Forecast - Summer						635	665	700	741	778
Summer enroute delay (all causes)	0.00	0.00	0.00	0.38	0.00					
Yearly enroute delay (all causes)	0.00	0.00	0.00	0.21	0.00					

2.2.2. Performance summer 2019

Tel Aviv ACC	Traffic evolution (2019 vs 2018)			En-route Delay (min. per flight)		Capacity (2019 vs 2018)		
	Traffic Forecast		Actual Traffic	All reasons	ACC Reference Value	Planned	Achieved	Capacity gap?
	Current Routes	Shortest Routes						
Year			+3.8%	0.00				
Summer			+3.0%	0.00			40	No

Summer 2019 performance assessment

There was no delay in Tel Aviv ACC during Summer 2019.

The ACC capacity baseline was estimated to be 40. During the measured period, the average peak 1 hour demand was 40 and the average peak 3 hour demand was 36.

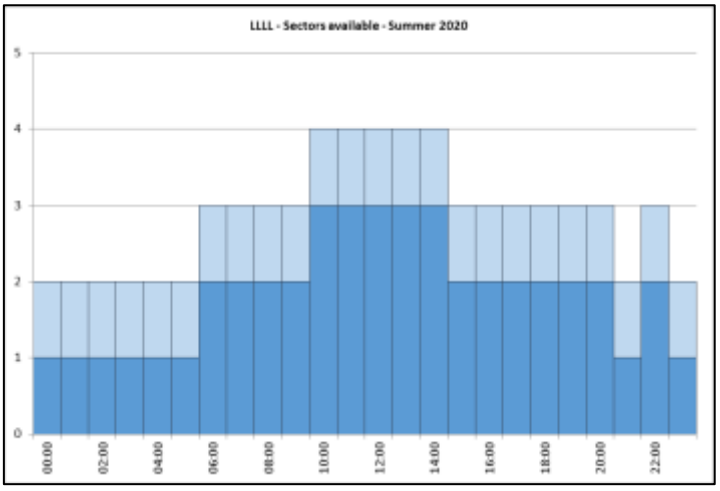
2.2.3. Planning Period 2020-2024

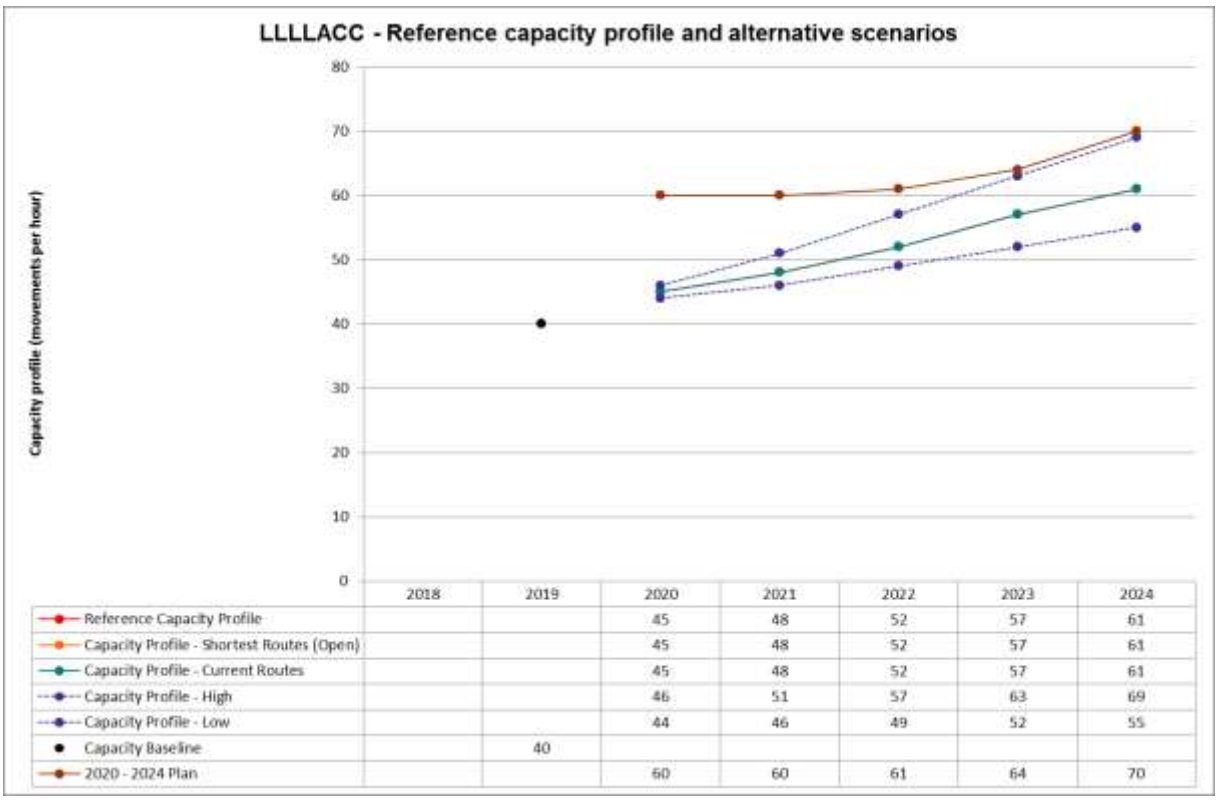
The planning focuses on the Summer season to reflect the most demanding period of the year from a capacity perspective. This approach ensures consistency with the previous planning cycles.

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

Summer Capacity Plan					
	2020	2021	2022	2023	2024
Free Route Airspace					
Airspace Management Advanced FUA	Upgrade of tactical CIV-MIL coordination procedures				
Airport & TMA Network Integration					
Cooperative Traffic Management					
Airspace	New Airspace Structure within Tel Aviv FIR New Interface with Nicosia FIR Opening of the interface with Jordan to overflights				
Procedures	Upgrade of ACC operating procedures				
Staffing			2 additional ATCOs	3 additional ATCOs	3 additional ATCOs
Technical	Upgrade of ATCO workstations to allow additional sectors				New ATC System
Capacity	New sectorisation and capacities as a result of new airspace structure				
Significant Events					
Max sectors	3 (North) + 1 (South)	3 (North) + 1 (South)	3 (North) + 1 (South)	4 (North) + 1 (South)	4 (North) + 1 (South)
Planned Annual Capacity Increase	50%	0%	1%	5%	10%
Reference profile Annual % Increase	13%	7%	8%	10%	7%
Difference Capacity Plan v. Reference Profile	33.3%	25.0%	17.3%	12.3%	14.8%
Annual Reference Value (min)	0.01	0.01	0.01	0.01	0.01
Additional information	An ongoing recruitment process started in 2019 and it is planned to provide 15% increase of ATCOs by the end of the planning period.				

The graph below shows an outline of available sector configurations for a typical day for summer 2020. The dark blue part of the bars refers to the North sectors. The light blue part of the bars refers to the South sector which is open at all times.





	2018	2019	2020	2021	2022	2023	2024
Reference Capacity Profile			45	48	52	57	61
Capacity Profile - Shortest Routes (Open)			45	48	52	57	61
Capacity Profile - Current Routes			45	48	52	57	61
Capacity Profile - High			46	51	57	63	69
Capacity Profile - Low			44	46	49	52	55
Capacity Baseline		40					
2020 - 2024 Plan			60	60	61	64	70

2020-2024 Planning Period Outlook
The airspace reorganisation both within Tel Aviv FIR and at the interface with Nicosia FIR is expected to bring additional capacity to cope with the forecasted traffic demand increase. Therefore no capacity issues are foreseen for Tel Aviv ACC during the planning period.

3. Implementation Projects

The tables below provide information about the main projects currently ongoing in Israel.

3.1. National projects

A-CDM at LLBG			
Organisation(s):	Israel Airports Authority (IL)	**Type of project:** National	
Schedule:	Started in 2017 functionality expected for 12/2021		
Status:	On-going		
Description:	Implementation of Airport Collaborative Decision Making		
Link and references			
ATM MP links:	L3: AOP05		
Other links:	-		
Project included in RP2 Performance Plan:	NA	**Name/Code in RP2 Performance Plan:**	-
Project included in DP:	NA	**Name/Code in DP:**	-
Performance contribution			
Safety:		-	
Environment:	+	-	
Capacity:	+	-	
Cost-efficiency:		-	
Operational efficiency:	++	-	
Security:		-	

New ATM Facility at LLBG			
Organisation(s):	Israel Airports Authority (IL)	**Type of project:** National	
Schedule:	Started in 2017 Expected to end in 2024		
Status:	"RFI" phase ended 2017, "RFP" during 2018, Location chosen, design of the facility in progress		
Description:	Deployment of a new ATM system which will combine the current 3 separate units into 1 unit at a new location at LLBG		
Link and references			
ATM MP links:	L3: ATC02.8, ATC07.1, ATC12.1, ATC15.1, ATC17, COM11.1, FCM03, FCM06, ITY-ACID		
Other links:	-		
Project included in RP2 Performance Plan:	NA	**Name/Code in RP2 Performance Plan:**	-
Project included in DP:	NA	**Name/Code in DP:**	-
Performance contribution			
Safety:	+++	-	
Environment:		-	
Capacity:	++	-	
Cost-efficiency:	++	-	
Operational efficiency:	++	-	
Security:		-	

New Eilat “Ramon” Airport			
Organisation(s):	Israel Airports Authority (IL)	**Type of project:** National	
Schedule:	Expected in Q2 2019		
Status:	Completed		
Description:	New airport, replacing the current Eilat and Ovda airports		
Link and references			
ATM MP links:	-		
Other links:	-		
Project included in RP2 Performance Plan:	NA	**Name/Code in RP2 Performance Plan:**	-
Project included in DP:	NA	**Name/Code in DP:**	-
Performance contribution			
Safety:	++	in particular due to substantially improved airport infrastructure	
Environment:	+	-	
Capacity:	+	-	
Cost-efficiency:	+	-	
Operational efficiency:	+	-	
Security:		-	

3.2. Multinational projects

Air Space Modification North-West sector			
Organisation(s):	Civil Aviation Authority of Israel (IL), DCAC - Air Navigation Service Provider (CY), Israel Airports Authority (IL)	**Type of project:** Multinational	
Schedule:	Started mid-2017, expected to end before summer 2020		
Status:	Initial design was agreed upon by Cyprus, the NM and Israel with the consent of Greece, "Real-Time- Simulation" is planned during 2019.		
Description:	Reorganisation of the North-West sector, involving Cyprus, Greece, Egypt and EUROCONTROL (Network Manager Directorate)		
Link and references			
ATM MP links:	-		
Other links:	-		
Project included in RP2 Performance Plan:	NA	**Name/Code in RP2 Performance Plan:**	-
Project included in DP:	NA	**Name/Code in DP:**	-
Performance contribution			
Safety:	++	-	
Environment:		-	
Capacity:	+++	-	
Cost-efficiency:		-	
Operational efficiency:	++	-	
Security:		-	
Cooperation Activities:	-		

4. Cooperation activities

4.1. Multinational cooperation initiatives

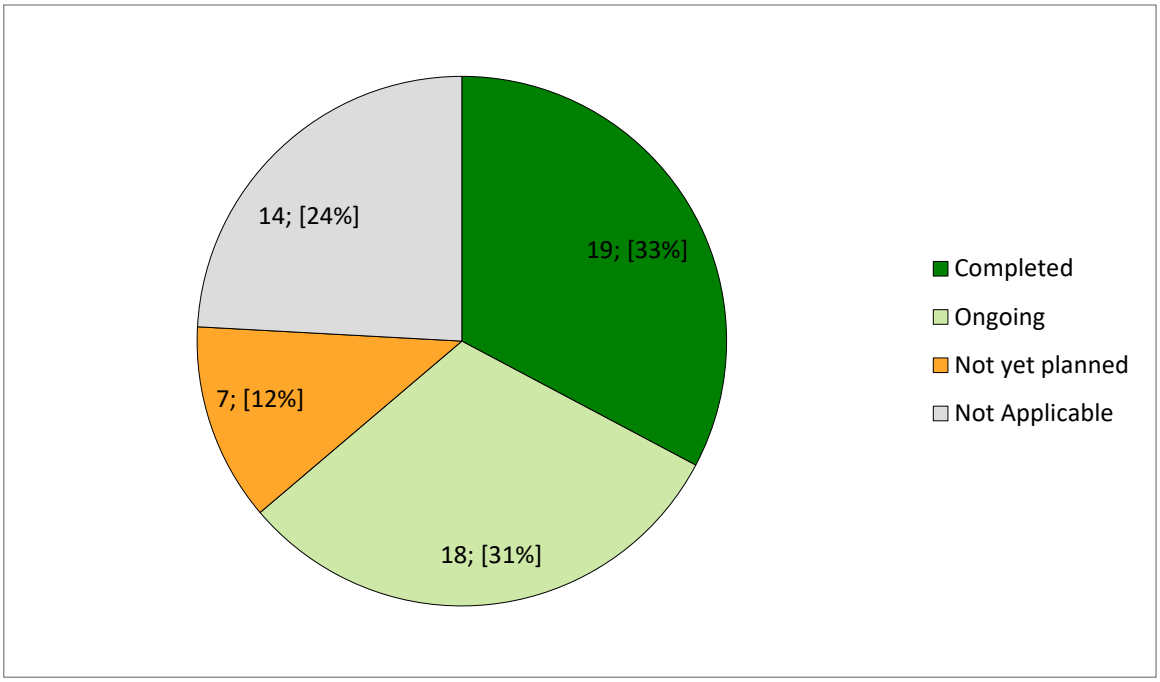
Israel is not part of any Functional Airspace Block (FAB), but is neighboring the BLUE MED FAB which involves four European Countries: Italy, Greece, Malta and Cyprus. Israel is an Associated Partner in the BLUEMED FAB without voting rights.

Search & Rescue Agreement with the state of Cyprus is implemented, and exercised. A joint trilateral statement for cooperation, between Israel, Cyprus and Greece, was declared in May 2018, and has not yet progressed further.

Israel has excellent and close ATM Cooperation and coordination with Cyprus, based on LOA, on a day-to-day basis, as well as on special operations.

5. Implementation Objectives Progress

5.1. State View: Overall Objective Implementation Progress



The trend in the implementation of Objectives has been confirmed during this reporting cycle, with a substantial number of objectives having changed their status from “Not yet planned” or “Planned” to “Ongoing”. The vast majority of this change of status related to the ongoing work for the deployment of a new ATM system, scheduled for 2024. It is expected that the new ATM system will significantly boost the number implemented objectives in particular in the field of ATC as well as in the field of supporting infrastructure (communication and surveillance) and better integration with the NM systems (FCM01 and FCM03 objectives). For these FCM objectives, preparatory work with the NM is already taking place at a high pace, with full implementation expected with the new system.

5.2. Objective Progress per SESAR Key Feature

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

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

Legend:

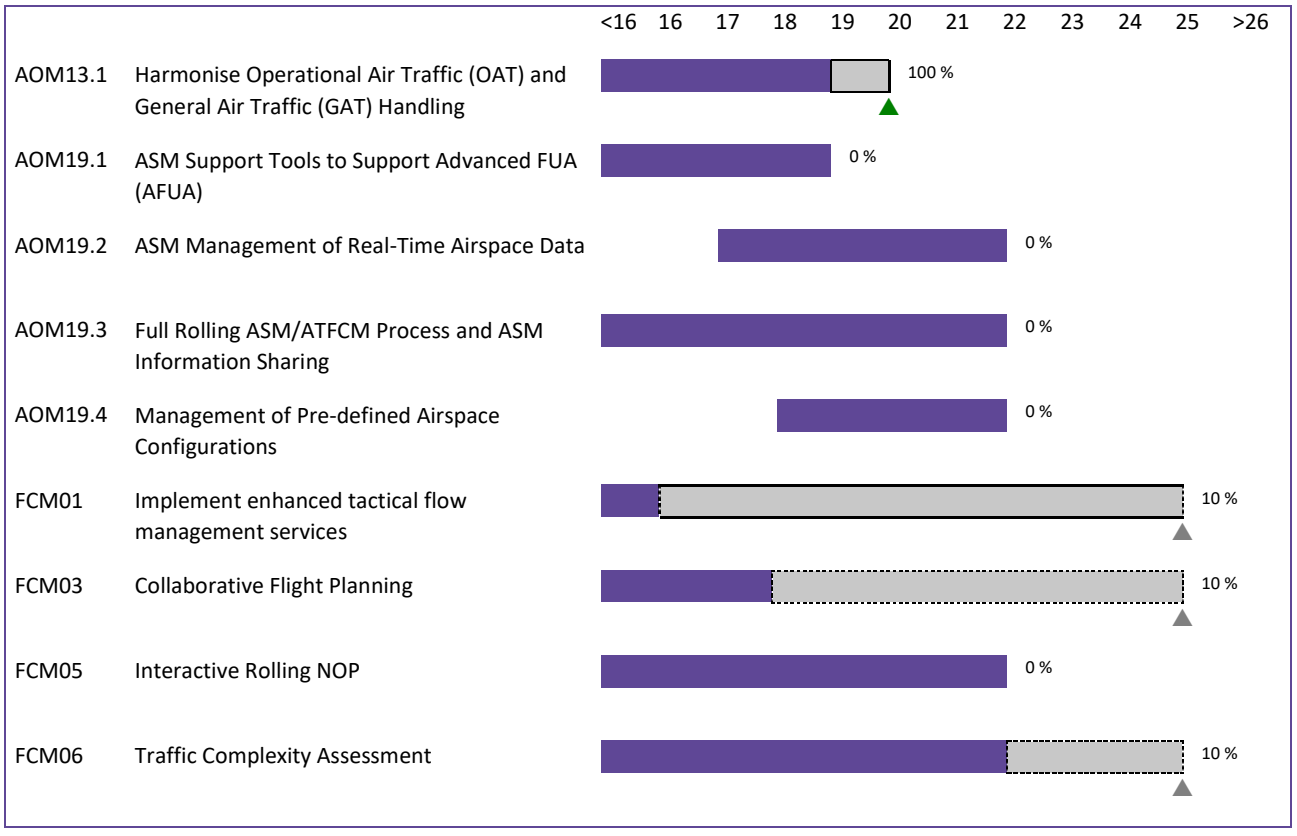
▲ ## % = Expected completion / % Progress

▲ 100% = Objective completed

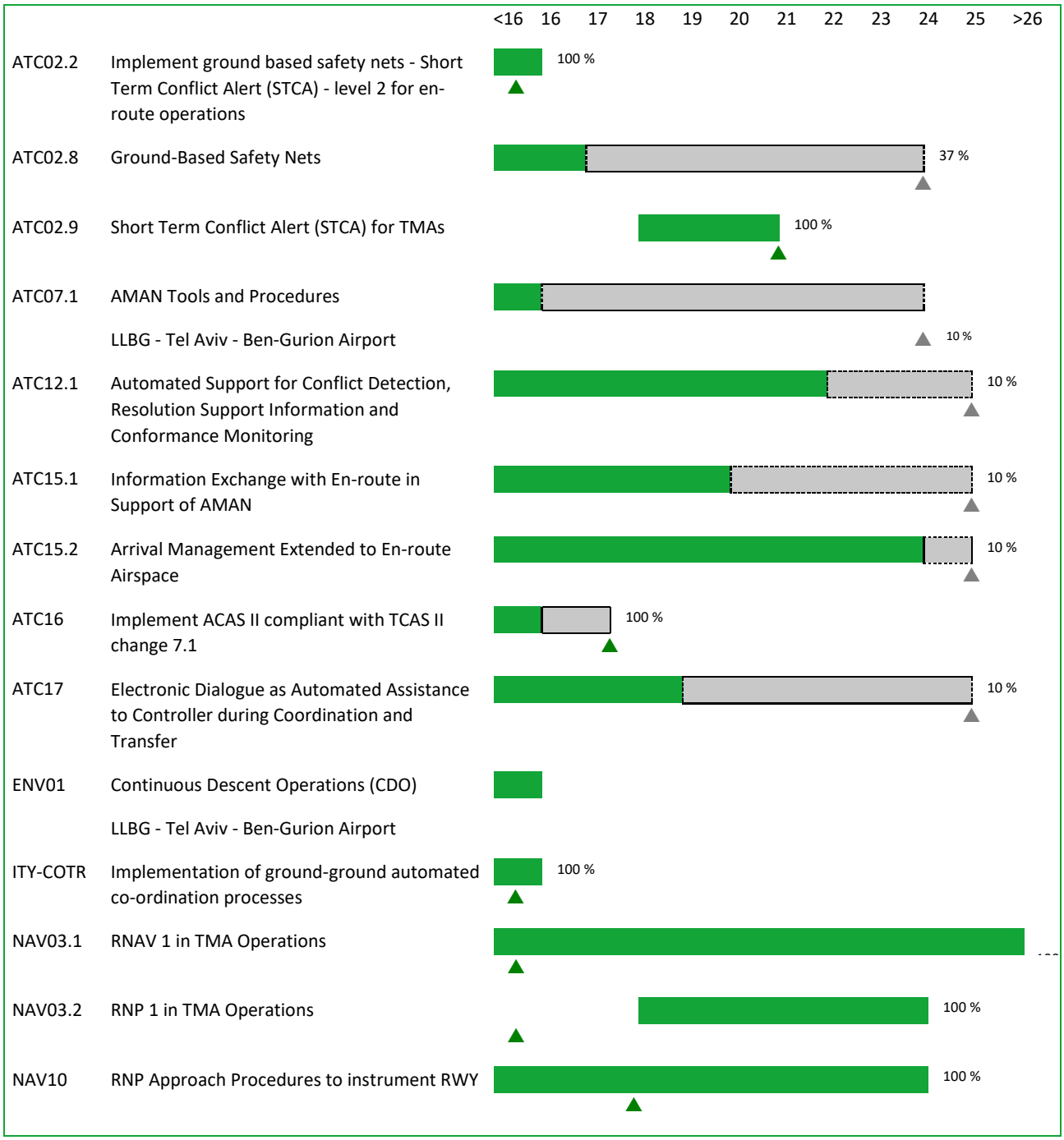
= Implementation Objective timeline (different colour per KF)

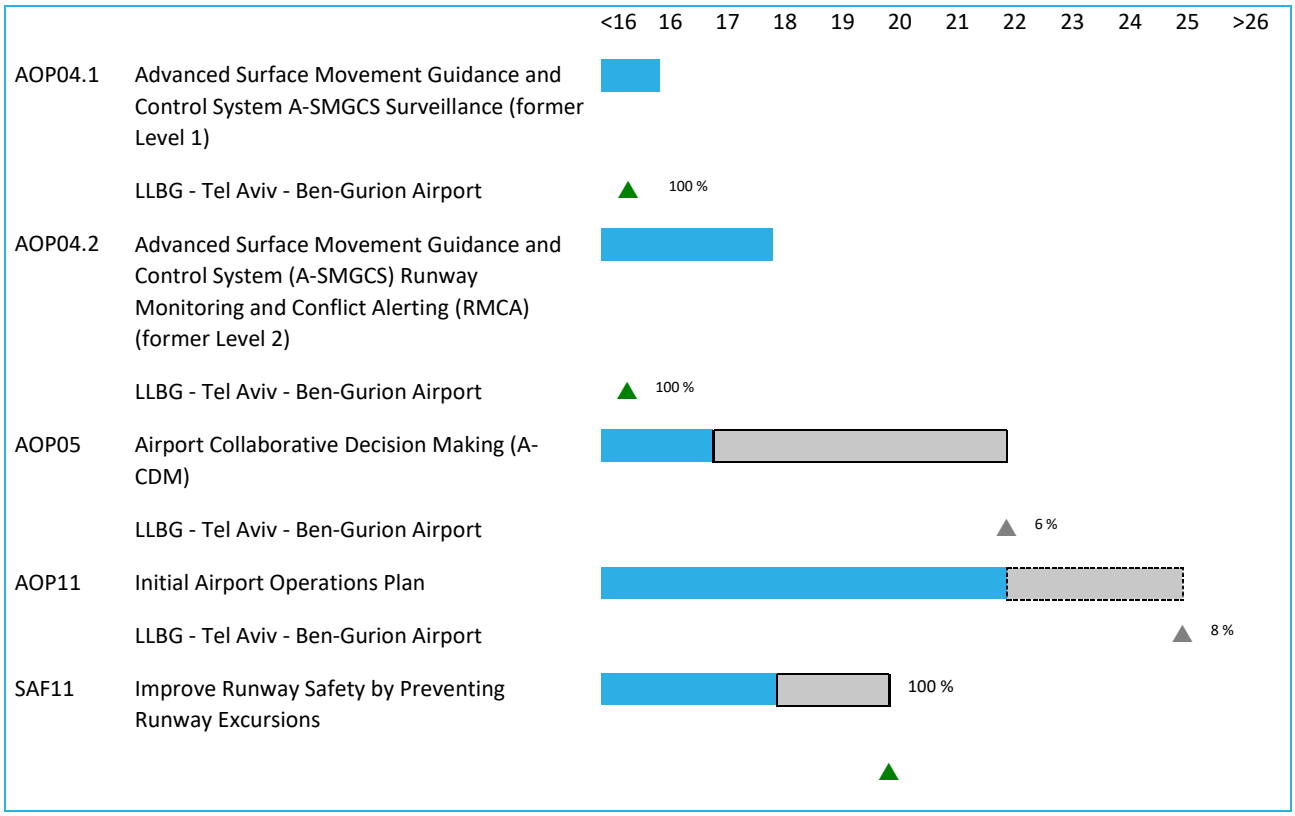
= Completion beyond Implementation Objective timeline

Optimised ATM Network Services



Advanced Air Traffic Services




<16
16
17
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21
22
23
24
25
>26
AOP04.1
Advanced Surface Movement Guidance and Control System A-SMGCS Surveillance (former Level 1)
LLBG - Tel Aviv - Ben-Gurion Airport
100 %
AOP04.2
Advanced Surface Movement Guidance and Control System (A-SMGCS) Runway Monitoring and Conflict Alerting (RMCA) (former Level 2)
LLBG - Tel Aviv - Ben-Gurion Airport
100 %
AOP05
Airport Collaborative Decision Making (A-CDM)
LLBG - Tel Aviv - Ben-Gurion Airport
6 %
AOP11
Initial Airport Operations Plan
LLBG - Tel Aviv - Ben-Gurion Airport
8 %
SAF11
Improve Runway Safety by Preventing Runway Excursions
100 %


<16
16
17
18
19
20
21
22
23
24
25
>26
COM10
Migrate from AFTN to AMHS
100 %
COM11.1
Voice over Internet Protocol (VoIP) in En-Route
10 %
COM11.2
Voice over Internet Protocol (VoIP) in Airport/Terminal
100 %
COM12
New Pan-European Network Service (NewPENS)
75 %
FCM08
Extended Flight Plan
0 %
INF07
Electronic Terrain and Obstacle Data (eTOD)
100 %
INF08.1
Information Exchanges using the SWIM Yellow TI Profile
0 %
ITY-ACID
Aircraft Identification
10 %
ITY-ADQ
Ensure Quality of Aeronautical Data and Aeronautical Information
100 %
ITY-FMTP
Common Flight Message Transfer Protocol (FMTP)
10 %
ITY-SPI
Surveillance Performance and Interoperability
72 %

5.3.ICAO ASBU Implementation Progress

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

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

Legend:

= Completed (during 2019 or before)

= Progress achieved in 2019

= Missing planning date

= Not applicable

5.4. Detailed Objectives Implementation progress

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

Main Objectives

AOM13.1	**Harmonise Operational Air Traffic (OAT) and General Air Traffic (GAT) Handling** ***Timescales:*** Initial operational capability: 01/01/2012 Full operational capability: 31/12/2018		**100%**	**Completed**
Key Feature: Optimised ATM Network Services				
-				
Objective is implemented				**31/12/2019**
REG (By:12/2018)				
Civil Aviation Authority of Israel	-	-	100%	Completed 31/12/2019
ASP (By:12/2018)				
Israel Airports Authority	-	-	100%	Completed 31/12/2019
MIL (By:12/2018)				
Israeli Air Force	-	-	100%	Completed 31/12/2019

AOM19.1	**ASM Support Tools to Support Advanced FUA (AFUA)** ***Timescales:*** Initial operational capability: 01/01/2011 Full operational capability: 31/12/2018		**0%**	**Not yet planned**
Links: B1-FRTO, B1-NOPS | Key Feature: Optimised ATM Network Services				
-				
No plan (the objective has been reviewed but no implementation decision has been taken yet). At tactical level there is a local tool supporting ASM.				-
ASP (By:12/2018)				
Israel Airports Authority	-	-	0%	Not yet planned -

AOM19.2	**ASM Management of Real-Time Airspace Data** ***Timescales:*** Initial operational capability: 01/01/2017 Full operational capability: 31/12/2021		**0%**	**Not yet planned**
Links: B1-FRTO, B1-NOPS | Key Feature: Optimised ATM Network Services				
-				
No plan defined yet				**-**
ASP (By:12/2021)				
Israel Airports Authority	-	-	0%	Not yet planned -

AOM19.3	**Full Rolling ASM/ATFCM Process and ASM Information Sharing** ***Timescales:*** Initial operational capability: 01/01/2014 Full operational capability: 31/12/2021		**0%**	**Not yet planned**
Links: B0-FRTO, B1-FRTO, B1-NOPS, B2-NOPS | Key Feature: Optimised ATM Network Services				
-				
No plan defined yet				**-**
ASP (By:12/2021)				
Israel Airports Authority	-	-	0%	Not yet planned -

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**
Links: B1-FRTO, B1-NOPS | Key Feature: Optimised ATM Network Services				
-				
No plan defined yet, **Local tools are used but without integration with the NM**				**-**
ASP (By:12/2021)				
Israel Airports Authority	-	-	0%	Not yet planned -

AOM21.2	**Free Route Airspace** **(Outside Applicability Area)** ***Timescales:*** - not applicable -		**%**	**Not Applicable**
Links: B0-FRTO, B1-FRTO | Key Feature: Advanced Air Traffic Services				
-				
For the time being there are no IFR/GAT over flights above FL310. Objective will be reconsidered in due time taking into account the airspace reorganisation.				**-**
ASP (By:12/2021)				
Israel Airports Authority	-	-	%	Not Applicable -

AOP04.1	**Advanced Surface Movement Guidance and Control System A-SMGCS Surveillance (former Level 1)** ***Timescales:*** Initial operational capability: 01/01/2007 Full operational capability: 31/12/2011		**100%**	**Completed**
Links: B0-SURF | Key Feature: High Performing Airport Operations				
LLBG - Tel Aviv - Ben-Gurion Airport				
A-SMGCS level 1 is implemented by IAA (Israel Airports Authority – the only ANSP in Israel) at Ben-Gurion international airport which is the main international airport in Israel (more than 99% of international traffic in Israel)				-
REG (By:12/2010)				
Civil Aviation Authority of Israel	-	-	100%	Completed -
ASP (By:12/2011)				
Israel Airports Authority	-	-	100%	Completed -
APO (By:12/2010)				
Israel Airports Authority	-	-	100%	Completed -

AOP04.2	**Advanced Surface Movement Guidance and Control System (A-SMGCS) Runway Monitoring and Conflict Alerting (RMCA) (former Level 2)** ***Timescales:*** Initial operational capability: 01/01/2007 Full operational capability: 31/12/2017		**100%**	**Completed**
Links: B0-SURF | Key Feature: High Performing Airport Operations				
LLBG - Tel Aviv - Ben-Gurion Airport				
The IAA implements A-SMGCS level 2 since Q1/2015				**31/03/2015**
ASP (By:12/2017)				
Israel Airports Authority	-	-	100%	Completed 31/03/2015
APO (By:12/2017)				
Israel Airports Authority	-	-	100%	Completed 31/03/2015

AOP05	**Airport Collaborative Decision Making (A-CDM)** ***Timescales:*** Initial operational capability: 01/01/2004 Full operational capability: 31/12/2016		**6%**	**Ongoing**
Links: B0-ACDM, B0-RSEQ | Key Feature: High Performing Airport Operations				
LLBG - Tel Aviv - Ben-Gurion Airport				
IAA decided to implement A-CDM at Ben-Gurion airport.				**31/12/2021**
ASP (By:12/2016)				
Israel Airports Authority	-	A-CDM at LLBG	6%	Ongoing 31/12/2021
APO (By:12/2016)				
Israel Airports Authority	-	A-CDM at LLBG	6%	Ongoing 31/12/2021

AOP10	**Time-Based Separation** ***Timescales:*** - not applicable -		**%**	**Not Applicable**
Links: B1-RSEQ, B2-WAKE | Key Feature: High Performing Airport Operations				
LLBG - Tel Aviv - Ben-Gurion Airport **(Outside Applicability Area)**				
LLBG is not within the applicability area of the objective and for the time being there are no operational needs for implementation				**-**
REG (By:12/2023)				
Civil Aviation Authority of Israel	-	-	%	Not Applicable -
ASP (By:12/2023)				
Israel Airports Authority	-	-	%	Not Applicable -

AOP11	**Initial Airport Operations Plan** ***Timescales:*** Initial Operational Capability: 01/01/2015 Full Operational Capability: 31/12/2021		**8%**	**Ongoing**
Links: B1-ACDM | Key Feature: High Performing Airport Operations				
LLBG - Tel Aviv - Ben-Gurion Airport				
Planned to be implemented by 2024.				**31/12/2024**
ASP (By:12/2021)				
Israel Airports Authority	-	-	10%	Ongoing 31/12/2024
APO (By:12/2021)				
Israel Airports Authority	Objective not reviewed yet.	-	7%	Ongoing 31/12/2024

AOP12	Improve Runway and Airfield Safety with Conflicting ATC Clearances (CATC) Detection and Conformance Monitoring Alerts for Controllers (CMAC) *Timescales:* - not applicable -	%	Not Applicable
Links: B2-SURF | Key Feature: High Performing Airport Operations			
LLBG - Tel Aviv - Ben-Gurion Airport **(Outside Applicability Area)**			
There is no operational need for the functionality			-
ASP (By:12/2020)			
Israel Airports Authority	-	-	%	Not Applicable -
APO (By:12/2020)			
Israel Airports Authority	-	-	%	Not Applicable -

AOP13	Automated Assistance to Controller for Surface Movement Planning and Routing *Timescales:* - not applicable -	%	Not Applicable
Links: B1-ACDM, B1-RSEQ, B2-SURF | Key Feature: High Performing Airport Operations			
LLBG - Tel Aviv - Ben-Gurion Airport **(Outside Applicability Area)**			
The airport configuration does not require or justify the implementation of the objective			-
REG (By:12/2023)			
Civil Aviation Authority of Israel	The airport configuration does not require or justify the implementation of the objective	-	%	Not Applicable -
ASP (By:12/2023)			
Israel Airports Authority	The airport configuration does not require or justify the implementation of the objective	-	%	Not Applicable -

ATC02.8	Ground-Based Safety Nets *Timescales:* Initial operational capability: 01/01/2009 Full operational capability: 31/12/2016	37%	Ongoing
Links: B0-SNET, B1-SNET | Key Feature: Advanced Air Traffic Services			
-			
Implementation of APW function: **Implemented for ACCs and expected 31/12/2023 for Ben-Gurion Airport** **Implementation of MSAW function:** **MSAW functions are implemented at Ben-Gurion airport and ACC's,** **Implementation of APM functionality is planned with the system improvement at LLBG for 12/2023**			**31/12/2023**
ASP (By:12/2016)			
Israel Airports Authority	-	New ATM Facility at LLBG	37%	Ongoing 31/12/2023

ATC02.9	**Short Term Conflict Alert (STCA) for TMAs** ***Timescales:*** Initial operational capability: 01/01/2018 Full operational capability: 31/12/2020		**100%**	**Completed**
Links: B0-SNET, B1-SNET | Key Feature: Advanced Air Traffic Services				
-				
The STCA functionality is available in the TMA. The algorithm is the same as for en-route. The multi-hypothesis algorithm is not used				-
ASP (By:12/2020)				
Israel Airports Authority	-	-	100%	Completed -

ATC07.1	**AMAN Tools and Procedures** ***Timescales:*** Initial operational capability: 01/01/2007 Full operational capability: 31/12/2019		**10%**	**Ongoing**
Links: B0-RSEQ | Key Feature: Advanced Air Traffic Services				
LLBG - Tel Aviv - Ben-Gurion Airport				
Functionality is planned to be included in the new ATM system expected for the 12/2023				**31/12/2023**
ASP (By:12/2019)				
Israel Airports Authority	-	New ATM Facility at LLBG	10%	Ongoing 31/12/2023

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		**10%**	**Ongoing**
Links: B1-FRTO | Key Feature: Advanced Air Traffic Services				
-				
Functionality is planned to be included in the new ATM system expected for 12/2024				**31/12/2024**
ASP (By:12/2021)				
Israel Airports Authority	-	New ATM Facility at LLBG	10%	Ongoing 31/12/2024

ATC15.1	**Information Exchange with En-route in Support of AMAN** ***Timescales:*** Initial operational capability: 01/01/2012 Full operational capability: 31/12/2019		**10%**	**Ongoing**
Links: B1-RSEQ | Key Feature: Advanced Air Traffic Services				
-				
Functionality is planned to be included in the new ATM system expected for 12/2024 (Refer also to ATC07.1 information)				**31/12/2024**
ASP (By:12/2019)				
Israel Airports Authority	-	New ATM Facility at LLBG	10%	Ongoing 31/12/2024

ATC15.2	**Arrival Management Extended to En-route Airspace** ***Timescales:*** Full operational capability: 31/12/2023		**10%**	**Ongoing**
Links: B1-RSEQ | Key Feature: Advanced Air Traffic Services				
-				
Functionality is planned to be included in the new ATM system expected for 12/2024				**31/12/2024**
ASP (By:12/2023)				
Israel Airports Authority	-	-	10%	Ongoing 31/12/2024

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		**10%**	**Ongoing**
Key Feature: Advanced Air Traffic Services				
-				
Functionality is planned to be included in the new ATM system expected for 12/2024				**31/12/2024**
ASP (By:12/2018)				
Israel Airports Authority	-	New ATM Facility at LLBG	10%	Ongoing 31/12/2024

COM10	**Migrate from AFTN to AMHS** ***Timescales:*** Initial operational capability: 01/12/2011 Full operational capability: 31/12/2018		**100%**	**Completed**
Key Feature: Enabling the Aviation Infrastructure				
-				
The systems has the AMHS capability. The link with Jordan is via AMHS. For the other connections, the systems is using an AMHS/AFTN gateway.				-
ASP (By:12/2018)				
Israel Airports Authority	-	-	100%	Completed -

COM11.1	**Voice over Internet Protocol (VoIP) in En-Route** ***Timescales:*** Initial operational capability: 01/01/2013 Full operational capability: 31/12/2021		**10%**	**Ongoing**
Key Feature: Enabling the Aviation Infrastructure				
-				
Implementation is ongoing. The other links (e.g. TMA to ACC controllers, links between ACC controllers and ground stations, etc.) will migrate to VoIP by 2024.				**31/12/2024**
ASP (By:12/2021)				
Israel Airports Authority	-	New ATM Facility at LLBG	10%	Ongoing 31/12/2024

COM11.2	**Voice over Internet Protocol (VoIP) in Airport/Terminal** ***Timescales:*** Initial operational capability: 01/01/2013 Full operational capability: 31/12/2023		**100%**	**Completed**
Key Feature: Enabling the Aviation Infrastructure				
-				
The links between ATC and ground stations at Ben Gurion airport are via VoIP. The same for the links between TWR and TMA controllers (therefore the overwritten percentages).				**31/12/2018**
ASP (By:12/2023)				
Israel Airports Authority	-	-	100%	Completed 31/12/2018

COM12	**New Pan-European Network Service (NewPENS)** ***Timescales:*** Initial operational capability: 01/01/2018 Full operational capability (Other stakeholders): 31/12/2024		**75%**	**Ongoing**
Links: B1-SWIM | Key Feature: Enabling the Aviation Infrastructure				
-				
Israel has joined PENS, There are plans to join new PENS by 31/12/2020.				**31/12/2020**
ASP (By:12/2024)				
Israel Airports Authority	-	-	75%	Ongoing 31/12/2020
APO (By:12/2024)				
Israel Airports Authority	-	-	75%	Ongoing 31/12/2020

ENV01	**Continuous Descent Operations (CDO)** ***Timescales:*** Initial operational capability: 01/07/2007 Full operational capability: 31/12/2023		**100%**	**Completed**
Links: B0-CDO, B1-CDO | Key Feature: Advanced Air Traffic Services				
LLBG - Tel Aviv - Ben-Gurion Airport				
CDOs are implemented wherever possible (in IAPs and STARs) in Israel. CAAI supports the implementation with the ANSP and Israeli operators have full awareness of CDO, and conduct it in daily operations.				-
ASP (By:12/2023)				
Israel Airports Authority	-	-	100%	Completed -
APO (By:12/2023)				
Israel Airports Authority	-	-	100%	Completed -

FCM03	**Collaborative Flight Planning** ***Timescales:*** Initial operational capability: 01/01/2000 Full operational capability: 31/12/2017		**10%**	**Ongoing**
Links: B0-NOPS | Key Feature: Optimised ATM Network Services				
-				
First steps in implementation have been taken through Israel joining the IFPZ. Full completion is expected with the deployment of the new ATM system planned for 12/2024.				**31/12/2024**
ASP (By:12/2017)				
Israel Airports Authority	-	New ATM Facility at LLBG	10%	Ongoing 31/12/2024

FCM04.2	**Short Term ATFCM Measures (STAM) - Phase 2** **(Outside Applicability Area)** ***Timescales:*** - not applicable -		**%**	**Not Applicable**
Key Feature: Optimised ATM Network Services				
-				
Current levels of traffic do not require such measures				-
ASP (By:12/2021)				
Israel Airports Authority	-	-	%	Not Applicable -

FCM05	**Interactive Rolling NOP** ***Timescales:*** Initial operational capability: 01/09/2013 Full operational capability: 31/12/2021		**0%**	**Not yet planned**
Links: B1-ACDM, B1-NOPS | Key Feature: Optimised ATM Network Services				
-				
No plan defined yet. Pending the evolution on AOM19.x objectives (Which are "Not yet planned" too). The implementation of the AOP is also not planned yet.				-
ASP (By:12/2021)				
Israel Airports Authority	-	-	0%	Not yet planned -
APO (By:12/2021)				
Israel Airports Authority	-	-	0%	Not yet planned -

FCM06	**Traffic Complexity Assessment** ***Timescales:*** Full operational capability: 31/12/2021		**10%**	**Ongoing**
Links: B1-NOPS | Key Feature: Optimised ATM Network Services				
-				
There is a local tool based on FPL data but not integrated with NM. Implementation of the objective expected with the new ATM system 12/2024.				**31/12/2024**
ASP (By:12/2021)				
Israel Airports Authority	-	New ATM Facility at LLBG	10%	Ongoing 31/12/2024

FCM08	**Extended Flight Plan** ***Timescales:*** Initial operational capability: 01/01/2016 Full operational capability: 31/12/2021		**0%**	**Not yet planned**
Links: B1-FICE | Key Feature: Enabling the Aviation Infrastructure				
-				
No plan yet, pending the availability of ICAO specs for FF-ICE/1				**-**
ASP (By:12/2021)				
Israel Airports Authority	-	-	0%	Not yet planned -

INF07	**Electronic Terrain and Obstacle Data (eTOD)** ***Timescales:*** Initial operational capability: 01/11/2014 Full operational capability: 31/05/2018		**100%**	**Completed**
Key Feature: Enabling the Aviation Infrastructure				
-				
Implementation Plan has been developed and implementation is ongoing				**31/12/2019**
REG (By:05/2018)				
Civil Aviation Authority of Israel	-	-	100%	Completed 31/12/2018
ASP (By:05/2018)				
Israel Airports Authority	-	-	100%	Completed 31/12/2019
APO (By:05/2018)				
Israel Airports Authority	-	-	100%	Completed 31/12/2019

INF08.1	**Information Exchanges using the SWIM Yellow TI Profile** ***Timescales:*** - not applicable -		**%**	**Not yet planned**
Links: B1-DATM, B1-SWIM | Key Feature: Enabling the Aviation Infrastructure				
-				
Objective not reviewed yet				**-**
ASP (By:12/2024)				
Israel Airports Authority	-	-	%	Not yet planned -
MIL (By:12/2024)				
Israeli Air Force	-	-	%	Not yet planned -
APO (By:12/2024)				
Israel Airports Authority	-	-	%	Not yet planned -

ITY-ACID	**Aircraft Identification** ***Timescales:*** Entry into force of the Regulation: 13/12/2011 System capability: 02/01/2020		**10%**	**Ongoing**
Key Feature: Enabling the Aviation Infrastructure				
-				
Implementation is planned in the new ATM system, expected for 2024.				**31/12/2024**
ASP (By:01/2020)				
Israel Airports Authority	-	New ATM Facility at LLBG	10%	Ongoing 31/12/2024

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	**100%**	**Completed**
Links: B0-DATM | Key Feature: Enabling the Aviation Infrastructure			
-			
1. Implement a quality management system (QMS) – completed. **A QMS is fully implemented by CAAI with respect to AIP processes which is a service provided by** **CAAI (ISO certified).** **With respect to NOTAM and PIB, which are services provided by the IAA, a QMS implementation process is completed.** **2. Implement data quality requirements – completed.** **3. Implementation of Common dataset and digital exchange format – completed.** **Completion date – 12/2017.** **4. Establish formal arrangements – completed.** **CAAI AIS unit has established a set of procedures regarding the exchange of aeronautical data and information with data originators.**			**31/12/2017**
REG (By:06/2017)			
Civil Aviation Authority of Israel	-	-	100%	Completed 31/12/2017
ASP (By:06/2017)			
Israel Airports Authority	-	-	100%	Completed 31/12/2017
APO (By:06/2017)			
Israel Airports Authority	-	-	100%	Completed 31/12/2017

ITY-AGDL	Initial ATC Air-Ground Data Link Services (Outside Applicability Area) ***Timescales:*** - not applicable -	%	Not Applicable
Links: B0-TBO | Key Feature: Enabling the Aviation Infrastructure			
-			
Since the volume of over flight operations over Israel is relatively very low, there is no need at the moment to implement ATC air to ground data link above FL- 285.			-
REG (By:02/2018)			
Civil Aviation Authority of Israel	-	- %	Not Applicable -
ASP (By:02/2018)			
Israel Airports Authority	-	- %	Not Applicable -
MIL (By:01/2019)			
Israeli Air Force	-	- %	Not Applicable -

ITY-AGVCS2	8,33 kHz Air-Ground Voice Channel Spacing below FL195 (Outside Applicability Area) ***Timescales:*** - not applicable -	%	Not Applicable
Key Feature: Enabling the Aviation Infrastructure			
-			
The levels of traffic as well as the geographical location do not justify the implementation of the objective.			-
REG (By:12/2018)			
Civil Aviation Authority of Israel	-	- %	Not Applicable -
ASP (By:12/2018)			
Israel Airports Authority	-	- %	Not Applicable -
MIL (By:12/2020)			
Israeli Air Force	-	- %	Not Applicable -
APO (By:12/2018)			
Israel Airports Authority	-	- %	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		**10%**	**Ongoing**
Links: B0-FICE, B1-FICE | Key Feature: Enabling the Aviation Infrastructure				
-				
Implementation will be addressed in context of the new ATM system planned for 12/2024.				**31/12/2024**
ASP (By:12/2014)				
Israel Airports Authority	-	-	10%	Ongoing 31/12/2024
MIL (By:12/2014)				
Israeli Air Force	-	-	%	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		**72%**	**Ongoing**
Links: B0-ASUR | Key Feature: Enabling the Aviation Infrastructure				
-				
The safety related SLoAs have been implemented by both IAA and the CAAI. The interoperability SLoA will be addressed in the context of the deployment of the new ATM system. **With regards the surveillance infrastructure, all Tel-Aviv FIR is covered by a variety of surveillance infrastructure – PSR/SSR/Mode S and MLAT** **The MIL SLoAs are considered as not applicable as Mode S/ADS-B carriage is not required by the national Regulations. Aircraft flying in the applicability area of the SPI IR are equipped accordingly.**				**31/12/2024**
REG (By:02/2015)				
Civil Aviation Authority of Israel	-	-	100%	Completed -
ASP (By:02/2015)				
Israel Airports Authority	-	-	65%	Ongoing 31/12/2024
MIL (By:06/2020)				
Israeli Air Force	-	-	%	Not Applicable -

NAV03.1	**RNAV 1 in TMA Operations** ***Timescales:*** Initial operational capability: 01/01/2001 Locally determined number of RNAV1 SID/STAR, where established: 06/06/2030		**100%**	**Completed**
Links: B0-CCO, B0-CDO, B1-RSEQ | Key Feature: Advanced Air Traffic Services				
-				
P-RNAV Routes, SIDs, STARs and CDRs are implemented throughout the Israeli airspace. Israel is engaged in advanced action with EC to allow EGNOS SBAS operations as soon as operational coverage will begin. Safety case has been performed per IFP, and a general ESARR compliant Safety case has been recently performed in collaboration with "Helios", in the framework of EC technical assistance team.				**31/12/2014**
REG (By:06/2030)				
Civil Aviation Authority of Israel	-	-	100%	Completed 31/12/2014
ASP (By:06/2030)				
Israel Airports Authority	-	-	100%	Completed 31/12/2014

NAV03.2	**RNP 1 in TMA Operations** ***Timescales:*** Start: 07/08/2018 Locally determined number of RNP1 SID/STAR, where established.: 06/06/2030		**100%**	**Completed**
Links: B1-RSEQ | Key Feature: Advanced Air Traffic Services				
-				
RNP 1 operations are implemented in Tel Aviv TMA				**31/12/2014**
REG (By:06/2030)				
Civil Aviation Authority of Israel	-	-	100%	Completed 31/12/2014
ASP (By:06/2030)				
Israel Airports Authority	-	-	100%	Completed 31/12/2014

NAV10	**RNP Approach Procedures to instrument RWY** ***Timescales:*** Initial operational capability: 01/06/2011 Instrument RWY ends served by precision approach (including PCP airports): 25/01/2024 Instrument RWY ends without precision approach at other ECAC+ instrument RWYs.: 25/01/2024		**100%**	**Completed**
Links: B0-APTA | Key Feature: Advanced Air Traffic Services				
-				
Israel has implemented APV procedures in accordance with the objectives of ICAO Assembly resolution 37-11.				**31/12/2017**
REG (By:01/2024)				
Civil Aviation Authority of Israel	-	-	100%	Completed 31/12/2017
ASP (By:01/2024)				
Israel Airports Authority	-	-	100%	Completed 31/12/2017

NAV12	**ATS IFR Routes for Rotorcraft Operations** **(Outside Applicability Area)** ***Timescales:*** - not applicable -		**%**	**Not Applicable**
Links: B1-APTA | Key Feature: Advanced Air Traffic Services				
-				
There is no operational need for special low-level IRF routes for rotorcraft in Tel Aviv FIR.				**-**
REG (By:06/2030)				
Civil Aviation Authority of Israel	-	-	%	Not Applicable -
ASP (By:06/2030)				
Israel Airports Authority	-	-	%	Not Applicable -

SAF11	**Improve Runway Safety by Preventing Runway Excursions** ***Timescales:*** Initial operational capability: 01/09/2013 Full operational capability: 31/01/2018		**100%**	**Completed**
Key Feature: High Performing Airport Operations				
-				
The State runway safety plan is expected for mid-2019 while the overall implementation is scheduled for end-2019				**31/12/2019**
REG (By:01/2018)				
Civil Aviation Authority of Israel	-	-	100%	Completed 30/06/2019
ASP (By:12/2014)				
Israel Airports Authority	-	-	100%	Completed 31/12/2019
APO (By:12/2014)				
Israel Airports Authority	-	-	100%	Completed 31/12/2019

Additional Objectives for ICAO ASBU Monitoring

AOM21.1	**Direct Routing** **(Outside Applicability Area)** ***Timescales:*** - not applicable -	**%**	**Not Applicable**
Links: B0-FRTO, B1-FRTO | Key Feature: Advanced Air Traffic Services			
-			
For the time being there are no IFR/GAT over flights above FL310. Objective will be reconsidered in due time taking into account the airspace reorganisation.			**-**
ASP (By:12/2017)			
Israel Airports Authority	-	-	%	Not Applicable -

ATC02.2	**Implement ground based safety nets - Short Term Conflict Alert (STCA) - level 2 for en-route operations** ***Timescales:*** Initial operational capability: 01/01/2008 Full operational capability: 31/01/2013	**100%**	**Completed**
Links: B0-SNET | Key Feature: Advanced Air Traffic Services			
-			
STCA functions are implemented at all ATM units.			**-**
ASP (By:01/2013)			
Israel Airports Authority	-	-	100%	Completed -

ATC16	**Implement ACAS II compliant with TCAS II change 7.1** ***Timescales:*** Initial operational capability: 01/03/2012 Full operational capability: 31/12/2015	**100%**	**Completed**
Links: B0-ACAS | Key Feature: Advanced Air Traffic Services			
-			
All Israeli air carriers engaged in commercial int'l air operations are equipped with TCAS II version 7.1,			**30/06/2017**
REG (By:12/2015)			
Civil Aviation Authority of Israel	-	-	100%	Completed 30/06/2017
ASP (By:03/2012)			
Israel Airports Authority	-	-	100%	Completed 30/06/2017
MIL (By:12/2015)			
Israeli Air Force	-	-	100%	Completed -

FCM01	**Implement enhanced tactical flow management services** ***Timescales:*** Initial operational capability: 01/08/2001 Full operational capability: 31/12/2006		**10%**	**Ongoing**
Links: B0-NOPS | Key Feature: Optimised ATM Network Services				
-				
Implementation is planned with the new ATM system, expected for 12/2024				**31/12/2024**
ASP (By:07/2014)				
Israel Airports Authority	-	-	10%	Ongoing 31/12/2024

ITY-COTR	**Implementation of ground-ground automated co-ordination processes** ***Timescales:*** Entry into force of Regulation: 27/07/2006 For putting into service of EATMN systems in respect of notification and initial coordination processes: 27/07/2006 For putting into service of EATMN systems in respect of Revision of Coordination, Abrogation of Coordination, Basic Flight Data and Change to Basic Flight Data: 01/01/2009 To all EATMN systems in operation by 12/2012: 31/12/2012		**100%**	**Completed**
Links: B0-FICE | Key Feature: Advanced Air Traffic Services				
-				
The IAA has implemented the Electronic Flight Strip (EFS) since Q3 2015 which provides automated coordination capabilities between the Israeli ATC units. **The civil-military exchanges are not-applicable as the system uses the same database.**				**30/09/2015**
ASP (By:12/2012)				
Israel Airports Authority	-	-	100%	Completed 30/09/2015
MIL (By:12/2012)				
Israeli Air Force	-	-	%	Not Applicable -

Local Objectives

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

AOP14	Remote Tower Services *Applicability and timescale: Local*	%	Not Applicable
Links: B1-RATS | Key Feature: High Performing Airport Operations			
LLBG - Tel Aviv - Ben-Gurion Airport			
For the time being, the implementation of Remote Tower in Israel is not operationally nor economically justified.			-

AOP15	Enhanced traffic situational awareness and airport safety nets for the vehicle drivers *Applicability and timescale: Local*	10%	Ongoing
Links: B2-SURF | Key Feature: High Performing Airport Operations			
LLBG - Tel Aviv - Ben-Gurion Airport			
The system is being designed in house. Date of implementation for operational vehicles - by 31.12.2022.			31/12/2022

AOP16	Guidance assistance through airfield ground lighting *Applicability and timescale: Local*	%	Not Applicable
Links: B1-RSEQ, B2-SURF | Key Feature: High Performing Airport Operations			
LLBG - Tel Aviv - Ben-Gurion Airport			
Pre req AOP 13 is NA.			-

AOP17	Provision/integration of departure planning information to NMOC *Applicability and timescale: Local*	%	Not Applicable
Links: B1-ACDM, B1-NOPS | Key Feature: High Performing Airport Operations			
LLBG - Tel Aviv - Ben-Gurion Airport			
-			-

AOP18	Runway Status Lights (RWSL) *Applicability and timescale: Local*	%	Not Applicable
Links: B2-SURF | Key Feature: High Performing Airport Operations			
LLBG - Tel Aviv - Ben-Gurion Airport			
No operational need.			-

ATC18	Multi-Sector Planning En-route - 1P2T *Applicability and timescale: Local*	100%	Completed
Key Feature: Advanced Air Traffic Services			
-			
the current system has the capability, which is used operationally			31/12/2000

ATC19	Enhanced AMAN-DMAN integration *Applicability and timescale: Local*	%	Not Applicable
Links: B2-RSEQ | Key Feature: Advanced Air Traffic Services			
-			
No operational need.			-

ATC20	Enhanced STCA with down-linked parameters via Mode S EHS *Applicability and timescale: Local*	10%	Ongoing
Links: B1-SNET | Key Feature: Advanced Air Traffic Services			
-			
Functionality is planned to be included in the new ATM system expected for the 12/2024.			31/12/2024

ENV02	Airport Collaborative Environmental Management *Applicability and timescale: Local*	100%	Completed
Key Feature: High Performing Airport Operations			
LLBG - Tel Aviv - Ben-Gurion Airport			
The formal working partnership arrangements are based on monthly meetings.			-

ENV03	Continuous Climb Operations (CCO) *Applicability and timescale: Local*	100%	Completed
Links: B0-CCO | Key Feature: Advanced Air Traffic Services			
LLBG - Tel Aviv - Ben-Gurion Airport			
completed as far as practicable taking into account to constraints of the air-space			-

6. Annexes

A. Specialists involved in the ATM implementation reporting for Israel

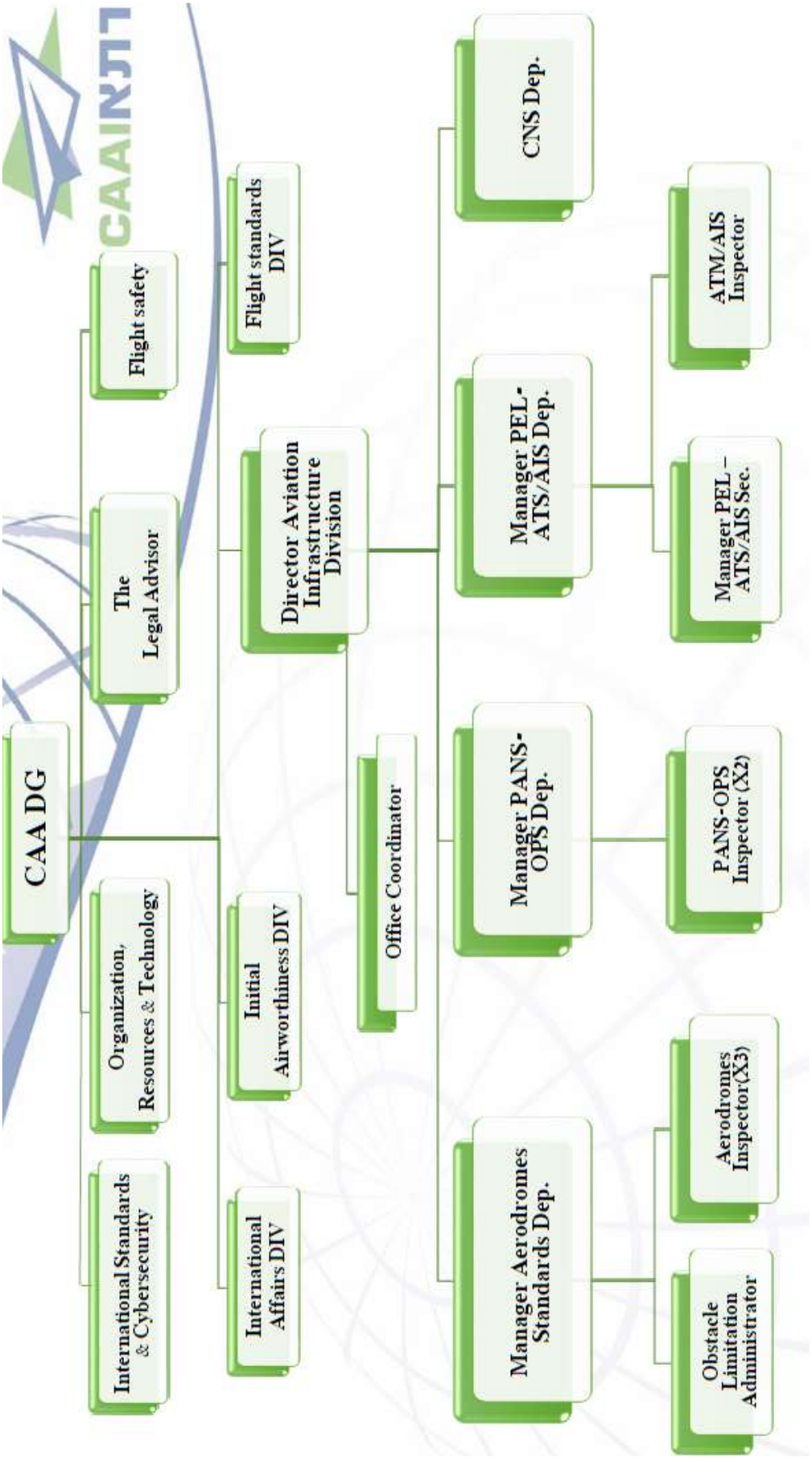
LSSIP Co-ordination

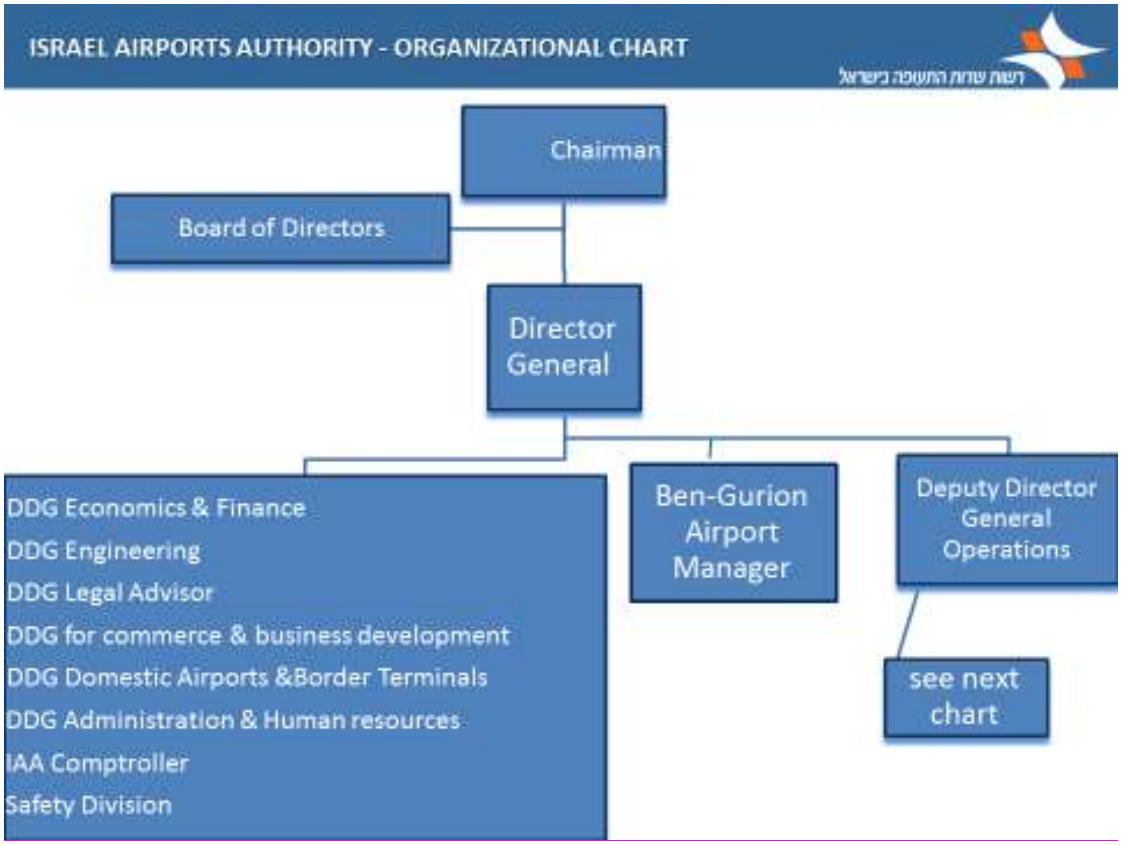
LSSIP Focal Points	Organisation	Name
LSSIP National Focal Point	CAA	Ilan WOLF
LSSIP Focal Point for NSA/CAA	CAA	Ilan WOLF
LSSIP Focal Point for ANSP	IAA	Asaf BEN-MICHAEL
LSSIP Focal Point for Airport	IAA	Jonathan BARLEV
LSSIP Focal Point for Military	IAF	Maj. Dan BENSOUSSAN

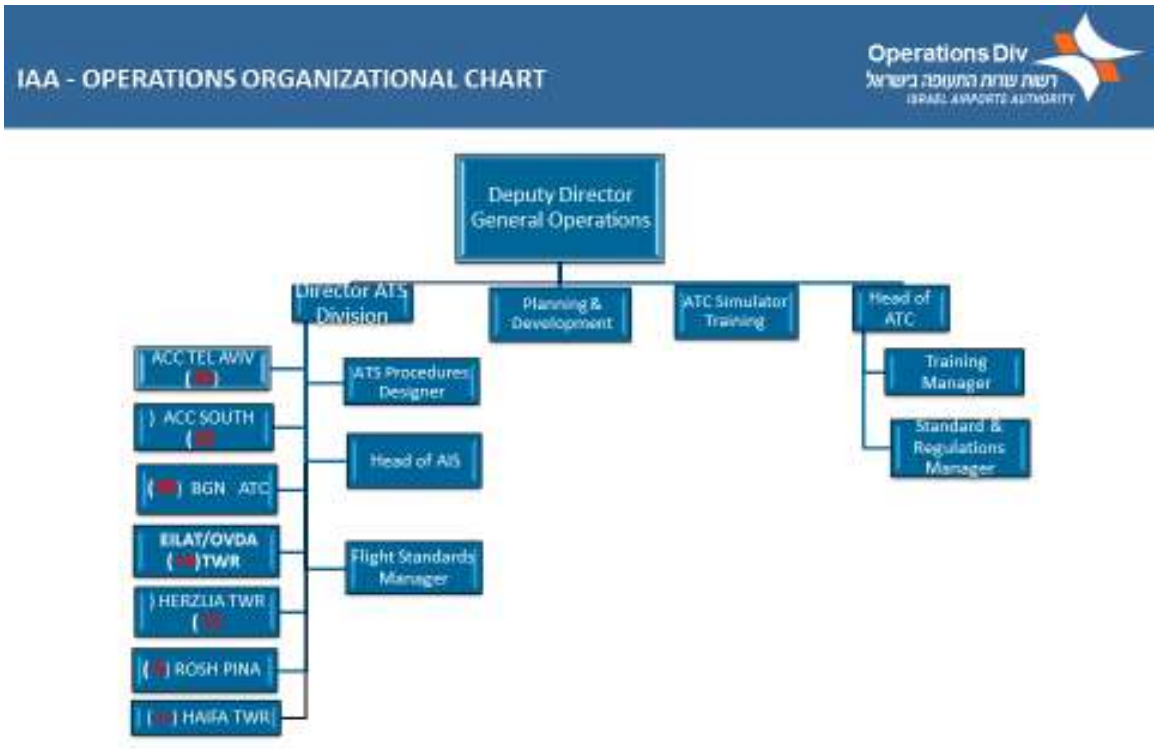
Other Focal Points	Organisation	Name
Focal Point for U-space	CAA	Libby BAHAT
Focal Point for NETSYS	IAA	Jacob SIVAN

B. National stakeholders organisation charts

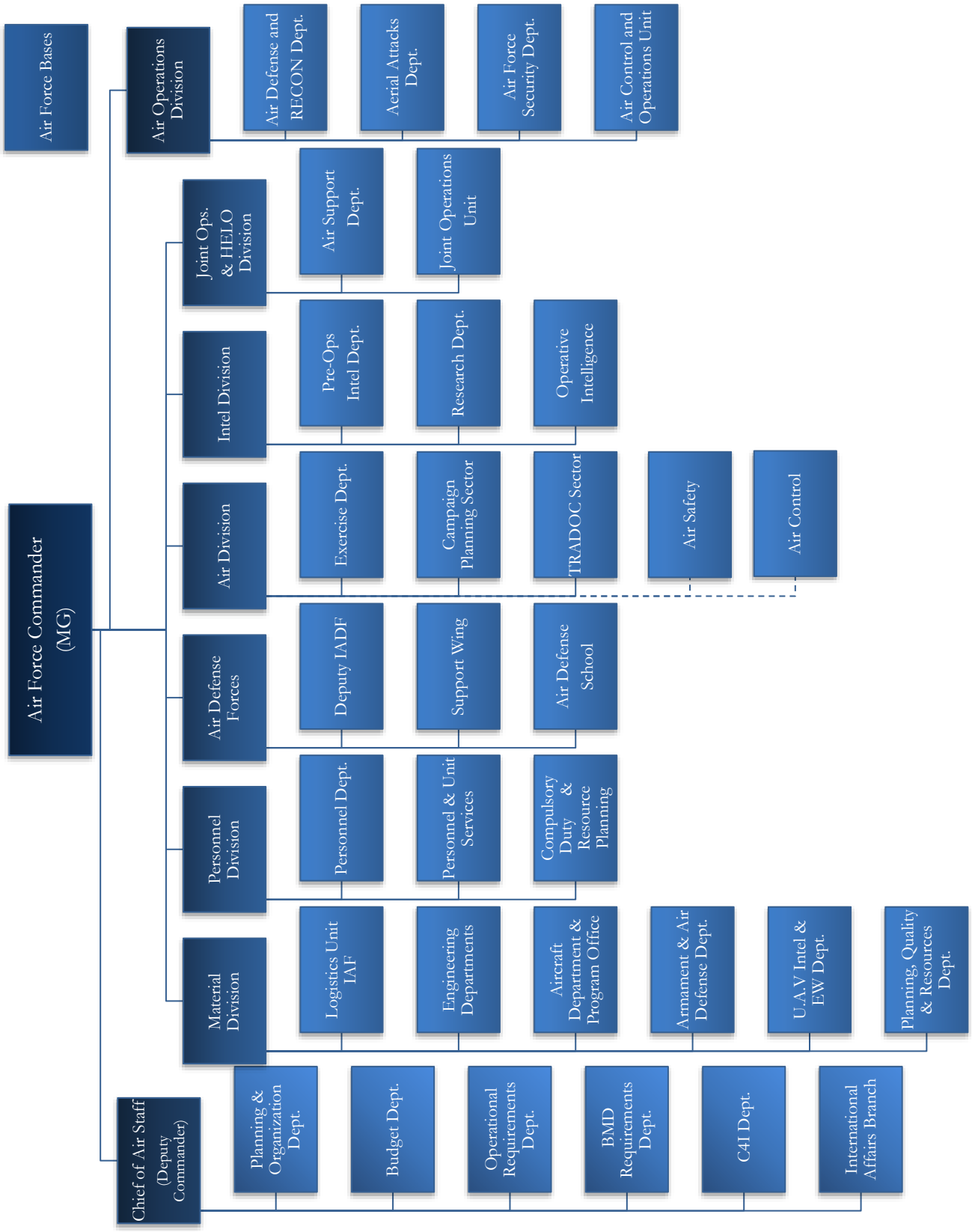
CAA Organisation Chart




ISRAEL AIRPORTS AUTHORITY - ORGANIZATIONAL CHART
רשות שדות התעופה בישראל
Chairman
Board of Directors
Director General
DDG Economics & Finance
DDG Engineering
DDG Legal Advisor
DDG for commerce & business development
DDG Domestic Airports &Border Terminals
DDG Administration & Human resources
IAA Comptroller
Safety Division
Ben-Gurion Airport Manager
Deputy Director General Operations
see next chart


IAA - OPERATIONS ORGANIZATIONAL CHART
Operations Div
רשות שדות התעופה בישראל
ISRAEL AIRPORTS AUTHORITY
Deputy Director General Operations
Director ATS Division
Planning & Development
ATC Simulator Training
Head of ATC
ACC TEL AVIV
ACC SOUTH
BGN ATC
EILAT/OVDA TWR
HERZLIA TWR
ROSH PINA
HAIFA TWR
ATS Procedures Designer
Head of AIS
Flight Standards Manager
Training Manager
Standard & Regulations Manager

IAF Organisation chart



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

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

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

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

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

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

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

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

Legend:

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

D. Implementation of U-Space Services

This annex provides an overview of the current implementation progress and short to medium term planning information on the main elements underlying the provision of the 16 U-Space services enabling Very Low Level drones operations. Those elements are expected to be available in phases U1 (2019) to U3 (2025) as described in the European ATM Master Plan add-on: Roadmap for the safe integration of drones into all classes of airspace.

Phase	Service	Service Element	Progress	Implementation Date	Comment
U1	e-Registration	Registration enforcement implemented	Completed	01-01-2020	not for recreational. for recreational - Dec. 31st 2020.
U1	e-Registration	Remote Identification system add-on registration service available (i.e. device physical serial number)	Not yet Planned		
U1	e-Registration	UA online registration service available	Planned	31-12-2020	
U1	e-Registration	UAS operator online registration service available	Planned	31-12-2020	
U1	e-Registration	UAS operator registration procedure implemented (e.g. national registration number)	Completed	01-01-2020	not for recreational. for recreational - Dec. 31st 2020.
U1	e-Identification	Authority in charge of issuing and managing identification numbers (i.e. code allocation and coordination) established	Completed	01-01-2020	not for recreational. for recreational - Dec. 31st 2020.
U1	e-Identification	E-identification enforcement implemented	Planned	31-12-2020	

Phase	Service	Service Element	Progress	Implementation Date	Comment
U1	e-Identification	The identification service includes the localisation of the drones (i.e. position and time stamp)	Not yet Planned		
U1	Pre-tactical geo-fencing	Geo-limitation database available	Not yet Planned		
U1	Pre-tactical geo-fencing	Pre-defined restricted areas implementation	Not yet Planned		
U1	Pre-tactical geo-fencing	User access to AIP and NOTAM provided (i.e. to feed drones embedded geofencing features)	Not yet Planned		
U2	Tactical geo-fencing	Geo-awareness information available (e.g. geofence and flight restriction information provided up to the moment of take-off)	Not yet Planned		
U2	Tactical geo-fencing	Real-time pre-defined restricted areas information data feed available	Not yet Planned		
U2	Tactical geo-fencing	Restricted area infringement notification implemented (based on ownship data)	Not yet Planned		
U2	Flight planning management	Airspace authorisation and flight planning approval processes available	Missing Data		
U2	Flight planning management	Automated flight plan validation	Missing Data		

Phase	Service	Service Element	Progress	Implementation Date	Comment
		capability available			
U2	Flight planning management	Digital notification (i.e. digital NOTAM) capability available	Missing Data		
U2	Flight planning management	Flight plan preparation/optimisation capabilities available	Missing Data		
U2	Flight planning management	Flight planning support publications available (e.g. obstacles maps; population density maps; risk reduction)	Missing Data		
U2	Weather information	Collection of weather information from different stakeholders implemented (including return of weather info drone to UTM)	Not yet Planned		
U2	Weather information	Hyperlocal weather information available	Not yet Planned		
U2	Weather information	Low-altitude wind forecasting information available	Not yet Planned		
U2	Weather information	Predictive weather hazard alerts at planned drone mission sites available	Not yet Planned		
U2	Weather information	Real-time low-altitude wind actual information available	Not yet Planned		

Phase	Service	Service Element	Progress	Implementation Date	Comment
U2	Tracking	Cooperative UAS positioning infrastructure available	Not yet Planned		
U2	Tracking	Non-cooperative UAS tracking capabilities available (e.g. at airports; high value assets)	Completed	01-01-2020	DJI tracking systems.
U2	Tracking	Real-time tracking capabilities available (e.g. location reports; data fusion from multiple sources)	Planned		ongoing research
U2	Tracking	Surveillance data exchange interface available (i.e. capability to exchange data among the tracking service and other services/systems)	Planned		ongoing research
U2	Tracking	Tracking data recording capability implemented	Completed	01-01-2020	DJI tracking systems.
U2	Monitoring	Air situation monitoring capability available (depending on the level of tracking available. See U2 Tracking capabilities)	Ongoing		monitoring station 24/7 active at Ben Gurion Airport.
U2	Monitoring	Alert/Report line available	Ongoing		monitoring station 24/7 active at Ben Gurion Airport.
U2	Monitoring	Flight non-conformance detection capability available	Completed	01-01-2020	active at Ben Gurion Airport.

Phase	Service	Service Element	Progress	Implementation Date	Comment
U2	Monitoring	Non-cooperative drones identification capability available to law enforcement, regulatory authority and service providers	Planned	31-12-2020	ANSP (Ben Gurion Airport) - ongoing research
U2	Monitoring	Provision of traffic information to UAS operators implemented	Not yet Planned		
U2	Monitoring	Restricted area infringement detection capability available (based on surveillance data)	Not yet Planned		
U2	Drone aeronautical information management	UTM-relevant dynamic aeronautical data available (i.e. provision of information to geofencing and mission planning services)	Not yet Planned		
U2	Drone aeronautical information management	UTM-relevant static aeronautical data available	Not yet Planned		
U2	Procedural interface with ATC	ATC/UAS coordination procedures defined according to airspace classification	Not yet Planned		
U2	Procedural interface with ATC	Emergency and contingency procedures implemented	Not yet Planned		
U2	Procedural interface with ATC	Flight notification procedures to nearby airports	Not yet Planned		

Phase	Service	Service Element	Progress	Implementation Date	Comment
		operators (i.e. AFIS; ATC; FIS) implemented			
U2	Procedural interface with ATC	Pre-tactical controlled airspace access coordination processes available	Not yet Planned		
U2	Procedural interface with ATC	Rules awareness service adapted to specific areas, time, type of operations	Not yet Planned		
U2	Procedural interface with ATC	UAS access conditions prescription (for specific volumes of airspace) implemented	Not yet Planned		
U2	Emergency management	Emergency alert line available	Not yet Planned		
U2	Emergency management	Provision of assistance information to UAS operator in case of emergency implemented	Not yet Planned		
U2	Strategic de-confliction	Manned-unmanned aircraft deconfliction capability available	Not yet Planned		
U2	Strategic de-confliction	Pre-flight information provision involving de-confliction management function	Not yet Planned		
U2	Strategic de-confliction	Strategic de-confliction capabilities based on mission plans analysis (e.g.	Not yet Planned		

Phase	Service	Service Element	Progress	Implementation Date	Comment
		conflicts identification; solution proposal) available			
U3	Dynamic geo-fencing	Data-link connectivity to geofencing function implemented (e.g. through dedicated web service)	Not yet Planned		
U3	Dynamic geo-fencing	Live dynamic restricted areas information data feed available for real-time flight path adjustments	Not yet Planned		
U3	Dynamic geo-fencing	Up-to-date guidance information including safety concerns (e.g. forest fires; major events; VIP travel) provided	Not yet Planned		
U3	Collaborative Interface with ATC	ATC alert notification implemented	Not yet Planned		
U3	Collaborative Interface with ATC	Global air situation monitoring capabilities available	Not yet Planned		
U3	Tactical de-confliction	de-confliction management information transmission from the USSP to the UAS	Not yet Planned		
U3	Tactical de-confliction	de-confliction management information transmission in real-time	Not yet Planned		

Phase	Service	Service Element	Progress	Implementation Date	Comment
U3	Dynamic capacity management	Airspace capacity monitoring capability available	Not yet Planned		
U3	Dynamic capacity management	Management for capacity due to non-nominal occurrences, such as weather hazards or emergency situations	Not yet Planned		
U3	Dynamic capacity management	UAS traffic complexity assessment capability available	Not yet Planned		
U3	Dynamic capacity management	demand and capacity management implemented	Not yet Planned		
U3	Dynamic capacity management	near-real-time flight authorization capability available	Not yet Planned		

E. SESAR Solutions implemented in a voluntary way[6]

This annex is considered as not applicable for Israel.

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

F. Military Organisations Infrastructure

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

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

G. Glossary of abbreviations

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

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

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

Term	Description
ANL	Air Navigation Law
ANR	Air Navigation Regulations
CAA	Civil Aviation of Israel
DGCAA	The CAAI Director General
IAA	Israel Airports Authority
IAF	Israeli Air Force
IDF	Israel Defence Forces