

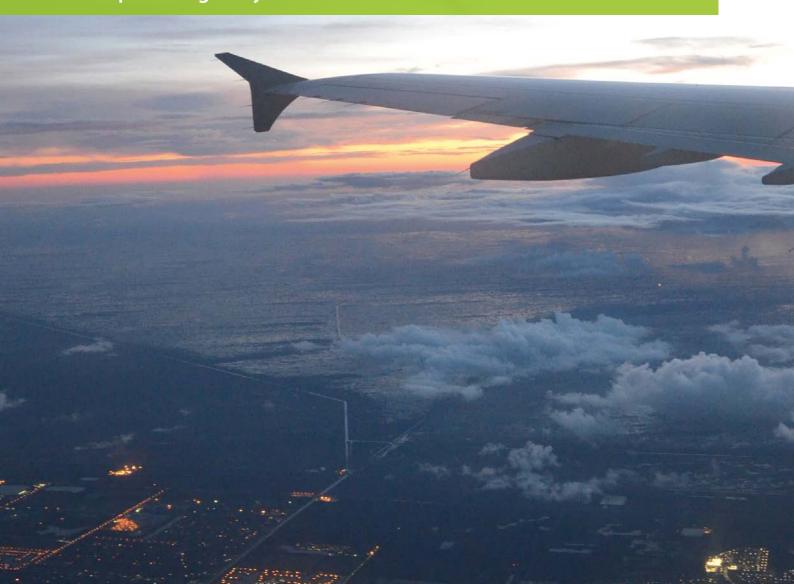




## **ESSIP REPORT 2014**

A Pan-European assessment of progress in the implementation of the ESSIP objectives

**European Single Sky ImPlementation** 







## **ESSIP Report 2014**

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#### Abstract

The yearly produced ESSIP Report closes the loop between planning (Level 3 of the Master Plan – ESSIP Plan) and reporting (LSSIP) in the yearly ESSIP/LSSIP cycle. The ESSIP Report for 2014 assesses the ECAC implementation progress at the end of 2014, of all objectives represented at Level 3 of the ATM Master Plan. For each of the Level 3 objectives it highlights critical issues, main reasons for delays, link to performance and where applicable positive trends and evolutions. Remedial actions are proposed for consideration of all ATM stakeholders.

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## **EXECUTIVE SUMMARY**

The ESSIP Report 2014 Executive Summary provides the main findings of the report.

Master Plan Level 3 implementation progress in 2014 is slightly worse comparing to 2013.



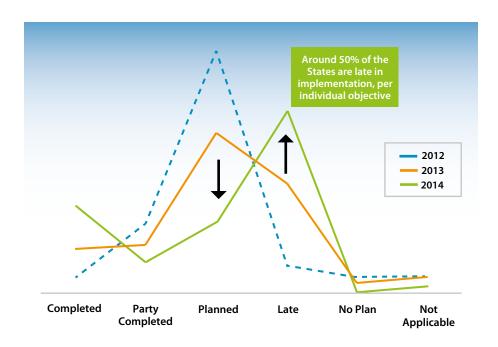
Comparing to 2013, the number of Level 3 implementation objectives progressing "on time" in 2014 has reduced. At the same time the number of objectives showing delays or risk of delays has increased. This indicates that the level of implementation activities in 2014 has reduced.

It appears that one of the possible reasons might be the change of the European Implementation Framework. The European Commission designated the SESAR Deployment Manager to lead the deployment of main SESAR technologies (Pilot Common Project Regulation 716/2014). Significant funding was announced for prospective projects that satisfy the funding criteria and bring performance benefits to the Network. It is hoped that this will foster implementation of some objectives which are currently lacking behind. This is supported by the fact that many delayed Level 3 objectives in 2014 relate to improvements linked to the Preliminary Deployment Programme, such as IPv6 implementation, Flight Message Transfer Protocol (FMTP) or Coordination and Transfer (COTR).

The delays trend in implementation of regulated technological improvements (interoperability IRs) continued in 2014.

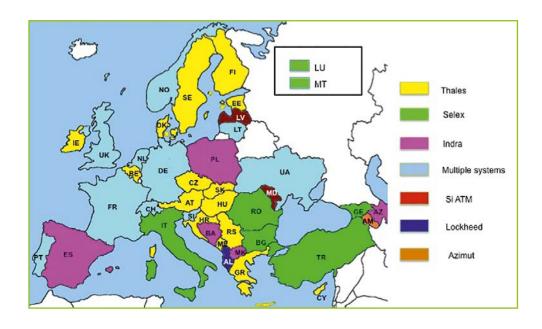
ESSIP Report for 2012 in one of its findings first indicated the possibility of delays in implementing the objectives linked to interoperability IRs (Aeronautical Data Quality, Air-Ground Data Link, Coordination and Transfer, Flight Message Transfer Protocol, Surveillance Performance and Interoperability). Since then subsequent editions of ESSIP Report repeatedly addressed this issue and detected further cumulating delays as the Final Operational Capability (FOC) dates were approaching.

In the ESSIP Report for 2014 these delays crossed the level of 50% of the States being late per individual objective (with the exception of the SPI objective). As some of these regulated items are pre-requisites for the implementation of ATM functionalities as defined in the PCP Regulation (EC regulation 716/2014), some corrective measures need to be taken to address these implementation issues. In this light, a recommendation to the European Commission is addressed in the report.



ATM technology overview shows that there is no synchronised approach to technology deployment among the ANSPs.

The ground based ATM technology picture in the region has not changed much since the former issue of the ESSIP Report. Based on the compliancy situation at ESSIP objective level it is clear that the planned dates for major functional upgrades to the ATC systems are not well coordinated among neighbouring States. The same can be concluded for the States collaborating under a FAB initiative. With few exceptions, the FAB states are not well coordinated when it comes to synchronized implementation of improvements in accordance with the ESSIP Plan.



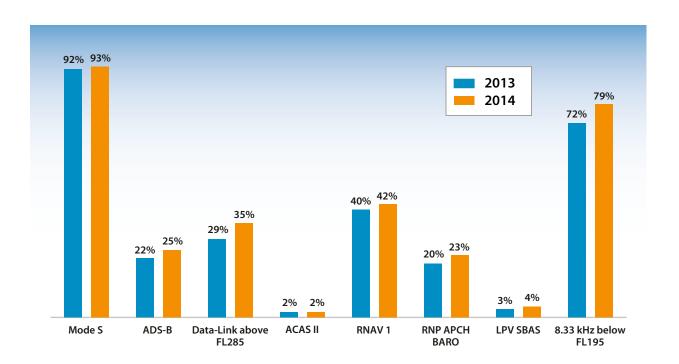
One reason for this is the strong dependency on system manufacturers' delivery capability that each State/ANSP will have to take into account. ANSPs are facing challenges when it comes to integrating systems delivered by different manufacturers. Nevertheless, this situation calls for more integrated planning amongst ANSPs in order to synchronize the time for introduction of new capability with the ATM Master Plan and the lower level planning instruments. In this context, the exercise of the first full Deployment Programme under the responsibility of the SESAR Deployment Manager will be an important mechanism to enhance the regional harmonization of capabilities.

This report collects information from 42 European ANSPs. Out of these, eight plan large-scale system replacements in the period 2015 to 2022. This also implies that the majority of those ANSPs take an evolutionary approach to their system capability evolution, which underlines that most players have chosen to work long-term with their ATM system technology partner in order to evolve their system capability and to enhance interoperability.

Due to the establishment of the Deployment Manager role, hereunder the Preliminary Deployment Programme supported by financial incentives, it would appear that investors have been waiting to see those instruments in place in order to better position their capability enhancement initiatives and strengthen the local business cases.

Thus, for the ANSPs deployment still depends on system manufacturer's capabilities and capacity and at the end of the day the approach technology, deployment is defined through the investor's individual decision-making.





Among Airspace Users, the equipage level continues to improve gradually and this has been a noticeable trend for some years now. From the data material, it is not possible to relate the evolution directly to any of the two dominating root causes:

- Improvement as a consequence of fleet renewal.
- Improvement because of concrete upgrade programmes for meeting harmonisation objectives and legal requirements.

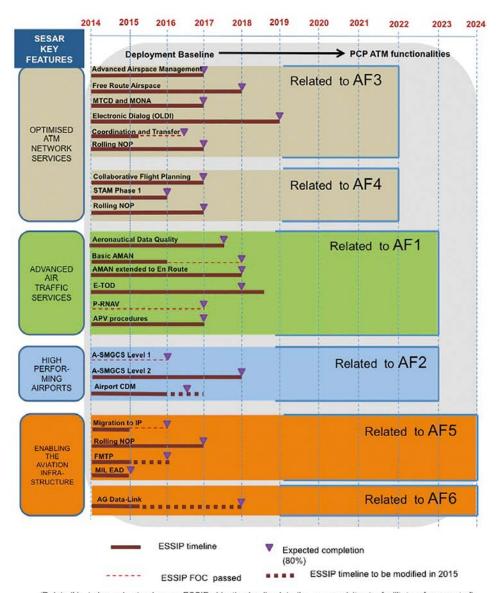
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There is one noticeable exception to this positive airborne equipage standard improvement tendency. The ACAS II v. 7.1 implementation status is still very low. The Implementing Rule 1332/2011 mandating the carriage of ACAS II version 7.1 within European Union airspace from 1 December 2015 by all aircraft equipped with version 7.0 would appear to be for all practical purposes ignored by the investors on the airborne side.

SESAR Key Features evolution focuses on progress of the baseline essential operational changes. Some implementation issues identified.

The SESAR key features concept was first introduced in the European ATM Master Plan Edition 2. The aim is to present the realisation of the SESAR target concept through strategic orientations described by four key features, which evolve through an ongoing Deployment and R&D programme:

- Optimised ATM Network Services;
- Advanced Air traffic Services;
- High Performing Airports;
- Enabling the Aviation Infrastructure.



'Related' is to be understood as an ESSIP objective leading into (i.e. pre-requisites to, facilitators for or part of) a DP family.

For the Optimised Network Services key feature, some delays observed in Collaborative Flight Planning (FCM03), are adversely affecting the performance of the network. In the context of the SESAR Interim Deployment Programme (IDP), ANSPs were encouraged to speed up, amongst others, the implementation of the automatic dissemination of AFP messages. Some implementation issues are also identified in the Implementation of ground-ground automated co-ordination processes (COTR). This objective in association with ATC17 is facilitator for the implementation of AF3, related to Flexible Airspace Management and Free Route sub-functionalities. It is NM opinion that their delay will put at risk AF3 implementation. On the positive side, very good progress was made in the area of Airspace Management. Significant progress has been achieved in Advanced Airspace Management (AOM19), Direct and Free Route Implementations (AOM21).

The Advanced Air Traffic Services key feature analysis indicates that there is a considerable risk associated with the timely adherence to the ADQ regulation and the majority of States report Planned or Late. Some delays are also identified in implementing arrival management tools. These would appear to be caused by constraints at technical level in ATM systems or weak business cases for the particular implementation.

In the area of Airports, dedicated key feature (High Performing Airports) shows some delays associated to implementation of Level 1 A-SMGCS. The delays are significant being cumulated for few years now. This can have an adverse effect on implementation of Level 2 A-SMGCS, as Level 1 is a pre-requisite. Both of the objectives are important elements of the ATM functionality 2 and measures should be taken to minimise the risks of further delays in implementation.

The last key feature deals with aviation Infrastructure and the main implementation issues that are associated to IP6 implementation (there is a high degree of technical readiness on the ANSP level, but more limited preparedness to undertake the actual integration work with international partners) and FMTP (the technical readiness is high among ANSPs, but the FMTP operational implementation is more demanding. A more active role from the FAB governance structures is a natural way of accelerating the implementation of this objective).

There is still no evidence of coordinated approach to capability evolution among the FAB partners.

As noted under the ATM Technology headline above, the States collaborating under a FAB initiative do not seem to fully engage in setting up coordinated initiatives to obtain more aligned capability evolution within each FAB. Most of the States forming the nine European FABs are often not well coordinated in order to realise synchronized implementation of improvements in accordance with the ESSIP Plan.

Category	Desig.	Baltic	Blue- Med	Danube	DK/SE	FABCE	FABEC	NEFAB	SW FAB	UK-IR
	ATC17									
ATC ATC abinetime	COM09									
ATC-ATC objectives	COTR 1									
	FMTP									
	FCM03									
ATC-Central objectives	FCM04									
	FCM05									
CNS objectives	AGDL <sup>2</sup>									
Common	AOM21									
Implementation	AOM19									
objectives	ATC12									
	Implementation	n on-time	A Ris	k of delay	▲ La	ite 🔺	Not releva	ant for FAI	3 impleme	entation

<sup>1</sup> LOF and NAN messages implementation (part of COTR) are related to AGDL implementation.

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<sup>2</sup> The FOC date for AGDL implementation is postponed to 2018 (EU Regulation 2015/310 of 26th February 2015).

This assessment is a result of expert judgement and it is based on the LSSIP 2014 information for ASP stakeholders only.

The above figure documents the implementation progress for four main categories of ESSIP objectives per FAB. It can be concluded that the progress under the group Common Implementation Objectives (representing harmonised technical performance of ATM functions) is satisfactory across the nine FABs.

The other three categories of ESSIP objectives show a much more diverse status and generally delays and risk of delays have been reported within all these categories. ATC-ATC objectives indicate centre-to-centre integration, ATC-Central objectives represent ATS unit's integration to centralised European capabilities while the CNS objective measures harmonised deployment of CNS infrastructure for the benefit of the airspace user.

As some of those ESSIP objectives form part of the Preliminary Deployment Programme under the responsibility of the Deployment Manager (ex. COM09, COTR and FMTP), one reason for delayed implementation progress could be the attractiveness in positioning those initiatives as part of a proposal under INEA's annual calls.

Having noted this should also be highlighted that many ANSPs have been putting considerable resources into FAB projects aiming at providing Free Route Airspace or Direct Routing to customers in FABs and beyond FABs. Those improvements will benefit ANSP's customers directly and it is understood that prioritising such FRA/DCT user improvements is strongly supported by the Airspace Users.

## INTRODUCTION

The ESSIP Report is produced in June each year, based on the Local Single Sky ImPlementation documents (LSSIPs), to address the progress made in the implementation actions during the previous year.

The ESSIP Report for 2014 completes the ESSIP Plan Edition 2014 planning cycle and is indicative of the level of stakeholders' commitment in pursuing the challenges they face. This document is also used as an aid to assist in defining an appropriate strategy to follow and to prepare for the ESSIP Plan – Edition 2015.

The ESSIP Report for 2014 is an official deliverable of the SESAR WP C.02, Task 7, Deployment Reports and Assessments. In this respect, ESSIP Report for 2014 provides an input for the maintenance of the Level 2 and Level 3 of the European ATM Master Plan. This is illustrated on the figure below.

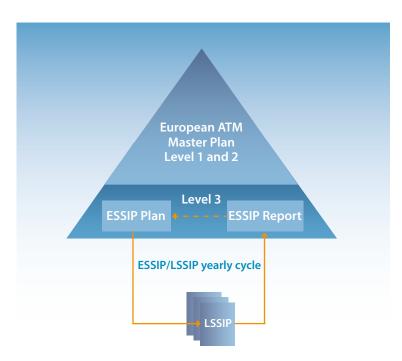


Figure 1: European ATM Master Plan implementation planning and reporting framework

#### Structure of the document

This report is structured as follows:

- Chapter 1: Executive Summary provides the summary of the most important findings in the report.
- Chapter 2: The Overview of SESAR Deployment Progress in 2014 provides the overall view on the implementation of ATM Master Plan Level 3 implementation objectives; it gives main trends in the implementation and presents progress in implementing main technological enablers.
- Chapter 3: The SESAR Key Features View provides the assessment of progress of main operational changes related to four SESAR Key Features.
- Chapter 4: FAB View considers the implementation progress per FAB by taking into account all those Level 3 implementation objectives linked to SESAR Key Features and also objectives considered as relevant by individual FABs.

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The report is completed by the following Annexes:

- Annex 1: Summary of all recommendations in ESSIP Report 2014 and the follow up of recommendations from ESSIP Report 2013, which provides a summary of all recommendations in ESSIP Report 2014, but also a feedback on the actions covered by recommendations in ESSIP Report for 2013.
- Annex 2: Progress of all active ESSIP objectives in 2014, which includes individual progress reports for all active ESSIP objectives.
- Annex 3: Acronyms, which includes all acronyms used in the report.
- Annex 4: Acknowledgments, which provides a complete list of contributors to this report.

#### Information sources

The main information sources for the production of this document are LSSIP State reports. In order to ensure the quality and consistency of LSSIP information, two data assessments took place in 2015:

- LSSIP in-cycle review: objective coordinators perform an assessment to make sure that the content is clear, information complete and guidance for implementation progress applied correctly;
- ESSIP objective experts review: before LSSIP reporting is closed, the information is sent to designated experts in EURO-CONTROL for assessment. For each ESSIP objective there is a dedicated expert in EUROCONTROL working in the field covered by the specific objective. The purpose of this check is to ensure the consistency of reported information with other data sources in EUROCONTROL and to challenge the States to report consistently. Once EUROCONTROL experts have provided their view, the comments are sent back to States, so the LSSIP information can be improved where needed.

The purpose of the mandatory LSSIP in-cycle review is to assess whether the reported information is complete and if it is in line with the objective progress assessment guidance. Also, the aim is to identify possible inconsistencies in the reporting. In addition to LSSIP information, other sources used in this report are:

- EUROCONTROL PRISME Fleet information related to Airspace Users;
- CAPEX information extracted from approved RP2 Performance Plans to link SESAR Deployment and CAPEX information;
- OLDI information extracted from the FMTP database in EUROCONTROL.

It is important to mention that the reported information analysed in this report is related to ESSIP Plan Edition 2014, based on ATM Master Plan Dataset 11. However, this report takes into account **ATM Master Plan Dataset 13**, frozen in October 2014 in relevant graphs and figures. This is because the difference between Dataset 11 and Dataset 13, that impacted Level 3 of the Master Plan, were minor.

#### Recommendations

This report contains a number of recommendations aimed at specific States, specific National Stakeholders, Airspace Users, FABs, EUROCONTROL, EASA and the European Commission. These recommendations are designed to improve the harmonised implementation of the ESSIP objectives and related OI steps or enablers, across ECAC.

# THE OVERVIEW OF SESAR DEPLOYMENT PROGRESS IN 2014

## 1. The overall progress of Level 3 ATM Master Plan implementation objectives in 2014

**Figure 2** depicts the comparison of Level 3 implementation progress for years 2013 and 2014. The number of Level 3 implementation objectives progressing "on time" has reduced. At the same time, number of Level 3 implementation objectives that show delays in implementation increased, in the same way as the number of objectives showing some potential risks of delay. Overall, the implementation progress worsened in 2014, comparing with 2013 results.

The main reason for this is a postponed implementation of several implementation objectives related to essential ATM functionalities (e.g. migration to IPv6.1, or FMTP implementation).

In comparison to 2013, the average ESSIP Compliance Rate (measures the level of compliance between the local implementation plans and The European Plan) also a shows slight reduction in 2014 (- 2%).

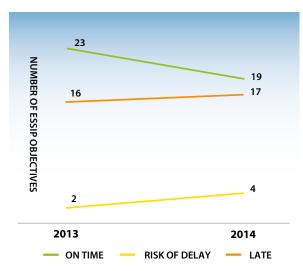


Figure 2: ESSIP Implementation progress in 2013 and 2014

The main reason for this is a postponed implementation of several implementation objectives related to essential ATM functionalities (e.g. migration to IPv6.1, or FMTP implementation).

In comparison to 2013, the average ESSIP Compliance Rate (measures the level of compliance between the local implementation plans and The European Plan) also a shows slight reduction in 2014 (- 2%).

ESSIP Compliance Rate = (# Objectives Completed +  $0.8 \times \#$  Objectives Partly Completed +  $0.5 \times \#$  Objectives Planned) / (Total # Objectives - # Objectives Not Applicable)

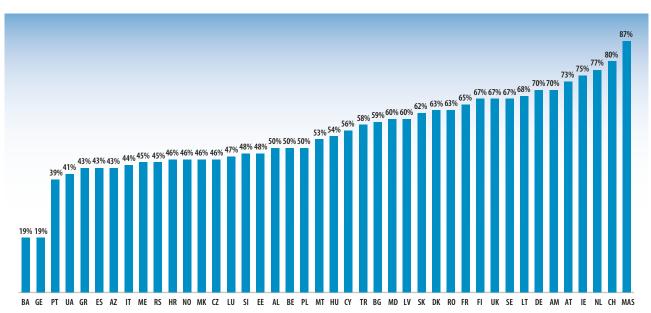


Figure 3: ESSIP Compliance Rate 2014

As **figure 3** shows, the lowest ESSIP Compliance Rate is calculated for Bosnia and Georgia. These two States should invest more effort in implementing ESSIP objectives based on SES legislation and SESAR improvements. It is expected that implementation activities will improve in 2015. This is because newly inaugurated ANSP in Bosnia and Herzegovina started its initial activities, and Georgia has joined EUROCONTROL as full member and therefore can benefit of the support provided to Member States.

REC-2014-1
To increase implementation activities related to SES and SESAR improvements with support of EUROCONTROL.

BA, GE

#### 2. Delays in implementation of ATM Master Plan Level 3 objectives

**Table 1** below illustrates the calendar of likely completion of the ESSIP objectives that were assessed as "late" in 2014. The estimate for completion (taking into account the ESSIP achievement criteria − 80% of applicability area having reported all actions as "completed"), based on statements made by individual National Stakeholders on those delayed objectives, is marked with the symbol ◆. Objectives that, based on 2014 data analysis, fulfil the achievement criteria are indicated with 'Ach'.

Estimated delay of achievement													
Desig.	'06	'07	′08	'09	<b>'10</b>	<b>'11</b>	′12	′13	<b>'14</b>	<b>'15</b>	'16	′17	′18
FCM01										•			
SRC-RMLK									Ach				
SRC-SLRD									Ach				
A0P04.1										•			
SAF10										•			
INF04										•			
NAV03											•		
AOP03										•			
ATC02.2									Ach				
ENV01										•			
ITY-AGDL <sup>3</sup>													
ITY-ADQ													•
СОМО9										•		<b>4</b>	
COM10													
ITY-FMTP										•			
ITY-COTR											•		

Table 1: Estimated objective implementation delays according to LSSIP 2014

<sup>3</sup> It should be noted that FOC date for AGDL implementation is postponed to 2018 (EU Regulation 2015/310 of 26th February 2015)

<sup>4</sup> Only for action with FOC date 12/2013

The estimated delay for completion of ESSIP objectives indicated in **Table 1**, compared to the initial endorsed date, varies from one to eight years, with an average of around three years.

**REC-2014-2** 

Local Stakeholders that declared delays in implementation of FCM01, A0P04.1, SAF10, INF04, NAV03, A0P03, ENV01, ITY-AGDL, ITY-ADQ, COM09, COM10, ITY-FMTP and ITY-COTR, to take corrective measures to reduce the implementation delays.

**Local Stakeholders** 

As already indicated in last year's report, the particular concern is the implementation of regulated interoperability implementation objectives based on EU legislation. Four Level 3 implementation objectives (ADQ, AGDL, COTR, and FMTP), related both to IR and Operational Improvements in the Master Plan have shown delays in implementation in 2014. **Figure 4** depicts the situation in 2014, with comparison of last two years. As most of these items are identified as pre-requisite technologies for the implementation of ATM functionalities, corrective measures should be applied in order to minimise the risks of delayed implementation of ATM functionalities.

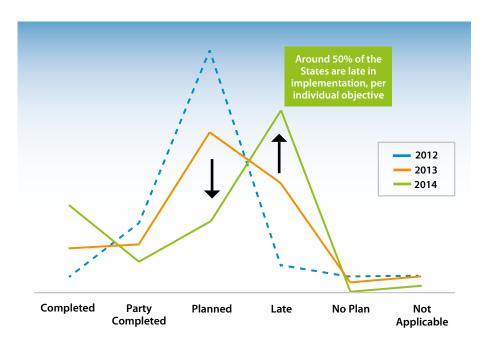


Figure 4: Cumulated delays in implementation of interoperability objectives

REC-2014-3 (equal to REC-2013-2)

Define corrective measures to address delays in implementation of interoperability objectives.

EC

ESSIP Report 2014

#### 3. ATM Master Plan Level 3 achievement outlook

**Figure 5** below shows a five years ESSIP achievement outlook. The upper side of the figure shows historic achievement data and the lower side provides information about ESSIP objectives planned to be achieved by 2016.

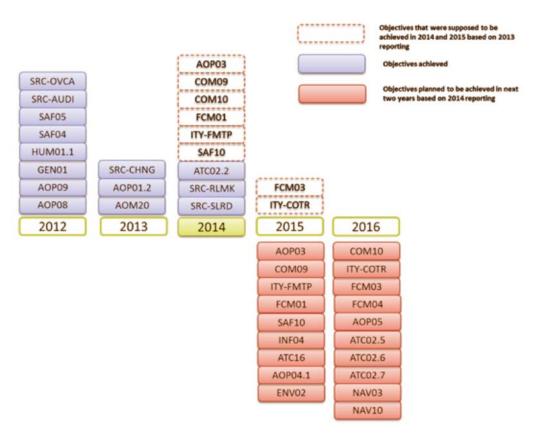


Figure 5: ESSIP achievement outlook

Three ESSIP objectives will be proposed as "achieved" in 2014 (fulfilled the 80% achievement criteria). These are the legacy SRC objectives RLMK and SLRD, and also the STCA Level 2 implementation objective (ATC02.2).

Red dashed squares, presented in **figure 5**, show the delta between what was supposed to be achieved according to 2013 reporting, and how those plans have realised in 2014. Out of nine objectives that were planned to be achieved in ECAC in 2014, only three have actually been achieved. Based on LSSIP 2014 information, there should be nine objectives reaching the 80% achievement criteria in the ECAC region in 2015. However, based on the experience from last year, there are some reservations on whether this implementation level will be reached. Therefore, better local planning processes are necessary to forecast future technology evolution with more reliability.

**REC-2014-4** ESSIP objectives SRC-SLRD, SRC-RLMK and ATC02.2 should be proposed as 'Achieved' for the ESSIP Plan Edition 2015.

**WPC.02 T006** 

#### 4. ATM technology overview and evolution

The ATM technology overview was first presented in the ESSIP Report for 2013, building on the information related to ATC system upgrades schedule in different ECAC States. For the ESSIP Report 2014, some additional technology information is presented to show progress of implementation for some of the most important technological enablers that are essential for the timely implementation of SESAR.

#### 4.1 ANSP technology

The last two editions of this report include recommendations that call for more coordination between the ANSPs on system deployment and capabilities implementation (REC-2013-5). So far, for most of the ANSPs, opportunities for a seamless evolution of ATM systems were not a priority and the approach to technology deployment was more on an individual basis.

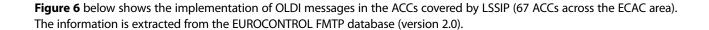
#### 4.1.1 Technical Capabilities

In order to present the current availability of some of the most important technology elements/capabilities represented at Level 3 of the Master Plan, the LSSIP 2014 information was analysed and presented in Table 2 (data is extracted for the main ANSP of each ECAC State). The colour coding indicacStates participating in the same FAB initiative. The States marked in grey colour do not participate in any of the existing FAB initiatives.

State	IPv6	AMHS	Ex. AMHS	AIXM 5.1	AGDL	FMTP	State	IPv6	AMHS	Ex. AMHS	AIXM 5.1	AGDL	FMTP
AL	$\square$	V	$\square$	2016	2018	$\square$	ΙΤ	2015	2015	2015	2016	2016	2015
AM	2015	2016	2016	n.p.	2015	2014	LT	$\overline{\mathbf{A}}$	V	2018	2016	2015	V
AT	$\square$	$\overline{\mathbf{Q}}$	$\square$	2016			LU	Ø	V	V	n.p.	n.a.	V
AZ	2015	2016	2016	n.a.	n.a.	2015	LV	Ø	2016	2016	2016	2015	V
ВА	2015	2015	2015	2016	2015	2015	MAS		V	$\overline{\checkmark}$	2015		V
BE	$\square$		$\square$	2016	$\square$	2015	MD	$\square$	2015	2015	2016	2017	$\overline{\mathbf{V}}$
BG	$\square$		2015	2015	2015	$\square$	ME	2016	2015	2015	2016	2018	V
СН	2015		2015	2012	$\square$	$\square$	MK	2017	2007	n.p.	n.p.	2017	2017
СҮ	$\square$	2015	2015	2016	2018		MT	2016	2017	2017	2016	2015	2015
CZ	2015	2015	2015	2016	2015	$\square$	NL	☑	$\overline{\square}$	2015	2016	n.a.	V
DE	☑	$\square$	2015	2016	$\square$	Ø	NO	2015	$\square$	2017	2015	n.p.	V
DK	$\square$		$\square$	n.p.	2018	$\square$	PL		Ø	2015	2016	2018	V
EE	2015	2015	2015	2015	2015	2015	PT	2015	$\square$	$\square$	2016	2017	2015
ES	$\square$		$\square$	n.p.	2016	$\square$	RO	☑		2015	2016	2016	V
FI	2015		2015	2016	2015	2015	RS	2016	2015	2015	2016	2018	V
FR	2015	$\square$	2016	2016	2018	2018	SE	☑	2015	n.p.	n.a.	2015	2015
GE	2017		2015	n.p.	n.p.	2015	SI	☑	2016	2016	2016	2015	V
GR	2015	2016	2016	n.p.	n.p.	2016	SK	☑	$\overline{\mathbf{A}}$	2014	2016	2016	V
HR		$\overline{\checkmark}$	2015	2016	2016		TR	Ø	$\overline{\mathbf{A}}$		n.p.	n.a.	2015
HU		2016	2017	2016	2015		UA	2016	2016	2016	n.p.	n.a.	2015
IE	2015			2016		2015	UK	☑	2015	2015	2016	V	V

**Table 2: Technological capabilities per LSSIP State** 

n.a. not applicable n.p. no plan ☑ achieved



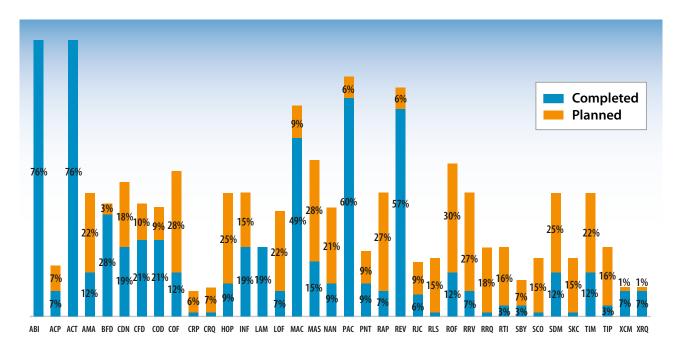


Figure 6: OLDI messages implementation in the ECAC area

It can be observed that messages ABI (Advance Boundary Information), ACT (Activate), MAC (Abrogation of Co-ordination), PAC (Preliminary Activation) and REV (Revision) are the only OLDI messages widely implemented by Air Navigation Service Providers. More than 50% of ACCs in the ECAC area have either completed or have plans for the implementation of these messages. For the rest of the OLDI messages, implementation varies from ACC to ACC.

#### 4.1.2 ATM system upgrades and replacement

**Table 3** below shows the schedule of major ATM system upgrades, as reported by the States. In total, 11 ANSPs in the ECAC region will perform a major upgrade of the ATM system in 2015. This table also includes the scheduled year of system replacement. In total two ECAC ANSPs have reported that they schedule system replacement in 2015. Years indicated in red refer to a major upgrade which took place in 2014 or earlier.

State	System	Major Upgrade	Replacement	System	Major Upgrade	Replacement	Ex. AMHS
AL	Lockheed Martin	2015	-	IT	Selex	2015	-
AM	AZIMUT	2013	-	LT	Multiple	2017	2017
AT	Thales	2013	2015	LU	Selex	2012	-
AZ	Indra	2014	-	LV	SiATM	2015	-
ВА	Indra	2015	-	MAS	Indra, Frequentis	2015	-
BE	Thales	2014	-	MD	SiATM	2013	-
BG	Selex	2015	2022	ME	Thales	2017	-
СН	Multiple	yearly	2016	MK	Indra	2017	-
CY	Thales	2013	-	MT	Selex	2015	-
CZ	Thales	2 x year	2019	NL	Raytheon, Indra	2017	2019
DE	Multiple	2015	-	NO	Raytheon, Indra	2015	-
DK	Thales	2 x year	-	PL	Indra	2015	-
EE	Thales	2015	-	PT	Multiple	2016	-
ES	Indra	2015	-	RO	Selex	2016	2016
FI	Thales	2014	-	RS	Thales	2015	-
FR	Multiple	2015		SE	Thales	2 x year	-
GE	Selex	2015	-	SI	Multiple	2014	-
GR	Thales	2016	-	SK	Thales	2015	-
HR	Thales	2018	2018	TR	Selex	2015	-
HU	Thales	2015	-	UA	Multiple	2015	-
IE	Thales			UK	Multiple	2015	-

Table 3: ATM system upgrades and replacement schedule

#### 4.2 Airspace Users technology

Airspace Users involvement in the ESSIP reporting process is established through SJU C.02 project arrangements. As for every ESSIP Objective, Stakeholder Lines of Actions are defined for every Stakeholder; Airspace Users are also addressed in ESSIP objectives, where the new technology requires upgrades of the aircraft equipage, update of the procedures or amendments to aircrew training. In order to collect information on the progress of these actions, it is very important to create a mechanism of collecting information from Airspace Users (not addressed via LSSIP). Since 2012, the main source of data used to assess Airspace Users actions in ESSIP is the EUROCONTROL PRISME Fleet information, extracted from the Flight Plans.

PRISME fleet information is used to determine the equipage levels and capabilities. The information is extracted from fields 10a, 10b and 18 of the submitted flight plans (new 2012 flight plan format). All flights in the IFPS Zone (IFPZ) in 2014 have been used in the analysis. This corresponds to over 9,7 million flights.

For some technologies featured in this chapter, the Flight Plan will inform about the operators operational approval, which can be different than equipage (aircraft can be equipped but because of the lack of operational approval, will not declare that in the flight plan).

The methodology, used for the production of this section, is similar to last year and comprises the following:

- First stage: the analysis of the PRISME Fleet information presented per class of Airspace Users (Scheduled, Non-scheduled/charter, Military, Business, Cargo, Low-fare and other all flights that could not be classified in these groups);
- Second stage: this analysis was provided to representatives of all categories of Airspace Users participating in C.02 project. Based on their feedback, this chapter was produced.

**Table 4** below shows percentage of flights in IFPS zone per type of Airspace User that had certain technological capabilities on-board, enabling them to use specific operational services. Table 4 also includes the comparison between data in 2013 and 2014 illustrating the progress of the fleet equipage.

%	Мос	de S	AD	S-B	DI	_5	AC	ACASII RNAV1		RNP BARO		LPV SBAS		8.33 6		
	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014
Scheduled	100	100	36	40	36	46	6	7	68	71	36	41	2	2	92	95
Non-scheduled	98	98	25	27	8	10	3	3	38	42	13	13	4	3	55	65
Low fare	100	100	45	45	29	38	0	0	77	78	44	46	0	0	99	100
Business	96	97	5	8	6	12	0	0	24	22	20	21	8	12	86	88
Cargo	97	97	31	37	40	44	2	2	45	46	17	26	1	1	74	88
Military	70	73	3	4	60	63	0	0	21	23	5	6	2	2	60	65
Other	86	88	7	8	26	30	0	1	10	11	7	9	4	7	39	52

**Table 4: Airspace Users equipage** 

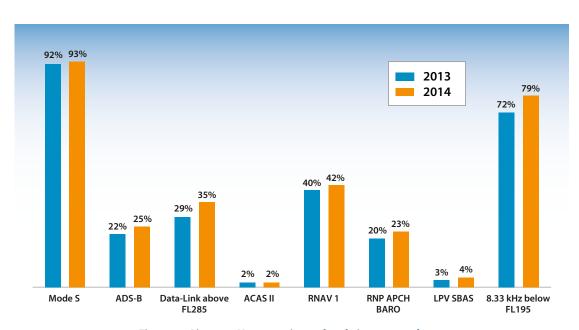


Figure 7: Airspace Users equipage levels in 2013 and 2014

<sup>5</sup> Data Link above FL285

<sup>6 8.33</sup>kHZ below FL195

**Figure 7** shows integrated results of Airspace Users equipage evolution for all flights in IFPS zone in 2014, regardless of the category of Airspace User. It can be observed that there is a progress for each of the technologies presented, except ACAS II version 7.1. The best progress is marked for Data-Link equipage (+6%) and 8.33 kHz below FL195 (+7%).

REC-2014-05 (equal to REC-2013-13)

Investigate the progress of ACASII equipage as mandated in Commission Regulation (EU) 1332/2011, in particular the issues related to operators operational approval of this technology.

**EASA** 

In addition to PRISME Fleet information, some data was obtained regarding rotorcraft fleet equipage levels. This is because Prisme Fleet info includes only rotorcraft operations that filled the flight plan, so information for this category of operators is limited. Additional data obtained relates to Agusta Westland IFR helicopters (AW139 and AW109), currently in production and referred to 2013-2014:

- 8.33 khz below FL195: all AW models (AW139, AW 109 SP) are equipped as part of the standard configuration
- ADS-B: all AW139 today in production are equipped with ADS-B out as part of the standard configuration (retrofit is available for previous versions)
- Mode S: all AW models (AW139, AW 109 SP) are equipped with Mode-S as part of the standard configuration
- RNP APCH BARO and LPV SBAS: all AW109 SP are equipped and certified as part of the standard configuration, all the AW 139 today in production are equipped and certified as part of the standard configuration (retrofit is available for previous versions)
- RNAV 1: all AW models (AW 139, AW 109 SP) are equipped and certified for RNAV 1
- ACAS II (TCASII): TCAS II is certified on AW139, the equipment installation is an optional to the standard configuration.

Furthermore, all recent Airbus Helicopters IFR models in production have similar CNS capabilities.

<sup>7</sup> Agusta Westland

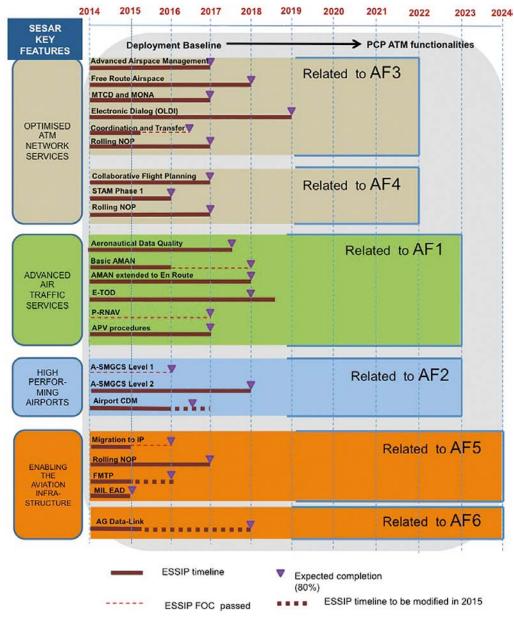


## SESAR KEY FEATURES VIEW

#### 1. The Overall European Perspective

The realisation of the SESAR target concept follows strategic orientations described by four key features, which evolve through an ongoing Deployment and R&D programme:

- Optimised ATM Network Services;
- Advanced Air traffic Services;
- High Performing Airports;
- Enabling the Aviation Infrastructure.



'Related' is to be understood as an ESSIP objective leading into (i.e. pre-requisites to, facilitators for or part of) a DP family.

**Figure 8: SESAR Key Features** 

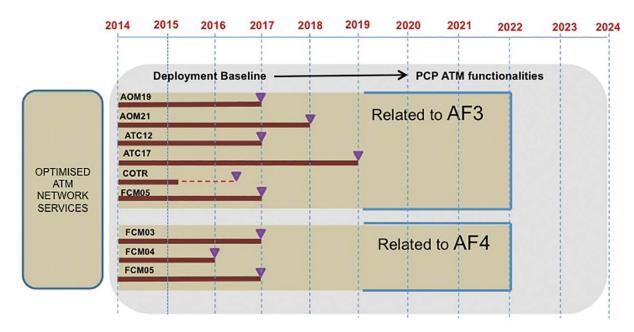
The most important operational changes represented at Level 3 of the Master Plan (in deployment phase) are showed in **figure 8** above. These changes are mapped to SESAR key features and include the expected dates of completion at European level (implementation completed at 80% of States in the applicability area).

For each of the ESSIP objectives related to the key features a stakeholder view is elaborated from the perspective of the lead stakeholder. Military view is included for the key features that MIL stakeholders see as the most important. This is to provide an additional angle (from specific stakeholder point of view) on the potential risks in implementation of these essential operational changes. Airspace Users contribution is missing in this section as it was not coordinated in time for inclusion in this document.

#### 2. The Individual Key Feature Perspective

#### 2.1 Optimised ATM Network Services

#### 2.1.1 Brief Description and timeline



**Figure 9: Optimised ATM Network Services** 

Optimised ATM Network Services rely on successive phases of operation planning from long to medium and short term. In this context, all involved ATM stakeholders progressively share more and more precise data to build a common traffic and operational environment picture called the Network Operations Plan (NOP). This NOP is updated in real time to reflect any changes in ATM operations.

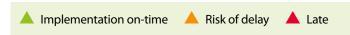
The NOP also covers military activity, taking full account of the needs of mission trajectories and military airspace demands.

This key feature contains mature operational changes related to airspace management, solutions to enable more efficient network operations and collaborative network operations planning and execution. These elements can be seen on **figure 9** above.

#### 2.1.2 Deployment baseline elements and their implementation progress in 2014

The following ESSIP objectives are addressed for this SESAR Key Feature:

ESSIP designator	ESSIP title	Progress 2014
AOM19	Implement Advanced Airspace Management	<b>A</b>
AOM21	Implement Free Route Airspace	
ATC12	Implement automated support to conflict detection and conformance monitoring	<b>A</b>
ATC17	Implement electronic dialogue as automated assistance to ATCO during coordination and transfer	
COTR	Implement ground-ground automated coordination process	
FCM05	Implement Interactive Rolling NOP	
FCM03	Implement Collaborative Flight Planning	<b>A</b>
FCM04	Implement Short term ATFCM Measures — phase 1	
FCM05	Implement Interactive Rolling NOP	<b>A</b>



Detailed progress assessment for each of these ESSIP objectives can be found in Annex 2.

#### 2.1.3 Stakeholder ViewStakeholder View

#### **Network Manager**

The ESSIP implementation objectives, contributing to the Optimised ATM Network Services Key Feature, are key contributors to enhancing the European ATM performance in all performance areas and, in particular, in the Capacity and Flight Efficiency ones. Most of the ESSIP Objectives in this Key Feature are green and good progress has been achieved in 2014. Significant progress has been achieved in Advanced Airspace Management (AOM19), Direct and Free Route Implementations (AOM 21) and Interactive Rolling NOP (FCM 05). The relevant NM system developments and corresponding SLoAs are compliant with the plan dates and the majority of the required upgrades were completed by October 2014 (NM Release 18.5). The implementation of the Flight Plan filing capability via NOP and the capability to correct errors, related to data alignment to airspace allocations and routes availability, have contributed to increase of the predictability, capacity and flight efficiency. The relevant "Flight Planning Indicator", measuring the average horizontal en-route flight efficiency of the last filed flight plan (RTE-FPL) reduced from 4.57% in 2013 to 4.48% in 2014. The "Airspace Design Indicator" -Flight extension due to route network design- (RTE-DES), reduced from 2.80% in 2013 down to 2,64% in 2014.

Delays observed in Collaborative Flight Planning (FCM03) are adversely affecting the performance of the network. In the context of the SESAR Interim Deployment Programme (IDP), ANSPs were encouraged to speed up, amongst others, the implementation of the automatic dissemination of AFP messages. Priority should be given to the AFP messages for missing flight plans, particularly for ANSPs at ECAC border, and for AFP messages for diversions. The implementations of Short Term ATFCM Measures have very positively contributed in the reduction of delays and enhancements to safety through the reduction of "over deliveries". Major benefits are expected from 2015 onwards through the more uniform and systematic implementation of STAM.

Concerning the Implementation of ground-ground automated co-ordination processes (COTR) this is long overdue. This objective in association with ATC17 is facilitator for the implementation of AF3, related to Flexible Airspace Management and Free Route sub-functionalities. It is NM opinion that their delay will put at risk AF3 implementation.

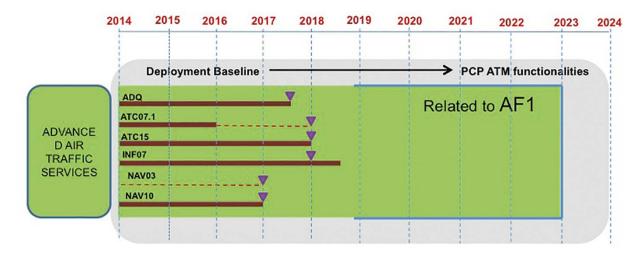
#### Military

In the frame of the Optimised ATM Network Services, the Military consider this key feature as the most relevant, either from the civil military perspective or in terms of its impact on the military operations. Actually they will be affected by both the ATM Functionalities number 3 and 4, in respect of their roles of Air Navigation Service Providers as well as Airspace Users. Accordingly all the objectives listed on **figure 9** have been duly taken into account for those activities establishing:

- a collaborative civil military airspace planning;
- the installation, deployment and integration of ASM tools;
- the sharing of information on the use and management of the European airspace to all interested parties;
- the ASM ATFCM procedures for coordination processes contributing to the enhancement of CDM;
- the upgrade of Flight Data Processing System FDPS, for the integration of the OAT FPL.

#### 2.2 Advanced Air Traffic Services

#### 2.2.1 Brief Content Description and timeline



**Figure 10: Advanced Air Traffic Services** 

Advanced Air Traffic Services combine three of the Key features from the 2012 Edition of the Master Plan, namely "Moving from Airspace to 4D Trajectory Management", "Traffic Synchronisation" and "Conflict Management and Automation".

This key feature contains mature operational changes related to solutions that enhance ATS operations and provide performance benefits mainly to terminal, but also to adjacent en-route operational environments. Operational changes represented at Level 3 include capabilities like AMAN, PBN, but also provisions related to Aeronautical Data Quality and eTOD.

#### 2.2.2 Deployment baseline elements and their implementation progress in 2014

The following ESSIP objectives are addressed for this key feature:

ESSIP designator	ESSIP title	Progress 2014
ADQ	Aeronautical Data Quality	<b>A</b>
ATC07.1	Implement arrival management tools	<b>A</b>
ATC15	Implement, in En Route operations, information exchange mechanisms, tools and procedures in support of basic AMAN	<b>A</b>
INF07	Electronic Terrain and Obstacle Data	_
NAV03	Implement P-RNAV	<b>A</b>
NAV10	Implement Approach Procedure with Vertical Guidance	



Detailed progress assessment for each of these ESSIP objectives can be found in Annex 2.

#### 2.2.3 Stakeholder View

#### **ANSP**

**ITY-ADQ:** There is considerable risk associated with the timely adherence to the ADQ regulation and the majority of States report Planned or Late. As software solutions are becoming available, also in the form of remotely hosted solutions, investors may chose a "fast track" approach by buying a commercial service.

ATC07.1: Delays in implementing arrival management tools would appear to be caused by constraints on the technical level in ATM systems or failing business case for the particular implementation.

**INFO7:** The reporting shows high risk of delay, typically because the investors await the definition of the relevant TOD plan and policy (and possible legal changes) on State level. The timely availability in the region of the national eTOD policy document by November 2015 is a key factor in assessing the actual risk of delay.

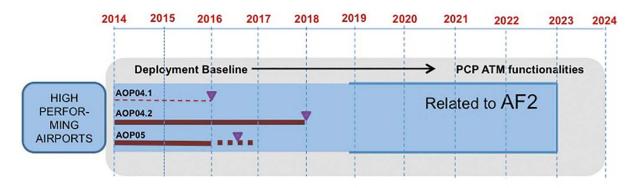
NAVO3: The data collection indicates a broad variety of reasons leading to a risk for delayed implementation. It is believed that the justification of this objective should be considered, based on findings through EASAs consultation of NPA 2015-01, PBN implementation in the EATMN.

#### Military

This key feature represents a challenge for the military, particularly in case of ANS provision to GAT. In this case all the ESSIP objectives, foreseen for the Advanced Traffic Services, are subject to analysis. According to the ESSIP Plan outline, it is responsibility of each Military Authority to evaluate the applicability of the objectives in respect of the local environment. Moreover, there is an impact on the State aircraft equipment when considering PBN regulation currently at final stage of development by EASA. The arrangements to accommodate non-equipped State aircraft are still under scrutiny, even though some initial proposals indicate the continued availability of conventional support. However, the Military is also considering RNP1equipage for transport-type State aircraft regularly flying in high density TMAs. Other aircraft types may have to seek compliance on the basis of performance equivalence.

#### 2.3 High Performing Airports

#### 2.3.1 Brief Content Description and timeline



**Figure 11: High Performing Airports** 

High performing airport operations aim at achieving a full integration of airports into the ATM network, ensuring a seamless process through Collaborative Decision Making. Airports will contribute to achieving SESAR performance goals through the increase of runway throughput and improved surface movement management (as shown in **figure 11** above).

#### 2.3.2 Brief Content Description and timeline

The following ESSIP objectives are addressed for this SESAR Key Feature:

ESSIP designator	ESSIP title	Progress 2014					
A0P04.1	Implement A-SMGCS Level 1	<b>A</b>					
A0P04.2	Implement A-SMGCS Level 2	<b>A</b>					
AOPO5	AOPO5 Implement A-CDM						
	▲ Implementation on-time ▲ Risk of						

Detailed progress assessment for each of these ESSIP objectives can be found in Annex 2.

#### 2.3.3 Stakeholder View

#### **Airport**

Main operational changes, included in this key feature, are very important operational concepts aimed at improving performance of the airports. Both A-SMGCS and A-CDM are included in the Preliminary Deployment Programme of the SESAR Deployment Manager, based on the PCP Regulation (EC 716/2014). That means that airports, specified in the annexes to this regulation, have a mandatory provision to implement AF2 by 2023 (among these are A-SMGCS and A-CDM).

Based on LSSIP 2014 reporting, it can be observed that there are some delays identified in A-SMGCS Level 1 and A-CDM implementation. However, it should be noted that ESSIP applicability area for airports is much wider than what is defined in the PCP. Therefore, delays presented may not be as critical.

The analysis shows the following:

- A-SMGCS Level 1: six airports in the PCP applicability area declared delays in implementation of Level 1 SMGCS (EBBR, EDDL, LIMC, LEBL, LEPA and EGLL). These delays will most certainly impact timely implementation of Level 2 SMGCS, as some of the functionalities of Level 2 can't be unlocked without implementation of Level 1.
- A-CDM: four airports in the PCP applicability area declared delays in implementation of A-CDM (LOWW, LEPA, EKCH, EIDW). However, these delays are assessed against 01/2016 FOC date as specified in dedicated ESSIP objective. Preliminary Deployment Programme mandates 12/2016 as the FOC date for functionalities, described under current A-CDM objective. If re-assessed against that date, all four delayed airports report completion within that FOC date.

#### 2.4 Enabling the Aviation Infrastructure

#### 2.4.1 Brief Content Description and timeline

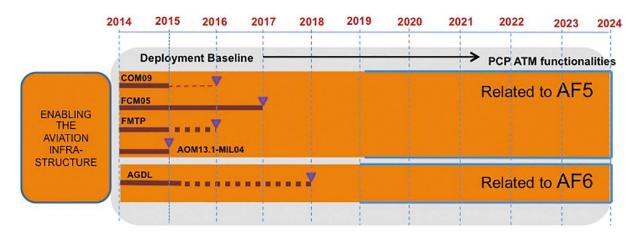


Figure 12: Enabling the Aviation Infrastructure

This key feature contains mature operational changes related to aviation infrastructure and technology that facilitate the transition to next generation ATM system, which would support introduction of advanced solutions to enhance day to day ATM operations (E.g. SWIM). Operational changes, represented at Level 3, include technology evolutions such as migration to IP, data-link infrastructure and others as showed on **figure 12** above.

#### 2.4.2 Deployment baseline elements and their implementation progress in 2014

The following ESSIP objectives are addressed for this SESAR Key Feature:

ESSIP designator	ESSIP title	Progress 2014
СОМО9	Implement migration to IP	<b>A</b>
FCM05	Implement Interactive Rolling NOP	<b>A</b>
FMTP	Implement common Flight message Transfer Protocol	<b>A</b>
AOM13.1_MIL04	Migrate military aeronautical information to EAD	<b>A</b>
AGDL	Implement air-ground data link	<b>A</b>

Detailed progress assessment for each of these ESSIP objectives can be found in Annex 2.

A Risk of delay

Implementation on-time

#### 2.4.3 Stakeholder View

#### **ANSP**

**COM09:** The typical picture is a high degree of technical readiness on the ANSP level, but more limited preparedness to undertake the actual integration work with international partners. As the technical enabler (IP6) is largely in place, this objective may for the future be addressed through higher level COM applications.

**ITY-FMTP:** As for COM09, the technical readiness is high among ANSPs, but the FMTP operational implementation is more demanding. A more active role from the FAB governance structures is a natural way of accelerating the implementation of this objective.

ITY-AGDL: Being a prerequisite for the AF6 part of PCP, it is vital to ensure timely implementation of AGDL according to IR 310/2015 (ANSP 5 February 2018/AU 1 January 2019). The complexity concerning timely completion of required measures (airborne equipment/ground based communication infrastructure/ATN system adaptation/controller training) should not be underestimated.

#### **Military View**

The objectives reported in **figure 12** are relevant for the military, irrespective of their role of ANSP providing services to GAT or to OAT. The objectives COM09 and FMTP have a particular relevance as they are expected to pave the way for ground-ground civil-military system interoperability. Flight Message Transfer Protocol (FMTP) is related with regulation 633/2007 of 07 June 2007, where it is prescribed to rely on the TCP over IPv6 protocol for the communications systems supporting the coordination procedures between ATS units and controlling military units, using a peer-to-peer communications mechanism. This is applicable in information exchanges between FDPS for the purpose of notification, coordination and transfer of flights between ATC units and for the purposes of civil-military coordination.

The objective AOM13.1 and the SLOaS MIL04 - Migrate military aeronautical information to EAD - has captured the interest of the military Authorities. Considering those countries where this objective is not applicable, because the military are not ANSP or the military AIP doesn't exist, or where the Military information is maintained by Civil AIS in EAD, some Military Organisations have already migrated to EAD or are planned to migrate. A remaining number of countries have not planned the migration yet. NM has conducted work to extend AIXM 5.1 model to cover military requirements so that EAD static data base can accommodate military AIP data. It is important to note that harmonisation of military aeronautical information and its migration to EAD was flagged for SESAR Deployment.

## GEOGRAPHICAL VIEW: THE FAB VIEW

Implementing technical capabilities within SES needs to be established as a set of objectives (such as the ESSIP objectives) that define specific operational requirements. An example would be the ability of two Air Traffic Control Centres to exchange flight plan data. The objectives would define the concepts and interface requirements required much as the ESSIP objectives do.

In order to structure the FAB analysis in a logical way, the approach of classifying technical capabilities by the type of required exchange or interface is taken as appropriate. In this respect, Level 3 objectives analysed in this chapter are divided in following groups:

- ATC-ATC Objectives relate to an interface between one ATC centre and another.
- ATC-Centralised System Objectives relate to an interface between ATC and centralised systems such as the NM or EAD.
- CNS Objectives relate to harmonised deployment of CNS infrastructure from the airspace user perspective.
- Common Implementation Objectives relate to an achievement of a harmonised technical performance of ATM functions.

Table 5 below presents the assessment of implementation status for each of the objectives at FAB level. It should be noted that this assessment is a result of expert judgement and it is based on the LSSIP 2014 information for ASP stakeholders only.

	Desig.	Baltic	Blue- Med	Danube	DK/SE	FABCE	FABEC	NEFAB	SW FAB	UK-IR
	ATC17									
ATC ATC abia diam	СОМОЭ									
ATC-ATC objectives —	COTR 8									
	FMTP									
	FCM03									
ATC-Central objectives	FCM04									
	FCM05									
CNS objectives	AGDL <sup>9</sup>									
	AOM21									
Common Implementa- tion objectives	AOM19									
	ATC12									

▲ Implementation on-time ▲ Risk of delay ▲ Late ▲ Not relevant for FAB implementation

**Table 5: FAB progress assessment** 

<sup>8</sup> LOF and NAN messages implementation (part of COTR) are related to AGDL implementation.

<sup>9</sup> The FOC date for AGDL implementation is postponed to 2018 (EU Regulation 2015/310 of 26th February 2015).

#### 1. Baltic FAB (LT - PL)

#### Assessment of the ATC-ATC objectives

The ESSIP objectives relating to interfaces between one ATC centre and another (ATC-ATC) are aligned, which is proven by fact that both State ANSPs have already completed three objectives. One objective is reported three month late.

Electronic Dialogue as Automated Assistance to Controller during Coordination and Transfer are planned for 2018.

Migration to Internet protocol has been performed. Data networks are IPv4 capable for international services.

Both PANSA and ORO NAVIGACIJA ATM systems are capable of sending basic OLDI messages. However, PANSA reports ITY-COTR objective is completed, and ORO NAVIGACIJA reports three month delay.

PANSA and ORO NAVIGACIJA data communication systems are upgraded and have FTMP capability. Common flight message transfer protocol was implemented at Baltic FAB level.

#### Assessment of ATC-Central objectives

The most of the required actions (messages and formats) have been implemented within the Baltic FAB for Collaborative flight planning, although use of Individual Flight Plan Identity code (IFPLID) in all messages to ETFMS is planned for PANSA by end of 2015.

Implementation of Short Term ATFCM Measures (STAM Phase 1) is planned by PANSA by end of 2015. For ORO NAVIGACIJA this objective is not applicable.

Both ANSPs have plans to implement the interactive rolling NOP by the end of 2016.

#### Assessment of CNS objectives

Both ANSPs are late with implementation of Initial ATC air-ground data link services above FL-285 from ESSIP FOC date 02/2015. Taking into account that the new proposed FOC date is 02/2018 for ANSPs this shouldn't be considered as late.

#### Assessment of Common Implementation objectives

Advanced Airspace Management implementation is planned by both ANSPs by end of 2015.

Feasibility Study on FRA implementation is in progress. Establishment of a Free Route Airspace within Baltic FAB is planned for end of 2017.

Automated support for conflict detection and conformance monitoring: both PANSA and ORO NAVIGACIJA plan implementation of MTCD by end of 2016. ORO NAVIGACIJA indicates that Conformance Monitoring functions are implemented and operational.

#### 2. Blue-Med FAB (CY – GR – IT – MT - AL as associate)

#### ■ Assessment of the ATC-ATC objectives

The migration from IPv4 to IPv6 is already completed for Albania and Cyprus, while Greece and Italy declare a little delay due to alignment with FMTP regulation and according to PENS project. Malta will comply within 2016.

The implementation of both regulation COTR and FMTP shows a wide delay for most of BLUE MED FAB members, only Albania (both IR) and Cyprus (FMTP IR) have already applied the mandatory requirements.

Electronic Dialogue implementation is fully in line with European deadline.

#### Assessment of ATC-Central objectives

Collaborative Flight Planning is already planned by all FAB members within the scheduled timeframe.

STAM is only applicable to Italy that is planning the completion in time.

Interactive Rolling NOP shows no delay, although Greece has not yet planned its implementation.

#### Assessment of CNS objectives

AGDL implementation is planned by FAB members that are waiting for the amendments of the regulation.

#### ■ Assessment of Common Implementation objectives

All the objectives are planned and some of them already completed. No risk of delay.

#### 3. Danube FAB (BG-RO)

#### Assessment of the ATC-ATC objectives

ESSIP objectives that relate to an interface between one ATC centre and another (ATC-ATC) are fully harmonised within DANUBE FAB, being Partly Completed by both ANSPs.

Electronic Dialogue as Automated Assistance to Controller during Coordination and Transfer is implemented in both ATM systems, the limiting factor for the operational use being the level of preparedness in the neighbouring countries.

Both BULATSA and ROMATSA data networks are IPv4 capable for international services and migration has already been performed with all adjacent ANSPs. FMTP message exchange over IPv6 was completed at FAB level.

Both BULATSA and ROMATSA ATM systems are capable of sending and receiving a complete set of basic OLDI messages, and support the transfer of communication messages and co-ordination dialogue messages. The full implementation of ITY-COTR is planned.

Both BULATSA and ROMATSA data communication networks have got the FMTP capability and the common flight message transfer protocol was implemented at FAB level.

#### ■ Assessment of the ATC-Central objectives

Harmonization of ESSIP objectives that relate to an interface between ATC and centralised systems (such as the CFMU or EAD) is worked within DANUBE at the ANSP level.

Collaborative flight planning is completed by BULATSA, with ROMATSA planning to complete in 2015.

The automatic receiving and processing of ICAO FPL/RPL IFPS data is already in use in the BULATSA and ROMATSA ATM systems. Also, both ATM systems are able to provide AFP messages in ADEXP format and needs to be validated by the NM; actions are in progress for full implementation of the objective by 2015.

Both ANSPs plan to implement the interactive rolling NOP by the end of 2016.

Implementation of Short Term ATFCM Measures - phase 1 is not applicable in Bulgaria and Romania.

#### Assessment of CNS objectives

Both ANSPs plan to implement in due time the initial ATC air-ground data link services above FL195. A harmonised FAB approach towards DLS implementation has been established through the TEN-T activities. The studies have developed efficient procedures and provide an early insight into how the DLS will affect ATCO workload and how this translates into available airspace capacity. The execution of a real time simulation and the preparation of a supporting safety case are currently in progress, and will be used during the implementation of air-ground data link in DANUBE FAB.

#### Assessment of the Common Implementation objectives

ESSIP objectives that relate to an achievement of a harmonised technical performance of ATM functions are harmonised within DANUBE FAB.

Implementation of automated support for conflict detection and conformance monitoring is completed by both ANSPs. Night Free Route at state level was implemented in both states in November 2013. An intermediate expansion step will take place in 2015, with night-time FRA at DANUBE FAB level planned for introduction in Q1 2016. Depending on the outcome of the TEN-T studies, phase 3 (extension to up to 24/7 operations) is planned for 2019/2020.

The implementation of the Advanced Airspace Management is Partly Completed by BULATSA with plans to be fully completed by the end of 2015, while ROMATSA completed the implementation at the end of 2014.

#### 4 DK/SE FAB (DK-SE)

#### ■ Assessment of the ATC-ATC objectives

The interface in DK-SE FAB are fully harmonised and the ANSPs have the same version of the system Topsky.

Electronic dialogue as Automated Assistance to Controller during Coordination will be implemented according to plan. (ATC-17)

Migrate ground international or regional X.25 data networks or services to the Internet Protocol (IP) are expected to be fully implemented at FAB level early 2015. LFV are working on migration of international services from X.25 to IP. (COM09) Implementation of ground-ground automated co-ordination processes will be operational in 2015 at FAB level. It has been technically possible since 04/2014. LFV will implement operationally in 2015. (ITY-COTR)

Flight message transfer protocol (FMTP) was implemented technically in Topsky systems 2013. Operational implementation will be a gradual transition, starting with Naviair in 2014 and followed by LFV. Full implementation at FAB level will be in 2015. (ITY-FMTP)

#### Assessment of the ATC-Central objectives

Collaborative flight planning will be implemented according to plan. (FCM03)

Denmark and Sweden are not in the applicability area, and will not implement Short Term ATFCM Measures. (FCM04)

The ANSPs has not identified a need for implementation of interactive rolling NOP. (FCM05)

#### Assessment of CNS objectives

Initial ATC air-ground data link services above FL-285 are planned to become operational in 2015. (ITY-AGDL)

#### Assessment of the Common Implementation objectives

Advanced Airspace Management is implemented at FAB level. However the ANSPs have not implemented SLoAs with non-operational value or needs. (AOM-21)

Free route airspace is implemented in DK-SE FAB for FL285 and above. (AOM19)

Automated support for conflict detection and conformance monitoring are fully implemented in the Topsky system. (ATC-12)

#### 5. FABCE (AT – BA – CZ – HR – HU – SK – SI)

#### Assessment of the ATC-ATC objectives

The ESSIP objectives relating to an interface between one ATC centre and another (ATC-ATC) are subject to FAB projects to harmonise implementation of COTR and OLDI. COTR status is late due to delayed implementation of AGDL throughout the FAB except AT. The principle of Electronic Dialogue as Automated Assistance to Controller during Coordination and Transfer has been technically implemented in the majority of the ATM systems. Nevertheless, some of these systems will be upgraded / replaced during the next years until 2018 (CZ, SI, SK), thus not making the implementation possible or justifying an earlier operational usage. AT still has to run the legacy ATM system in parallel to COOPANS until the full integration of Local Approach Units by end of 2015, preventing full OLDI deployment till then.

All data networks within FABCE are Internet Protocol (IP) capable for international services. Minor adaptations to IPv6 – especially for MIL ANSPs depend on the budgetary situation. FMTP message exchange over IPv6 was completed at FAB level.

#### Assessment of the ATC-Central objectives

ESSIP objectives that relate to an interface between ATC and centralised systems (CFMU and EAD) are tackled at ANSP level. Nonetheless, FCM04 (STAM) is subject to a common FABCE project, and even not being in the applicability area for STAM Phase 1, FABCE will run a regional STAM live trial in September 2015. The implementation of interactive rolling NOP elements is commonly planned.

#### Assessment of CNS objectives

Due to the expected postponement of the existing Air-Ground Datalink mandate by the European Commission at least to 2018, most of FABCE -partners have stopped their plans to implement AGDL for the time being, except AT where AGDL has been put into operation in Oct. 2014.

Surveillance performance and interoperability is subject to a common FABCE project, tackling common principles of sharing SUR-data, which is as such a common practice within FABCE already now.

#### Assessment of the Common Implementation objectives

The FAB CE Free Route Airspace Project in the framework of Strategic Operational Planning is a core project within FAB CE, covering the whole FAB CE airspace. ESSIP contributors for FRA are the objectives AOM19, AOM21 and ATC17 to reach the RP2 environmental target.

A clear roadmap for FRA is in place, developing cross border DCT applications H24 to full FRA. HU started with H24 full FRA in Feb. 2015. For the time being, ATC12 / MTCD is not considered to be main enabler for Free Route implementation; individual deployments are dependent on ATM System developments and either completed or planned by most of the ANSPs (exemption SI).

#### 6. FABEC (BE – FR – DE – LU – NL - CH)

#### Assessment of the ATC-ATC objectives

All 4 FAB relevant ATC to ATC objectives have either been planned or have already been implemented, fully or partly, within FABEC. The exception is for:

- France where there is delay on 3 of the 4 objectives (COM09, COTR, FMTP), caused by the progress plan for DSNA's next generation ATM system.
- Besides, it is noted that Belgocontrol reports "no plan" for the COTR objective because the implementation of the ground-ground automated coordination processes has not yet been put in place with all neighbours.

#### Assessment of ATC-Central objectives

FCM03 (Collaborative Flight Planning) is already partly implemented in FABEC and plans are in place to achieve full implementation.

FCM04 (Short Term ATFCM Measures) is already partly implemented in FABEC except in Germany where there are no plans to implement procedures, which support STAM phase 1.

The implementation of FCM05 (Interactive Rolling NOP) is already partly implemented and plans exist to have the full implementation on time.

#### Assessment of CNS objectives

The regulatory requirement AGDL (Initial ATC air-ground Datalink above FL285) has been fully implemented in the applicable FABEC airspace, except in France.

In France a revised scenario for phased deployment has been developed jointly with the European Commission, EUROCONTROL and DSNA Clients (airlines). Full capability in France will be achieved with the deployment of the new French ATM systems (2016-2018).

#### Assessment of Common Implementation objectives

The FABEC ANSPs are working together on the implementation of AOM19 (Advanced Airspace Management) in the frame of the FABEC project ATFCM/ASM.

All FABEC ANSPs have reported (partly) completed except for DFS:

"DFS, as main service provider, and the German military have implemented an improved ASMA/ATFCM process as part of the civil-military integration in Germany. Due to the fact that DFS is not using the Eurocontrol CIAM (Collaboration Interface for Airspace Managers) system the interoperability with the ADR (Airspace Data Repository) is not planned to be implemented. Therefore the status of the objective has to be set to «No Plan»".

The FABEC ANSPs are working together on the implementation of AOM21 (Free Route Airspace) in the frame of the FABEC project FRA.

Skyguide, DFS and MUAC report to have already partly completed with the implementation of some direct routings.

The implementation of ATC12 (automated support for conflict detection and conformance monitoring) is very much dependent on the capabilities of the provider's (legacy) ATM systems.

Both DFS and DSNA report "late" on this objective. DFS implementation is pending ITEC based system upgrade for all ACCs but UAC Karlsruhe where the capabilities are available. Similarly, DSNA's implementation is dependent of the 4-Flight system upgrades for all ACCs but Brest and Bordeaux, where the legacy ATM system will be upgraded in 2015. Belgocontrol has to make a new plan as the validation tests of the MTCD tool in the legacy system were unsuccessful. LVNL, MUAC and Skyguide have partly completed.

#### 7. NEFAB (EE – FI – LV - NO)

#### Assessment of the ATC-ATC objectives

- ATC17: This is considered to be on time (due 12/2018), although there is no exact plan for Avinor who is presently conducting the ATM-system renewal project and accurate dates are not available.
- **COM09:** All four ANSPs are considered to have technical readiness in order to replace the X.25 with TCP/IP. NEFAB should take more active role to carry out the remaining integration between ANSPs, also with DK/SE FAB which is largely surrounded by NEFAB.

- **COTR:** The Objective is considered to be completed except for Avinor who is presently conducting the ATM-system up-date project.
- FMTP: Avinor and LGS are completed; EANS and Finavia are late due to the COM09 delay.

#### Assessment of ATC-Central objectives

- **FCM03:** The Objective is considered to be on time.
- **FCM04:** Not applicable for NEFAB.
- **FCM05:** The Objective is considered to be on time.

#### Assessment of CNS objectives

■ **AGDL:** The Objective is late due to various reasons, the major reason being the known European-wide technical A/G link problems.

#### Assessment of Common Implementation objectives

- ATC12: The Objective is considered to be completed except for Avinor who is presently conducting the ATM-system up-date project.
- FMTP: Avinor and LGS are completed; EANS and Finavia are late due to the COM09 delay.

#### 8. SW FAB (ES - PT)

#### Assessment of the ATC-ATC objectives

Implementation status of ATC-ATC objectives has small changes with respect to 2013. Although the progress can be considered slow, completion of ATC-ATC objectives is progressing mostly aligned within the SW FAB. Objective ATC17 is planned to be implemented on time but the others will be delayed.

COM09 full implementation is expected by the end of 2015 in Spain and Portugal because the overall NAV migration of X.25 data to IPv6 is still in course inside the PENS Framework (both ANSPs have subscribed to PENS services). Concerning the Portuguese Military Authority, the transition is planned, but it will be dependent on Ministry of Defence budgetary approval.

The objective implementation will be deployed in consecutive phases in the Portuguese ANSP both (basic and advanced) by 2015, and with the Spanish ANSP by 2016. Similarly, ITY-FMTP objective implementation over IPv6 is currently being prepared and planned for December 2015 to fulfil the Commission Implementing Regulations (EU) No 633/2007 and 283/2011. NAV and ENAIRE deployed FTMP over IPv4 in June 2014 and plan to fully deploy the FMTP exchanges over IPv6 in 2015.

#### Assessment of ATC-Central objectives

Both Spanish and Portuguese ANSPs have implemented almost all the FCM03 SLoAs. The remaining ones are either partially developed or pending on NM trials. In the case of NAV Portugal, there are two SLoAs planned for delayed implementation: ASP 09 (Provide AFP message for a change of requested cruising level) planned by end 2017, and ASP11 (Use IFPLID in all messages to ETFMS) which are partially developed and planned to be completed in 2015-2016.

Both FCM04 and FCM05 have risk of delay because of SLoAs not yet planned in Spain. Portugal is not in the FCM04 applicability area. In Spain, STAM phase 1 trial is being implemented in Barcelona ACC. Although the first outcomes from the trial are satisfactory, the used occupancy parameters still need some refinement. Therefore the implementation is still pending final decision. In addition, the following short term ATFCM measures are already used by ENAIRE in tactical operations: Rerouting, Flight Level Capping, MIT (Miles in trail), Dynamic Configurations, Cherry Picking, Flow (Terminal rerouting) and Capacity Management (Military negotiation) according to the specific needs per ACC.

Although the FCM05 implementation is not planed in Spain yet, the objective has been considered at FAB level by military stakeholders within SW FAB Common Plan. In Portugal, the first steps of the interactive Rolling NOP are already implemented through the deployment of the NOP portal. Further information and data will be planned for deployment to support the Interactive approach to the NOP

#### Assessment of CNS objectives

Resembling the COTR objective, ITY-AGDL implementation will be deployed in consecutive phases in ENAIRE by 2016 and in NAV by 2017.

#### ■ Assessment of Common Implementation objectives

The AOM objectives are planned to be implemented on time with the exception of AOM19 in Spain. Even both CIAM phase 1 and phase 2 are being used in ENAIRE in accordance with the procedures, there is no plan for the implementation of interoperability of local system with ADR, the improvement of the accuracy of airspace booking and the automated ASM support system.

Concerning ATC12, ENAIRE and NAV have planned the implementation of MTCD functionality by before the end of 2019.

#### 9. UK-IR FAB (IE - UK)

#### ■ Assessment of the ATC-ATC objectives

- ATC17: This objective is not applicable to Ireland and therefore not a FAB objective.
- **COM09:** The objective has been achieved by the UK and will be implemented in Ireland by end 2015.
- **COTR:** This objective is being advanced at a FAB level and while implemented in Ireland it will be complete in the UK by end of 2016.
- **FMTP:** Late at FAB Level. Completed by the UK and will be completed by Ireland in 2015.

#### Assessment of ATC-Central objectives

- **FCM03:** This objective has been implemented by Ireland and partially implemented by UK with final implementation planned for 2020.
- **FCM04:** Ireland is not part of the implementation area.
- **FCM05:** This objective is being advanced at a FAB level including upgrades to the ASM systems. The deadline will be achieved.

#### Assessment of CNS objectives

■ **AGDL:** Implemented by both ANSPs.

#### ■ Assessment of Common Implementation objectives

- ATC12: Objective implemented in Ireland and partly completed by the UK. The complete objective will be implemented at FAB level by 2020. The IFACTS system in the UK will meet this objective.
- **AOM19:** Partly completed by both ANSPs, progress fully coordinated between both ANSPs and 2016 deadline will be achieved.
- **AOM21:** FRA has been implemented in Ireland only. Planning is under way for a 2017 implementation in the UK.

#### 10. Conclusion

**Table 5** (FAB progress assessment) indicates the implementation progress for the four main categories of ESSIP objectives per FAB, based on expert judgement of the LSSIP information originating from ANSPs.

The progress under the group Common Implementation Objectives (AOM21, AOM19 and ATC12, which represent an indication of the harmonised technical performance of ATM functions) is satisfactory across the nine FABs. The status of AOM21 illustrates the strong will among ANSPs to provide the Free Route Airspace capability.

The other three categories of ESSIP objectives show a much more diverse status. ANSPs report a higher degree of delays and risk of delays within all these categories. The centre-to-centre integration capabilities that will be implemented are indicated through the ATC-ATC objectives. Considerable risk for late implementation in the majority of the FABs exists for objectives COM09, COTR and FMTP.

The category ATC-Central objectives represent the ATS unit's integration to centralised European capabilities. Even if those objectives have, in some cases, been implemented by the ANSPs unilaterally, particularly FCM03 carries risk for late implementation (in reality offset by the fact that the required date for full operational capability has been moved out as well). It should be noted that this group of objectives will now be aligned with the content of and timelines for the Preliminary Deployment Program.

The CNS objective (ITY-AGDL) measures harmonised deployment of CNS infrastructure for the benefit of the airspace user. The uncertainty around the final technical solution for this objective, the complexity of its realisation and the recent establishment of a later due date for the realisation of this capability calls for close monitoring of this objective at the next LSSIP reporting point.

A number of the above ESSIP objectives form part of the Preliminary Deployment Program under the responsibility of the Deployment Manager (ex. COM09, COTR and FMTP). One of the assumed reasons for delayed implementation progress is that it is attractive for investors to position those enhancements as part of a proposal under INEA's annual calls.

REC-2014-06 (equal to REC-2013-15)

The ANSPs within a FAB should coordinate their system renewal and capability evolution more closely in order to deliver larger scale performance improvements to customers.

**FAB ANSPs** 



# ANNEX 1 - SUMMARY OF RECOMMENDATIONS IN ESSIP REPORT 2014 AND FOLLOW UP OF RECOMMENDATIONS IN ESSIP REPORT 2013

Summary of recommendations in ESSIP Report for 2014

Reference number	Recommendation 2014	Ownership
REC-2014-1	To increase implementation activities related to SES and SESAR improvements with support of EUROCONTROL.	BA, GE
REC-2014-2	Local Stakeholders that declared delays in implementation of FCM01, AOP04.1, SAF10, INF04, NAV03, AOP03, ENV01, ITY-AGDL, ITY-ADQ, COM09, COM10, ITY-FMTP and ITY-COTR, to take corrective measures to reduce the implementation delays.	Local Stakeholders
REC-2014-3 (equal to REC-2013-2)	Define corrective measures to address delays in implementation of interoperability objectives.	EC
REC-2014-4	ESSIP objectives SRC-SLRD, SRC-RLMK and ATCO2.2 should be proposed as 'Achieved' for the ESSIP Plan Edition 2015.	WPC.02 T006
REC-2014-5 (equal to REC-2013-13)	Investigate the progress of ACASII equipage as mandated in Commission Regulation (EU) 1332/2011, in particular the issues related to operators operational approval of this technology.	EASA
REC-2014-6 (equal to REC-2013-13)	The ANSPs within a FAB should coordinate their system renewal and capability evolution more closely in order to deliver larger scale performance improvements to customers.	FAB ANSPs

#### Follow-up of recommendations in ESSIP Report for 2013

Reference number	Recommendation 2013	Ownership	Follow up 2014
REC-2013-1	Local Stakeholders that declared delays in implementation of FCM01, SRC-RLMK, SRC-SLRD, AOP04.1, SAF10, INF04, NAV03, AOP03, ATC02.2, ENV01, ITY-AGDL, ITY-ADQ, COM10, FCM03 and ITY-COTR, to take corrective measures to reduce the implementation delays.	Local Stakeholders	See individual State replies in Chapter 5 of the State LSSIP 2014 documents: http://www.eurocontrol.int/articles/lssip
REC-2013-2	Define corrective measures to address delays in implementation of interoperability objectives.	EC	Recommendation distributed to EC through official letter dated 31/07/2014
REC-2013-3	ESSIP objectives AOM20, AOP01.2 and SRC-CHNG should be proposed as 'Achieved' for the ESSIP Plan Edition 2014.	WPC.02 T006	Implemented in ESSIP Plan Edition 2014.
REC-2013-4	Ensure better planning reliability at local level.	All States	See individual State replies in Chapter 5 of the State LSSIP 2014 documents: http://www.eurocontrol.int/articles/lssip
REC-2013-5	The ANSPs should ensure synchronised system evolution between neighbouring States.	All ECAC ANSPs	See individual State replies in Chapter 5 of the State LSSIP 2014 documents: http://www.eurocontrol.int/articles/lssip
REC-2013-6	To provide deployment support assistance to BA, GE and SI to increase the level of their local implementation activities to comply with the Level 3 of the European ATM Master Plan.	EUROCONTROL DPS	Recommendation distributed to Support to States activity in Directorate pan European Sky

Reference number	Recommendation 2013	Ownership	Follow up 2014
REC-2013-7	Closely monitor implementation of pre-requisites for AF2 and AF6 to ensure proper risk management in case of delays in implementation.	EC	Recommendation distributed to EC through official letter dated 31/07/2014
REC-2013-8	Investigate the possibility of supporting the national regulatory authorities in performance of their tasks.	EC	Recommendation distributed to EC through official letter dated 31/07/2014
REC-2013-9	Follow up EUROCONTROL letter 23/09/2013 to the EC on responsibility for ADQ implementation with particular focus on handling of NSA responsibilities vs ANSP responsibilities. An impact assessment of the fact that the majority of stakeholders have not been able to comply with the SLoA deadlines that were due in 2013 should be initiated.	EUROCONTROL DPS	Since origination of the letter EC has held number of workshops with Stakeholders to discuss ADQ implementation. Therefore, recommendation is closed.
REC-2013-10	Follow up EUROCONTROL letter 23/09/2013 to the EC on ways to ensure early development of required guidance and specifications, in order to safeguard the progress of the ADQ implementation.	EUROCONTROL DPS	Since origination of the letter EC has held number of workshops with Stakeholders to discuss ADQ implementation. Therefore, recommendation is closed.
REC-2013-11	To consider ESSIP objective ATC07.1 as an airport related objective.	WPC.02 T006	Recommendation will be implemented in ESSIP Plan Edition 2015.
REC-2013-12	To consider the EFS and initial DMAN as a candidates to be included in ESSIP.	WPC.02 T006	Recommendation will be implemented in ESSIP Plan Edition 2015.
REC-2013-13	Investigate the progress of ACASII equipage as mandated in Commission Regulation (EU) 1332/2011, in particular the issues related to operators operational approval of this technology.	EASA	Recommendation distributed to EASA through working level arrangements.  Carried over to 2014 edition of the report.
REC-2013-14	To survey ANSPs in order to determine a number of operational OLDI links between adjacent ACC units and messages being exchanged between these units.	EUROCONTROL DPS	Recommendation completed through COM SG/FMTP database.
REC-2013-15	The ANSPs within a FAB should coordinate their system renewal and capability evolution more closely in order to deliver larger scale performance improvements to customers.	FAB ANSPs	See individual State replies in Chapter 5 of the State LSSIP 2014 documents: http://www.eurocontrol.int/articles/lssip  Recommendation is carried over to 2014 edition of the report.

# ANNEX 2 - PROGRESS OF 'ACTIVE' ESSIP OBJECTIVES IN 2014

#### How to read

ATM Master Plan - presents OI steps and enablers linked to ESSIP objective

PCP related AFx – indicates if the ESSIP objective implementation is linked to PCP ATM functionality

(months) – indicates the delta between planned achievement date of ESSIP objective and estimated achievement date as reported by the Stakeholders

Implementation progress:

On Time	Implementation progressing on time. No delays expected.
Late	Estimated achievement date beyond ESSIP Panning date. Delayed implementation.
Risk of Delay	Estimated achievement date is in line with ESSIP FOC date but there are risks that could jeopardise timely implementation of the ESSIP objective. In exceptional cases, "Risk of Delay" status can be attributed to objectives that are estimated to be achieved beyond ESSIP FOC date. This is where experts decide that current delays will not impact the overall implementation. These intermediate delays can be max up to 12 months beyond ESSIP FOC. If more than 12 months, objective has to be declared as "late".

**Overview of progress –** shows overview of implementation in the year of reporting and previous year. It indicates the differences in what is reported in the applicability area, which are the last implementers of the objective and when the objective achievement will be reached. -No data- is indicated in the table (field "Planned Achievement") every time when there is no sufficient information provided by Stakeholders to estimate when objective may reach 80% achievement in ECAC area (due mainly to "no plan" status).

**Stakeholders matters** - Highlights the progress (or lack of progress) of objective or specific SLoAs for the different stakeholder categories. This information is used at European level to identify possible difficulties or reluctance to implement the objective or complete the action, that are specific to a given stakeholder category. In addition, any other specific stakeholder issue important for implementation of the objective (E.g. military) is addressed in this section.

**Main reasons for delay** - Highlights main reasons reported by stakeholders in LSSIP L2 for their delays (E.g.: no budget allocated, not a priority, no operational benefit at National level, technical difficulties, prerequisite not available, lack of skilled resources, lack of coordination with neighbouring countries, etc).

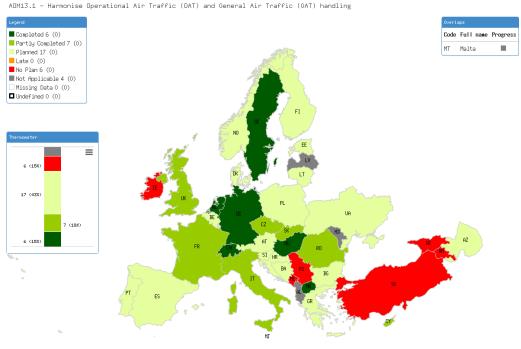
**CAPEX RP2 Performance Plans –** indicates if at least one ANSP within a FAB has included the project related to ESSIP objective in the RP2 Performance Plan. This information is extracted from Section 2 - Investments and Annex D "ANSPs Investment plans" of the RP2 Performance Plans adopted by the European Commission in accordance with the EC Decision 2015/348.

Recommendation to stakeholders or expected evolution of the objective - Provides recommendation/remedial action to stakeholder (if any). If objective is expected to evolve in 2015, it is explained in this field.

**Map** – indicates implementation status per State in the applicability area. In most of the cases State map is included, but there are also few examples of ANSP map being used (e.g. ATC15).

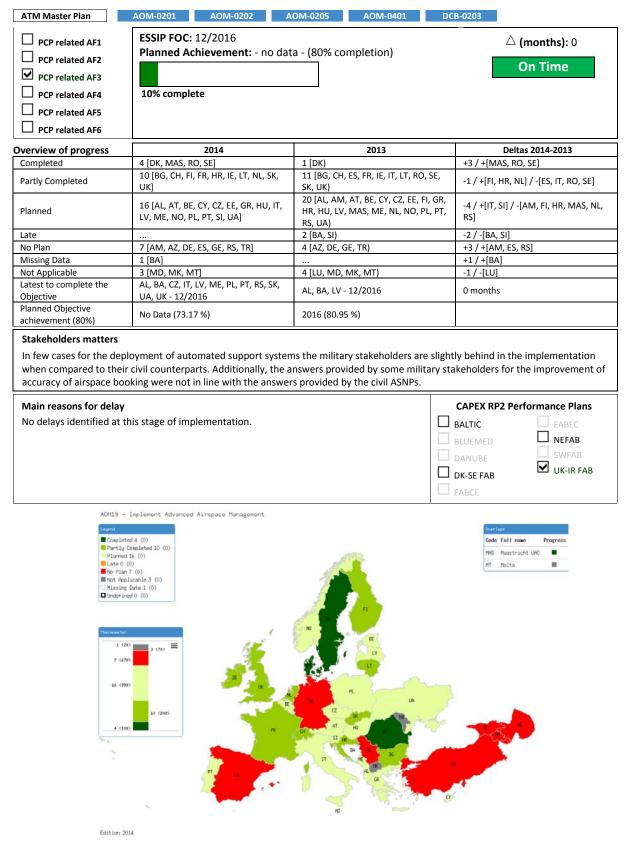
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ATM Master Plan	AOM-0202 AOM-0301		
PCP related AF1	<b>ESSIP FOC:</b> 12/2018		$\triangle$ (months): 0
PCP related AF2	Planned Achievement: - no dat	a - (80% completion)	
PCP related AF3			On Time
PCP related AF4	15% complete		
	15% complete		
PCP related AF5			
PCP related AF6			
verview of progress	2014	2013	Deltas 2014-2013
Completed	6 [CH, DE, HU, MK, NL, SE]	5 [CH, DE, HU, NL, SE)	+1 / +[MK]
Partly Completed	7 [CY, CZ, FR, IT, RO, SK, UK]	6 [AZ, CY, FR, RO, SK, UK)	+1 / +[CZ, IT] / -[AZ]
Planned	17 [AT, AZ, BA, BE, BG, DK, EE, ES, FI,	19 [AT, BA, BE, BG, CZ, DK, EE, ES, FI,	-2 / +[AZ] / -[CZ, IT, MK]
No Dlan	GR, HR, LT, NO, PL, PT, SI, UA]	GR, HR, IT, LT, MK, NO, PL, PT, SI, UA)	0
No Plan Not Applicable	6 [AM, GE, IE, ME, RS, TR] 4 [AL, LV, MD, MT]	6 [AM, GE, IE, ME, RS, TR) 6 [AL, LU, LV, MAS, MD, MT)	-2 / -[LU, MAS]
Latest to complete the	AT, AZ, BA, CZ, FI, FR, IT, LT, LV, PL,	AT, BA, CZ, FI, FR, IT, LT, LV, RO, SI, SK,	
Objective	RO, SI, SK, UA, UK - 12/2018	UA, UK - 12/2018	0 months
Planned Objective	No Data (75 %)	No Data (71.43 %)	
achievement (80%)	140 Data (75 76)	140 Bata (71.43 70)	
•	s from 13 States declared the revision the revision within the FOC and 9 MIL		•
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completed and 12 plans implementation exist m under review. With rega completed or partly con Main reasons for delay	the revision within the FOC and 9 MIL ainly due to negligible or no OAT traff ards to the migration of the military ac appleted, 11 plan the implementation v	stakeholders this objective is not app ic, OAT/GAT rules not based on EURO eronautical information to EAD 8 mil s within FOC. However 16 MIL stakehold	clicable and for 4 no plans for DAT or this objective being still stakeholders declared it as ders find it not applicable.  CAPEX RP2 Performance Plans BALTIC FABEC NEFAB DANUBE SWFAB
completed and 12 plan implementation exist m under review. With rega completed or partly con Main reasons for delay	the revision within the FOC and 9 MIL ainly due to negligible or no OAT traff ards to the migration of the military ac appleted, 11 plan the implementation v	stakeholders this objective is not app ic, OAT/GAT rules not based on EURO eronautical information to EAD 8 mil s within FOC. However 16 MIL stakehol	clicable and for 4 no plans for DAT or this objective being still stakeholders declared it as ders find it not applicable.  CAPEX RP2 Performance Plans BALTIC FABEC NEFAB DANUBE SWFAB
completed and 12 plans implementation exist m under review. With rega completed or partly con Main reasons for delay	the revision within the FOC and 9 MIL ainly due to negligible or no OAT traff ards to the migration of the military ac appleted, 11 plan the implementation v	stakeholders this objective is not app ic, OAT/GAT rules not based on EURO eronautical information to EAD 8 mil s within FOC. However 16 MIL stakehole	capea and for 4 no plans for this objective being still takeholders declared it as ders find it not applicable.  CAPEX RP2 Performance Plans BALTIC FABEC NEFAB SWFAB ANUBE
completed and 12 plans implementation exist m under review. With rega completed or partly con Main reasons for delay No delays identified at t	the revision within the FOC and 9 MIL ainly due to negligible or no OAT traff ards to the migration of the military acompleted, 11 plan the implementation whis stage of implementation.	stakeholders this objective is not app ic, OAT/GAT rules not based on EURO eronautical information to EAD 8 mil s within FOC. However 16 MIL stakehold	clicable and for 4 no plans for DAT or this objective being still stakeholders declared it as ders find it not applicable.  CAPEX RP2 Performance Plans BALTIC FABEC BLUEMED NEFAB DANUBE UK-IR FAI
completed and 12 plant implementation exist m under review. With rega completed or partly con Main reasons for delay No delays identified at t	the revision within the FOC and 9 MIL ainly due to negligible or no OAT traff ards to the migration of the military ac appleted, 11 plan the implementation v	stakeholders this objective is not app ic, OAT/GAT rules not based on EURO eronautical information to EAD 8 mil s within FOC. However 16 MIL stakehold	CAPEX RP2 Performance Plans BALTIC FABEC BLUEMED NEFAB DANUBE DK-SE FAB FABCE
completed and 12 plans implementation exist munder review. With regacompleted or partly con  Main reasons for delay  No delays identified at t	the revision within the FOC and 9 MIL ainly due to negligible or no OAT trafferds to the migration of the military achieved, 11 plan the implementation with the stage of implementation.	stakeholders this objective is not app ic, OAT/GAT rules not based on EURO eronautical information to EAD 8 mil s within FOC. However 16 MIL stakehold	clicable and for 4 no plans for DAT or this objective being still stakeholders declared it as ders find it not applicable.  CAPEX RP2 Performance Plans BALTIC FABEC NEFAB SWFAB DANUBE DK-SE FAB FABCE
completed and 12 plant implementation exist m under review. With regacompleted or partly con  Main reasons for delay  No delays identified at t	the revision within the FOC and 9 MIL ainly due to negligible or no OAT trafferds to the migration of the military achieved, 11 plan the implementation with the stage of implementation.  The revision within the FOC and 9 MIL ainly due to the migration of the military achieved in the migration of the military achieved in the migration of the military achieved in the migration of the migration	stakeholders this objective is not app ic, OAT/GAT rules not based on EURO eronautical information to EAD 8 mil s within FOC. However 16 MIL stakehold	CAPEX RP2 Performance Plans BALTIC FABEC BLUEMED SWFAB DANUBE DK-SE FAB FABCE
completed and 12 plans implementation exist munder review. With regacompleted or partly con  Main reasons for delay  No delays identified at t	the revision within the FOC and 9 MIL ainly due to negligible or no OAT trafferds to the migration of the military achieved, 11 plan the implementation with the stage of implementation.  The revision within the FOC and 9 MIL ainly due to the migration of the military achieved in the migration of the military achieved in the migration of the military achieved in the migration of the migration	stakeholders this objective is not app ic, OAT/GAT rules not based on EURO eronautical information to EAD 8 mil s within FOC. However 16 MIL stakehold	CAPEX RP2 Performance Plans BALTIC FABEC BLUEMED SWFAB DANUBE DK-SE FAB FABCE  Code Full name Progress
completed and 12 plant implementation exist m under review. With regacompleted or partly con  Main reasons for delay  No delays identified at t  AOM13.1 - Ha  Completed 6 (in Partly C	the revision within the FOC and 9 MIL ainly due to negligible or no OAT trafferds to the migration of the military achieved, 11 plan the implementation with the stage of implementation.  The revision with the implementation with the implementation with the implementation with the implementation.	stakeholders this objective is not app ic, OAT/GAT rules not based on EURO eronautical information to EAD 8 mil s within FOC. However 16 MIL stakehold	CAPEX RP2 Performance Plans BALTIC FABEC BLUEMED SWFAB DANUBE DK-SE FAB FABCE  Code Full name Progress
completed and 12 plant implementation exist m under review. With regacompleted or partly con  Main reasons for delay No delays identified at t  ADM13.1 - Ha  Looked Completed 6 ( Partly Comple Planned 17 (0) Looked No Plan 6 (0) Not Applicable Missing Data	the revision within the FOC and 9 MIL ainly due to negligible or no OAT trafferds to the migration of the military achieved, 11 plan the implementation with this stage of implementation.  The revision with the implementation of the military achieved in the implementation of the military achieved in the implementation of the implementation.  The revision within the FOC and 9 MIL and 10 military achieved in the implementation of the imple	stakeholders this objective is not app ic, OAT/GAT rules not based on EURO eronautical information to EAD 8 mil s within FOC. However 16 MIL stakehold	CAPEX RP2 Performance Plans BALTIC FABEC BLUEMED NEFAB DANUBE DK-SE FAB FABCE  COMPAN TO THIS OBJECTIVE being still stakeholders declared it as ders find it not applicable.  CAPEX RP2 Performance Plans FABCE SWFAB DK-SE FAB FABCE  Code Full name Progress
completed and 12 plant implementation exist m under review. With regacompleted or partly com  Main reasons for delay  No delays identified at t  AOM13.1 - Ha  Loon Completed 6 ( Partly Completed 6 ( Partly Completed 6 ( No Planed 17 ( Late 0 (0) No Plan 6 (0) No Plan 6 (0)	the revision within the FOC and 9 MIL ainly due to negligible or no OAT trafferds to the migration of the military achieved, 11 plan the implementation with this stage of implementation.  The revision with the implementation of the military achieved in the implementation of the military achieved in the implementation of the implementation.  The revision within the FOC and 9 MIL and 10 military achieved in the implementation of the imple	stakeholders this objective is not app ic, OAT/GAT rules not based on EURO eronautical information to EAD 8 mil s within FOC. However 16 MIL stakehold	CAPEX RP2 Performance Plans BALTIC FABEC BLUEMED NEFAB DANUBE DK-SE FAB FABCE  COMPLETE:  COMPLETE:  CAPEX RP2 Performance Plans SWFAB DK-SE FAB COMPLETE:  COMPLETE:



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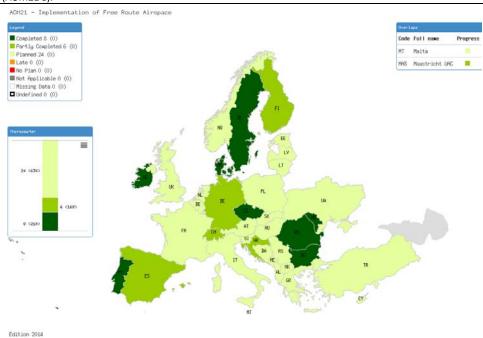
#### **AOM19 - Implement Advanced Airspace Management**



### **AOM21 - Implementation of Free Route Airspace**

ATM Master Plan	AOM-0401 AOM-0402		
PCP related AF1 PCP related AF2 PCP related AF3 PCP related AF4 PCP related AF5 PCP related AF6	Planned Achievement: 12/2017 Planned Achievement: 12/2017 21% complete	7 (80% completion)	△ (months): 0 On Time
Overview of progress	2014	2013	Deltas 2014-2013
Completed	8 [BG, CZ, DK, IE, MD, PT, RO, SE]	6 [BG, DK, IE, PT, RO, SE)	+2 / +[CZ, MD]
Partly Completed	6 [CH, DE, ES, FI, HR, MAS]	2 [CH, MAS)	+4 / +[DE, ES, FI, HR]
Planned	24 [AL, AT, BA, BE, CY, EE, FR, GR, HU, IT, LT, LV, ME, MK, MT, NL, NO, PL, RS, SI, SK, TR, UA, UK]	30 [AL, AT, BA, BE, CY, CZ, DE, EE, ES, FI, FR, GR, HR, HU, IT, LT, LV, MD, ME, MK, MT, NL, NO, PL, RS, SI, SK, TR, UA, UK)	-6 / -[CZ, DE, ES, FI, HR, MD]
Not Applicable		1 [LU)	-1 / -[LU]
Latest to complete the Objective	ES - 12/2020	AT, BA, BE, CH, CZ, DE, FR, GR, HR, IT, LT, MD, NL, PL, SI, SK, UK - 12/2017	36 months
Planned Objective achievement (80%)	2017 (97.37 %)	2017 (97.44 %)	0
	jective as completed, however 3 of th isfactory with the aim of this objectiv		
Main reasons for delay  No delays identified at th	is stage of implementation.		BALTIC FABEC BLUEMED NEFAB DANUBE SWFAB UK-IR FAB FABCE
Recommendation to stak	eholders or expected evolution of th	ne objective	

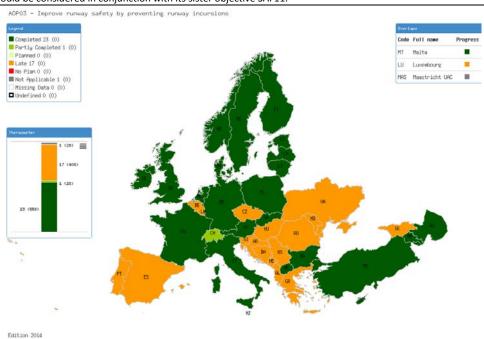
This objective will be reviewed and aligned with the content of the PDP. It will address full FRA (AOM21 b) and DCT aligned with PCP i.e. above FL310 (AOM21 a).



## AOP03 - Improve runway safety by preventing runway incursions

ATM Master Plan	AO-0101		
PCP related AF1 PCP related AF2 PCP related AF3 PCP related AF4 PCP related AF5 PCP related AF5	Planned Achievement: 12/2015 55% complete	(80% completion)	△ (months): +24  Late
Overview of progress	2014	2013	Deltas 2014-2013
Completed	23 [AM, AT, AZ, BG, CY, DE, DK, EE, FI, FR, IE, IT, LT, LV, MK, MT, NL, NO, PL, SE, SK, TR, UK]	23 [AM, AT, AZ, BG, CY, DE, DK, EE, FR, IE, IT, LT, LV, MK, MT, NL, NO, F SE, SK, TR, UK)	· I
Partly Completed	1 [CH]	2 [CH, GE)	-1 / -[GE]
Late	17 [AL, BA, BE, CZ, ES, GE, GR, HR, HU, LU, MD, ME, PT, RO, RS, SI, UA]	16 [AL, BA, BE, CZ, ES, GR, HR, HU, MD, ME, PT, RO, RS, SI, UA)	LU, +1/+[GE]
Not Applicable	1 [MAS]	1 [MAS)	0
Latest to complete the Objective	CZ, HU - 12/2018	HU - 12/2018	0 months
Planned Objective achievement (80%)	2015 (80.95 %)	2015 (83.33 %)	0
	m 17 States have reported this object the European Action Plan for Preventi ES, PT, RO, UA).		
- MIL stakeholders implementation slower than expected (ES, BE, RO, CZ, HR) - National Regulation awaiting for approval (PT, UA, BA) - Difficulty to implement RT phraseology in English (MD, HU) - Runway Safety team Framework Agreement still pending (RS, ME)		BLUEMED NEFAB  DANUBE SWFAB  DK-SE FAB  UK-IR FAB	
	seholders or expected evolution of the	•	

This objective should be considered in conjunction with its sister objective SAF11.



# AOP04.1 - Implement Advanced Surface Movement Guidance and Control System (A-SMGCS) Level1

ATM Master Plan	AO-0201		
PCP related AF1 PCP related AF2 PCP related AF3 PCP related AF4 PCP related AF5 PCP related AF5	ESSIP FOC: 12/2011 Planned Achievement: 12/2015 53% complete	i (80% completion)	△ (months): +48  Late
Overview of progress	2014	2013	Deltas 2014-2013
Completed	25 [EDDF, EDDM, EETN, EFHK, EGKK, EGSS, EHAM, EIDW, EKCH, ENGM, ESSA, EVRA, EYVI, LEMD, LFLL, LFPG, LFPO, LHBP, LKPR, LOWW, LSGG, LSZH, LTAC, LTAI, LTBA]	24 [EDDF, EETN, EFHK, EGKK, EGPH EGSS, EHAM, EIDW, EKCH, ENGM, ESSA, EVRA, EYVI, LEMD, LFPG, LFP LHBP, LKPR, LOWW, LSGG, LSZH, LTAC, LTAI, LTBA]	
Late	21 [EBBR, EDDL, EGCC, EGLL, EGPH, EPWA, LBSF, LEBL, LEPA, LFBO, LFML, LFMN, LGAV, LGTS, LIMC, LIML, LIPZ, LIRF, LPPT, LROP, UKBB]	21 [EBBR, EDDL, EDDM, EGLL, EPW LBSF, LEBL, LEPA, LFBO, LFLL, LFML LFMN, LGAV, LGTS, LIMC, LIML, LIP LIRF, LPPT, LROP, UKBB]	0 / +[EGCC EGPH] / -[EDDM LELL]
Not Applicable	1 [EDDB]	3 [EDDB, EGCC, ESSB]	-2 / -[EGCC, ESSB]
Latest to complete the Objective	EGLL - 12/2018	EDDL - 12/2017	12 months
Planned Objective achievement (80%)	2015 (85.11 %)	2015 (81.25 %)	6
Certification status of the		nted at different airports. Very ra	ng factor in reporting on REG actions is rely specific references or statements
LEBL, LIMC, LIML, LIRF, LF - Initial project plan in de - Business benefit of inve (EGPH) - Implementation planne needs (LBSF) - Lack of consistent provicespecially with regard to - Pending procurement (Lesystem under operation - Late joining to applicabi	velopment or revised (EGCC, EPWA) sting in Vehicle Locator Transmitter B d outside objective implementation t sions and/or regulations in all areas in aerodromes (LFBO, LFML, LFMN) GAV) all and technical evaluation (LGTS) lity area (LROP, UKBB)	Beacon being examined imeframe according to local mpacted by A-SMGCS,	CAPEX RP2 Performance Plans   BALTIC FABEC  BLUEMED NEFAB  DANUBE SWFAB  DK-SE FAB  FABCE  CAPEX RP2 Performance Plans  FABCC
	eholders or expected evolution of the	•	ita far Laval 2 implementation 15

A-SMGCS Level 1 is an important element of ATM functionality 2 of the PCP. It is also pre-requisite for Level 2 implementation. In order to meet the deadlines specified in PCP regulation, airports that are in the regulation applicability area have to speed up the deployment process. One of the ways to get more information on the A-SMGCS implementation is a dedicated training course in IANS.

AOPO4.1 - Implement Advanced Surface Movement Guidance and Control System (A-SMGCS) Level1

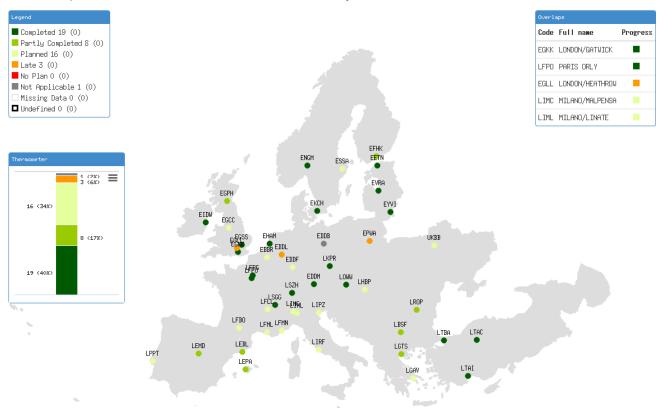


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# AOP04.2 - Implement Advanced Surface Movement Guidance and Control System (A-SMGCS) Level 2

ATM Master Plan	AO-0102		
PCP related AF1 PCP related AF2 PCP related AF3 PCP related AF4 PCP related AF5 PCP related AF5 PCP related AF6	Planned Achievement: 12/2017 Planned Achievement: 12/2017 40% complete	7 (80% completion)	△ (months): 0 On Time
Overview of progress	2014	2013	Deltas 2014-2013
Completed	19 [EDDM, EETN, EGKK, EGSS, EHAM, EIDW, EKCH, ENGM, EVRA, EYVI, LFPG, LFPO, LKPR, LOWW, LSGG, LSZH, LTAC, LTAI, LTBA]	20 [EDDM, EETN, EGKK, EGLL, EGPH, EGSS, EHAM, EIDW, EKCH, EVRA, EYVI, LFPG, LFPO, LKPR, LOWW, LSGG, LSZH, LTAC, LTAI, LTBA]	-1 / +[ENGM] / -[EGLL, EGPH]
Partly Completed	8 [EFHK, EGPH, LBSF, LEBL, LEMD, LEPA, LGTS, LROP]	2 [LGTS, LROP]	+6 / +[EFHK, EGPH, LBSF, LEBL, LEMD, LEPA]
Planned	16 [EBBR, EDDF, EGCC, ESSA, LFBO, LFLL, LFML, LFMN, LGAV, LHBP, LIMC, LIML, LIPZ, LIRF, LPPT, UKBB]	23 [EBBR, EDDF, EDDL, EFHK, ENGM, EPWA, ESSA, LBSF, LEBL, LEMD, LEPA LFBO, LFLL, LFML, LFMN, LGAV, LHBP LIMC, LIML, LIPZ, LIRF, LPPT, UKBB]	
Late	3 [EDDL, EGLL, EPWA]		+3 / +[EDDL, EGLL, EPWA]
Not Applicable	1 [EDDB]	3 [EDDB, EGCC, ESSB]	-2 / -[EGCC, ESSB]
Latest to complete the Objective	EDDL, EGLL - 12/2018	EDDL, EFHK, LFBO, LIMC, LIML, LIPZ, LIRF - 12/2017	12 months
Planned Objective achievement (80%)	2017 (91.49 %)	2017 (93.75 %)	0
Stakeholders matters  No specific stakeholder is reported applicability for	ssues are identified at present. Milita r MIL stakeholders.	ry applicability reported in 2014 is r	narginal. Only few civil/MIL airports
to implement it accordin jeopardise timely implem - Vehicle Locator Transm unlock full functionality of AOP04.1) Implementation of Lever reliable and stable Level	· · · · · · · · · · · · · · · · · · ·	hicles is a pre-requisite to is late at many airports (see time is unrealistic because	CAPEX RP2 Performance Plans  BALTIC FABEC  BLUEMED NEFAB  DANUBE SWFAB  UK-IR FAB  FABCE
In the framework of align	<b>keholders or expected evolution of th</b> Iment between ESSIP and PDP, new A more information regarding the A-SM	irspace Users SLoA will be added in	this objective. Dedicated training

AOPO4.2 - Implement Advanced Surface Movement Guidance and Control System (A-SMGCS) Level 2

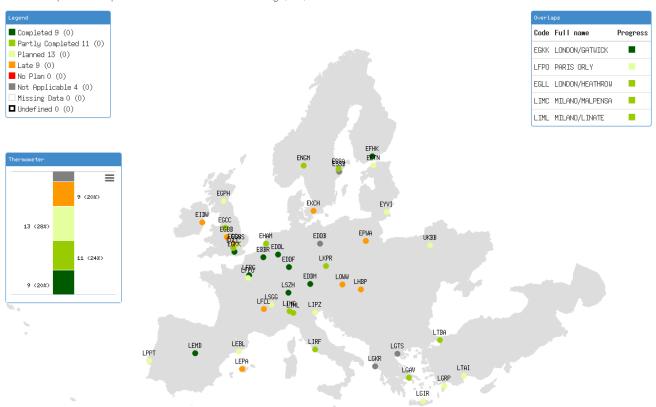


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## **AOP05 - Implement Airport Collaborative Decision Making (CDM)**

ATM Master Plan	AO-0501 AO-0601 A	AO-0602 AO-0603	
PCP related AF1 PCP related AF2	ESSIP FOC: 01/2016 Planned Achievement: 06/2016	6 (80% completion)	△ (months): +5
PCP related AF3			Late
PCP related AF4	20% complete		
PCP related AF5			
PCP related AF6			
Overview of progress	2014	2013	Deltas 2014-2013
Completed	9 [EBBR, EDDF, EDDL, EDDM, EFHK, EGKK, LEMD, LFPG, LSZH]	7 [EBBR, EDDF, EDDL, EDDM, EFHK, LFPG, LSZH]	+2 / +[EGKK, LEMD]
Partly Completed	11 [EGCC, EGLL, EHAM, ENGM, ESSA, LGAV, LIMC, LIML, LIRF, LKPR, LTBA]	12 [EGCC, EGLL, EHAM, ENGM, ESSA, LGAV, LIMC, LIML, LIPZ, LIRF, LKPR, LOWW]	-1 / +[LTBA] / -[LIPZ, LOWW]
Planned	13 [EETN, EGPH, EGSS, EYVI, LEBL, LFPO, LGIR, LGRP, LIPZ, LPPT, LSGG, LTAI, UKBB]	18 [EETN, EGBB, EGKK, EGPH, EGSS, EIDW, EPWA, EYVI, LEBL, LEMD, LGIR, LGRP, LHBP, LPPT, LSGG, LTAI, LTBA, UKBB]	-5 / +[LFPO, LIPZ] / -[EGBB, EGKK, EIDW, EPWA, LEMD, LHBP, LTBA]
Late	9 [EGBB, EGGW, EIDW, EKCH, EPWA, LEPA, LFLL, LHBP, LOWW]	5 [EGGW, EKCH, LEPA, LFLL, LFPO]	+4 / +[EGBB, EIDW, EPWA, LHBP, LOWW] / -[LFPO]
Not Applicable	4 [EDDB, ESSB, LGKR, LGTS]	2 [EDDB, ESSB]	+2 / +[LGKR, LGTS]
Latest to complete the		EGGW - 09/2016	3 months
Objective Planned Objective achievement (80%)	2016 (82.61 %)	2016 (86.36 %)	5
Stakeholders matters			
few States reporting it as From Airspace Users per implementation by 2012	o be completed by different stakehol s applicable at certain aerodromes. spective: the A-CDM was seen as a m . A few airports across Europe have so mitment to deploy more widely.	ature project in the SESAR Definition	n Phase and targeted for full
- System selection under - ANSP is awaiting airport - Project restarted after b - Full operational exploits (LGAV) - DPI implementation del	GSS)  r badged not approved yet (EGPH) way (EIDW) t initiative (EKCH) being frozen due to budget constraint ation to be achieved in conjunction w layed (LOWW)	ith DMAN development	CAPEX RP2 Performance Plans  BALTIC FABEC  BLUEMED NEFAB  DANUBE SWFAB  UK-IR FAB  FABCE
	<b>keholders or expected evolution of tl</b> Iment between ESSIP and PDP, FOC d	•	ed by 12/2016.

ADPO5 - Implement Airport Collaborative Decision Making (CDM)

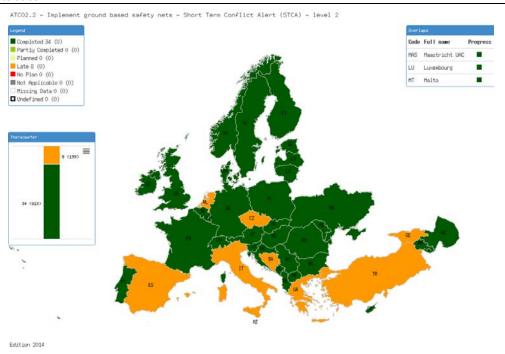


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## ATC02.2 - Implement ground based safety nets - Short Term Conflict Alert (STCA) - level 2

ATM Master Plan	CM-0801			
PCP related AF1 PCP related AF2 PCP related AF3 PCP related AF4 PCP related AF5 PCP related AF6	Planned Achievement: 12/2014 81% complete	(80% completion)		△ (months): +23  Late
Overview of progress	2014	2013		Deltas 2014-2013
Completed	34 [AL, AM, AT, AZ, BE, BG, CH, CY, DE, DK, EE, FI, FR, HR, HU, IE, LT, LU, LV, MAS, MD, ME, MK, MT, NO, PL, PT, RO, RS, SE, SI, SK, UA, UK]	30 [AM, AT, BE, BG, CH, CY, DE, D EE, FI, FR, HR, HU, IE, LT, LU, LV, N MD, ME, MK, NO, PT, RO, RS, SE, SK, UA, UK)	MAS,	+4 / +[AL, AZ, MT, PL]
Partly Completed		1 [AZ)		-1 / -[AZ]
Late	8 [BA, CZ, ES, GE, GR, IT, NL, TR]	10 [AL, BA, CZ, ES, GE, IT, MT, NL, TR)	PL,	-2 / +[GR] / -[AL, MT, PL]
No Plan		1 [GR)		-1 / -[GR]
Latest to complete the Objective	GR, NL - 12/2020	IT - 12/2017		36 months
Planned Objective achievement (80%)	2014 (80.95 %)	2014 (80.95 %)		6
Stakeholders matters  No specific Stakeholder related issues identified at present.				
- due to the implementat	by States for their delays are: ion of a new ATM System (BA and GR or upgrading of existing system (CZ, G	, .	<b>&gt;</b>	CAPEX RP2 Performance Plans BALTIC FABEC BLUEMED NEFAB DANUBE SWFAB DK-SE FAB UK-IR FAB FABCE
Recommendation to stakeholders or expected evolution of the objective				

This objective has reached 80% of achievement in the applicability area for 2015. States that still need to implement the objective should continue to do so.



ATC02.5 - Implement ground based safety nets - Area Proximity Warning - level 2

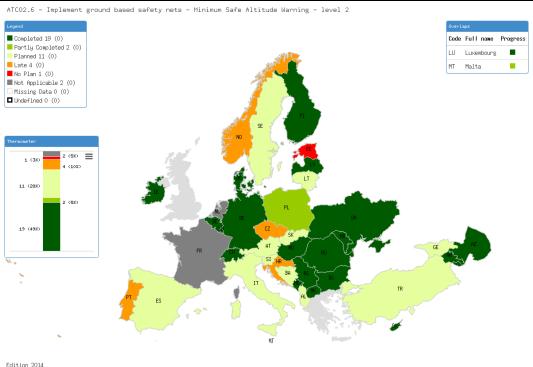
ATM Master Plan	CM-0801	,	Warning - level 2
PCP related AF1 PCP related AF2 PCP related AF3 PCP related AF4	ESSIP FOC: 12/2016 Planned Achievement: 12/201 50% complete	6 (80% completion)	$\triangle$ (months): 0
PCP related AF5			
PCP related AF6			
Overview of progress	2014	2013	Deltas 2014-2013
Completed	21 [AL, AM, AT, AZ, BE, BG, CY, DE, DK, FI, HR, HU, IE, LV, MD, ME, MK, PL, RO, RS, UA]	19 [AL, AM, AT, BE, BG, CY, DE, DK, FI, HR, HU, IE, LV, MD, ME, MK, RO, RS, UA)	+2 / +[AZ, PL]
Partly Completed	3 [MAS, MT, SE]	4 [AZ, MAS, PL, SE)	-1 / +[MT] / -[AZ, PL]
Planned	12 [CH, EE, ES, GE, GR, IT, LT, LU, PT, SI, SK, TR]	12 [CZ, EE, ES, GE, LT, LU, MT, NO, PT, SI, SK, TR)	0 / +[CH, GR, IT] / -[CZ, MT, NO]
Late	3 [CZ, NO, UK]	2 [IT, UK)	+1 / +[CZ, NO] / -[IT]
No Plan	1 [BA]	3 [BA, CH, GR)	-2 / -[CH, GR]
Not Applicable  Latest to complete the  Objective	2 [FR, NL] NO - 12/2019	2 [FR, NL) IT, UK - 12/2017	24 months
Planned Objective achievement (80%)	2016 (83.33 %)	2016 (83.33 %)	0
			DK-SE FAB UK-IR FAB FABCE
	akeholders or expected evolution of to nowever concerns regarding the progre		ing SPIN Sub-Group and Safety
ATCO2.5 Legend  Complet Partly Planned Late 3  No Plan	Completed 3 (0) 12 (0) (0) 1 (0) 1 (0) 1 (0) 1 (0) Data 0 (0)	roximity Warning - level 2	Code Full name Progress  LU Luxembourg  MRS Maastricht URC  MT Malta
1 (2) 1 (2) 1 (2)	2 (78)	NO SE	- C

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## ATC02.6 - Implement ground based safety nets - Minimum Safe Altitude Warning - level 2

	C) 4 0004		_
ATM Master Plan	CM-0801		
PCP related AF1	<b>ESSIP FOC:</b> 12/2016		$\triangle$ (months): 0
PCP related AF2	Planned Achievement: 12/2016	6 (80% completion)	
PCP related AF3			On Time
	400/		
PCP related AF4	49% complete		
PCP related AF5			
PCP related AF6			
Overview of progress	2014	2013	Deltas 2014-2013
Completed	19 [AM, AZ, BE, BG, CH, CY, DE, DK, FI, HU, IE, LU, LV, MD, ME, MK, RO, RS, UA]	17 [AM, BE, BG, CH, CY, DK, FI, HU, IE, LU, LV, MD, ME, MK, RO, RS, UA)	+2 / +[AZ, DE]
Partly Completed	2 [MT, PL]	3 [AZ, GE, PL)	-1 / +[MT] / -[AZ, GE]
Planned	11 [AL, AT, BA, ES, GE, IT, LT, SE, SI, SK, TR]	15 [AL, AT, BA, CZ, DE, ES, HR, LT, MT, NO, PT, SE, SI, SK, TR)	-4 / +[GE, IT] / -[CZ, DE, HR, MT, NO, PT]
Late	4 [CZ, HR, NO, PT]	1 [IT)	+3 / +[CZ, HR, NO, PT] / -[IT]
No Plan	1 [EE]	1 [EE)	0
Not Applicable	2 [FR, NL]	3 [FR, MAS, NL)	-1 / -[MAS]
Latest to complete the Objective	NO, PT - 12/2019	IT - 12/2017	24 months
Planned Objective achievement (80%)	2016 (82.05 %)	2016 (87.5 %)	0
Main reasons for delay	hoing able to do this by 04/2017 (C7)	12/2017 (HP) and 12/2010	CAPEX RP2 Performance Plans
•	being able to do this by 04/2017 (CZ) specific reasons given for this delay w		
,	nal implementation has been delayed	·	BLUEMED MEFAB
alerts which have a safety	•	due to faise and fluisance	DANUBE SWFAB
alerts willer have a salety	y impact.		DK-SE FAB UK-IR FAB
		100	
			FABCE
Recommendation to stakeholders or expected evolution of the objective			
No specific action yet, however concerns regarding the progress implementation will be raised during SPIN Sub-Group and Safety			
Team Meetings.	3 3 7 8	•	

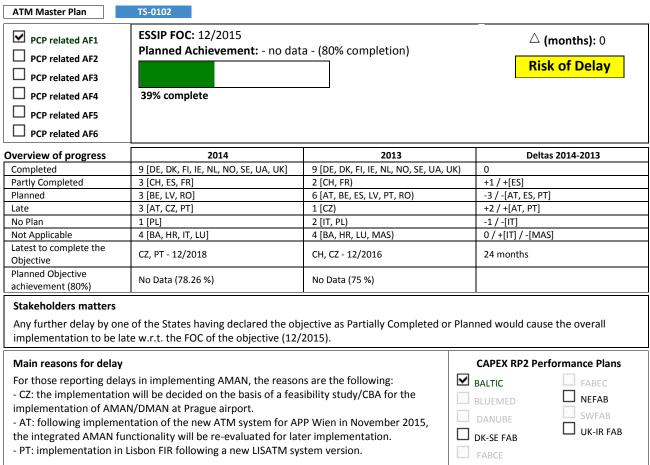


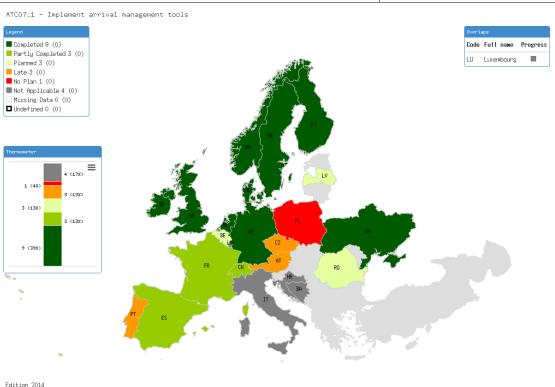
ATC02.7 - Implement ground based safety nets - Approach Path Monitor - level 2

PCP related AF1 PCP related AF2 PCP related AF3 PCP related AF4 PCP related AF5 PCP related AF5 PCP related AF6	ESSIP FOC: 12/2016 Planned Achievement: - no dat  24% complete	a - (80% completion)		△ (months): 0 On Time
Overview of progress	2014	2013		Deltas 2014-2013
Completed	9 [AM, BE, CH, DK, FI, HU, IE, MD, UA]	9 [AM, BE, CH, DK, FI, HU, IE, MD	. UA)	0
Partly Completed	3 [DE, LT, MT]	1 [LT)	, - ,	+2 / +[DE, MT]
·	10 [AT, CY, EE, ES, IT, LU, PL, SE, SI,	16 [AT, AZ, CY, CZ, DE, EE, ES, HR,	LU.	-6 / +[IT] / -[AZ, CZ, DE, HR, MT, NO,
Planned	TR]	MT, NO, PL, PT, SE, SI, TR)	,	PT]
Late	7 [AZ, HR, ME, NO, PT, RS, UK]	4 [IT, ME, RS, UK)		+3 / +[AZ, HR, NO, PT] / -[IT]
No Plan	7 [AL, BA, BG, CZ, LV, MK, RO]	6 [AL, BA, BG, LV, MK, RO)		+1 / +[CZ]
Not Applicable	2 [FR, NL]	3 [FR, MAS, NL)		-1 / -[MAS]
Latest to complete the Objective	ME, RS - 12/2020	ME, RS - 12/2020		0 months
Planned Objective achievement (80%)	No Data (76.32 %)	No Data (76.92 %)		
Main reasons for delay  There are no other specific reasons given for this delay then the implementation of a new ATM system (AZ, HR, ME, NO, and RS) or upgrade/enhancement of the existing system (PT and UK).  ■ BALTIC FABEC ■ BLUEMED ■ DANUBE ■ DANUBE ■ DK-SE FAB ■ FABCE				
Recommendation to stakeholders or expected evolution of the objective  No specific action yet, however concerns regarding the progress implementation will be raised during SPIN Sub-Group and Safety Team Meetings.				

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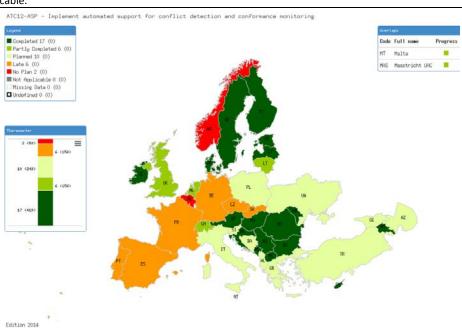
#### ATC07.1 - Implement arrival management tools





## ATC12 - Implement automated support for conflict detection and conformance monitoring

ATM Master Plan	CM-0202 CM-0203		
PCP related AF1 PCP related AF2 PCP related AF3 PCP related AF4 PCP related AF5 PCP related AF5	ESSIP FOC: 12/2016 Planned Achievement: 12/2017 41% complete	7 (80% completion)	△ (months): +12  Risk of Delay
Overview of progress	2014	2013	Deltas 2014-2013
Completed	17 [AM, AT, BG, CY, DK, EE, FI, HR, HU, IE, LV, MD, ME, MK, RO, RS, SE]	16 [AM, AT, BG, DK, EE, FI, HR, HU, LV, MD, ME, MK, RO, RS, SE)	IE, +1/+[CY]
Partly Completed	6 [CH, LT, MAS, MT, NL, UK]	5 [CH, LT, MAS, NL, UK)	+1 / +[MT]
Planned	10 [AL, AZ, BA, BE, GE, GR, IT, PL, TR, UA]	16 [AL, AZ, BA, BE, CY, CZ, ES, GE, C IT, MT, PL, PT, SK, TR, UA)	-6 / -[CY, CZ, ES, MI, PI, SK]
Late	6 [CZ, DE, ES, FR, PT, SK]	2 [DE, FR)	+4 / +[CZ, ES, PT, SK]
No Plan	1 [NO]	1 [NO)	0
Not Applicable	1 [SI]	2 [LU, SI)	-1 / -[LU]
Latest to complete the Objective	UK - 12/2020	UK - 12/2020	0 months
Planned Objective achievement (80%)	2017 (80.49 %)	2016 (85.71 %)	12
Stakeholders matters  Although the trend is towards the achievement of 80% of the implementation within the objective FOC date, there is some risk for delay, given that a few operational introductions are still under evaluation, albeit the capability is already available or planned into their (new) ATM systems (Azerbaijan, Georgia, Slovenia and Poland).			
Main reasons for delay  For Slovenia, given the current traffic levels, the need for MTCD is still to be evaluated within its FAB. Spain and Portugal have a common plan at FAB level to implement it in 2019. France will complete its deployment in the context of their new ATM system (4-Flight programme) by 12/2017. Germany plans the introduction of MTCD and MONA by 2019, in the context of their iCAS programme (phase II). Implementation in Slovak Republic is linked to the implementation of an upgrade to their ATM system, by 12/2018).  CAPEX RP2 Performance Plans  BALTIC  BLUEMED  DANUBE  DANUBE  UK-IR FAB  UK-IR FAB			
Recommendation to stakeholders or expected evolution of the objective  Azerbaijan, Georgia, Slovenia and Poland should confirm their plans for operational introduction of MTCD and MONA, or declare the objective as Not Applicable.			



# ATC15 - Implement, in En-Route operations, information exchange mechanisms, tools and procedures in support of Basic AMAN operations

ATM Master Plan	TS-0305		
PCP related AF1 PCP related AF2 PCP related AF3 PCP related AF4 PCP related AF5 PCP related AF6	Planned Achievement: - no date 23% complete	a - (80% completion)	△ (months): 0 On Time
Overview of progress	2014	2013	Deltas 2014-2013
Completed	7 [AT, DK, FI, MAS, NO, SE, UK]	6 [AT, DK, FI, MAS, SE, UK)	+1 / +[NO]
Partly Completed	4 [DE, FR, IE, NL]	3 [FR, NL, NO)	+1 / +[DE, IE] / -[NO]
Planned	9 [BE, CH, CZ, EE, HU, IT, LV, RO, TR]	12 [BE, CH, CZ, DE, EE, ES, HU, IT, L PT, RO, TR)	·V, -3 / -[DE, ES, PT]
Late	2 [ES, PT]		+2 / +[ES, PT]
No Plan	4 [BA, BG, HR, PL]	5 [BA, BG, HR, IE, PL)	-1 / -[IE]
Not Applicable	4 [LU, ME, RS, UA]	4 [LU, ME, RS, UA)	0
Latest to complete the Objective	ES - 12/2018	DE, FR, IT, RO - 12/2017	12 months
Planned Objective achievement (80%)	No Data (73.33 %)	No Data (70 %)	
Stakeholders matters  A number of administrations are still reporting no firm plans to implement it: Bulgaria, Croatia, Bosnia Herzegovina and Poland.			
Main reasons for delay			CAPEX RP2 Performance Plans
In a number of cases, the operational introduction of extended AMAN has to be coordinated with the neighbouring ANSP. This negotiation has not yet been finalised for a few of them (BG, HR and HU).  In other cases, its implementation is timed in line with a broader adaptation of their systems (ES and PT).  BALTIC  BBLUEMED  DANUBE  DIN-SE FAB  WIK-IR FAB			
Recommendation to stakeholders or expected evolution of the objective  Montenegro, Serbia and Ukraine should require to be removed from the applicability area of this objective.			

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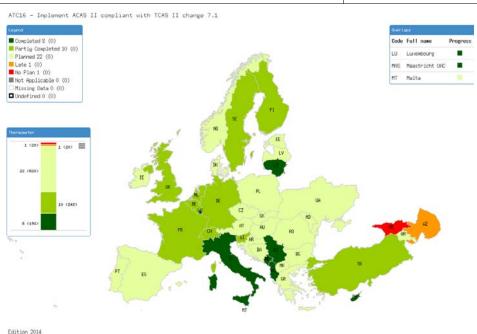
#### ATC16 - Implement ACAS II compliant with TCAS II change 7.1

ATM Master Plan			
PCP related AF1 PCP related AF2 PCP related AF3 PCP related AF4 PCP related AF5 PCP related AF6	Planned Achievement: 12/2015 19% complete	5 (80% completion)	△ (months): 0 On Time
Overview of progress	2014	2013	Deltas 2014-2013
Completed	8 [AL, CY, IT, LT, LU, MAS, ME, RS]	5 [IT, LU, MAS, ME, RS)	+3 / +[AL, CY, LT]
Partly Completed	10 [BE, CH, DE, FI, FR, NL, SE, SI, TR, UK]	8 [CH, DE, FR, LT, NL, SE, TR, UK)	+2 / +[BE, FI, SI] / -[LT]
Planned	22 [AM, AT, BA, BG, CZ, DK, EE, ES, GR, HR, HU, IE, LV, MD, MK, MT, NO, PL, PT, RO, SK, UA]	27 [AL, AM, AT, AZ, BE, BG, CY, CZ, DK, EE, ES, FI, GR, HR, HU, IE, LV, MD, MK, MT, NO, PL, PT, RO, SI, SK, UA)	-5 / +[BA] / -[AL, AZ, BE, CY, FI, SI]
Late	1 [AZ]	1 [BA)	0 / +[AZ] / -[BA]
No Plan	1 [GE]	1 [GE)	0
Latest to complete the Objective	AZ - 12/2018	BA, CH, CZ, DE, ES, FI, FR, GR, MD, MT, NO, RO, UA, UK - 12/2015	36 months
Planned Objective achievement (80%)	2015 (95.24 %)	2015 (97.62 %)	0
Stakeholders matters			

A few ANSPs still seem to misunderstand the requirement in ATC16-ASP02 -Establish ACAS II performance monitoring- which in fact only calls for the implementation (as for PANS-ATM - ICAO Doc. 4444) of a monitoring and reporting mechanism in the ANSP to account for care of RA reports.

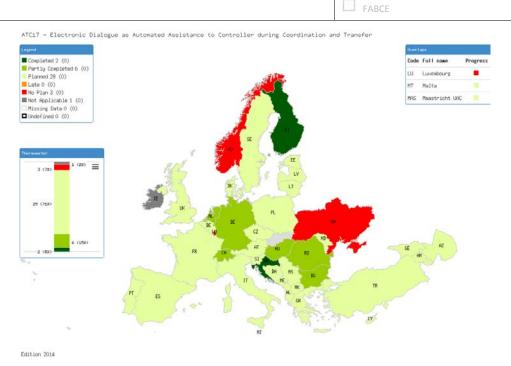
Some Military Authorities do not seem to have fully acknowledged yet the fact that aircrews of tactical aircraft, not equipped with ACAS II, still need to be trained to understand the possible impact of operating high performance aircraft in an airspace environment with ACAS equipped aircraft (ATC16-MIL02).

# Main reasons for delay No delays identified at this stage of implementation but there is an issue in some States that objective is completed at ANSP level but not yet finalised at state level due to the fact that operators did not implement ACAS II requirements so far (impacting REG action completion). CAPEX RP2 Performance Plans BALTIC BALUEMED NEFAB DANUBE DANUBE DK-SE FAB UK-IR FAB



# ATC17 - Electronic Dialogue as Automated Assistance to Controller during Coordination and Transfer

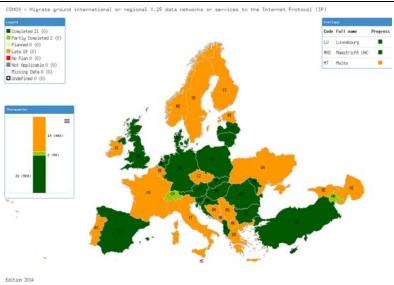
ATM Master Plan	CM-0201		
PCP related AF1 PCP related AF2 PCP related AF3 PCP related AF4 PCP related AF5 PCP related AF6	Planned Achievement: 12/2018 State of the st	8 (80% completion)	△ (months): 0 On Time
Overview of progress	2014	2013	Deltas 2014-2013
Completed	2 [FI, HR]	1 [HR)	+1 / +[FI]
Partly Completed	6 [BG, CH, DE, HU, NL, RO]	6 [BG, CH, DE, FI, NL, RO)	0 / +[HU] / -[FI]
Planned	29 [AL, AM, AT, AZ, BA, BE, CY, CZ, DK, EE, ES, FR, GE, GR, IT, LT, LV, MAS, MD, ME, MK, MT, PL, PT, RS, SE, SI, TR, UK]	30 [AL, AM, AT, AZ, BA, BE, CY, CZ, EE, ES, FR, GE, GR, HU, IT, LT, LV, MAS, MD, ME, MK, MT, PL, PT, RS SI, TR, UK)	SE, -1/-[HU]
No Plan	3 [LU, NO, UA]	3 [LU, NO, UA)	0
Not Applicable	1 [IE]	1 [IE)	0
Latest to complete the Objective	AL, AZ, BA, BG, CY, DK, EE, FR, GR, HU, IT, LT, LV, MD, ME, NL, PL, PT, RO, RS, SE, SI, UK - 12/2018	AL, BA, BE, BG, CY, DK, EE, FR, GR, IT, LT, LV, MAS, MD, ME, NL, PL, P' RO, RS, SE, SI, UK - 12/2018	
Planned Objective achievement (80%)	2018 (90.24 %)	2018 (90.24 %)	0
Stakeholders matters  Implementation of ASP02 (PAC and COD) is fairly advanced, with 18 centres having completed the action and another 11 partially completed it. Implementation of ASP03 (transfer and communication process) and ASP04 (electronic dialogue procedure in coordination process) evolve at a slower pace, in a fairly similar manner.			
Main reasons for delay  Of the 3 States currently declaring of not having a plan, one (Norway) mentions that the implementation will be considered in relation to the next generation ATM system, one (Luxembourg) declares that the functions are already available in their system, but not in operation pending requests from neighbouring centres. The third one (Ukraine) declares the objective as being under review.  CAPEX RP2 Performance Plans  BALTIC  BALUEMED  NEFAB  WHAB  UK-IR FAB			



# COM09 - Migrate ground international or regional X.25 data networks or services to the Internet Protocol (IP)

ATM Master Plan	CTE-C06b GGSWIM-26a GG	SSWIM-52 NIMS-02	
PCP related AF1 PCP related AF2 PCP related AF3 PCP related AF4 PCP related AF5 PCP related AF6	Planned Achievement: 12/2015 50% complete	5 (80% completion)	△ (months): +12  Late
Overview of progress	2014	2013	Deltas 2014-2013
Completed	21 [AL, AT, BG, CY, DE, DK, ES, HR, HU, LT, LU, LV, MAS, MD, NL, PL, RO, SI, SK, TR, UK]	8 [BE, HR, LT, LU, MAS, NL, PL, TR)	+13 / +[AL, AT, BG, CY, DE, DK, ES, HU, LV, MD, RO, SI, SK, UK] / -[BE]
Partly Completed	2 [AM, CH]	10 [AL, AM, BG, CH, GR, IT, LV, RO, SE, SK)	-8 / -[AL, BG, GR, IT, LV, RO, SE, SK]
Planned		19 [AT, AZ, CY, CZ, DK, EE, ES, FI, GE, HU, IE, MD, ME, MT, NO, PT, RS, SI, UK)	-19 / -[AT, AZ, CY, CZ, DK, EE, ES, FI, GE, HU, IE, MD, ME, MT, NO, PT, RS, SI, UK]
Late	19 [AZ, BA, BE, CZ, EE, FI, FR, GE, GR, IE, IT, ME, MK, MT, NO, PT, RS, SE, UA]	5 [BA, DE, FR, MK, UA)	+14 / +[AZ, BE, CZ, EE, FI, GE, GR, IE, IT, ME, MT, NO, PT, RS, SE] / -[DE]
Latest to complete the Objective	GE, MK - 12/2017	MK, UA - 12/2015	24 months
Planned Objective achievement (80%)	2015 (85.71 %)	2014 (92.86 %)	12
Stakeholders matters  This objective is applicable to ANPs providing services to GAT with communication networks connected to neighbouring States, which makes it applicable only a very small number of military ANSP, therefore the delay is mostly attributable the main civil ANSPs.			
Main reasons for delay  ANSPs did not provide specific details to justify the delay, in most cases they informed that the deadline for the project had been postponed for 12 months.  There is no specific technical issue hindering implementation, and PENS is available as a means of compliance, so it would seem that not enough priority has been given to the			BLUEMED NEFAB  DANUBE SWFAB  UK-IR FAB
Recommendation to stakeholders or expected evolution of the objective			

Being an enabler for other COM applications, this objective should be considered to be deleted and specific SLoAs added in the objectives dealing with the different COM applications



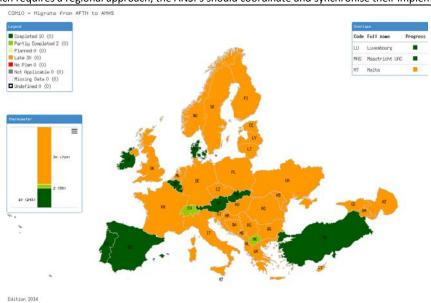
### **COM10 - Migrate from AFTN to AMHS**

ATM Master Plan	CTE-C06c		
PCP related AF1 PCP related AF2 PCP related AF3 PCP related AF4 PCP related AF5 PCP related AF6	Planned Achievement: 12/2016 24% complete	5 (80% completion)	△ (months): +24  Late
Overview of progress	2014	2013	Deltas 2014-2013
Completed	10 [AT, BE, DK, ES, IE, LU, MAS, PT, SK, TR]	4 [BE, DK, ES, PT)	+6 / +[AT, IE, LU, MAS, SK, TR]
Partly Completed	2 [CH, MK]	11 [AT, AZ, BG, CH, DE, LT, NL, RC TR, UK)	, SK, -9 / +[MK] / -[AT, AZ, BG, DE, LT, NL, RO, SK, TR, UK]
Planned		19 [AL, BA, CY, CZ, FI, GE, HR, IE, I LU, LV, MAS, MD, ME, MK, MT, P SE)	
Late	30 [AL, AM, AZ, BA, BG, CY, CZ, DE, EE, FI, FR, GE, GR, HR, HU, IT, LT, LV, MD, ME, MT, NL, NO, PL, RO, RS, SE, SI, UA, UK]	7 [AM, EE, FR, GR, HU, NO, UA)	+23 / +[AL, AZ, BA, BG, CY, CZ, DE, FI, GE, HR, IT, LT, LV, MD, ME, MT, NL, PL, RO, RS, SE, SI, UK]
No Plan		1 [SI)	-1 / -[SI]
Latest to complete the Objective	LT - 09/2018	HU - 12/2017	9 months
Planned Objective achievement (80%)	2016 (90.48 %)	2014 (80.95 %)	24
•	asic AMHS, can be considered as achion the ASP03, the Extended AMHS.	eved (more than 80% Complete	d).The objective is suffering delay, in
Main reasons for delay  - Some Extended AMHS functionalities are of a slight risk without the implementation of a supporting security infrastructure which is not mandated by the Community Specification;  - Operation is subject to the readiness of the neighbouring ANSP-s;  - Delay on implementation of the new software regarding the -Directory Services- funct.;  - Operational needs do not justify the implementation of the Extended AMHS;  - Implementation is linked to the implementation of PENS;			CAPEX RP2 Performance Plans  BALTIC FABEC  BLUEMED VINEFAB  DANUBE SWFAB  DK-SE FAB  FABCE

#### Recommendation to stakeholders or expected evolution of the objective

- Negative Cost Benefit Analysis regarding the implementation of the Extended AMHS;

As this is an objective which requires a regional approach, the ANSPs should coordinate and synchronise their implementation plans.



## **COM11** - Implementation of Voice over Internet Protocol (VoIP) in ATM

ATM Master Plan	CTE-C05a		
PCP related AF1	<b>ESSIP FOC:</b> 12/2020		$\triangle$ (months): 0
PCP related AF2	Planned Achievement: 12/2020	) (80% completion)	— (months). 0
			On Time
PCP related AF3			
PCP related AF4	2% complete		
PCP related AF5			
☐ PCP related AF6			
Overview of progress	2014	2013	Deltas 2014-2013
Completed	1 [MD]		+1 / +[MD]
Planned	2 [AM, DE] 35 [AL, AT, AZ, BA, BE, BG, CH, CY, CZ, EE, ES, FI, FR, GE, GR, HU, IE, IT, LT, LV, MAS, ME, MK, MT, NL, PL, PT, RO, RS, SE, SI, SK, TR, UA, UK]	1 (AM) 35 (AL, AT, AZ, BA, BE, BG, CH, CY, CZ, EE, ES, FI, FR, GE, GR, HU, IE, IT, LT, LV, MAS, MD, ME, MK, MT, NL, PL, PT, RO, RS, SE, SK, TR, UA, UK)	+1 / +[DE] 0 / +[SI] / -[MD]
Late		1 [SI)	-1 / -[SI]
No Plan	4 [DK, HR, LU, NO] AT, BA, BE, BG, CH, CZ, DE, EE, ES, FI,	5 [DE, DK, HR, LU, NO) AT, BA, BG, CZ, EE, ES, FI, FR, HR, IT,	-1 / -[DE]
Latest to complete the Objective	FR, HR, IT, LT, LU, LV, NL, NO, PL, PT, SE, SI, SK, UA, UK - 12/2020	LT, LU, LV, MD, NL, NO, PT, RO, SE, SI, SK, UA, UK - 12/2020	0 months
Planned Objective achievement (80%)	2020 (90.48 %)	2020 (88.1 %)	0
Stakeholders matters			
All States/ANSPs, except I possible risks on reaching	the target date.	at the objective will be completed by 2018, the military has not yet consid	
Main reasons for delay  No delays identified at thi	is stage of implementation.	Y	BALTIC FABEC BLUEMED NEFAB DANUBE UK-IR FAB FABCE
Legend Completed	Deleted 2 (0)   (0)	FI SE EE LV LT LR RS RG RG RS RG RG RS RG RG RS RG RG RS RG	Overlaps  Code Full name Progress  LU Luseabourg  MT Multo  MNS Maastricht UNC

# ENV01 - Implement Continuous Descent Operations (CDO) techniques for environmental improvements

ATM Master Plan	AOM-0701			
PCP related AF1 PCP related AF2 PCP related AF3 PCP related AF4 PCP related AF5 PCP related AF6	Planned Achievement: 12/2015 71% complete	5 (80% completion)	△ (months): +24  Late	
Overview of progress	2014	2013	Deltas 2014-2013	
Completed	42 [EBBR, EBCI, EBLG, EDDF, EDDH, EDDK, EDDM, EDDN, EDDS, EDDV, EFHK, EGBB, EGCC, EGGD, EGGW, EGKK, EGLL, EGNT, EGNX, EGPH, EGSS, EHAM, EIDW, EPWA, ESGG, ESMS, ESNU, ESSA, EYVI, LEBL, LEMD, LEPA, LFLL, LFML, LFMN, LFPG, LFPO, LHBP, LOWW, LPPT, UDYZ, UKBB]	41 [EBCI, EDDF, EDDH, EDDK, EDDM, EDDN, EDDN, EDDN, EDDN, EFHK, EGBB, EGCC, EGGD, EGGW, EGKK, EGLL, EGNT, EGNX, EGPH, EGSS, EHAM, EIDW, EKCH, EPWA, ESGG, ESMS, ESNU, ESSA, EYVI, LEBL, LEMD, LEPA, LFBO, LFLL, LFML, LFMN, LFPG, LFPO, LHBP, LOWW, LPPT, UKBB]	+1 / +[EBBR, EBLG, UDYZ] / -[EKCH, LFBO]	
Partly Completed	1 [LSGG]	2 [LSGG, LSZH]	-1 / -[LSZH]	
Planned		1 [LYBE]	-1 / -[LYBE]	
Late	13 [EBOS, EETN, EGPF, ENGM, LIMC, LIPZ, LIRF, LQSA, LROP, LSZH, LTAI, LTBA, LYBE]	16 [EBAW, EBBR, EBLG, EBOS, EETN, EGPF, ENGM, LIMC, LIML, LIPZ, LIRF, LKPR, LQSA, LROP, LTAI, LTBA]	-3 / +[LSZH, LYBE] / -[EBAW, EBBR, EBLG, LIML, LKPR]	
Not Applicable	3 [EDDL, LDSP, LKPR]	4 [EDDB, EDDL, ESSB, LDSP]	-1 / +[LKPR] / -[EDDB, ESSB]	
Latest to complete the Objective	LSZH - 12/2016	EGPF, LKPR, LROP, LSGG, LSZH - 12/2015	12 months	
Planned Objective achievement (80%)	2015 (93.22 %)	2014 (85.94 %)	12	
Stakeholders matters  The implementation of CDO techniques has not significantly improved in 2014. The anticipated 80% implementation target, due by end of 2013, was not reached by end of 2014.				
Main reasons for delay  - Delays in implementing the Aeronautical Information Management recommendations (AL, GR, HR, ME, RO, RS);  - Reorganisation of service provision and establishment of the ANSP (BH).  CAPEX RP2 Performance Plans  BALTIC  FABEC  NEFAB  DANUBE  DANUBE  DK-SE FAB  FABCE				
Recommendation to stakeholders or expected evolution of the objective  Based on the reports of Stakeholders, the Objective is expected to be achieved by December 2015 at the latest.				

ENV01 - Implement Continuous Descent Operations (CDO) techniques for environmental improvements



Edition 2014

## **ENV02 - Implement Collaborative Environmental Management (CEM) at Airports**

ATM Master Plan	AO-0703 AO-0705 A	AO-0706	
PCP related AF1 PCP related AF2 PCP related AF3 PCP related AF4 PCP related AF5 PCP related AF5 PCP related AF6	ESSIP FOC: 12/2016 Planned Achievement: 12/2015 58% complete	5 (80% completion)	△ (months): -12  On Time
Overview of progress	2014	2013	Deltas 2014-2013
Completed	28 [EDDF, EDDL, EDDM, EFHK, EGBB, EGCC, EGLL, EGNT, EGSS, EHAM, EIDW, EKCH, ENGM, ESSA, LEBL, LEMD, LEPA, LFBO, LFLL, LFML, LFMN, LFPG, LFPO, LHBP, LKPR, LOWW, LPPT, LTBA]	26 [EDDF, EDDL, EDDM, EFHK, EGBB, EGCC, EGNT, EGSS, EHAM, EIDW, EKCH, ENGM, ESSA, LEBL, LEMD, LEPA, LFBO, LFLL, LFML, LFMN, LFPG, LFPO, LKPR, LOWW, LPPT, UDYZ]	+2 / +[EGLL, LHBP, LTBA] / -[UDYZ]
Partly Completed	13 [EGGD, EGGW, EGKK, EGLC, EGPH, LGAV, LIMC, LIML, LIPZ, LIRF, LSGG, LSZH, LTAI]	16 [EGGD, EGGW, EGKK, EGLC, EGLL, EGPH, ESSB, LGAV, LIMC, LIML, LIPZ, LIRF, LSGG, LSZH, LTAI, LTBA]	-3 / -[EGLL, ESSB, LTBA]
Planned	5 [EBBR, EETN, EPWA, EYVI, LQSA]	6 [EBBR, EETN, EPWA, EYVI, LHBP, LQSA]	-1 / -[LHBP]
Not Applicable	2 [EDDB, EGPF]	2 [EDDB, EGPF]	0
Latest to complete the Objective	EGGD, EGPH, EPWA, LGAV, LQSA, LSGG - 12/2016	EGGD, LQSA, LSGG - 12/2016	0 months
Planned Objective achievement (80%)	2015 (83.33 %)	2015 (90 %)	0
Stakeholders matters  Two states declared that the Objective is not applicable to them, although they are in the Applicability Area of this Objective (EDDN-Berlin Brandenburg International and EGPF-Glasgow). Berlin Brandenburg International Airport is not yet open to traffic and Glasgow Airport might have misinterpreted the Objective NATS (ANSP) has declared the Objective completed for its Actions.			
Main reasons for delay  Reasons for delay are a backlog of initiating formal working partnership agreements for CEM and the establishment of a CEM Team by the Airport Operators (EGGD, EGPH, LGAV, LIMC, LIPZ, LQSA, LTAI). Some Airport Operators still need to conduct or finalise the training of their operational staff (EBBR, EETN, EGGD, EGGW, EGKK, EGPF, EPWA, EYVI, LGAV, LQSA).  Some other Airport Operators still need to ensure implementation of an appropriate Airport Policy and procedures (EGLC, EYVI, LGAV, LIRF, LQSA, LSGG, LSZH).			
Recommendation to stakeholders or expected evolution of the objective  Under the condition that the current backlogs are overcome, the Objective is expected to be achieved by end of 2016.			

ENVO2 - Implement Collaborative Environmental Management (CEM) at Airports



Edition 2014

#### FCM01 - Implement enhanced tactical flow management services

ATM Master Plan	IS-0102			
PCP related AF1 PCP related AF2 PCP related AF3 PCP related AF4 PCP related AF5 PCP related AF5 PCP related AF6	ESSIP FOC: 12/2006 Planned Achievement: 12/2015 60% complete	5 (80% completion)	△ (months): +108  Late	
Overview of progress	2014	2013	Deltas 2014-2013	
Completed	25 [AL, AT, BG, CZ, DE, ES, FI, FR, GR, HR, HU, IE, IT, LT, LU, MAS, ME, MT, NL, PL, RO, RS, SE, SI, SK]	23 [AL, AT, BG, DE, ES, FI, FR, GR, HF HU, IE, IT, LT, LU, ME, MT, NL, PL, RC RS, SE, SI, SK)		
Partly Completed	1 [CH]	1 [CH)	0	
Late	14 [AM, BA, BE, CY, DK, EE, GE, LV, MK, NO, PT, TR, UA, UK]	15 [AM, BA, BE, CY, CZ, DK, EE, LV, MAS, MK, NO, PT, TR, UA, UK)	-1 / +[GE] / -[CZ, MAS]	
Not Applicable	2 [AZ, MD]	3 [AZ, GE, MD)	-1 / -[GE]	
Latest to complete the Objective	UK - 12/2020	UK - 12/2020	0 months	
Planned Objective achievement (80%)	2015 (83.33 %)	2014 (80.95 %)	12	
Stakeholders matters  The Objective is late, with SLoAs which should have been implemented more than 15 years ago and are still not finalised by several States. However the priorities SLoAs have been implemented by more than three quarters of the States even if some of these States reported -Late- at the overall objective level.				
Main reasons for delay			CAPEX RP2 Performance Plans	
The main reason given by the States for delaying the implementation is of a technical nature and lack of operational justification. Implementation is mostly linked to the deployment of new systems or to major upgrades of existing ones, therefore the stand alone implementation of the objective was not considered beneficial. In many instances the objective is perceived as not being operationally justified at local level. However the implementation decisions shall also take into account the network benefits, as the Objective will allow the Network Manager to have access to real-time aircraft information, enhancing so the Air Traffic Flow and Capacity Management.				
	keholders or expected evolution of the	•		
The objective is close to it	mplementation, at least with regard t	the priority SLOAS.		

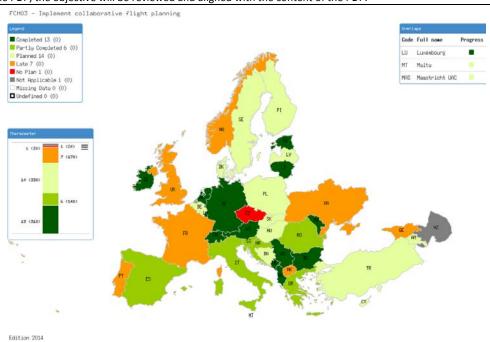
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#### FCM03 - Implement collaborative flight planning

ATM Master Plan	DCB-0302 IS-0101	IS-0102	
PCP related AF1 PCP related AF2 PCP related AF3 PCP related AF4 PCP related AF5 PCP related AF5 PCP related AF6	ESSIP FOC: 12/2015 Planned Achievement: 12/2016 31% complete	6 (80% completion)	△ (months): +12  Risk of Delay
Overview of progress	2014	2013	Deltas 2014-2013
Completed	13 [AL, AT, BG, CH, DE, EE, IE, LT, LU, MD, ME, NL, RS]	16 [AL, AT, BG, CH, DE, DK, EE, GR, LT, LU, MD, ME, NL, RS, SK)	IE, -3 / -[DK, GR, SK]
Partly Completed	6 [ES, GR, HR, IT, RO, SI]	3 [ES, IT, RO)	+3 / +[GR, HR, SI]
Planned	14 [AM, BA, BE, CY, DK, FI, HU, LV, MAS, MT, PL, SE, SK, TR]	18 [AM, BA, BE, CY, CZ, FI, HR, HU, MAS, MK, MT, PL, PT, SE, SI, TR, UA	
Late	7 [FR, GE, MK, NO, PT, UA, UK]	3 [FR, NO, UK)	+4 / +[GE, MK, PT, UA]
No Plan	1 [CZ]		+1 / +[CZ]
Not Applicable	1 [AZ]	2 [AZ, GE)	-1 / -[GE]
Latest to complete the Objective Planned Objective achievement (80%)	UK - 12/2020 2016 (83.33 %)	UK - 12/2020 2015 (88.1 %)	0 months
	gress in the implementation of the objected that is a successive changes of the successive changes of the successive changes or the successive changes of the successive chang	•	Full Operational Capability (FOC) date ), very few States appear as late.
through the planned upg At the same time stakeho	he objective involves a certain level o grades of current ATM systems or the olders do not recognise direct benefit twork level and may not be perceived	installation of the new ones. t from implementation as the as such by the individual	CAPEX RP2 Performance Plans  BALTIC FABEC  BLUEMED NEFAB  DANUBE SWFAB  W DK-SE FAB UK-IR FAB  FABCE
Recommendation to stal	keholders or expected evolution of the	he objective	

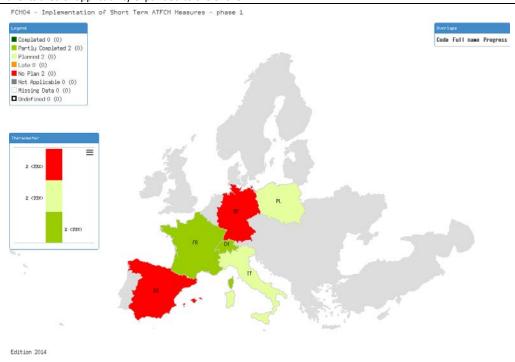
In the context of the PDP, the objective will be reviewed and aligned with the content of the PDP.



#### FCM04 - Implementation of Short Term ATFCM Measures - phase 1

ATM Master Plan	DCB-0205				
PCP related AF1 PCP related AF2 PCP related AF3 PCP related AF4 PCP related AF5 PCP related AF6	Planned Achievement: - no dat  0% complete	a - (80% completion)	△ (months): 0 On Time		
Overview of progress	2014	2013	Deltas 2014-2013		
Partly Completed	2 [CH, FR]	2 [CH, FR)	0		
Planned	2 [IT, PL]	2 [IT, PL)	0		
No Plan	2 [DE, ES]	2 [DE, ES)	0		
Latest to complete the Objective			0 months		
Planned Objective achievement (80%)	No Data (50 %)	No Data (50 %)			
Stakeholders matters  The submitted reports indicate that the objective will be implemented in time by the States within its area of applicability. However there is still a need for the clarification of implementation intention of States which have reported -No Plan- despite being in the applicability area of the objective, as the applicability area has been customised based on the information provided by the IDP (Interim Deployment Programme).					
Main reasons for delay  No delays identified at th	is stage of implementation.		CAPEX RP2 Performance Plans  BALTIC FABEC  BLUEMED NEFAB  DANUBE SWFAB  DK-SE FAB UK-IR FAB  FABCE		
Recommendation to stak	eholders or expected evolution of the	ne objective			
STAM Phase 1 is identified	d as a Fast Track in the Preliminary de	eployment programme. As such th	e objective may suffer changes in the		

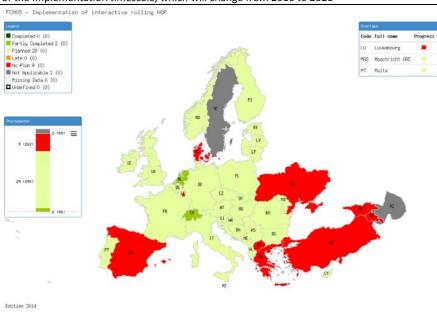
STAM Phase 1 is identified as a Fast Track in the Preliminary deployment programme. As such the objective may suffer changes in the near future and have its area of applicability expanded to the entire EATMN.



#### FCM05 - Implementation of interactive rolling NOP

ATM Master Plan	AOM-0202 AOM-0205 D	CB-0102	
PCP related AF1 PCP related AF2 PCP related AF3 PCP related AF4 PCP related AF5 PCP related AF6	ESSIP FOC: 12/2016 Planned Achievement: - no data  0% complete	a - (80% completion)	△ (months): 0 On Time
Overview of progress	2014	2013	Deltas 2014-2013
Partly Completed	2 [CH, NL]	2 [CH, NL)	0
Planned	29 [AL, AT, BA, BE, BG, CY, CZ, DE, EE, FI, FR, HR, HU, IE, IT, LT, LV, MAS, MD, ME, MT, NO, PL, PT, RO, RS, SI, SK, UK]	24 [AL, AT, BA, BE, BG, CY, CZ, EE, FI, FR, HU, IT, LT, LV, MAS, MD, MT, NO, PL, PT, RO, SI, SK, UK)	+5 / +[DE, HR, IE, ME, RS]
No Plan	9 [AM, DK, ES, GE, GR, LU, MK, TR, UA]	13 [AM, DE, DK, ES, GR, HR, IE, LU, ME, MK, RS, TR, UA)	-4 / +[GE] / -[DE, HR, IE, ME, RS]
Not Applicable	2 [AZ, SE]	3 [AZ, GE, SE)	-1 / -[GE]
Latest to complete the Objective	AZ - 12/2018	AL, AT, BA, BE, CY, CZ, FI, FR, HU, IE, IT, LT, LV, MD, MT, NL, PL, PT, RO, SI, SK, UA, UK - 12/2016	24 months
Planned Objective achievement (80%)	No Data (71.43 %)	No Data (59.52 %)	
Stakeholders matters  It is important to note the	at most of the SLoAs are applicable to	o the Network Manager (NM) and th	nat all NM-s SLoAs planned for 2014
(5 out of 7) have been im	plemented according with the plans	so can be considered as -Finalised	·
Main reasons for delay			CAPEX RP2 Performance Plans
•	is stage of implementation.		BALTIC FABEC BLUEMED NEFAB  DANUBE SWFAB  UK-IR FAB  FABCE
Recommendation to stak	eholders or expected evolution of th	ne objective	

The objective is expected to evolve due to the publication of the Preliminary Deployment Programme. The most important change will be the enlargement of the scope of the objective, so as to cover the connectivity with the Airport Operational Plan (AOP). This change will also imply a revision of the implementation timescale, which will change from 2016 to 2021



#### **INF04 - Implement integrated briefing**

ATM Master Plan	IS-0201		
PCP related AF1 PCP related AF2 PCP related AF3 PCP related AF4 PCP related AF5 PCP related AF6	Planned Achievement: 12/2015 61% complete	5 (80% completion)	△ (months): +36  Late
Overview of progress	2014	2013	Deltas 2014-2013
Completed	25 [AL, AM, AT, AZ, BE, CH, CY, CZ, DK, EE, FR, LT, LV, MD, MK, MT, NL, NO, PT, SE, SI, SK, TR, UA, UK]	25 [AL, AM, AT, AZ, BE, CH, CY, CZ, Dk EE, FR, LT, LV, MD, MK, MT, NL, NO, PT, SE, SI, SK, TR, UA, UK)	0
Late	14 [BA, BG, DE, FI, GE, GR, HR, HU, IT, LU, ME, PL, RO, RS]	15 [BA, BG, DE, ES, FI, GE, GR, HR, HU IT, LU, ME, PL, RO, RS)	, -1 / -[ES]
No Plan	1 [ES]		+1 / +[ES]
Not Applicable	1 [IE]	2 [IE, MAS)	-1 / -[MAS]
Latest to complete the Objective	HR - 12/2017	HR - 12/2017	0 months
Planned Objective achievement (80%)	2015 (80.49 %)	2015 (83.33 %)	0
(BA, BG, GE, HU, IT, LU, a	Iready late in 2013 did introduce in th and RO). The objective is optional to N vice to both civil and military. There w	Military however it is recommended	the implementation by those Units
Main reasons for delay			CAPEX RP2 Performance Plans
Main reasons for delay a - States are waiting for th	re: ne implementation of new systems (B.	A, DE, GE and GR)	BALTIC FABEC  REFABE  REFABE

#### Recommendation to stakeholders or expected evolution of the objective

- In house developments and upgrades have been done using a step approach

- Institutional aspects for integration of different sources of data remains a problem

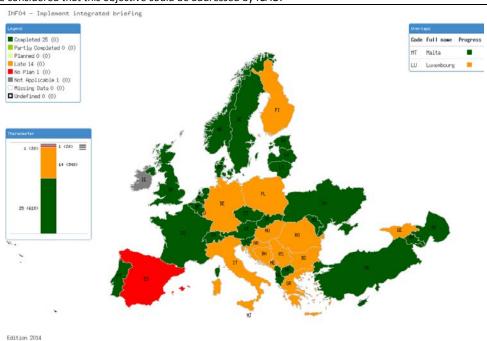
- Migration to EAD is expected but not yet achieved

It is recommended that States develop realistic plans in relation to this objective as there are postponements of implementation year after year. It may be considered that this objective could be addressed by ICAO.

SWFAB

☐ DK-SE FAB

UK-IR FAB



#### **INF07** - Electronic Terrain and Obstacle Data (TOD)

ATM Master Plan	AIMS-16				
PCP related AF1 PCP related AF2 PCP related AF3 PCP related AF4 PCP related AF5 PCP related AF6	Planned Achievement: - no data 2% complete	a - (80% completion)			months): 0 k of Delay
Overview of progress	2014	2013		Delta	s 2014-2013
Completed	1 [IE]				
Partly Completed	2 [LT, SK]				
Planned	27 [AL, AM, AT, BE, BG, CH, CY, CZ, EE, FI, FR, GE, HR, HU, IT, LU, LV, MD, MT, NL, NO, PL, PT, SI, TR, UA, UK]				
Late	1 [SE]				
No Plan	9 [AZ, DE, DK, ES, GR, ME, MK, RO, RS]				
Missing Data	1 [BA]				
Latest to complete the Objective	SE - 12/2020				
Planned Objective achievement (80%)	No Data (75.61 %)	No Data (0 %)			
Stakeholders matters  Only 3 States declared Military applicability (ES, PT and UK). An important missing action as reported by some Regulators, ANSPs and AOPs is the lack of a TOD policy that shall be developed, as a matter of urgency, by the Regulators in cooperation with Stakeholders.					
Main reasons for delay  This is a new objective and therefore the first year of implementation.  Only one State declared being late (SE). The delay is due to an existing number of open questions and the impossibility to provide oversight on all TOD affected stakeholders, even if the National TOD policy was established by the Regulator.  There is an overall risk of delay as some SLoAS that are due by end November 2015 are still declared as -No Plan- by 9 States (AZ, DE, DK, ES, GR, ME, MK, RO, RS).  CAPEX RP2 Performance Plans  BALTIC  BALTIC  BALTIC  DANUBE  DANUBE  DANUBE  DK-SE FAB  UK-IR FAB  FABCE					
Recommendation to stakeholders or expected evolution of the objective  One important action for the very short term (Nov 2015) is the development of the National TOD Policy (REG 01).					

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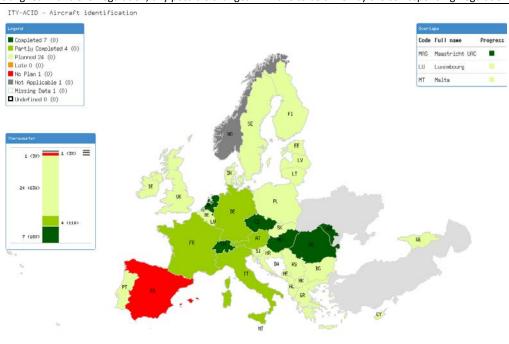
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#### **ITY-ACID - Aircraft identification**

ATM Master Plan	GSURV-0101			
PCP related AF1 PCP related AF2 PCP related AF3 PCP related AF4 PCP related AF5 PCP related AF5	Planned Achievement: 01/2020 18% complete	0 (80% completion)		△ (months): -60 On Time
Overview of progress	2014	2013		Deltas 2014-2013
Completed	7 [CH, CZ, HU, MAS, MD, NL, RO]			
Partly Completed	4 [AT, DE, FR, IT]			
Planned	24 [AL, BE, BG, CY, DK, EE, FI, GE, GR, HR, IE, LT, LU, LV, ME, MK, MT, PL, PT, RS, SE, SI, SK, UK]			
No Plan	1 [ES]			
Missing Data	1 [BA]			
Not Applicable	1 [NO]			
Latest to complete the	BE, CY, DE, FI, GR, IE, LV, MT, PL, PT,			
Objective	SE, SI - 01/2020			_
Planned Objective achievement (80%)	2020 (92.11 %)	No Data (0 %)		
Stakeholders matters  It is important to note that some States which are outside the applicability area have reported implementation plans or even completion of the objective.				
Main reasons for delay			CAF	PEX RP2 Performance Plans
new objective and as the conclusions. It should also of Regulation 1206/2011	formation does not show risks of delection date is 01/2020 it is preno be noted that the objective is only a strength the formal that the following the formal that the following of the 1st milestone of 02/2012.	nature to draw definitive addressing the 2nd milestone	DAN	UBE SWFAB UK-IR FAB
Recommendation to stake	eholders or expected evolution of the	ne objective		

As the objective is aligned with a SES Regulation, any possible changes will have to be driven by the corresponding Regulation.



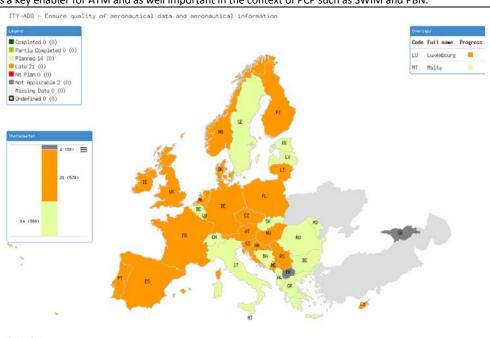
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#### ITY-ADQ - Ensure quality of aeronautical data and aeronautical information

ATM Master Plan	IS-0202 IS-0204		
PCP related AF1 PCP related AF2 PCP related AF3 PCP related AF4 PCP related AF5 PCP related AF6	Planned Achievement: 07/2017  O% complete	7 (80% completion)	△ (months): +1  Late
Overview of progress	2014	2013	Deltas 2014-2013
Planned	14 [AL, BA, BE, BG, CH, EE, GR, IT, LV, MD, MT, RO, SE, SK]	20 [BA, BE, BG, CH, CY, EE, FI, GR, IT, LU, LV, MD, ME, MT, PL, RO, RS SE, SK)	1 -6 / ±1Δ11 / -1( Υ EL HR 111 ME PL
Late	21 [AT, CY, CZ, DE, DK, ES, FI, FR, HR, HU, IE, LT, LU, ME, NL, NO, PL, PT, RS, SI, UK]	14 [AL, AT, CZ, DE, ES, FR, HU, IE, I NL, NO, PT, SI, UK)	.T, +7 / +[CY, DK, FI, HR, LU, ME, PL, RS] / -[AL]
No Plan		1 [DK)	-1 / -[DK]
Not Applicable	2 [GE, MK]	3 [GE, MAS, MK)	-1 / -[MAS]
Latest to complete the Objective	CZ - 12/2018	CZ - 12/2018	0 months
Planned Objective achievement (80%)	2017 (86.49 %)	2017 (86.84 %)	0
Stakeholders matters There isn't any State hav	ing achieved the -Completed- status a	and only about 35% are planning	to complete it on time.
challenging to meet by the ADQ regulation were estanditionally some means time reliable software so	that the requirements of this objection defined deadline. Moreover the locablished very late, in some cases dues of compliance arrived late and industitutions. Achieving compliance with the shad to significantly adapt existing present the shadow of the shadow o	to lack of resources.  try failed to provide in due le regulation is seen as a	CAPEX RP2 Performance Plans  BALTIC FABEC  BLUEMED NEFAB  DANUBE SWFAB  DK-SE FAB  FABCE

#### Recommendation to stakeholders or expected evolution of the objective

EUROCONTROL shall continue supporting stakeholders, as far as possible through various activities at different levels (including guidelines), as well using the existing fora, working groups, workshops and training initiatives. States shall take urgent action and not wait because AIM is a key enabler for ATM and as well important in the context of PCP such as SWIM and PBN.



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#### ITY-AGDL - Initial ATC air-ground data link services above FL-285

ATM Master Plan	AUO-0301		
PCP related AF1 PCP related AF2 PCP related AF3 PCP related AF4 PCP related AF5 PCP related AF6	Planned Achievement: 12/2018  19% complete	3 (80% completion)	△ (months): +34  Late
Overview of progress	2014	2013	Deltas 2014-2013
Completed	7 [AT, BE, CH, DE, IE, MAS, UK]	5 [BE, CH, DE, MAS, UK)	+2 / +[AT, IE]
Partly Completed	1 [HR]		+1 / +[HR]
Planned	4 [BG, LV, MK, RO]	14 [BA, BG, CY, CZ, EE, FI, GE, HU, LT, LV, MD, MK, PL, RO)	-10 / -[BA, CY, CZ, EE, FI, GE, HU, LT, MD, PL]
Late	21 [AL, BA, CY, CZ, DK, EE, ES, FI, FR, HU, IT, LT, MD, ME, MT, PL, PT, RS, SE, SI, SK]	13 [AT, ES, FR, IE, IT, ME, MT, NO, PT, RS, SE, SI, SK)	+8 / +[AL, BA, CY, CZ, DK, EE, FI, HU, LT, MD, PL] / -[AT, IE, NO]
No Plan	3 [GE, GR, NO]	3 [AL, DK, GR)	0 / +[GE, NO] / -[AL, DK]
Not Applicable	1 [NL]	3 [HR, LU, NL)	-2 / -[HR, LU]
Latest to complete the Objective	AL, DK, FR, ME, PL, RS - 12/2018	FR, SE - 12/2018	0 months
Planned Objective achievement (80%)	2018 (89.19 %)	2018 (84.21 %)	0

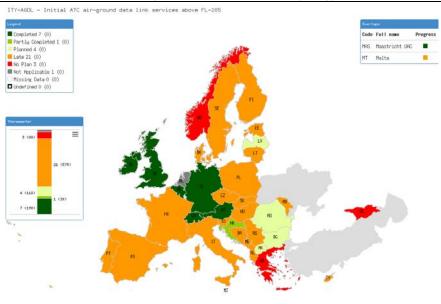
#### Stakeholders matters

Some of the Military Authorities report of not having plans to equip the existing fleet. There are 18 Military Authorities, which have reported the objective as -Not Applicable-. AUs investments have been done in vane as the expected capabilities have not been realised in ground systems. With the new compliance dates in IR 310/2015 States will be given additional respite, but without meeting them the first important step of SESAR deployment (i.e. PCP) will be jeopardised.

# Main reasons for delay - Due to the status of the IR, the work on data link implementation is stopped; - Due to technical problems identified with the reliability of DLS A/G service link on European level; - Due to complexity of ATM systems in place, a phased implementation is planned based on the outcomes of CBA; CAPEX RP2 Performance Plans BALTIC FABEC DANUBE SWFAB UK-IR FAB FABCE

#### Recommendation to stakeholders or expected evolution of the objective

The Commission Implementing Regulation (EU) 2015/310 of 26 February 2015 has amended Regulation (EC) No 29/2009 and hence the new completion date for the ANSPs will be 5 February 2018, while for the new transport type state aircraft 1 January 2019.

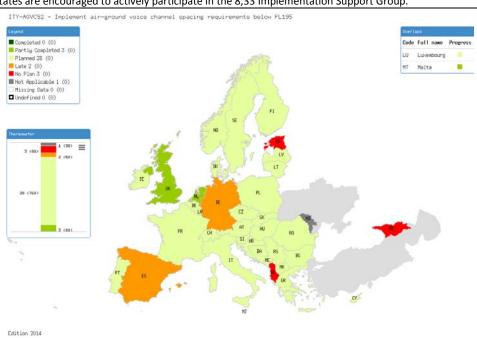


#### ITY-AGVCS2 - Implement air-ground voice channel spacing requirements below FL195

ATM Master Plan	CTE-C01a			
PCP related AF1 PCP related AF2 PCP related AF3 PCP related AF4 PCP related AF5 PCP related AF6	Planned Achievement: 12/2020 0% complete	) (80% completion)	△ (months): 0 On Time	
Overview of progress	2014	2013	Deltas 2014-2013	
Partly Completed	3 [MT, NL, UK]		+3 / +[MT, NL, UK]	
Planned	28 [AT, BA, BE, BG, CH, CY, CZ, DK, FI, FR, GR, HR, HU, IE, IT, LT, LU, LV, ME, MK, NO, PL, PT, RO, RS, SE, SI, SK]	27 [AT, BA, BE, BG, CY, CZ, DE, DK, FR, GR, HU, IE, IT, LT, LU, LV, ME, N NL, PL, PT, RO, RS, SE, SK, UK)	1 +1 / +1( H HR M/K N() \( \) \( \) -11)F M/1	
Late	2 [DE, ES]	1 [CH)	+1 / +[DE, ES] / -[CH]	
No Plan	3 [AL, EE, GE]	5 [AL, EE, GE, HR, NO)	-2 / -[HR, NO]	
Missing Data		2 [ES, SI)	-2 / -[ES, SI]	
Not Applicable	1 [MD]	2 [MD, MK)	-1 / -[MK]	
Latest to complete the Objective	CZ, DE, HU, UK - 12/2020	CZ, HU, UK - 12/2020	0 months	
Planned Objective achievement (80%)	2020 (89.19 %)	No Data (75.68 %)		
States to which it applies	is objective, the interim target for fre (AT, DE, FR, HU, IE, IT, LU, NL, UK). O	nly 10 regulators have reportedly	. , , ,	
among the airspace users	s of the provisions of Regulation (EU)	No 1079/2012.		
Main reasons for delay			CAPEX RP2 Performance Plans	
	ays in the objective, explaining that the		BALTIC FABEC	
	onversions and full compliance can be		BLUEMED L NEFAB	
•	ne of the intermediate milestones mig		DANUBE SWFAB	
	with the frequency conversions dead			
_	this stage is some States, not yet hav	ing a clear implementation	DK-SE FAB	
plan ahead of the 12/201	plan ahead of the 12/2018 deadline.			

#### Recommendation to stakeholders or expected evolution of the objective

Where applicable, States should start planning their activities for raising awareness and implementing this objective well ahead of the 12/2018 deadline. States are encouraged to actively participate in the 8,33 Implementation Support Group.



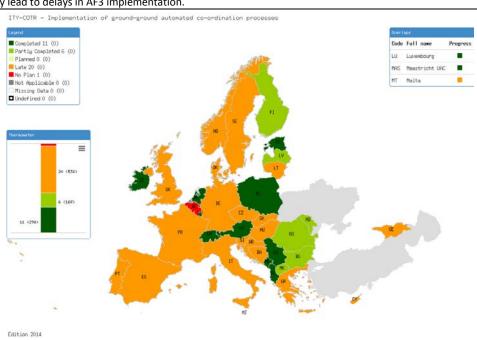
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#### ITY-COTR - Implementation of ground-ground automated co-ordination processes

ATM Master Plan	CM-0201		
PCP related AF1 PCP related AF2 PCP related AF3 PCP related AF4 PCP related AF5 PCP related AF6	Planned Achievement: 06/2016 29% complete	5 (80% completion)	△ (months): +4  Late
Overview of progress	2014	2013	Deltas 2014-2013
Completed	11 [AL, AT, CH, EE, IE, LU, MAS, ME, NL, PL, RS]	8 [AL, CH, EE, LU, MAS, ME, PL, RS	+3 / +[AT, IE, NL]
Partly Completed	6 [BG, FI, LV, MD, MK, RO]	9 [BG, CZ, GR, LT, LV, MK, NL, RO,	, SE) -3 / +[FI, MD] / -[CZ, GR, LT, NL, SE]
Planned		3 [CY, FI, MD)	-3 / -[CY, FI, MD]
Late	20 [BA, CY, CZ, DE, DK, ES, FR, GE, GR, HR, HU, IT, LT, MT, NO, PT, SE, SI, SK, UK]	18 [AT, BA, BE, DE, DK, ES, FR, GE, HU, IE, IT, MT, NO, PT, SI, SK, UK)	' ' I +2 / +ICV C7 GR IT SEL/ =IAT RE IEI
No Plan	1 [BE]		+1 / +[BE]
Latest to complete the Objective	HR - 12/2017	IT - 10/2016	14 months
Planned Objective achievement (80%)	2016 (81.58 %)	2015 (81.58 %)	16
Stakeholders matters 64% of Military stakehold	lers reported this objective as not ap	plicable to them.	
<ul> <li>implementation linked t</li> <li>MIL centers capability u</li> <li>new system upgrade wil</li> </ul>	ends on neighboring centers (BE, CY, to A/G Data-Link implementation (CZ) pgrade (DE, DK) Il address this implementation (GE, Goperational implementation postpon	r, it, mt, no, si, uk)	CAPEX RP2 Performance Plans  BALTIC FABEC BLUEMED NEFAB DANUBE SWFAB W DK-SE FAB FABCE
l <b></b>			

#### Recommendation to stakeholders or expected evolution of the objective

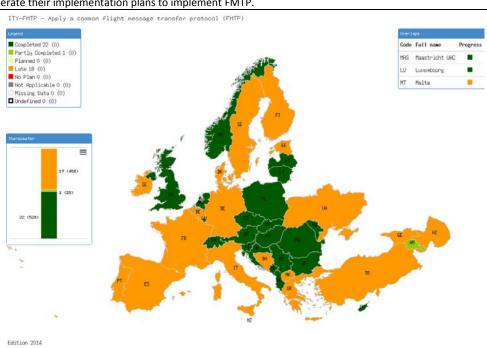
This objective is one of the important enablers in implementation of AF3 related to Flexible Airspace Management and Free Route. Non-compliance may lead to delays in AF3 implementation.



#### ITY-FMTP - Apply a common flight message transfer protocol (FMTP)

ATM Master Plan	CM-0201-A		
PCP related AF1 PCP related AF2 PCP related AF3 PCP related AF4 PCP related AF5 PCP related AF6	Planned Achievement: 12/2015 52% complete	5 (80% completion)	△ (months): +12  Late
Overview of progress	2014	2013	Deltas 2014-2013
Completed	22 [AL, AT, BG, CH, CY, CZ, HR, HU, LT, LU, LV, MAS, MD, ME, NL, NO, PL, RO, RS, SI, SK, UK]	8 [AL, AT, CY, LT, MAS, RO, RS, SK)	+14 / +[BG, CH, CZ, HR, HU, LU, LV, MD, ME, NL, NO, PL, SI, UK]
Partly Completed	1 [AM]	8 [AM, BG, CH, DE, EE, LU, NL, PL)	-7 / -[BG, CH, DE, EE, LU, NL, PL]
Planned		19 [AZ, BA, BE, DK, FI, GE, GR, HR, HU, IE, IT, LV, MD, ME, NO, PT, SE, SI, TR)	-19 / -[AZ, BA, BE, DK, FI, GE, GR, HR, HU, IE, IT, LV, MD, ME, NO, PT, SE, SI, TR]
Late	19 [AZ, BA, BE, DE, DK, EE, ES, FI, FR, GE, GR, IE, IT, MK, MT, PT, SE, TR, UA]	7 [CZ, ES, FR, MK, MT, UA, UK)	+12 / +[AZ, BA, BE, DE, DK, EE, FI, GE, GR, IE, IT, PT, SE, TR] / -[CZ, UK]
Latest to complete the Objective	FR - 01/2018	UK - 12/2018	-11 months
Planned Objective achievement (80%)	2015 (92.86 %)	2014 (83.33 %)	12
Stakeholders matters			
-	which considered this objective appli of completion is slightly below that o		
Main reasons for delay			CAPEX RP2 Performance Plans
States did not provide specific details to justify the delay, in most cases they informed that the deadline for the project had been postponed for 12 months.  Probably the non-synchronised deployment of different Internet Protocol versions by different ANSPs during the transition phase of Regulation (EC) No 633/2007, and the need for coordinated tests with neighbours prior to operational deployment can account for some of the delays, however it cannot not justify the current low level of completion rate.    ABLTIC   BALTIC   NEFAB   SWFAB   DANUBE   DANUBE   DANUBE   DANUBE   DK-SE FAB   DK-SE FAB			
Recommendation to stak	seholders or expected evolution of th	ne objective	

#### ANSPs should accelerate their implementation plans to implement FMTP.



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#### ITY-SPI - Surveillance performance and interoperability

ATM Master Plan	GSURV-0101		
PCP related AF1 PCP related AF2 PCP related AF3 PCP related AF4 PCP related AF5 PCP related AF6	ESSIP FOC: 06/2020 Planned Achievement: 12/2019 (80% completion)  On Time  8% complete		
	2014	2013	D-lh 2014 2012
Overview of progress			Deltas 2014-2013
Completed	3 [MAS, MT, NL]	2 [MAS, MT)	+1 / +[NL]
Partly Completed	8 [CZ, DE, DK, FR, IE, LT, RO, UK]	7 [CZ, DE, FR, LT, LU, RO, UK)	+1 / +[DK, IE] / -[LU]
Planned	17 [AT, BE, BG, CH, HR, HU, IT, LV, MD, ME, MK, NO, PT, RS, SE, SI, SK]	21 [AT, BE, BG, CH, CY, ES, FI, GR, HU, IE, IT, LV, MD, ME, NL, NO, PL, PT, RS, SE, SK)	-4 / +[HR, MK, SI] / -[CY, ES, FI, GR, IE, NL, PL]
Late	9 [AL, BA, CY, EE, ES, FI, GR, LU, PL]	4 [BA, DK, EE, HR)	+5 / +[AL, CY, ES, FI, GR, LU, PL] / -[DK, HR]
No Plan		1 [AL)	-1 / -[AL]
Missing Data		1 [SI)	-1 / -[SI]
Not Applicable	1 [GE]	2 [GE, MK)	-1 / -[MK]
Latest to complete the Objective	DE, FR, HR, IT - 06/2020	AT, CZ, ES, FR, LV, NL, PL - 12/2019	5 months
Planned Objective achievement (80%)	2019 (86.84 %)	2019 (89.47 %)	0

#### Stakeholders matters

The overall implementation progress is good with very few ANSPs being just a few months late (map below). In this context it is observed that in most of the States where multiple service providers are using or providing surveillance data, only the ANSP providing service en-route have submitted reports. There is also good visibility from the Military stakeholders with regard the equipage plans of their fleets.

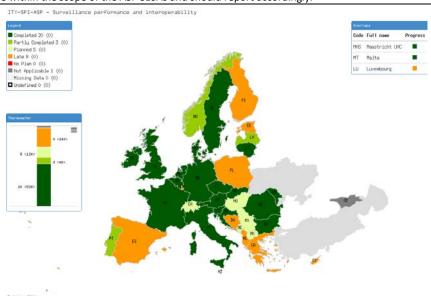
#### Main reasons for delay

No substantial delays are expected in the implementation of the ESSIP objective (however it should be noted that information captured through the LSSIP does not cover all the regulatory requirements of Regulation (EU) No 1207/2011,as amended, therefore a timely implementation of the objective does not imply a timely implementation of all the regulatory requirements). Moreover, there are elements indicating that regulatory requirements applicable directly to the Member States and which should have been already implemented, were not implemented as required by the Regulation.

CAPEX RP2 Pe	erformance Plans
<b>☑</b> BALTIC	FABEC
BLUEMED	☐ NEFAB
DANUBE	SWFAB
✓ DK-SE FAB	☐ UK-IR FAB
FABCE	

#### Recommendation to stakeholders or expected evolution of the objective

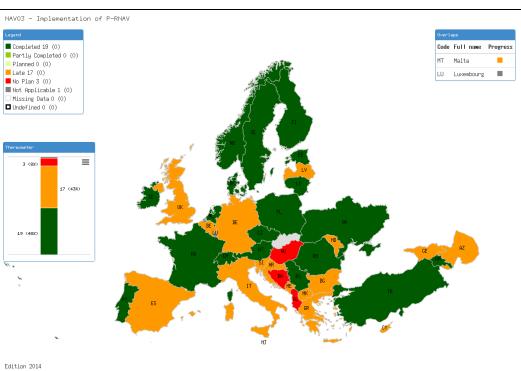
For the States having multiple service providers providing services to IFR/GAT flights, it should be clarified that all ANSP providing or using surveillance data are within the scope of the ASP SLoAs and should report accordingly.



#### NAV03 - Implementation of P-RNAV

ATM Master Plan	AOM-0601 AOM-0602			
PCP related AF1 PCP related AF2 PCP related AF3 PCP related AF4 PCP related AF5 PCP related AF6	Planned Achievement: 12/2016 48% complete	5 (80% completion)		△ (months): +48  Late
Overview of progress	2014	2013		Deltas 2014-2013
Completed	19 [AM, AT, CH, CZ, DK, EE, FI, FR, IE, LT, NL, NO, PL, PT, RO, RS, SE, TR, UA]	18 [AM, AT, CH, CZ, DK, EE, FI, FR, LT, NL, NO, PL, PT, RO, SE, TR, UA)		+1 / +[RS]
Late	17 [AZ, BE, BG, CY, DE, ES, GE, GR, HR, IT, LV, MD, ME, MK, MT, SI, UK]	16 [AZ, BE, BG, CY, DE, ES, GE, HR, LV, MD, ME, MK, MT, RS, UK)	IT,	+1 / +[GR, SI] / -[RS]
No Plan	3 [AL, BA, HU]	6 [AL, BA, GR, HU, LU, SI)		-3 / -[GR, LU, SI]
Not Applicable	1 [LU]	1 [MAS)		0 / +[LU] / -[MAS]
Latest to complete the Objective	UK - 01/2020	UK - 01/2020		0 months
Planned Objective achievement (80%)	2016 (82.5 %)	2018 (80.49 %)		-23
Main reasons for delay  - Implementation is subject to the development and approval of the National PBN Concept and subsequently the PBN Plan at State Level;  - The necessity for the installation of new ground equipment i.e. DMEs;  - Implementation is subject to the user local airspace users capability, OPS concept development and approval, etc;  - Terrain limitations restricting the full DME coverage;  - Implementation is part of the wider project on the whole TMA Airspace restructure;  - Implementation is subject to a positive Cost Benefit Analysis and Operational needs;  - Implementation is planned in steps approach, starting with major airports and continue with minor ones;				CAPEX RP2 Performance Plans BALTIC FABEC BLUEMED NEFAB DANUBE SWFAB DK-SE FAB FABCE
Recommendation to stak	eholders or expected evolution of th	ne objective		

The continuation of this objective will be re-assessed following the publication of PBN Implementing Rule expected by beginning of 2016.

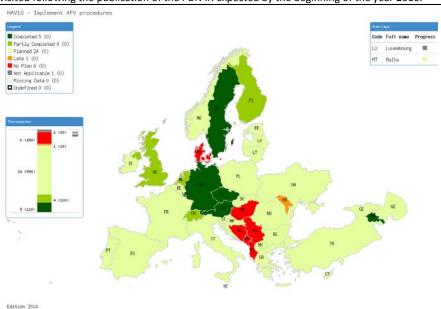


#### **NAV10 - Implement APV procedures**

ATM Master Plan	AOM-0602 AOM-0604		
PCP related AF1 PCP related AF2 PCP related AF3 PCP related AF4 PCP related AF5 PCP related AF6	Planned Achievement: 12/2016  12% complete	5 (80% completion)	△ (months): 0 On Time
Overview of progress	2014	2013	Deltas 2014-2013
Completed	5 [AM, AT, CZ, DE, SE]	2 [AM, AT)	+3 / +[CZ, DE, SE]
Partly Completed	4 [CH, FI, NL, UK]	6 [CH, CZ, FR, IT, NL, UK)	-2 / +[FI] / -[CZ, FR, IT]
Planned	24 [AZ, BE, BG, CY, EE, ES, FR, GE, GR, HR, IE, IT, LT, LV, MK, MT, NO, PL, PT, RO, SI, SK, TR, UA]	23 [AZ, BE, BG, CY, DE, EE, ES, FI, GE HR, IE, LT, LV, MD, MK, MT, NO, PL, PT, RO, SK, TR, UA)	+1 / +[FR, GR, IT, SI] / -[DE, FI, MD]
Late	1 [MD]	1 [SE)	0 / +[MD] / -[SE]
No Plan	6 [AL, BA, DK, HU, ME, RS]	9 [AL, BA, DK, GR, HU, LU, ME, RS, S	I) -3 / -[GR, LU, SI]
Not Applicable	1 [LU]	1 [MAS)	0 / +[LU] / -[MAS]
Latest to complete the Objective	AZ, BG, CH, FI, FR, GE, GR, HR, IT, LT, LV, MD, MK, MT, NL, NO, RO, SI, UA, UK - 12/2016	SE - 12/2018	-24 months
Planned Objective achievement (80%)	2016 (82.93 %)	No Data (76.19 %)	
published to cover this su	hat EASA Material is considered direc ubject. Most of ANSPs have planned Safety Case will be used and Local Saf	to develop a National Safety Case	
<ul> <li>Implementation is base account safety, operation</li> <li>Implementation depend Concept of Operation and</li> </ul>	epends from the business needs defin d on a list of criteria which have been nal, economic and environmental fact ds from the development and approved d National PBN Plan; or the development and approval of t	developed taking into ors; al of the National PBN	CAPEX RP2 Performance Plans  BALTIC FABEC  BLUEMED NEFAB  DANUBE UK-IR FAB  FABCE

#### Recommendation to stakeholders or expected evolution of the objective

The objective may be revisited following the publication of the PBN IR expected by the beginning of the year 2016.



### SAF10 - Implement measures to reduce the risk to aircraft operations caused by airspace infringements

ATM Master Plan					
PCP related AF1 PCP related AF2 PCP related AF3 PCP related AF4 PCP related AF5 PCP related AF5	Planned Achievement: 12/2015 (80% completion)  Late  44% complete				
Overview of progress	verview of progress 2014 2013 Deltas 2014-2013				
Completed	18 [AM, AT, CH, CY, DE, DK, FI, GE, IE, IT, LT, MAS, NL, NO, PL, RO, SK, UK]	16 [AM, AT, CY, DE, DK, FI, GE, IT, LT, MAS, NL, NO, PL, RO, SK, UK)	+2 / +[CH, IE]		
Partly Completed		1 [CH)	-1 / -[CH]		
Late	20 [AL, AZ, BA, BE, BG, CZ, EE, GR, HR, HU, LV, MD, ME, MK, PT, RS, SE, SI, TR, UA] 22 [AL, AZ, BA, BE, BG, CZ, EE, ES, GR, HR, HU, IE, LV, MD, ME, MK, PT, RS, SE, SI, TR, UA)		·		
No Plan	2 [ES, LU]	1 [LU)	+1 / +[ES]		
Not Applicable	1 [MT]	1 [MT)	0		
Latest to complete the Objective	AZ, CZ, SI - 12/2016	CZ - 12/2016	0 months		
Planned Objective achievement (80%)	2015 (85.37 %) 2014 (82.93 %)		12		
	made in the deployment of this object of all ECAC States. The majority of the				
Main reasons for delay  - National regulators have delays in verification of the implementation (EE, LV, SE);  - National regulators have not yet promulgated or are still considering the promulgation of the action plan (AL, BA, BE, BG, CZ, GR, HR, HU, ME, MK, RS, SI, TR);  - Formalisation of the action plan dependent of actions taken by the European Commission (ES).  CAPEX RP2 Performance Plans  BALTIC  BALUEMED  NEFAB  DANUBE  DANUBE  DK-SE FAB  DK-SE FAB  FABCE					
Recommendation to stakeholders or expected evolution of the objective					

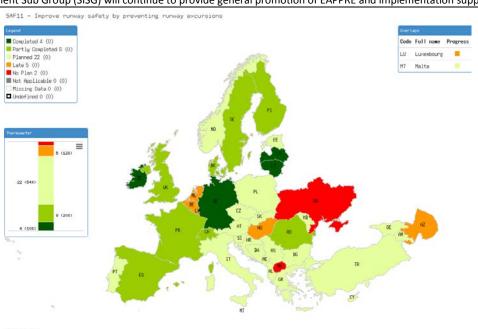
# Safety Improvement Sub Group (SISG) will to continue to support Stakeholders to work towards implementation. SAF10 - Implement measures to reduce the risk to aircraft operations caused by airspace infringements The Date of the Completed 13 (0) The Planted of (0) The Planted of (0) The Size of the Complete of (0) The Size of (0

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#### SAF11 - Improve runway safety by preventing runway excursions

ATM Master Plan					
PCP related AF1 PCP related AF2 PCP related AF3 PCP related AF4 PCP related AF5 PCP related AF6	Planned Achievement: 01/2018 10% complete	3 (80% completion)			onths): 0
Overview of progress	2014	2013		Deltas	2014-2013
Completed	4 [DE, IE, LT, LV]	2 [DE, LV)		+2 / +[IE, LT]	
Partly Completed	8 [CH, DK, ES, FI, FR, RO, SE, UK]	5 [ES, FI, RO, SE, UK)		+3 / +[CH, DK, FR]	
Planned	22 [AL, AM, AT, BA, BG, CY, CZ, EE, GE, GR, HR, IT, MD, ME, MT, NO, PL, PT, RS, SI, SK, TR]  25 [AL, AT, BA, BE, BG, CY, CZ, EE, FR, GE, GR, HU, IE, IT, LT, MD, ME, MT, NL, NO, PL, PT, RS, SK, TR)			-3 / +[AM, HR, SI] / -[BE, FR, HU, IE, LT, NL]	
Late	5 [AZ, BE, HU, LU, NL]			+5 / +[AZ, BE, HU,	LU, NL]
No Plan	2 [MK, UA] 6 [AM, DK, HR, LU, MK, UA)		-4 / -[AM, DK, HR, LU]		
Missing Data		3 [AZ, CH, SI)		-3 / -[AZ, CH, SI]	
Not Applicable		1 [MAS)		-1 / -[MAS]	
Latest to complete the Objective	AZ, HU - 12/2018	AM, BA, CZ, ES, FR, GR, HU, IT, MD, HU - 12/2018 MT, NL, NO, PL, PT, RO, SK, UK - 01/2018		11 months	
Planned Objective achievement (80%)	2018 (90.24 %) No Data (76.19 %)				
Stakeholders matters					
•	in the deployment of this objective. T constitutes around respectively 10%		this ob	ojective complete	d and 3 more
Main reasons for delay  The majority of the States have reported that the implementation of this objective is ongoing. However, no specific reasons are given for this delay.			□ B	CAPEX RP2 Perfo BALTIC BLUEMED DANUBE	rmance Plans  FABEC  NEFAB  SWFAB
Recommendation to stakeholders or expected evolution of the objective					

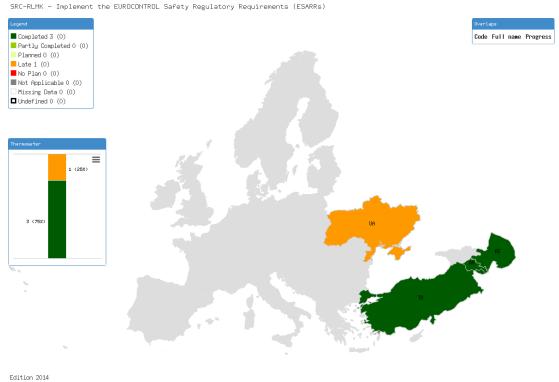
The Safety Improvement Sub Group (SISG) will continue to provide general promotion of EAPPRE and implementation support.



Edition 2014

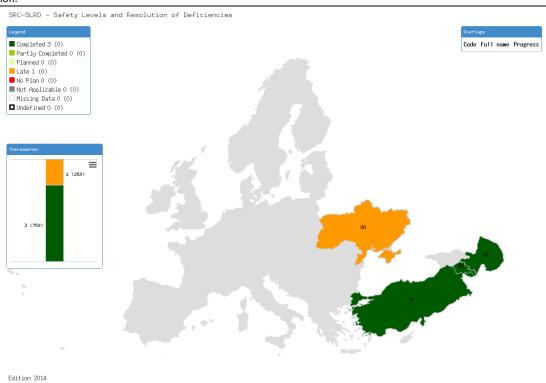
#### SRC-RLMK - Implement the EUROCONTROL Safety Regulatory Requirements (ESARRs)

PCP related AF3 PCP related AF4 PCP related AF5 PCP related AF6 PCP related AF6  verview of progress Completed Late Latest to complete the Objective Planned Objective achievement (80%)  Stakeholders matters The implementation star at State level.	75% complete  2014 3 [AM, AZ, TR] 1 [UA] UA - 12/2015 2015 (100 %)  tus for this objective is determ	2013  2 [AM, TR) 2 [AZ, UA)  AZ, UA - 12/2014  2014 (100 %)	Deltas 2014-201 +1/+[AZ] -1/-[AZ] 12 months	3
PCP related AF5 PCP related AF6  verview of progress Completed Late Latest to complete the Objective Planned Objective achievement (80%)  Stakeholders matters The implementation sta	2014 3 [AM, AZ, TR] 1 [UA] UA - 12/2015 2015 (100 %)	2 (AM, TR) 2 (AZ, UA) AZ, UA - 12/2014 2014 (100 %)	+1 / +[AZ] -1 / -[AZ] 12 months	13
PCP related AF5 PCP related AF6  verview of progress Completed Late Latest to complete the Objective Planned Objective achievement (80%)  Stakeholders matters The implementation sta	2014 3 [AM, AZ, TR] 1 [UA] UA - 12/2015 2015 (100 %)	2 (AM, TR) 2 (AZ, UA) AZ, UA - 12/2014 2014 (100 %)	+1 / +[AZ] -1 / -[AZ] 12 months	13
PCP related AF6  verview of progress  Completed Late Latest to complete the Objective Planned Objective achievement (80%)  Stakeholders matters  The implementation sta	3 [AM, AZ, TR] 1 [UA] UA - 12/2015 2015 (100 %)	2 (AM, TR) 2 (AZ, UA) AZ, UA - 12/2014 2014 (100 %)	+1 / +[AZ] -1 / -[AZ] 12 months	13
verview of progress Completed Late Latest to complete the Objective Planned Objective achievement (80%)  Stakeholders matters The implementation sta	3 [AM, AZ, TR] 1 [UA] UA - 12/2015 2015 (100 %)	2 (AM, TR) 2 (AZ, UA) AZ, UA - 12/2014 2014 (100 %)	+1 / +[AZ] -1 / -[AZ] 12 months	13
Completed Late Latest to complete the Objective Planned Objective achievement (80%)  Stakeholders matters The implementation sta	3 [AM, AZ, TR] 1 [UA] UA - 12/2015 2015 (100 %)	2 (AM, TR) 2 (AZ, UA) AZ, UA - 12/2014 2014 (100 %)	+1 / +[AZ] -1 / -[AZ] 12 months	
Late Latest to complete the Objective Planned Objective achievement (80%)  Stakeholders matters The implementation sta	1 [UA] UA - 12/2015 2015 (100 %)	2 (AZ, UA) AZ, UA - 12/2014 2014 (100 %)	-1 / -[AZ] 12 months	
atest to complete the Objective Planned Objective achievement (80%)  Stakeholders matters The implementation sta	UA - 12/2015 2015 (100 %)	AZ, UA - 12/2014 2014 (100 %)	12 months	
achievement (80%)  Stakeholders matters  The implementation star	<u> </u>		12	
The implementation sta	tus for this objective is determ	ained only by the PEC stakeholder ther		
Main reasons for delay Only 1 State (UA) report of ESARR 5 into national		on-going work on the transposition		Plans BEC FAB
			DANUBE SW	/FAB -IR FAB
			FABCE	
	keholders or expected evoluti			
Objective will be closed a implementation.	as achieved in 2014. Ukraine sl	hould continue implementing this obje	ctive as the only State still to fin	alise t
SRC-RLMK - I	mplement the EUROCONTROL Safety Re	egulatory Requirements (ESARRs)		
■ Completed 3 (( ■ Partly Comple ■ Planned 0 (0)			Overlaps Code Full name Po	rogress



#### **SRC-SLRD - Safety Levels and Resolution of Deficiencies**

	y Levels and Resoluti	ion or beneficies	
PCP related AF1 PCP related AF2 PCP related AF3 PCP related AF4 PCP related AF5 PCP related AF5 PCP related AF6	ESSIP FOC: 12/2010 Planned Achievement: 12/ 75% complete	2015 (80% completion)	△ (months): +60  Late
Overview of progress	2014	2013	Deltas 2014-2013
Completed	3 [AM, AZ, TR]	2 [AM, TR)	+1 / +[AZ]
Late	1 [UA]	2 [AZ, UA)	-1 / -[AZ]
Latest to complete the Objective		UA - 12/2014	12 months
Planned Objective achievement (80%)	2015 (100 %)	2014 (100 %)	12
Stakeholders matters The implementation stat at State level.	cus for this objective is determine	ed only by the REG stakeholder the	refore the results are the same at REG as
	s this objective as Late due to on- ew rules for aircraft accidents an		CAPEX RP2 Performance Plans  BALTIC FABEC  BLUEMED NEFAB  DANUBE SWFAB  DK-SE FAB  FABCE
	keholders or expected evolution is achieved in 2014. Ukraine shou		ective as the only State still to finalise the
SRC-SLRD - S	Safety Levels and Resolution of Defici	encies	
Legend			0verlaps



#### ANNEX 3 - ACRONYMS

A		В	
ACAS	Airborne Collision Avoidance System	BCDA	Basic Continuous Descent Approach
ACC	Area Control Centre		
A-CDM	Airport Collaborative Decision making	C	
<b>ADEXP</b>	ATC Data Exchange Presentation	CAA	Civil Aviation Authority
ADS	Automatic Dependent Surveillance	CAPEX	Capital Expenditure
ADS-B	Automatic Dependent Surveillance - Broadcast	CAPLX	Cost Benefit Analysis
ADQ	Aeronautical Data Quality	CCD	Continuous Climb Departure
AF	ATM Functionality	CDA	Continuous Descent Approach
AFTN	Aeronautical Fixed Telecommunications Network	CDM	Collaborative Decision Making
AGDL	Air-Ground Data Link	CEM	Collaborative Environmental Management
AGDE	Aeronautical Information Publication	CNS	Communications, Navigation and Surveillance
AIRAC	Aeronautical Information Regulation and	COM	Communications
AINAC	Control	COTR	Coordination and Transfer
AIS	Aeronautical Information Service	CPDLC	Controller Pilot Data Link Communications
AIXM	Aeronautical Information eXnange Model	CWP	Controller Working Position
AMAN	Arrival Manager		
AMHS	ATS Message Handling Service	D	
ANS	Air Navigation Service	DMAN	Departure Manager
ANSP	Air Navigation Service Provider	DME	Distance Measuring Equipment
AOM	Airspace organisation and management	DMEAN	Dynamic Management of the European
AOP	Airport Operations Programme		Airspace Network
AOT	Airport Operations Team	DP	Deployment Programme
APL	ATC Flight Plan	DPI	Departure Planning Information (NM message)
APO	Airport Operations		
APP	Approach Control Service Facility	E	
APV	Approach with Vertical Guidance	EAD	European Aeronautical Service
APW	Airborne Proximity Warning	EAPPRI	European Action Plan for the Prevention of
ARINC	Aeronautical Radio Incorporated		Runway Incursions
ARN	ATS Route Network	<b>EATMN</b>	European Air Traffic Management Network
ARTAS	ATM Surveillance Tracker and Server System	EC	European Commission
A-SMCG	S Advanced Surface Movement Control and Guidance System	ECAA	European Common Aviation Area
ASP	Air Navigation Service Providers	ECAC	European Civil Aviation Conference
ATC	Air Traffic Control	EASA	European Aviation Safety Agency
ATCO	Air Traffic Control Officer	ENV	Environment
ATFCM	Air Traffic Flow and Capacity Management	ETFMS	Enhanced Tactical Flow Management System
ATFM	Air Traffic Flow Management	EUROCA	EEuropean Organisation for Civil Aviation
ATM	Air Traffic Management	ESARR	Equipment EUROCONTROL Safety Regulatory
ATN	Aeronautical Telecommunications network	LOMIN	Requirements
ATS	Air Traffic Services	ESP	European Safety Programme
AU	Airspace Users	ESSIP	European Single Sky Implementation
		ETOD	Electronic Terrain and Obstacle Data
		EU	European Union
			> <b>p-a</b>

F		<u>L</u>	
FAB	Functional Airspace Block	LSSIP	Local Single Sky Implementation
FCM	Flow and Capacity Management		
FDPS	Flight Data Processing System	M	
FIS	Flight Information Services	MET	Meteorology
FL	Flight Level	MHz	Megahertz
FMTP	Flight Message Transfer Protocol	MIL	Military Authorities
FMS	Flight Management System	MN	Multi-National
FOC	Final Operational Capability	Mode S	SSR Selective Interrogation Mode
FPL	Filed Flight Plan (Message Designator)	MoU	Memorandum of Understanding
FRA	Free Route Airspace	MTCD	Medium Term Conflict Detection
FUA	Flexible Use of Airspace	MUAC	Maastricht Upper Area Control (Centre)
FUM	Flight Update Message (CFMU message)	MOAC	Maastricht Opper Area Control (Centre)
FYROM	Former Yugoslavian Republic of Macedonia	N	
G		N/A	Not applicable
		NAV	Navigation
GAT	General Air Traffic	NOP	Network Operations Plan
GBAS	Ground Based Augmentation System	NPA	Notice of Proposed Amendment
GEN	General		
GNSS	Global Navigation Satellite System	0	
GPS	Global Positioning System	OAT	Operational Air Traffic
Н		OI	Operational improvements
	Homes France	OLDI	On Line Data Interchange
HUM	Human Factors		
l l		Р	
ICAO	International Civil Aviation Organisation	PENS	Pan-European Network Services
IDP	Interim Deployment Programme	PCP	Pilot Common Project
IDSG	Interim Deployment Steering Group	P-RNAV	Precision RNAV
IFPL	Individual Filed Flight Plan		
IFPS	Initial Flight Plan Processing System	R	
IFR	Instrument Flight Rules	REG	Regulatory Authorities
ILS	Instrument Landing System	RNAV	Area Navigation
INF	Information Management	RPL	Repetitive Flight Plan
IP	Internet Protocol	R&D	Research and Development
		RNP	Required Navigation Performance
J			
JU	Joint undertaking	S	
		SAF	Safety
K		SBAS	Satellite Based Augmentation System
KPI	Key Performance Area	SDM	SESAR Deployment Manager
	,	SES	Single European Sky

**SESAR** Single European Sky ATM Research

SJU SESAR Joint Undertaking

**SJUWPC.02** SESAR Joint Undertaking Work package C.02

SLoA Stakeholder Line of Action
STCA Short Term Conflict Alert

**SUR** Surveillance

**SWIM** System-Wide Information Management

T

TBD To Be Determined

TCP/IP Transmission Control Protocol / Internet Protocol

U

UAC Upper Area Control (Centre)

**USE** Airspace Users

V

VCS Voice Communications System

VDL VHF Digital Link
VFR Visual Flight Rules
VHF Very High Frequency

W

**WP** Work Package

#### **ANNEX 4 - ACKNOWLEDGMENTS**

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