



ATMGE/ 23

Paris, 23 March 2017

ASBU Monitoring and Reporting

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EUROCONTROL

Agenda

- 1. EANPG Decisions**
- 2. Summary of ESSIP/LSSIP process and process followed**
- 3. The ASBU Implementation Monitoring Report 2015**
- 4. Process for reference period 2016 & revised questionnaire**
- 5. Way forward**

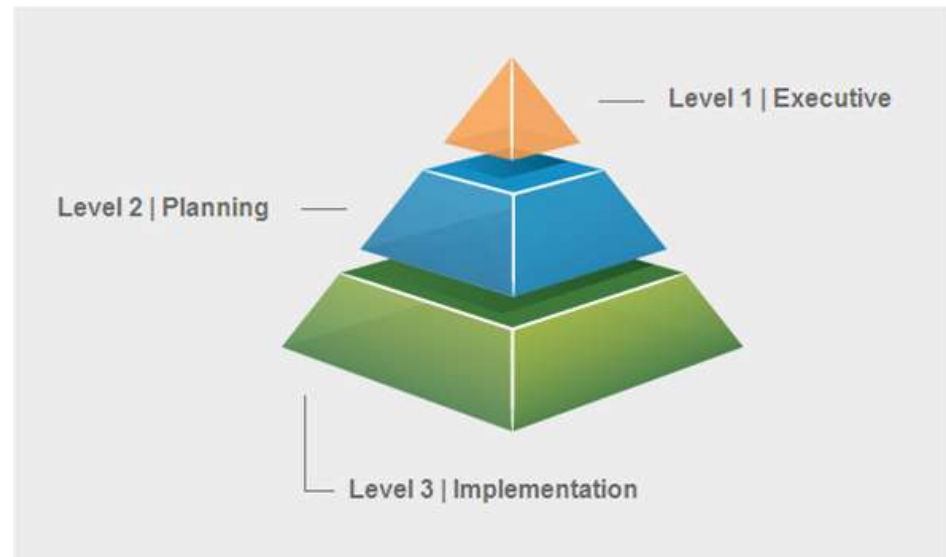
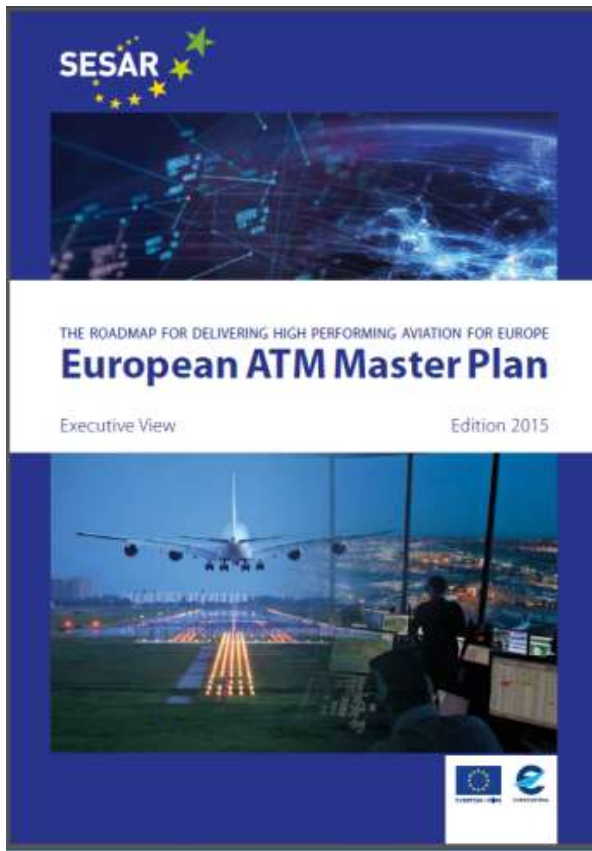
EANPG decisions

- EANPG /55 agreed that a cooperative mechanism would be put in place between ICAO and EUROCONTROL. This mechanism would encompass the utilisation of the EUROCONTROL ESSIP/LSSIP process complemented by a specific ICAO EUR ASBU questionnaire.
- Reporting mechanism already existing in the European region to be re-used in order to prepare a report for ICAO HQ on ASBU implementation.
- For ECAC States there was no double reporting issue - as all the information was extracted from ESSIP/LSSIP process.
- For non-ECAC States reporting burden limited to minimum with specific guidance provided by EUROCONTROL.
- A very good example of cooperation between two international organisations where mechanisms already existing in the European region were re-used to prepare a report for ICAO

- Confirmed that reporting is linked to existing mechanisms (ESSIP/LSSIP) and enhanced (ATMGE) questionnaires to avoid double reporting from stakeholders
- Noted that the number and quality of the replies received from the questionnaire represented a considerable improvement in relation to the information obtained on the previous year
- **Proposed inclusion of two additional modules B0 CCO and B0 AMET** into the implementation monitoring mechanisms for the 2016 reference period
- Invited the States, which are not covered by the ESSIP/LSSIP mechanism, to provide their responses by using the updated and revised questionnaires

- Obligation for States to report the status of their ASBU implementation will continue with annual EANPG endorsement
- Highlighted that as the Global Air Navigation Plan requires States to report the status of their ASBU implementation, the ASBU monitoring report is a key document for the EANPG to monitor and analyse the ASBU implementation within the EUR Region.
- Report is part of eANP Vol III and also be part of the ICAO Global Air Navigation Report

The European ATM Master Plan – Highlights



- Updated in 2015
- Under the governance of SJU, with a dedicated Project for its Maintenance, and led by EUROCONTROL
- (Next update planned end 2019)

Click on the link to access European ATM Portal: <https://www.eatmportal.eu/working/>

The MP L3 Implementation view & ESSIP/LSSIP Mechanism

Few Network Strategy
Plan elements

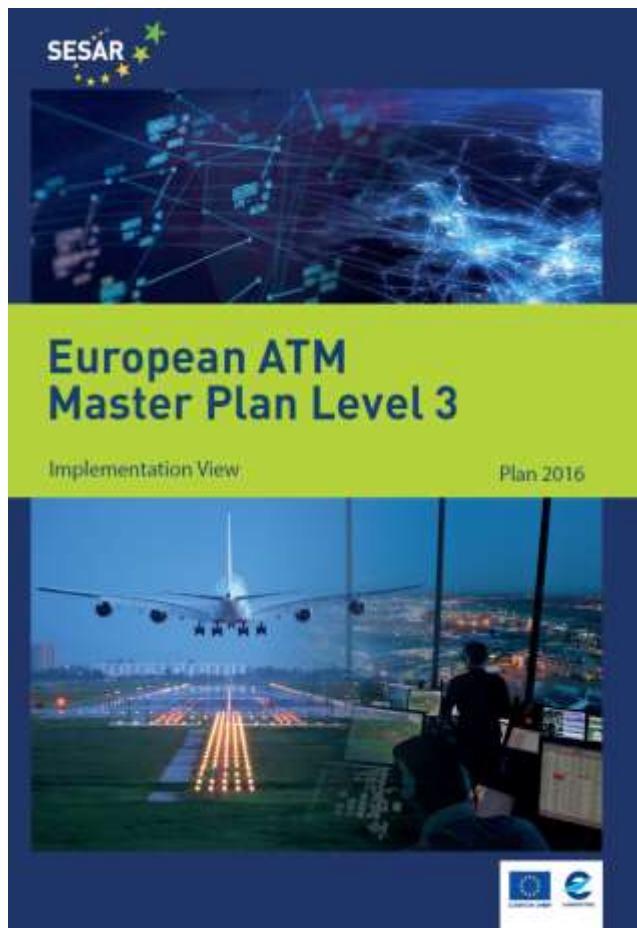
Only mature and essential
ATM Solutions, for which there is a
need of a European monitoring

Implementing
Rules prerequisite
to deployment

➤ Level 3 of the Master Plan = [MP L3 Plan + MP L3 Report]



MP L3 Plan Document – ESSIP Plan – Implementation view



Click here to access



<http://www.eurocontrol.int/sites/default/files/content/documents/official-documents/reports/2016-masterplan-implementationplan.pdf>

- Plans for next 5-7 years
- The MP L3 Implementation Plan is updated **every year**.
- Official deliverable of SJU and EUROCONTROL

- MP L3 Plan includes:
 - **Implementation Objectives**
 - **Stakeholder Lines of Action (SLoAs)**

- For the year 2016 cycle, there are **44 Implementation Objectives** of which:
 - 33 related to SESAR DP
 - 33 related to ICAO GANP (not the same as the DP ones)

The MP L3 Report



Click here to access



- **ECAC-wide implementation Progress Assessment**
- The MP L3 Report provides a holistic view of the implementation of **commonly agreed actions to be taken by ECAC States**
- MP L3 Report is **based mainly on LSSIP data**
- Provides **different views of implementation** (Strategic, Deployment, FAB, State centric View)
- The MP L3 Report is **produced annually**, developed in close cooperation with the SJU and SESAR partners.
- The MP L3 2015 Implementation Report (latest edition) is based on the MP L3 Implementation Plan that included **41 implementation objectives**.

<http://www.eurocontrol.int/articles/european-atm-master-plan-level-3-implementation-report>

LSSIP Documents

- Planning and Reporting **Tool**
- For **all National Stakeholders**
- **Annual documents**, based on MP L3 Plan = fact finding on real progress and plans
- 42 Documents (one per each continental ECAC state + MUAC)
- **Azerbaijan** is not a ECTL member State but participates as well in the LSSIP monitoring



Level 1 – ***High Level View on the National ATM situation (Public part)***

Level 2 – ***Details on progress and plans of all Implementation Objectives (Restricted part)***

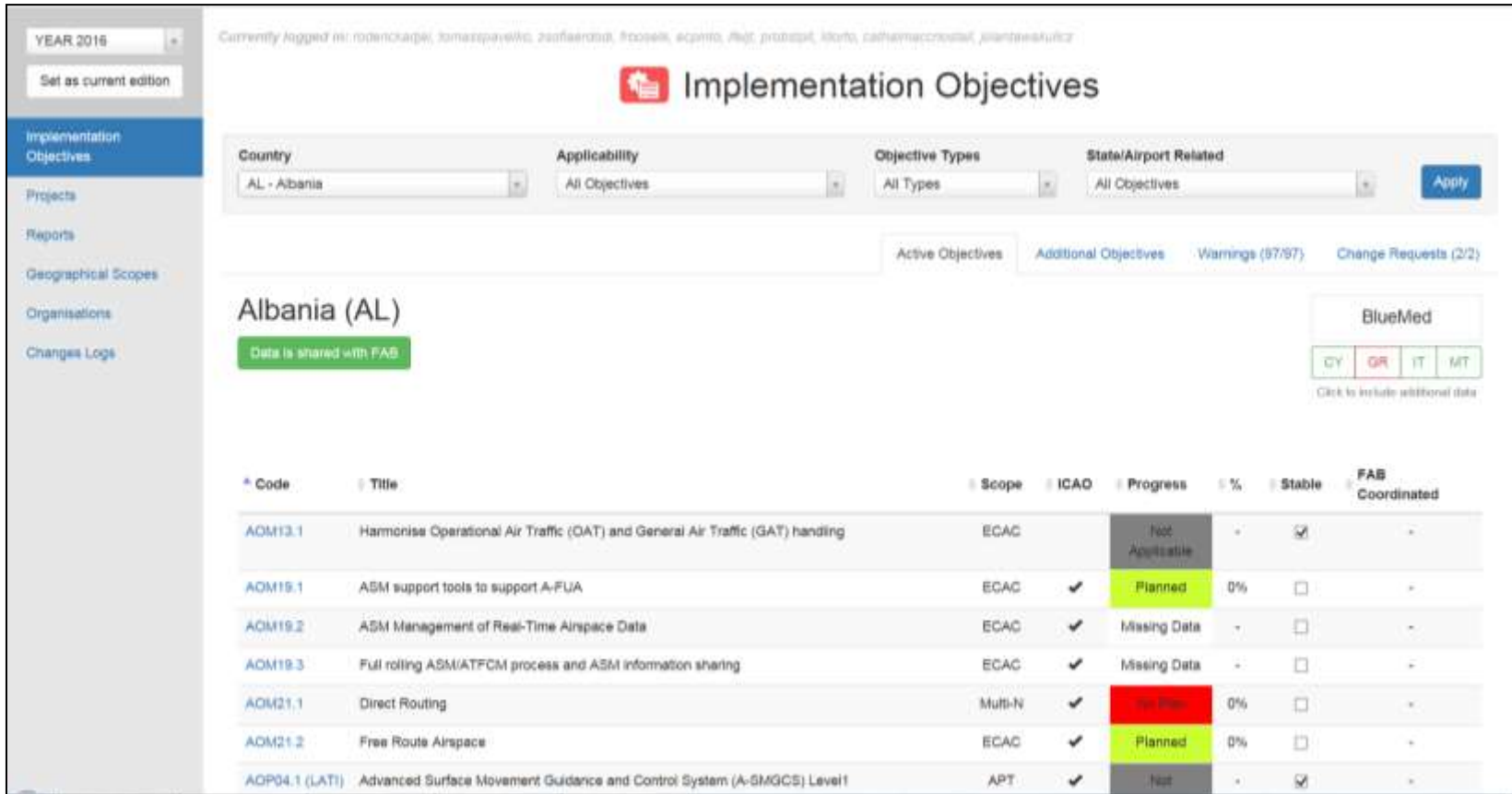
<http://www.eurocontrol.int/articles/lssip>

Click here to access LSSIP Documents



LSSIP Tools: Database

An Electronic Database is used to access and report on Implementation Progress



Currently logged in: rodenokaj@, tomaspaiv@, zefiaerdaj, Pcoseti, eqarrio, flaj, prapasit, blorja, catherineccrovat, plantawesulicZ

Implementation Objectives

Country: AL - Albania | Applicability: All Objectives | Objective Types: All Types | State/Airport Related: All Objectives [Apply]

Active Objectives | Additional Objectives | Warnings (57/57) | Change Requests (2/2)

Albania (AL)

Data is shared with FAB

BlueMed

CY GR IT MT

Click to include additional data

* Code	Title	Scope	ICAD	Progress	%	Stable	FAB Coordinated
AOM13.1	Harmonise Operational Air Traffic (OAT) and General Air Traffic (GAT) handling	ECAC		Not Applicable	-	<input checked="" type="checkbox"/>	-
AOM19.1	ASM support tools to support A-FUA	ECAC	<input checked="" type="checkbox"/>	Planned	0%	<input type="checkbox"/>	-
AOM19.2	ASM Management of Real-Time Airspace Data	ECAC	<input checked="" type="checkbox"/>	Missing Data	-	<input type="checkbox"/>	-
AOM19.3	Full rolling ASM/ATFCM process and ASM information sharing	ECAC	<input checked="" type="checkbox"/>	Missing Data	-	<input type="checkbox"/>	-
AOM21.1	Direct Routing	Multi-N	<input checked="" type="checkbox"/>	Not Done	0%	<input type="checkbox"/>	-
AOM21.2	Free Route Airspace	ECAC	<input checked="" type="checkbox"/>	Planned	0%	<input type="checkbox"/>	-
AOP04.1 (LATI)	Advanced Surface Movement Guidance and Control System (A-SMGCS) Level I	APT	<input checked="" type="checkbox"/>	Not	-	<input checked="" type="checkbox"/>	-

There are 300+ users of the Database

LSSIP Database: Current Users / Use

At Global level

Institutions	Purpose
ICAO EUR office	GANP/ASBU monitoring

At EU level

Bodies/organisations	Purpose
SJU For the ECAC states monitoring purposes	To provide a holistic roll-out plan for the SESAR seen as a whole and to ensure alignment of other implementation/programme plans (such as the SESAR Deployment Programme or the NextGen implementation Plan) with the Master Plan
SDM	To ensure the appropriate link between the Deployment Programme and the Master Plan, especially PCP elements.
Performance Review Body (PRB)	To support the assessment of CAPEX
European Defence Agency (EDA)	EDA in cooperation with NATO and EUROCONTROL military unit uses LSSIP reports to collect information on military systems and infrastructure to support the military input to the Master Plan, and to support the operational and financial impact analysis of its implementation for the military community.
EUROCONTROL/NM	

At local level

Institutions	Purpose
ANSPs, Airspace Users, Airport Operators, Military Authorities	For development of business plans, for monitoring the progress, for synchronised regional/ Functional airspace Blocks (FAB) development
State Aviation Departments, Aviation Authorities; Military Authorities	For monitoring, oversight purposes

Stakeholders Roles – States



STATE RESPONSIBILITIES IN MONITORING ATM DEPLOYMENT

NSAs while representing the States have **multiple responsibilities** that are in relation to the implementation of appropriate functionalities while building and further developing the European ATM system.

These include :

- Ensure oversight of changes;
- Draw up of performance plans, performance oversight and monitoring of implementation of performance plans and targets achieving processes;
- Ensure support to EC as described in Commission Regulation 409/2013 for the setting up of the SESAR Deployment (SD) Governance;
- Ensure coordination with the SDM as described in Commission Regulation 409/2013 for the setting up of the SD Governance;
- Monitor investments in ATM, including activities related to Common Projects.

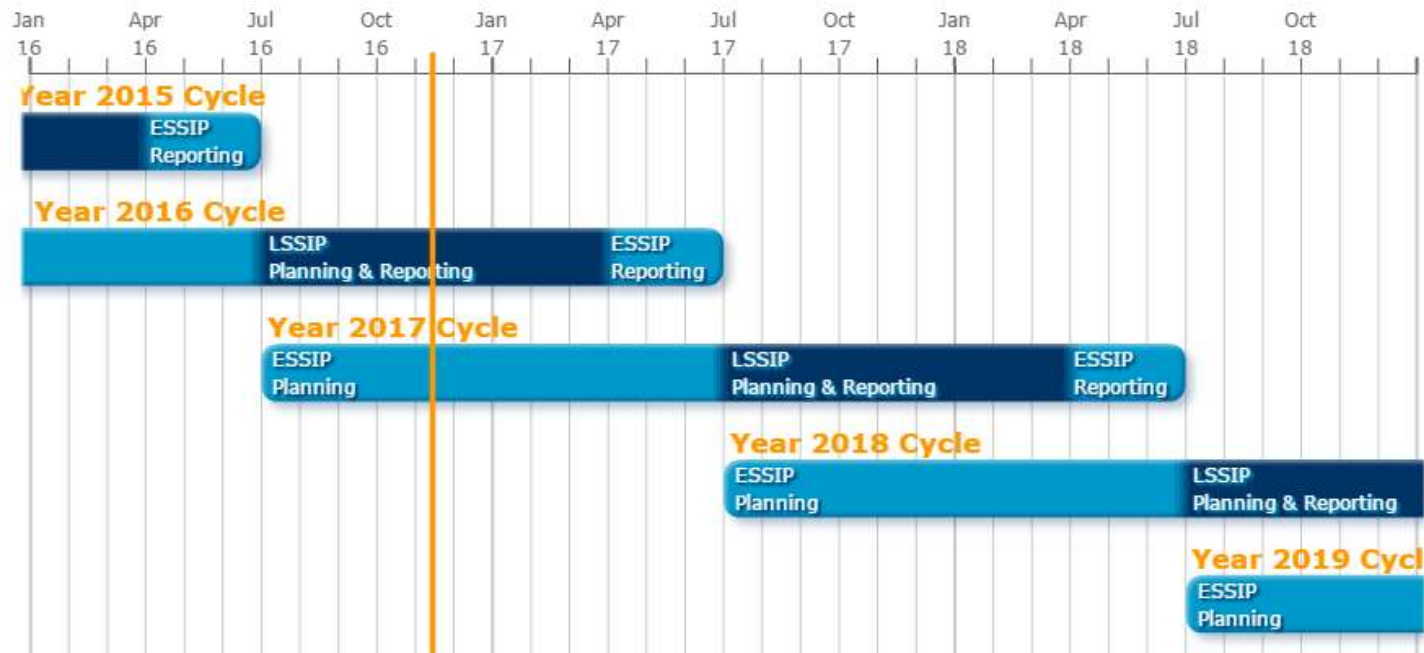
Furthermore, EUROCONTROL Member States are under the obligation to:

- **Report on the progress of the implementation of the MP L3 Plan;**
- **Report to ICAO-EUR on the progress towards the implementation of the ICAO Global Air Navigation Plan (GANP) Aviation System Block Upgrades (ASBUs).**

This is done through the LSSIP process and related National LSSIP documents.

Planning/Reporting cycles – Years to come

A full planning & reporting cycle takes two years. This means that at any time there are 2 cycles in progress: The diagram below shows where we are near the end of year 2016, and what cycles are operational:



The process also includes: yearly satisfaction survey, lessons learned to improve process, quality of information, data usability and accessibility, and cross-feeding with/to other sources



ATM Master Plan Portal



<https://www.atmmasterplan.eu/>

Welcome to the eATM Portal

The European ATM Portal provides an integrated view of the European ATM System outlining the essential operational and technology changes foreseen to deliver the SESAR contributions to the Single European Sky performance objectives.

This Portal reflects the 2015 Edition of the European ATM Master Plan.

Browse the Portal

Level 1
Executive View

Level 2
Planning and
Architecture View

Level 3
Implementation View

By Master Plan Level

By Stakeholder

ANSP	APT	AU
MIL	NM	REG

By Operating Environment

ER	TMA
APT	NW

By Data Object

By Topic

 PERFORMANCE	 OPERATIONAL CONCEPT	 TECHNOLOGY	 PLANNING	 MONITORING	 STANDARDS & REGULATIONS
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ASBU Implementation Monitoring Report

Reference period 2015

ASBU Implementation Monitoring Report

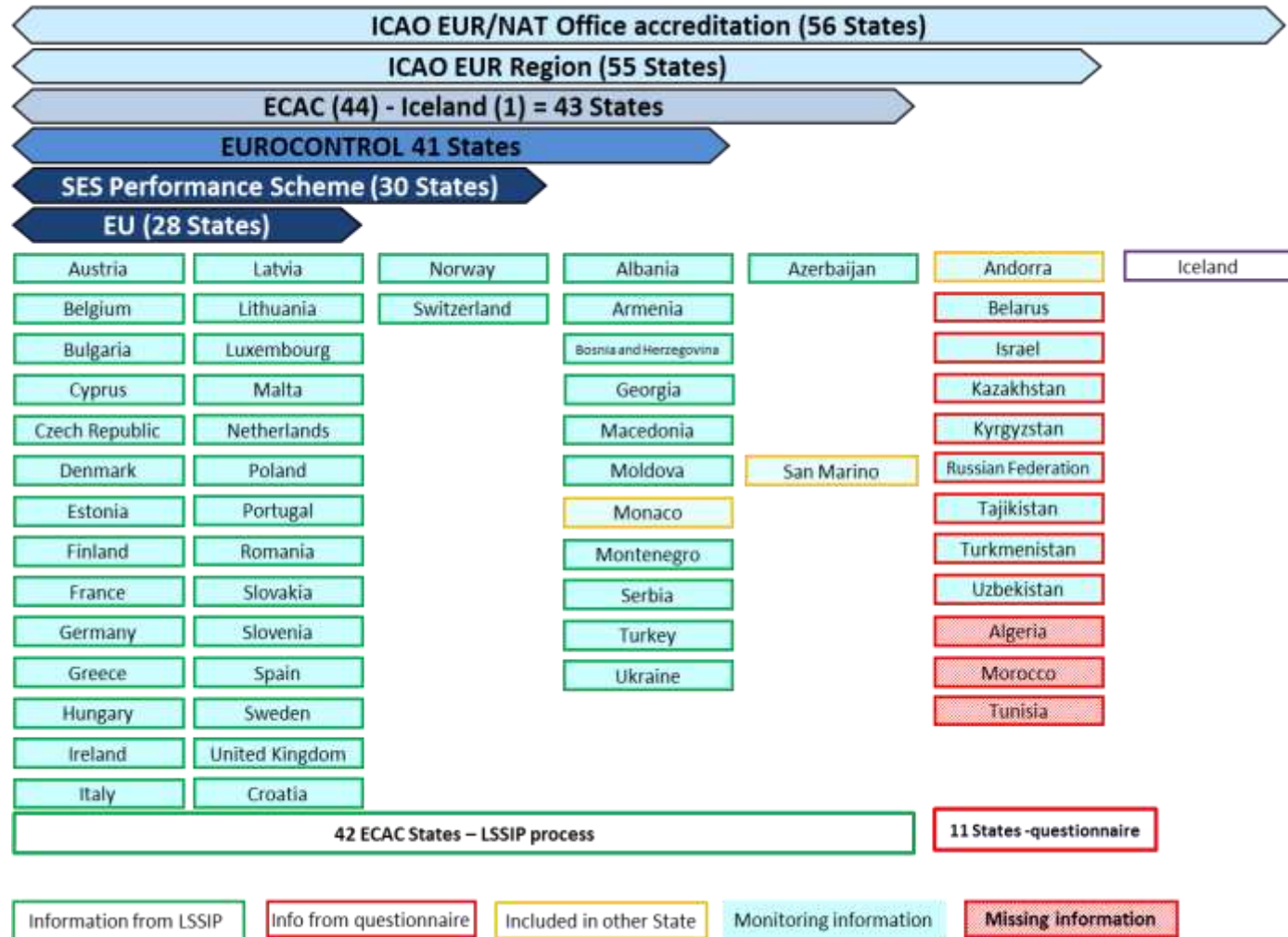
reference period 2015

- For ALL ICAO EUR States and published on an annual basis
- Was developed by EUROCONTROL and ICAO EUR/NAT Office
- Uses combined data, from the ESSIP/LSSIP mechanism and questionnaire, in order to avoid duplication of reporting from stakeholders
- The report gives an overview of the planning dates and implementation progress for the ICAO ASBU Block 0 Modules within the ICAO EUR Region during the reporting year 2015 (reference date Dec 2015)
- Was endorsed by EANPG/58 and is now part of the eANP (European Air Navigation Plan)

Objective

- The report contains all information on the implementation process of the ASBU modules and is the key document for the EANPG to monitor and analyse the implementation within the region
- Gives a complete overview of the status of ASBU Block 0 implementation from all States within the complete ICAO EUR Region
- The EANPG invited States to actively support the described ASBU implementation monitoring process, so that the number of responses could be increased and the quality of the reported information could be enhanced in the future

Scope of the report



Scope of the report

The report is based on the information submitted:

- by 41 States participating in the ESSIP/LSSIP mechanism
- Monaco, San Marino and Andorra are included in hosting States
- by 8 other States outside that reporting mechanism, using a questionnaire
- 3 States, Algeria, Morocco and Tunisia, did not submit any information on ASBU Block 0 modules implementation progress

Thanks to all States ATMGE States for their timely provision of good quality monitoring data !

Structure of the report

- Simple structure to make it easier for the reader to consult and analyse
- The introduction (chapter 1) explains the objectives, the background and the geographical scope covered by the report.
- The two processes used for collection of data are indicated and explained in the following chapter (2).
- Two main chapters (3 and 4) are addressing and analysing the status of ASBU Block 0 modules implementation
 - Chapter 3 is important because it gives a consolidated view of the planning dates foreseen by States to finalise the implementation of each individual ASBU Block 0 module. Can be considered as a dashboard for ASBU Block 0 modules deployment in the ICAO EUR Region.

Structure of the report

- Chapter 4 presents a global view on the implementation progress of the ESSIP objectives mapped to each ASBU module
- Conclusions and Recommendations chapter includes a summary table of an “**ASBU Block 0 Modules Implementation Dashboard 2015**” and a projection of the “Completion” status rates foreseen to be achieved by the end 2018 – “**ASBU Block 0 Modules Implementation Outlook for 2018**”. Include proposals for required actions from the EANPG so that the integrated implementation of the ASBU modules in the ICAO EUR Region can be further enhanced.
- Three Annexes complement the report:
 - Annex 1 – Block 0 Modules EUR Implementation Plan and Mapping
 - Annex 2 - ICAO ASBU Implementation Monitoring Questionnaire
 - Annex 3 - General Implementation overview

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The content

- Block 0 Modules are characterized by operational improvements which have already been developed and implemented in many parts of the world.
- Near-term implementation period is 2013–2018
 - 2013 refers to the availability of all components of its particular performance modules
 - 2018 refers to the target implementation deadline
- ICAO is working with its Member States to help each determine exactly which capabilities they should have in place based on their unique operational requirements








The content

- Two main chapter of the report:
 - **Deployment Planning view :**
provides an overview using maps and statistics of the dates when States plan to conclude, or have already completed, each of the ASBU Module Block 0

Legend

-  Completed in 2015 or before
-  Planned for 2016
-  Planned for 2017
-  Planned for 2018
-  Planned for 2019 or after
-  No Final Plan
-  Not applicable
-  Missing Data

- **Implementation Progress View :**
presents a global view on the implementation progress of each ESSIP objective included in each ASBU Module Block 0

-  Completed
-  Partly Completed
-  Planned
-  Late
-  No Plan
-  Not Applicable
-  Missing Data

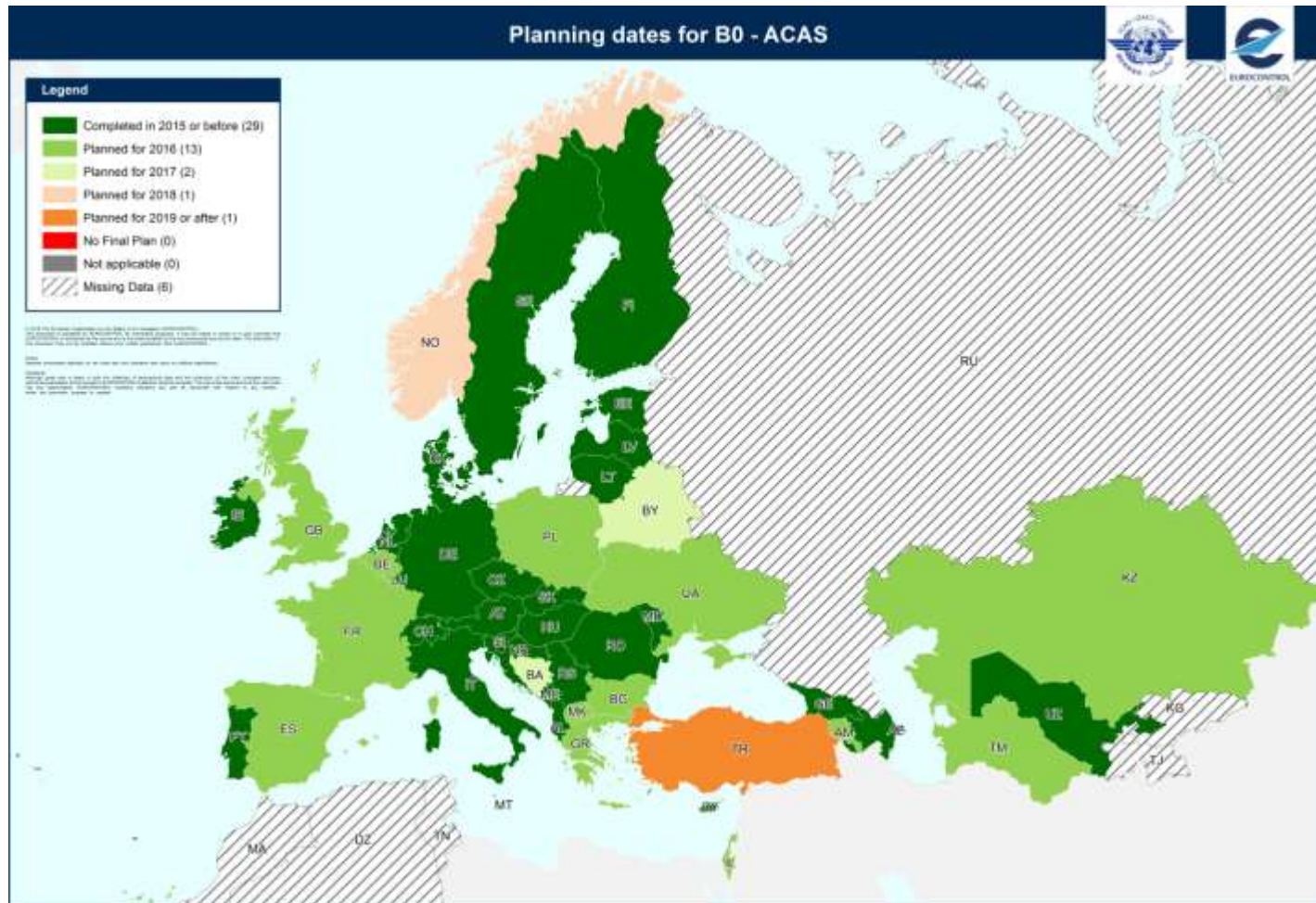
DEPLOYMENT PLANNING VIEW

B0-ACAS

- This module is about ACAS Improvements, provision of short term improvements to existing airborne collision avoidance systems (ACAS) in order to reduce nuisance alerts while maintaining existing levels of safety. This will reduce trajectory perturbation and increase safety in cases where there is a breakdown of separation
- **The progress of B0-ACAS can be considered good** as by the end of 2016 about **81%** of States are expected to have completed the implementation of the module.

Completed	54%
Planned for 2016	27%
Planned for 2017	4%
Planned for 2018	2%
Planned for 2019 or after	2%
Not applicable	0%
Missing Data	11%
No final Plan	0%

B0-ACAS

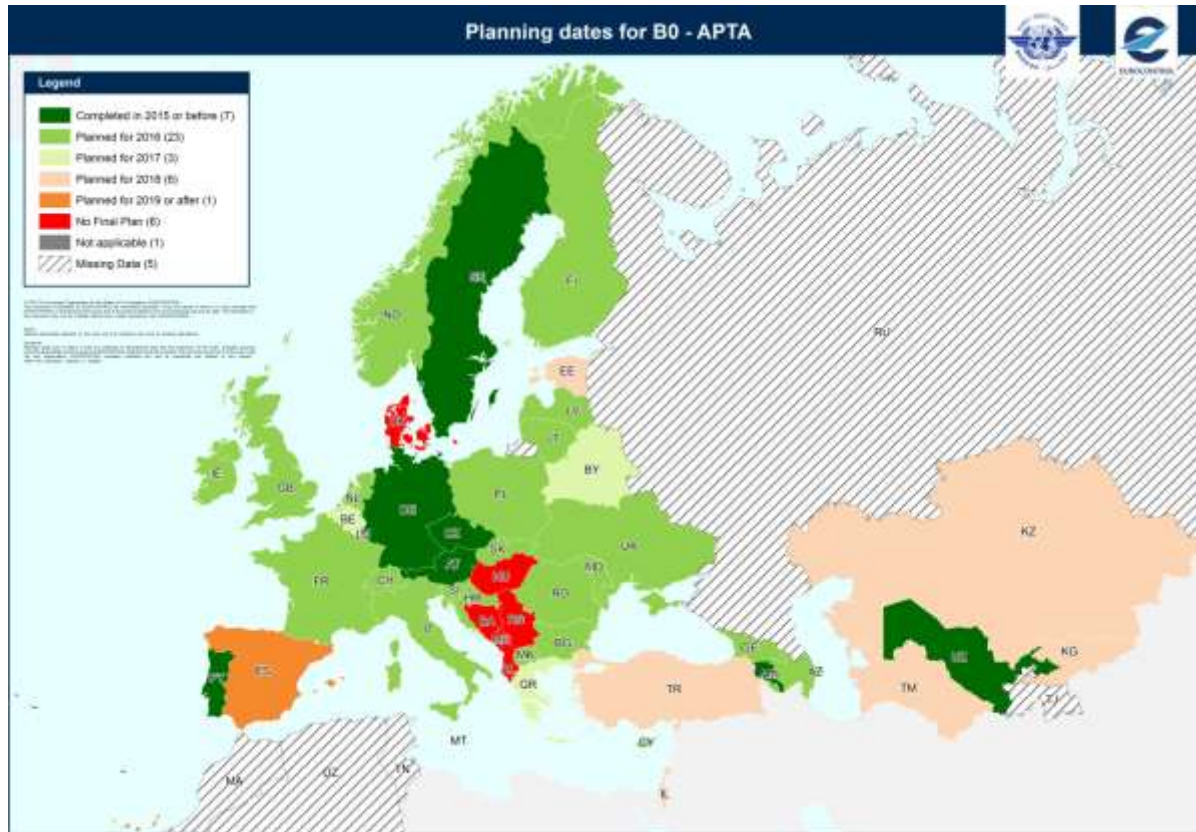


B0-APTA

- Optimization of Approach Procedures including vertical guidance. This module is about the first step towards universal implementation of GNSS-based approaches.
- **The progress for B0-APTA is slow (12% Completed)** however it is expected that by the end of **2016** an additional **44%** of States will achieve completion.

Completed	12%
Planned for 2016	44%
Planned for 2017	6%
Planned for 2018	13%
Planned for 2019 or after	2%
Not applicable	2%
Missing Data	10%
No final Plan	11%

B0-APTA

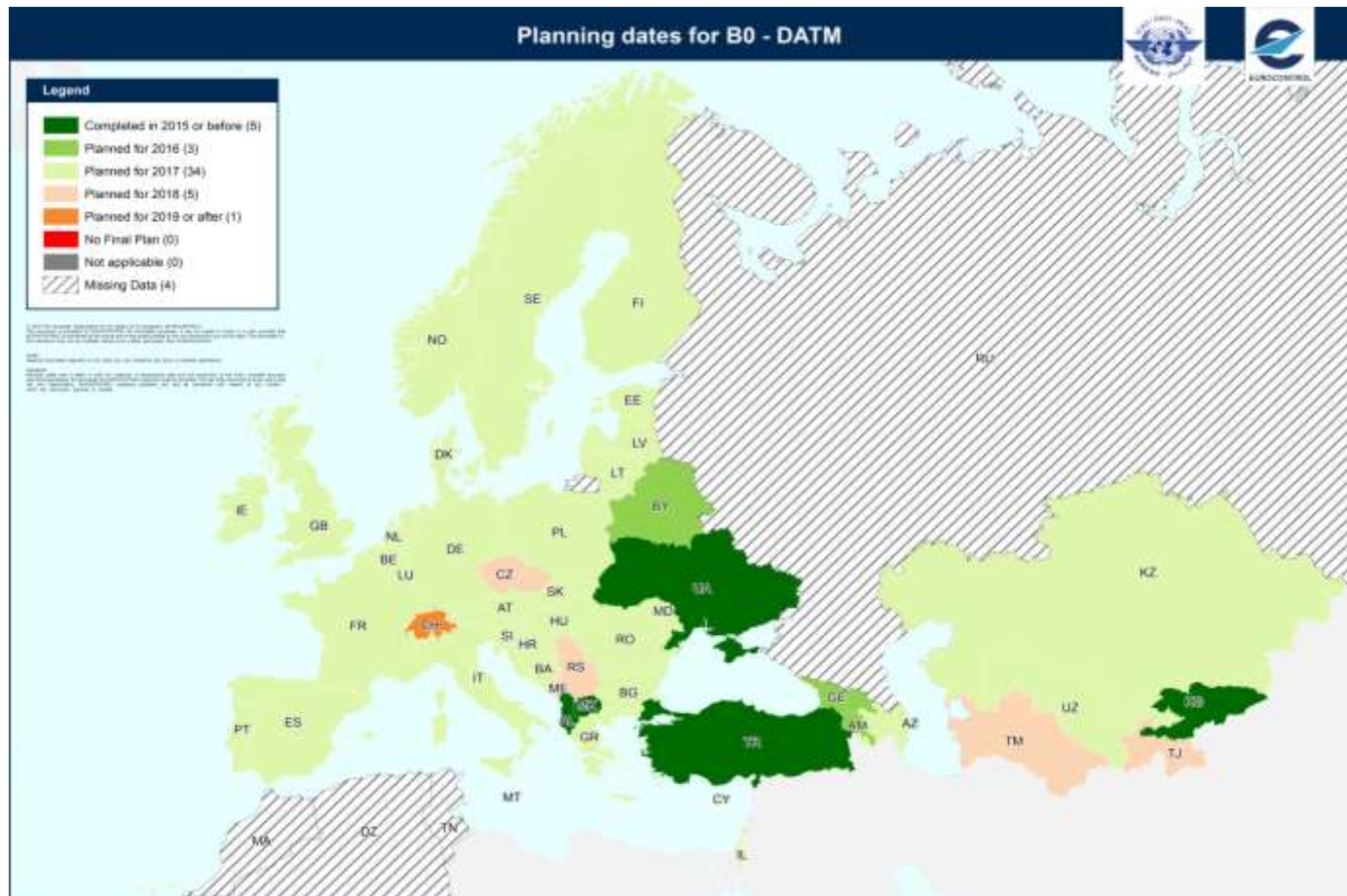


B0-DATM

- This module is about Service Improvement through Digital Aeronautical Information Management. It concerns initial introduction of digital processing and management of information, by the implementation of AIS/AIM making use of AIXM, moving to electronic AIP and better quality and availability of data.
- **Progress of B0-DATM is slow with 10% only completed.** During the year 2016 no significant evolution, only 6% planned to complete. By the end of **2017 an additional 65%** of States plan to achieve the required activities.

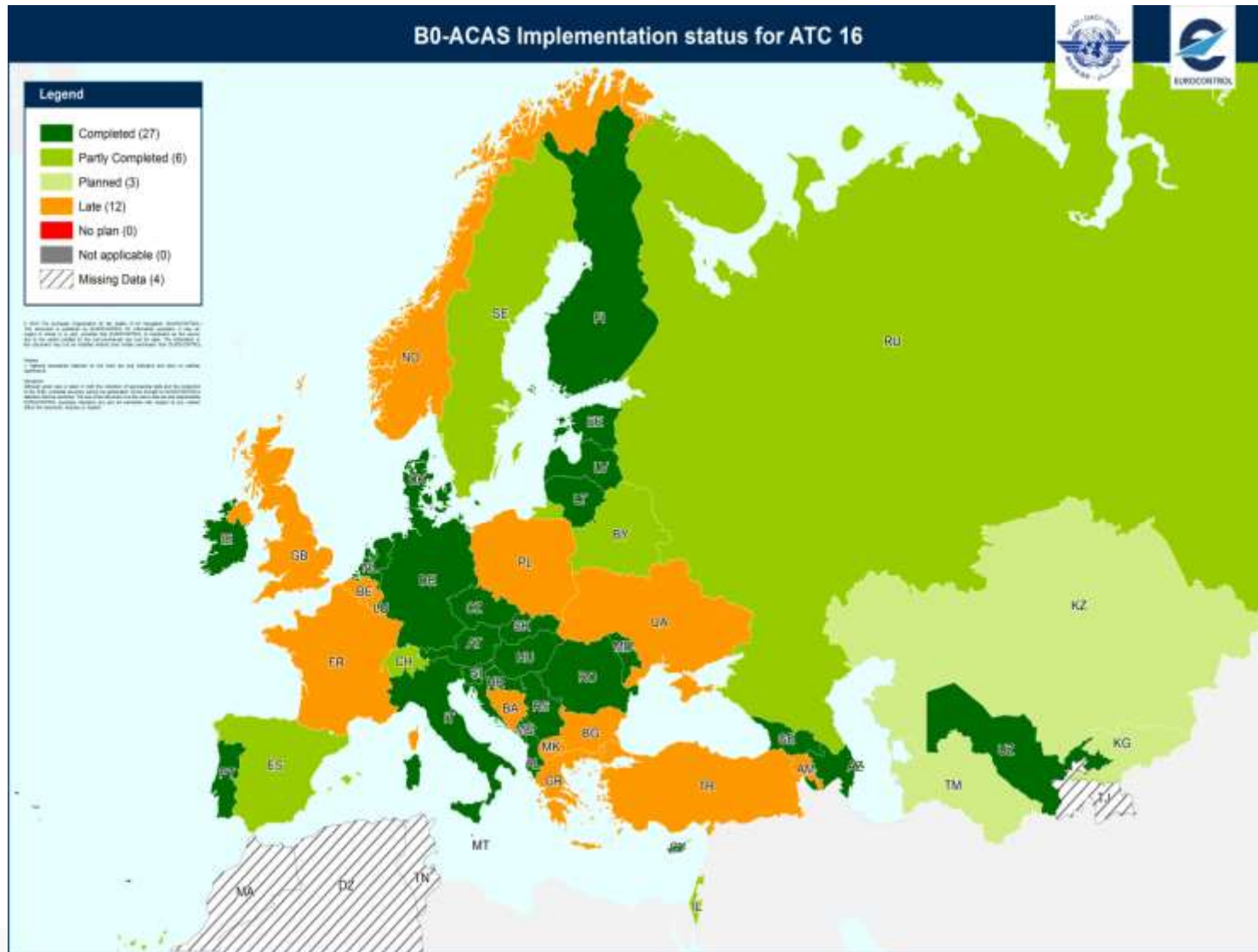
Completed	10%
Planned for 2016	6%
Planned for 2017	65%
Planned for 2018	9%
Planned for 2019 or after	2%
Not applicable	0%
Missing Data	8%
No final Plan	0%

B0-DATM



IMPLEMENTATION PROGRESS VIEW

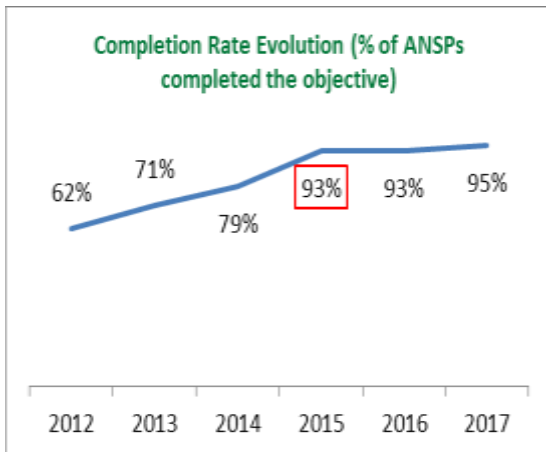
BO-ACAS status for ATC 16



BO-ACAS status for ATC 16

FOC: 12/2015
Estimated achievement: 12/2015

Achieved



Main 2015 developments:

Year 2015 has seen a tremendous increase in the completion rate of this ESSIP objective. Training of controllers, addressed by Line of Action ASP01 is fully completed (93%). The same goes for the establishing of a monitoring process of TCAS Reports (ASP02), completed by 88% of the ANSPs. Equipage of relevant MIL air transport a/c is roughly 50% completed (SLoA MIL01), while the training of tactical pilots is finalised all across the area. For all those airframes subject to the ACAS II mandate, this objective requires to upgrade the relevant avionics to TCAS II change 7.1. 93% of the ANSPs have implemented the provisions prescribed in the objective. This means that the civil side has fully implemented the objective but this is not the case for the Military (which is reflected in the picture above). However as this objective is not mandatory for MIL, it will be declared as achieved for ESSIP Plan Edition 2016.

BO-ACAS status for ATC 16

Algeria		Missing Data
Belarus	Aircraft operators have developed and implemented special training programmes on flights with TCAS II version 7.1. Training for flight crew members is carried out. Procedures for flights with TCAS II version 7.1 have been developed, approved and implemented. Technical maintenance of aircraft and training of aircraft engineers are carried out in compliance with Aircraft Operator Manual for Technical Maintenance of Aircraft.” Performance monitoring of ACAS II (TCAS II version 7.1) is carried out. Certificates for all types of activities are granted based on the existing Air Rules	Partly Completed 31/01/2017
Israel	Delivery of operational approval and AW certification for ACAS II version 7.1 equipped aircraft. Israeli air carriers engaged in commercial int'l air operations are equipped with TCAS II version 7.1. CAAI is in a process of approval of training and maintenance programmes, operational procedures, manuals, etc. Establishment of performance monitoring completed. TCAS RA reports are submitted as mandatory.	Partly Completed 31/12/2016
Kazakhstan	Work in progress to equip registered aircraft for TCAS II version 7.1 .	Planned 31/12/2016
Kyrgyzstan	RA Monitoring has been implemented together with other reporting requirements. Annex 10 requirement (all aircraft from 01 Jan 2017) transposition into national aviation law.	Planned
Morocco		Missing Data
Russian Federation	Aircraft on-going retrofit is realizing in accordance with the plan.	Partly Completed
Tajikistan		Missing Data
Tunisia		Missing Data
Turkmenistan	All aircraft (which are required to be equipped with ACAS) registered in Turkmenistan have been already equipped, or have scheduled maintenance program to install ACAS II/TCAS 7.1 before the Annex 10 deadline. RA investigation process has been implemented together with other AIRPROX, LHD reports, etc	Planned 31/12/2016
Uzbekistan	All aircraft (which are required to be equipped with ACAS) registered in Uzbekistan have been already equipped, or have scheduled maintenance program to install ACAS II/TCAS 7.1 before the Annex 10 deadline. RA monitoring is part of the normal reporting process , similar to AIRPROX, LHD reports, etc	Completed 31/12/2015

ASBU Dashboard & OUTLOOK 2018

ASBU Block 0 Modules Implementation Dashboard 2015

ASBU B0 Module	Number of States Completed by the end of 2015	Not Applicable States	Completion by the end of 2015 (%) - Excludes States where the module is Not Applicable
ACAS	28	0	54%
APTA	6	1	12%
DATM	5	0	10%
FICE	1	0	2%
SNET	20	0	38%
SURF	13	16	36%
ACDM	5	19	15%
ASUR	11	1	21%
CDO	17	13	43%
FRT0	4	1	8%
NOPS	3	0	6%
RSEQ	5	18	15%
TBO	7	10	16%

ASBU Block 0 Modules Implementation Outlook for 2018

ASBU B0 Module	Number of States foreseen to be Completed by the end of 2018	Not Applicable States	Completion foreseen by the end of 2018 (%) - Excludes States where the module is Not Applicable
ACAS	45	0	87%
APTA	39	1	76%
DATM	47	0	90%
FICE	40	0	77%
SNET	40	0	77%
SURF	30	16	83%
ACDM	27	19	82%
ASUR	24	1	47%
CDO	33	13	85%
FRTO	34	1	66%
NOPS	9	0	18%
RSEQ	22	18	65%
TBO	32	10	76%

Recommendations

- Undertake the necessary actions to ensure that all ICAO EUR States, specifically the 3 missing ones, will report their activities and provide their contributions in due time with detailed information about their plans and completion dates.
- Ensure that no duplication of reporting activities will be requested to States namely the ECAC ones, meaning that the data available through existing reporting mechanisms such as the ESSIP/LSSIP shall be always used.
- It is recognised and appreciated the significant evolution of the monitoring report and the important contribution and commitment by States. In an effort to improve it even further States are recommended to address carefully and seriously the quality of the reported data and the consistency of their projects and plans.

Recommendations

- Ensure that all States have a clear and common understanding on the scope and the details of the activities entailed in each ASBU Block 0 modules and associated elements.
- The existing monitoring questionnaire and information process to be updated in accordance with required evolution and changes in the activities linked to and in the scope of the ASBU Block 0 modules.

Process for reference period 2016 & revised questionnaire

LSSIP cycle 2016 – Process and Status

- Collection of information took place from Mid October 2016 until Mid February 2017 for 41 States
 - Based on ESSIP Plan 2016
 - Covered detailed progress (at level of Stakeholder Line of Action)
- LSSIP database was closed on 16 February 2017 and information is now frozen
- Based, amongst others, on that information we are finalising individual LSSIP document for each of the 41 States
 - Are officially signed by State authorities from the different organisations involved (ANSP, Regulators, Airports, Military)
- Information from LSSIP database will be used to prepare ASBU Implementation Monitoring Report reference period 2016

WHAT DOES REPORTING MEAN FOR YOU?



- If you are already reporting in the context of the LSSIP process:
 - = **it's a do nothing scenario** (no double reporting), you just have to indicate that monitoring information is available from the LSSIP database or copy it into the State Report !
- If you are not reporting in that context:
 - = You are requested to **fill in the questionnaire!**

For those outside LSSIP process --- What is expected?

- Nomination of a Focal Point for monitoring aspects that will act as the interface between State and ICAO EUR RO

On an annual basis:

- Filling in the questionnaire in due time
 - Internal coordination inside the State is needed to collect information from different ATM areas of activity
- Complete the State report with remaining information and send it to ICAO (latest by May)
- All ICAO EUR States are requested to report
- Preparation of the ASBUs Monitoring report is done by EUROCONTROL
 - We need information from ALL States even if the level of granularity is different

Why are we doing this, why is monitoring needed?

- Create a global picture of GANP implementation, at ICAO EUR/NAT Region and progressively on a global worldwide basis
- Ensure that harmonisation and interoperability are achieved through a steady, uniform and coordinated implementation approach based on a global plan (GANP)
- Understand issues and problems in the implementation process
- Analyse trends and difficulties
- Analyse areas to improve or change
- Provide feedback to the GANP for possible adjustments and improvements

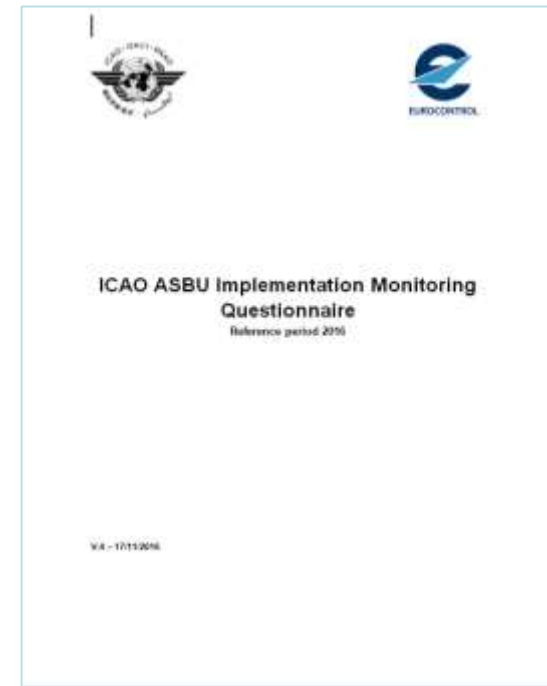
“What you can measure, you can manage”

Questionnaire for reporting period 2016

For the States outside the ESSIP/LSSIP mechanism the ASBU Implementation Monitoring questionnaire is used to collect information concerning the status and progress achieved.

For the current cycle it was reviewed and improved taking into account:

- The experience in the preparation of the previous report
- The introduction of an improved LSSIP methodology that includes a quantification (%) on the progress achieved
- Considering EANPG/58 decision to include 2 additional Block 0 modules – B0 CCO and B0 AMET
- Alignment with the new mapping



Mapping of ESSP Objectives and ASBUs Approved by EANPG/58

ASBU Block 0 Priority 1 Modules	Objective designator (ESSIP)
B0-ACAS	ATC16
B0-APTA	NAV10
B0-DATM	INF04 ITY-ADQ
B0-FICE	ATC17 ITY-COTR ITY-FMTP
B0-SNET	ATC02.2 ATC02.8
B0-SURF	AOP04.1 AOP04.2

Other Block 0 Modules	Objective designator (ESSIP)
B0-ACDM	AOP05
B0-ASUR	ITY-SPI
B0-CDO	ENV01 NAV03
B0-FRTO	AOM19.1 NAV03
B0-NOPS	FCM01 FCM03
B0-RSEQ	ATC07.1 ATC15.1
B0-TBO	ITY-AGDL

Questionnaire for reporting period 2016

Structure:

- Information on Block 0, Priority 1 Modules
- Information on other Block 0 Modules
- Annex A giving guidance on how to determine progress
- Annex B contains detailed description of relevant actions for Priority modules (including CCO and AMET)
- Annex C contains detailed actions for “Other Block 0 modules”

- It covers 15 Block 0 Modules that are linked with 22 Implementation (ESSIP) Objectives

Questionnaire: The look and feel

B0-SNET

ATC02.2	Implement ground based safety nets – Short Term Conflict Alert (STCA) - level 2		
Increased Effectiveness of Ground-Based Safety Nets – STCA		12/2018	Status
Relevant actions: <ul style="list-style-type: none"> Conduct safety oversight of the changes Implement the STCA function Develop safety assessment of the changes 		Completion Date	Percentage of completion (%)
Explain how and when you intend to complete this objective			
ATC02.8	Implement ground based safety nets (level 2) of - Area Proximity Warning, Minimum Safe Altitude Warning		
Increased Effectiveness of Ground-Based Safety Nets – APW, MSAW		12/2018	Status
Relevant actions: <ul style="list-style-type: none"> Implement the APW function Implement the MSAW function 		Completion Date	Percentage of completion (%)
Explain how and when you intend to complete this objective			

B0-SURF



AOP04.1	Implement Advanced Surface Movement Guidance and Control System (A-SMGCS) Level 1		
Safety and Efficiency of Surface Operations (A-SMGCS Level 1-2)		12/2018	Status
Relevant actions: <ul style="list-style-type: none"> Install required surveillance equipment Publish A-SMGCS Level 1 procedures (including transponder operating procedures) in national aeronautical information publications Implement approved A-SMGCS operational procedures at airports equipped with A-SMGCS Equip Ground vehicles Mandate the carriage of required equipment 		Completion Date	Percentage of completion (%)
Explain how and when you intend to complete this objective			
AOP04.2	Implement Advanced Surface Movement Guidance and Control System (A-SMGCS) Level 2		
Safety and Efficiency of Surface Operations (A-SMGCS Level 1-2)		12/2018	Status
Relevant actions: <ul style="list-style-type: none"> Install required A-SMGCS control function equipment Implement approved A-SMGCS Level 2 operational procedures at airports equipped with A-SMGCS Level 2 		Completion Date	Percentage of completion (%)
Explain how and when you intend to complete this objective			

What is expected from you ?

- Give us high level data covering at least the relevant actions indicated in the questionnaire
- Reference date for the reported progress - **Dec 2016**
- Explain briefly, in a couple of lines, how the actions were achieved, if the objective is completed.
- If still under implementation indicate your plans and what is intended to do to achieve the indicated actions
- The field “Completion Date” shall be filled in and it refers to:
 - either the date when it was completed
 - or the date when it is intended to be completed, if still in the planning or ongoing phase
- Indicate the “Status” of implementation, eg “Planned”, “Ongoing”, “Completed”, “Late”, “Not Applicable”
- Send replies latest by May 2017

What changes?

B0-APTA

NAV10		Implement APV procedures	
Optimization of Approach Procedures including vertical guidance	12/2018	Status	
Relevant actions:	Completion Date	Percentage of completion (%)	
<ul style="list-style-type: none"> Design and Publish APV/Baro and/or APV/SBAS procedures Publish in AIPs all coordinates data in WGS-84 in accordance with ICAO Annex 15 requirements 			
Explain how and when you intend to complete this objective			

Change: Inclusion of an estimation of progress achieved based on the activities/actions required to complete the module.

Implementation Progress Determination

What Changes?

Completed	Function in operational use.	100%
On going	Planned date \leq Deadline	1-99%
	Implementation has kicked off, but is not yet fully completed and the planned implementation date is within the SLoA finish date.	
Planned	A planned schedule and proper (approved and committed budgeted) actions are specified within the SLoA finish date for completion	0%
Late	Planned date $>$ Deadline	0-99%
	An SLoA shall be reported “Late” in the case when there is a firm commitment to implement the SLoA (e.g. budget and schedule approved) but foreseen to be achieved after the SLoA finish date	
No Plan	No plan yet -> Feasibility phase, no budget allocated, risk identification, etc.	xx%
Not Applicable	Objective is not relevant for the State	-

Additional Modules

Two additional Block 0 modules:

- B0 CCO
- B0 AMET

B0-CCO

Improved Flexibility and Efficiency Departure Profiles – Continuous Climb Operations	12/2018	Status
Relevant actions: <ul style="list-style-type: none"> • Coordinate activities and implement rules and procedures for the application of CCO techniques (e.g. develop and implement PBN SIDs) whenever practicable in Terminal Area Control Service in close cooperation with aircraft operators • Support CCO measures, implement route changes to facilitate CCOs, implement monitoring of performance and feedback to ANSP and users where equipment is available. Provide the main link with the local community • Include CCO techniques in the aircrew training manual and support its implementation wherever possible 	Completion Date	Percentage of completion (%)
Explain how and when you intend to complete this objective		

B0-AMET

Meteorological Information supporting enhanced operational efficiency and safety	12/2018	Status
Relevant actions: <ul style="list-style-type: none"> • Availability of forecasts provided by: <ul style="list-style-type: none"> ○ world area forecast centres (WAFc) ○ volcanic ash advisory centres (VAAC) ○ tropical cyclone advisory centres (TCAC) • Implement required systems to provide aerodrome warnings including wind shear warnings and alerts • Make available at least the following operational meteorological information: <ul style="list-style-type: none"> ○ SIGMETs to provide information on occurrence of specific en-route weather phenomena ○ Other OPMET information, including METAR/SPECI and TAF, to provide routine and special observations and forecasts of meteorological conditions occurring or expected to occur at the aerodrome 	Completion Date	Percentage of completion (%)
Explain how and when you intend to complete this objective		

Examples

ASBU B0-CCO – Continuous Climb Operations

AAAA

Airport ZZZZ UUUU

Improved Flexibility and Efficiency Departure Profiles – Continuous Climb Operations	12/2018	Completed
<p>Relevant actions:</p> <ul style="list-style-type: none"> Coordinate activities and implement rules and procedures for the application of CCO techniques (e.g. develop and implement PBN SIDs) whenever practicable in Terminal Area Control Service in close cooperation with aircraft operators Support CCO measures, implement route changes to facilitate CCOs, implement monitoring of performance and feedback to ANSP and users where equipment is available. Provide the main link with the local community Include CCO techniques in the aircrew training manual and support its implementation wherever possible 	31/12/2009	100%
<p>CCO is implemented for 24 hours. All airport departures are achieving a CCO profile. All airlines are applying CCO. There is no monitoring. All procedures including SIDs and STARs are designed aiming at minimising the environmental impact. CCO despatches are published in the AIP.</p>		



ASBU B0-CCO – Continuous Climb Operations

STATE NAME

Žaaabb LZZZ

Improved Flexibility and Efficiency Departure Profiles – Continuous Climb Operations	12/2018	Ongoing
Relevant actions: <ul style="list-style-type: none"> • Coordinate activities and implement rules and procedures for the application of CCO techniques (e.g. develop and implement PBN SIDs) whenever practicable in Terminal Area Control Service in close cooperation with aircraft operators • Support CCO measures, implement route changes to facilitate CCOs, implement monitoring of performance and feedback to ANSP and users where equipment is available. Provide the main link with the local community • Include CCO techniques in the aircrew training manual and support its implementation wherever possible 	12/2017	10%
Developing and implementation of RNAV SIDs and STARs under the project SPICE		

Way forward and schedule

- Need to involve **ALL ICAO EUR States** and strengthen monitoring and reporting activities
- For 41 ECAC States information from LSSIP database will be used
- Remaining States are requested to fill in the questionnaire:
 - 'high level' data for the 22 ESSIP objectives indicated in the questionnaire.
- **Latest by May 2017** questionnaires, dully filled in, shall be available to allow starting the preparation of the ASBU Implementation Monitoring Report
- We are looking forward to your cooperation and receiving monitoring data in due time.
- LSSIP data base is frozen since February 2017 so reporting information for 41 States is already available.
- Don't hesitate to contact us for any clarification or help required.

Useful Links

European ATM Master Plan Web-portal

<https://www.atmmasterplan.eu/>

PEPR Team

www.eurocontrol.int/articles/pepr-team

All MP L3/LSSIP information

www.eurocontrol.int/pepr

ICAO EUR/NAT

<http://www2010.icao.int/EURNAT/Pages/welcome.aspx>





Questions?

<http://www.eurocontrol.int>

<http://www.eurocontrol.int/pepr>

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