

# 5. MONITORING VIEW

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## 5. Monitoring view

The Deployment Programme represents a two-fold support at disposal of the whole European ATM Community; it is not only a planning tool, providing a common working reference for PCP implementation for all operational stakeholders, but also a reporting instrument where the current status of deployment of the PCP, based on an effective and wide-ranging monitoring exercise, is presented.

An effective monitoring of the current status of Implementation of the Programme throughout Europe is pivotal for the identification of those implementation initiatives that still need to be performed and for the definition and setup of the next steps towards the full PCP deployment. A preliminary outlook of the implementation status is ensured by SDM through *ad-hoc* monitoring exercises, whose main outcomes are respectively illustrated and presented in section 5.1 and 5.2.

The first one, carried out in strict cooperation with operational Stakeholders, is performed once per year by SDM and aims at ascertaining the overall Status of the PCP implementation across Europe, also identifying those implementation initiatives still needed to target the full Pilot Common Project deployment.

The second one, performed three times per year, aims at highlighting the progress achieved by PCP-related projects awarded in the CEF framework and is fed by the collection of up-to-date implementation data provided by the Implementing Partners and duly verified by the SDM. Specifically, the methodology underpinning these activities is described within section 5.3, in order to address and illustrate the main features of the SDM synchronization and monitoring approach.

### 5.1 PCP Current Status of Implementation

Considering the SESAR Deployment Manager obligation to “*implement the Commission’s Decisions and monitor their implementation by the implementation level*”, DP 2016 aims at identifying **all implementation activities that still need to be undertaken** in order to achieve the full PCP implementation across Europe, ensuring the adequate level of involvement of the requested stakeholders’ categories.

Such identification, achieved through a dedicated monitoring exercise of the current status of implementation of the Deployment Programme and consequently of the PCP, has been performed with the two-fold objective to **support ATM stakeholders in the identification of implementation areas to be tackled** by their investments and to **avoid significant gaps in the Programme’s implementation**, thus supporting performances’ expectations.

It is worth noting that the results of the **gap identification** represent a **living picture** of the current status of **SESAR implementation** and, as such, are to be constantly kept updated through SDM synchronization and monitoring of the Programme. It is also worth underlying that the mentioned gap identification embodies a **coherent continuation of the Interim Deployment Programme (IDP) monitoring activities**, considering the full alignment between specific Families included in the DP 2016 and the IDP Activity Areas and/or Work Packages addressing PCP prerequisites and facilitators.

The elaboration of such a comprehensive picture of the overall current PCP implementation status relies on the **strict cooperation amongst the SESAR Deployment Manager and the operational stakeholders**, as well as on the **support of the Network Manager** and of the **European Defence Agency**. Such cooperation has resulted in a **wide-ranging monitoring exercise**, aiming at providing an up-to-date picture of the implementation of the Programme. The monitoring exercise has been carried out building on inputs provided by the relevant operational stakeholders per Family, through **ad-hoc templates and surveys developed by SDM aiming at detailing the status of deployment by May 2016**.

The current monitoring snapshot is therefore the result of the integration of feedback received by all stakeholder categories involved in the deployment of each Family, and clearly identifies what has still to be implemented, where and by whom. To this end, the monitoring exercise has been organized in order to involve:

- The **ground stakeholders**, organized and clustered on a **geographical scope-basis**;
- The **Airspace Users**, for those Families in whose deployment they are directly involved, with specific reference to the **PCP-related flight planning capabilities**, as well as the **aircraft capabilities**. The analysis has been conducted building on a **fleet-centric approach**.

In order to summarize all required information, **dedicated charts and tables have been developed per each Family**, providing a “common” overview of what has already been done until now and which implementation activities are still to be performed to achieve PCP implementation. Specifically, **for the ground stakeholders** a dedicated chart has been developed per each Family and will be featured in section 5.1.1, whilst an overall recap of the **current status of deployment of PCP with regard to the Airspace Users** will be featured in section 5.1.2.

### Ground Stakeholders - Monitoring Overview

A generic overview of the chart used to outline the results of the monitoring exercise among Ground Stakeholders is proposed hereafter for illustrative purposes. Dedicated charts per each Family will be featured in section 5.1.1.

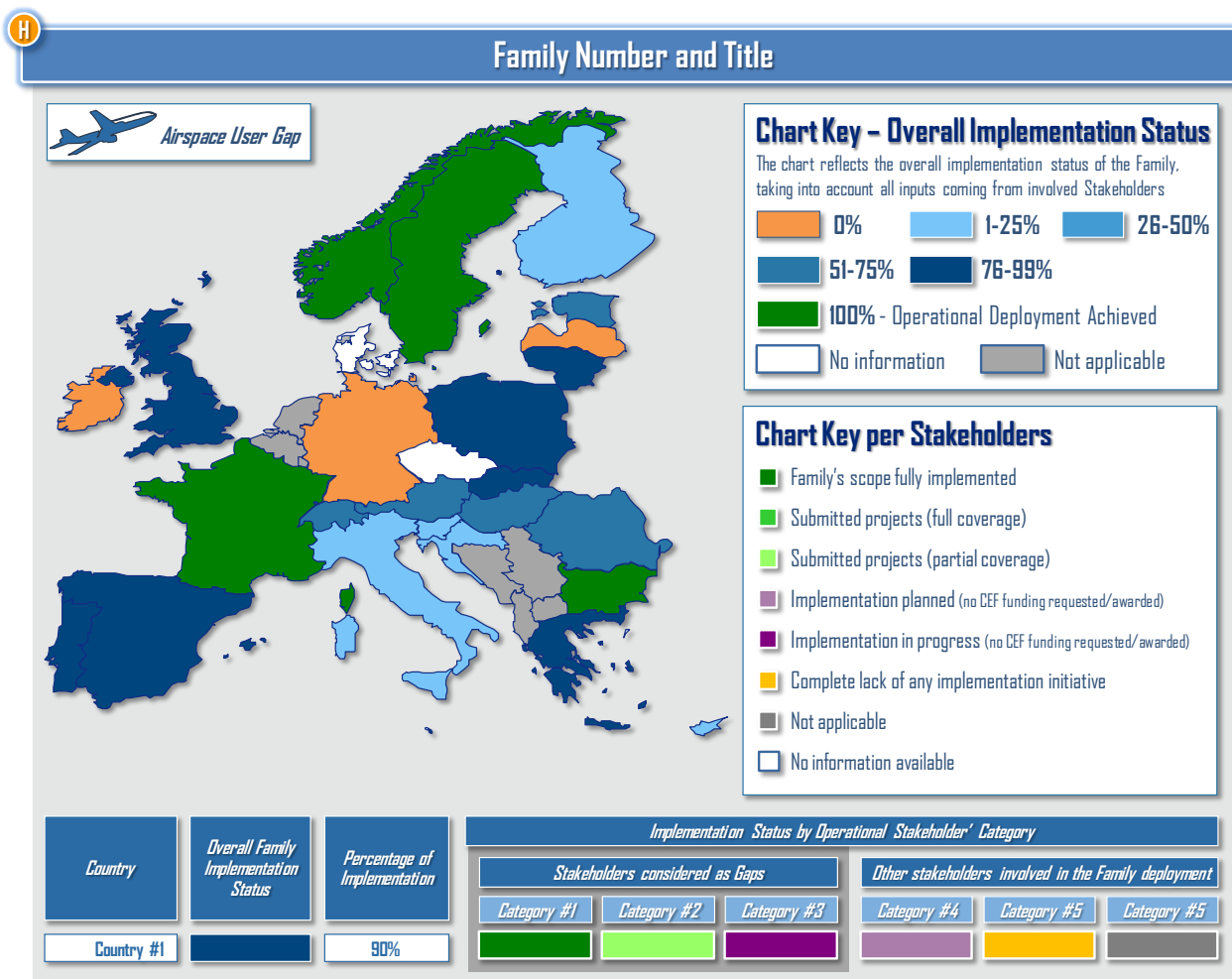
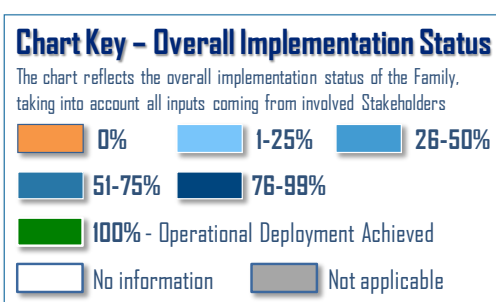


Fig. 45 – Ground Stakeholders – Overview of the results

### Family Number and Title

The **structure of the chart has been developed in order to provide the reader with a wide set of information**, which are reported hereafter. The chart will clearly identify the Family number, title and its level of **readiness for implementation** (High/Medium/Low), as outlined in section 2.3 and explained in Chapter 3;

The Europe chart shows **different colours for each State within the PCP geographical scope** (plus, where applicable, MUAC and the Network Manager), aiming at providing a quick and effective indication of the overall implementation status of the Family (for AF1 and AF2, only the 25 PCP airports and – if applicable – the Network Manager will be indicated). Different colours represent



The Europe chart shows **different colours for each State within the PCP geographical scope** (plus, where applicable, MUAC and the Network Manager), aiming at providing a quick and effective indication of the overall implementation status of the Family (for AF1 and AF2, only the 25 PCP airports and – if applicable – the Network Manager will be indicated). Different colours represent

**different percentage of completion of the Family and correspond to the current percentage of deployment** (i.e. which part of the gap has been already covered by May 2016). It is worth noting that – considering that the goal of the monitoring exercise is to ascertain the current PCP implementation status – this percentage does not include those activities which are already planned within CEF-awarded IPs, but have not been executed yet. Such activities – and the associated percentage of expected coverage of the gap – are reported in the Project View of the Programme, within each of the Family WBSs.

This table **recaps the overall Family implementation status per each country** within the PCP geographical scope, both through the **indication of the specific percentage** and through the **colour coding already used in the Europe chart**. It is worth mentioning that this percentage represents the integration of inputs coming from all involved stakeholders responding to the dedicated *surveys* and templates distributed by SDM.

Country	Overall Family Implementation Status	Percentage of Implementation
Country #1		90%
Country #2		60%
Country ...		30%



For each country, the **right section of the table** allows readers to check

the status of implementation for each category of stakeholders which is involved in the Family Implementation. Specifically, two kind of involvement by stakeholders' category is envisaged:

- **Stakeholders considered as gaps**, including those stakeholder categories that are requested by the Pilot Common Project regulatory framework to invest in order to fill in the gaps and are therefore potentially eligible for co-funding under upcoming CEF Transport Calls;
- **Other stakeholders involved in the Family deployment**, including stakeholder categories which have to be considered as contributors for the full operational deployment of the Family itself, without being necessarily requested by the PCP framework to invest.

Building on the clustering used in DP 2015, **seven categories of implementation status** have been **identified for each involved stakeholder**, plus an eighth one in case of missing information. Such information will be featured in the right section of the table and will be **populated on the basis of the input provided by operational stakeholders** through the monitoring exercise, in accordance to the following chart key/ categories:

1. **Family's scope fully implemented** (*no additional activities to fully deploy the Family is expected by the operational stakeholder category*);
2. **Awarded project(s) into 2014 CEF Call and / or into 2015 CEF Call**; its/their realization will ensure the **full Family**

**Chart Key per Stakeholders**

- Family's scope fully implemented
- Submitted projects (full coverage)
- Submitted projects (partial coverage)
- Implementation planned (no CEF funding requested/awarded)
- Implementation in progress (no CEF funding requested/awarded)
- Complete lack of any implementation initiative
- Not applicable
- No information available

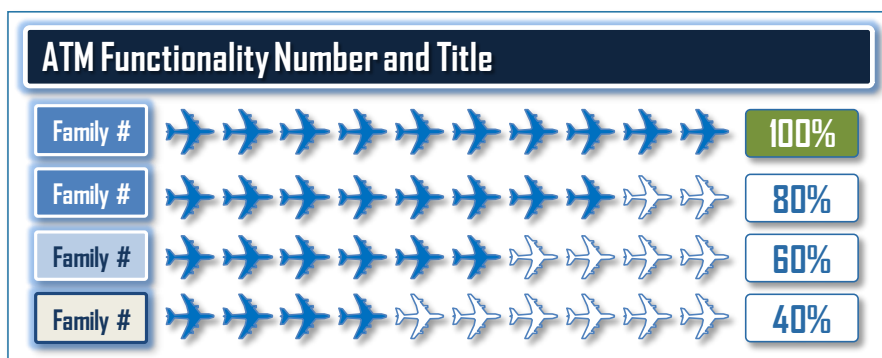
- implementation** from the operational stakeholder' perspective;
3. **Awarded project(s) into 2014 CEF Call and / or into 2015 CEF Call**; its/their realization **will not ensure the full Family implementation**;
  4. **Implementation initiative planned** but for which **co-financing through CEF Transport Calls has not been requested** and/or not awarded;
  5. **Implementation initiative in progress** but for which **co-financing through CEF Transport Calls has not been requested** and/or not awarded;
  6. **Complete lack of any implementation initiative** aimed at contributing to the Family deployment;
  7. **Family not applicable to the identified stakeholder category**, considering the specific features of the geographical scope of the implementation;
  8. **No information available.**



Whenever the specific features of a Family require for an **active involvement of the Airspace Users** in order to achieve the full deployment and the realization of the related performance benefits, a **dedicated label** has been added. Due to the nature of the AU stakeholders, which are not strictly connected to an EU State but rather are operating across the whole PCP geographical scope, such label highlights the **identification of a dedicated Airspace Users gap for the Family**, which will be further detailed in section 5.1.2.

## **Airspace Users - Monitoring Overview**

A generic overview of the chart used for outlining the Airspace User gaps is proposed hereafter for illustrative purposes. **Dedicated charts**, highlighting the current status of implementation amongst Airspace Users **per relevant ATM functionalities**, is featured in section 5.1.2.



**Fig. 46 – Airspace Users – Overview of the results of the Exercise**

For each relevant ATM Functionality, **only Families for which Airspace Users have been identified as directly involved in the Family implementation** are listed. The gap coverage of the identified Families is defined on the basis of the dedicated survey distributed among Airlines in cooperation with the Airspace Users association on March 4<sup>th</sup>, 2016. It is worth mentioning that the charts take into account all **inputs gathered from Airspace Users headquartered in EU which replied to the SDM surveys**; such inputs are considered as resulting into a representative snap-shot of the current state-of-play on airspace user side of the PCP implementation.

Specifically, the **coverage percentage** of the Airspace Users gaps included in the charts indicates the **percentage of fleet** operated by the survey respondents **already compliant with the PCP Regulation framework**, both in terms of aircraft and flight planning capabilities.

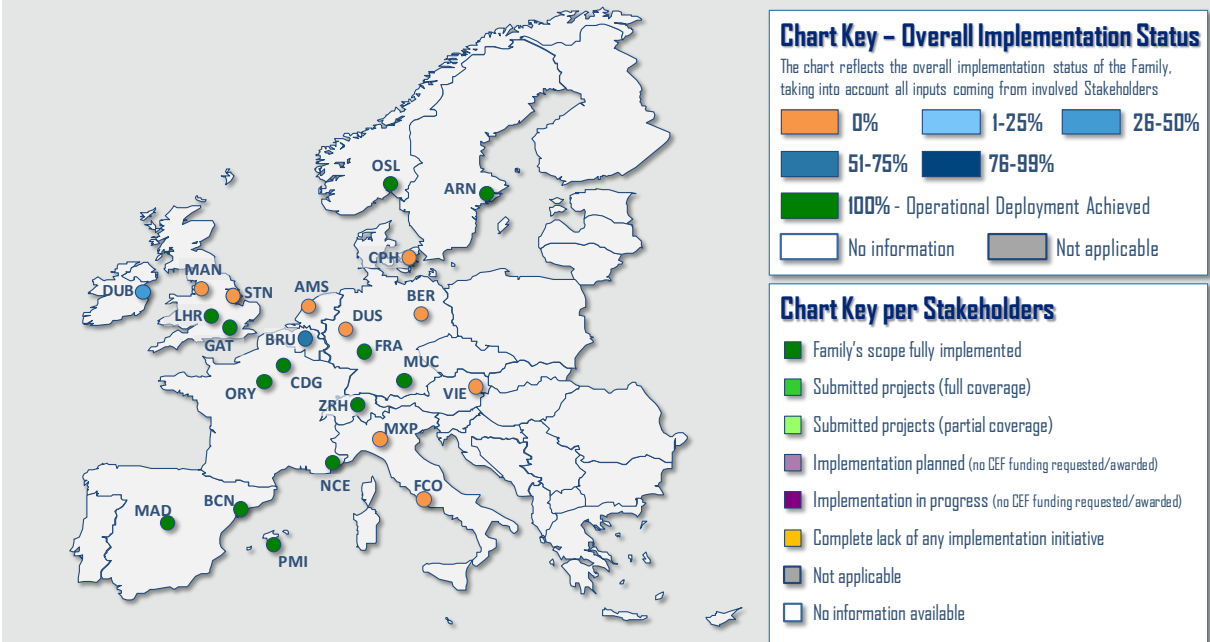
### **5.1.1 Ground Gaps – View per Family**

At ground level, a wide number of Operational Stakeholders have provided their **feedback on the current PCP implementation status** through the Monitoring Exercise, launched by the SESAR Deployment Manager on March 4<sup>th</sup>.

As a result, the **charts and tables** included in the following pages represent, on a Family basis, a **“common” overview of the activities that have already been performed and what still needs to be implemented** in order to achieve the full PCP implementation throughout Europe.

# AF 1 – Extended Arrival Management and Performance Based Navigation in the High Density TMAs

## 1.1.1 Basic AMAN



Airport	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder Category	
			Stakeholders considered as Gaps	Other stakeholders involved in the Family deployment
			ANSPs	Airport Operators
Amsterdam Schiphol	0%	0%	Light Green	Dark Green
Barcelona El Prat	100%	100%	Dark Green	Dark Green
Berlin Brandenburg Airport	0%	0%	Light Green	Grey
Brussels National	55%	55%	Dark Purple	Grey
Copenhagen Kastrup	0%	0%	Light Green	Grey
Dublin Airport	40%	40%	Light Green	Grey
Dusseldorf International	0%	0%	Light Green	Dark Green
Frankfurt International	100%	100%	Dark Green	Dark Green
Istanbul Ataturk Airport	-	-	White	White
London Gatwick	100%	100%	Dark Green	Dark Green
London Heathrow	100%	100%	Dark Green	Dark Green
London Stansted	0%	0%	Grey	Yellow
Madrid Barajas	100%	100%	Dark Green	Dark Green
Manchester Ringway	0%	0%	Grey	Yellow
Milan Malpensa	0%	0%	Light Green	Grey
Munich Franz Josef Strauss	100%	100%	Dark Green	Dark Green
Nice Cote D'Azur	100%	100%	Dark Green	Dark Green
Oslo Gardermoen	100%	100%	Dark Green	Dark Green
Palma de Mallorca San Juan	100%	100%	Dark Green	Dark Green
Paris Charles De Gaulle	100%	100%	Dark Green	Dark Green
Paris Orly	100%	100%	Dark Green	Dark Green
Rome Fiumicino	0%	0%	Light Green	Grey
Stockholm Arlanda	100%	100%	Dark Green	Dark Green
Vienna Schwechat	0%	0%	Light Green	Grey
Zurich Kloten	100%	100%	Dark Green	Dark Green



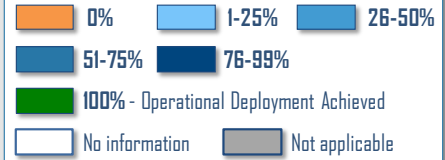
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### 1.1.2 AMAN Upgrade to include Extended Horizon function



#### Chart Key - Overall Implementation Status

The chart reflects the overall implementation status of the Family, taking into account all inputs coming from involved Stakeholders



#### Chart Key per Stakeholders

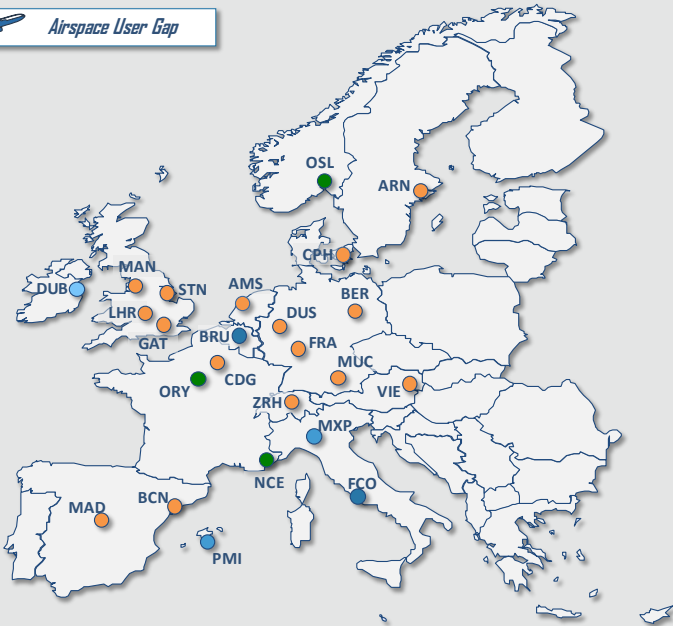


Airport	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder' Category			
			Stakeholders considered as Gaps		Other stakeholders involved	
			ANSPs	Network Manager	Military Authorities	Airport Operators
Amsterdam Schiphol	0%	0%	Not applicable	Submitted projects (full coverage)	Not applicable	Implementation planned
Barcelona El Prat	0%	0%	Implementation in progress	Submitted projects (full coverage)	Not applicable	Not applicable
Berlin Brandenburg Airport	0%	0%	Implementation planned	Submitted projects (full coverage)	Not applicable	Not applicable
Brussels National	0%	0%	Implementation planned	Submitted projects (full coverage)	Not applicable	Not applicable
Copenhagen Kastrup	0%	0%	Submitted projects (partial coverage)	Submitted projects (full coverage)	Not applicable	Not applicable
Dublin Airport	0%	0%	Complete lack of any implementation initiative	Submitted projects (full coverage)	Not applicable	Complete lack of any implementation initiative
Dusseldorf International	0%	0%	Implementation planned	Submitted projects (full coverage)	Not applicable	Implementation planned
Frankfurt International	0%	0%	Submitted projects (partial coverage)	Submitted projects (full coverage)	Not applicable	Not applicable
Istanbul Ataturk Airport	No information	-	No information available	No information available	No information available	No information available
London Gatwick	0%	0%	Not applicable	Submitted projects (full coverage)	Not applicable	Complete lack of any implementation initiative
London Heathrow	95%	95%	Family's scope fully implemented	Submitted projects (full coverage)	Not applicable	Not applicable
London Stansted	0%	0%	Not applicable	Submitted projects (full coverage)	Not applicable	Complete lack of any implementation initiative
Madrid Barajas	0%	0%	Implementation in progress	Submitted projects (full coverage)	Not applicable	Not applicable
Manchester Ringway	0%	0%	Not applicable	Submitted projects (full coverage)	Not applicable	Complete lack of any implementation initiative
Milan Malpensa	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	Not applicable	Not applicable
Munich Franz Josef Strauss	10%	10%	Submitted projects (full coverage)	Submitted projects (full coverage)	Not applicable	Not applicable
Nice Cote D'Azur	0%	0%	Submitted projects (partial coverage)	Submitted projects (full coverage)	Not applicable	Submitted projects (partial coverage)
Oslo Gardermoen	0%	0%	Complete lack of any implementation initiative	Submitted projects (full coverage)	Not applicable	Complete lack of any implementation initiative
Palma de Mallorca Son San Juan	0%	0%	Implementation in progress	Submitted projects (full coverage)	Not applicable	Not applicable
Paris Charles De Gaulle	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	Not applicable	Submitted projects (full coverage)
Paris Orly	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	Not applicable	Submitted projects (full coverage)
Rome Fiumicino	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	Not applicable	Not applicable
Stockholm Arlanda	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	Not applicable	Not applicable
Vienna Schwechat	0%	0%	Implementation planned	Submitted projects (full coverage)	Not applicable	Not applicable
Zurich Kloten	0%	0%	Implementation in progress	Submitted projects (full coverage)	Not applicable	Implementation in progress

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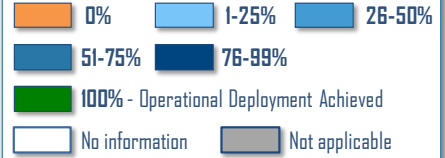
### 1.2.1 RNP APCH with vertical guidance

 Airspace User Gap

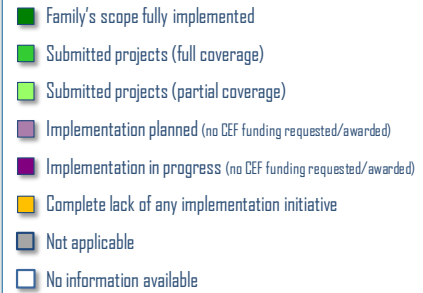


#### Chart Key - Overall Implementation Status

The chart reflects the overall implementation status of the Family, taking into account all inputs coming from involved Stakeholders



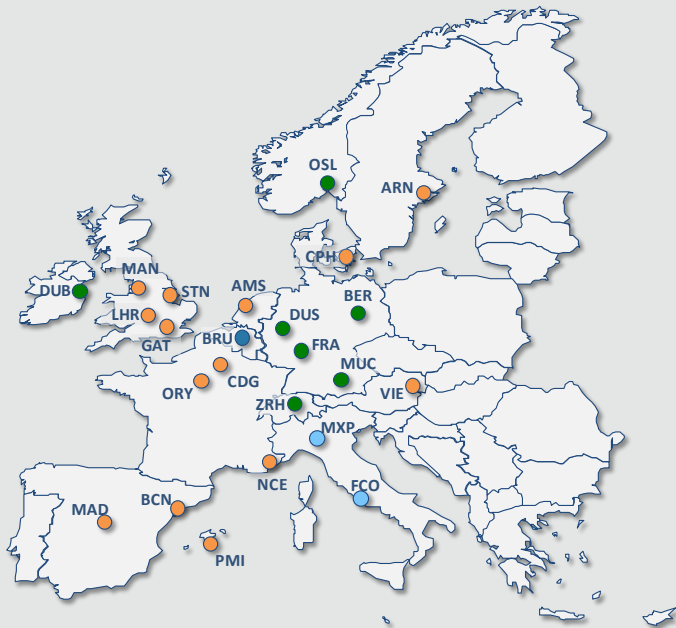
#### Chart Key per Stakeholders



Airport	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder' Category		
			Stakeholders considered as Gaps		
			ANSPs	Airport Operators	Military Authorities
Amsterdam Schiphol	0%	0%			
Barcelona El Prat	0%	0%			
Berlin Brandenburg Airport	0%	0%			
Brussels National	70%	70%			
Copenhagen Kastrup	0%	0%			
Dublin Airport	10%	10%			
Dusseldorf International	0%	0%			
Frankfurt International	0%	0%			
Istanbul Ataturk Airport	-	-			
London Gatwick	0%	0%			
London Heathrow	0%	0%			
London Stansted	0%	0%			
Madrid Barajas	0%	0%			
Manchester Ringway	0%	0%			
Milan Malpensa	40%	40%			
Munich Franz Josef Strauss	0%	0%			
Nice Cote D'Azur	100%	100%			
Oslo Gardermoen	100%	100%			
Palma de Mallorca San Juan	40%	40%			
Paris Charles De Gaulle	0%	0%			
Paris Orly	100%	100%			
Rome Fiumicino	65%	65%			
Stockholm Arlanda	0%	0%			
Vienna Schwechat	0%	0%			
Zurich Kloten	0%	0%			

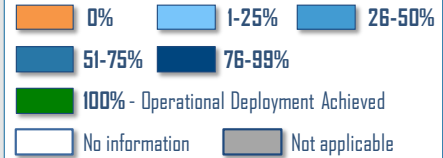
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## 1.2.2 Geographic Database for Procedure design

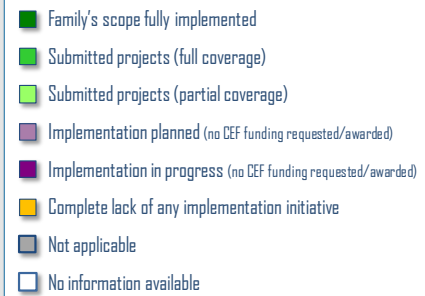


### Chart Key - Overall Implementation Status

The chart reflects the overall implementation status of the Family, taking into account all inputs coming from involved Stakeholders



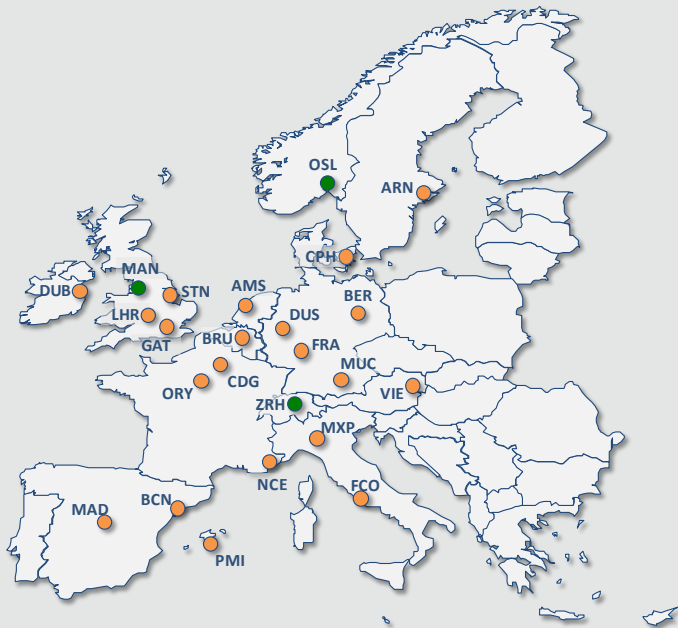
### Chart Key per Stakeholders



Airport	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder' Category		
			Stakeholders considered as Gaps		Other stakeholders involved
			ANSPs	Airport Operators	Military Authorities
Amsterdam Schiphol	0%	0%	Light Green	Grey	White
Barcelona El Prat	0%	0%	Medium Green	Grey	White
Berlin Brandenburg Airport	100%	100%	Dark Green	Dark Green	White
Brussels National	70%	70%	Purple	Grey	White
Copenhagen Kastrup	0%	0%	Yellow	Grey	White
Dublin Airport	100%	100%	Dark Green	Dark Green	White
Dusseldorf International	100%	100%	Dark Green	Dark Green	White
Frankfurt International	100%	100%	Dark Green	Dark Green	White
Istanbul Ataturk Airport	-	-	White	White	White
London Gatwick	0%	0%	Grey	Yellow	White
London Heathrow	0%	0%	Grey	Yellow	White
London Stansted	0%	0%	Grey	Yellow	White
Madrid Barajas	0%	0%	Light Green	Grey	White
Manchester Ringway	0%	0%	Grey	Yellow	White
Milan Malpensa	10%	10%	Light Green	Grey	White
Munich Franz Josef Strauss	100%	100%	Dark Green	Dark Green	White
Nice Cote D'Azur	0%	0%	Medium Green	Medium Green	White
Oslo Gardermoen	100%	100%	Dark Green	Dark Green	White
Palma de Mallorca San Juan	0%	0%	Light Green	Grey	White
Paris Charles De Gaulle	0%	0%	Medium Green	Medium Green	White
Paris Orly	0%	0%	Medium Green	Medium Green	White
Rome Fiumicino	10%	10%	Light Green	Grey	White
Stockholm Arlanda	0%	0%	Grey	Light Green	White
Vienna Schwechat	0%	0%	Purple	Grey	White
Zurich Kloten	100%	100%	Dark Green	Dark Green	White

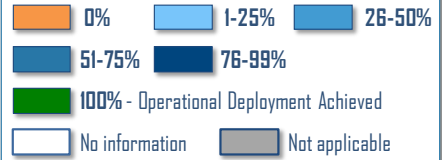
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### 1.2.3 RNP 1 Operations in high density TMA (ground capabilities)



#### Chart Key - Overall Implementation Status

The chart reflects the overall implementation status of the Family, taking into account all inputs coming from involved Stakeholders



#### Chart Key per Stakeholders



Airport	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder' Category		
			Stakeholders considered as Gaps		Other stakeholders involved
			ANSPs	Airport Operators	Military Authorities
Amsterdam Schiphol	0%	0%			
Barcelona El Prat	0%	0%			
Berlin Brandenburg Airport	0%	0%			
Brussels National	0%	0%			
Copenhagen Kastrup	0%	0%			
Dublin Airport	0%	0%			
Dusseldorf International	0%	0%			
Frankfurt International	0%	0%			
Istanbul Ataturk Airport	-	-			
London Gatwick	0%	0%			
London Heathrow	0%	0%			
London Stansted	0%	0%			
Madrid Barajas	0%	0%			
Manchester Ringway	100%	100%			
Milan Malpensa	0%	0%			
Munich Franz Josef Strauss	0%	0%			
Nice Cote D'Azur	0%	0%			
Oslo Gardermoen	100%	100%			
Palma de Mallorca San Juan	0%	0%			
Paris Charles De Gaulle	0%	0%			
Paris Orly	0%	0%			
Rome Fiumicino	0%	0%			
Stockholm Arlanda	0%	0%			
Vienna Schwechat	0%	0%			
Zurich Kloten	100%	100%			

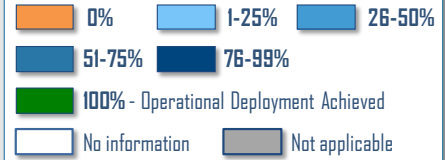
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### 1.2.5 Implement Advanced RNP routes below Flight Level 310

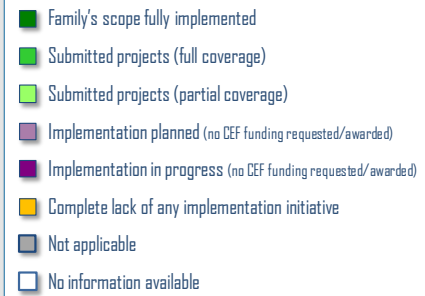


#### Chart Key – Overall Implementation Status

The chart reflects the overall implementation status of the Family, taking into account all inputs coming from involved Stakeholders



#### Chart Key per Stakeholders

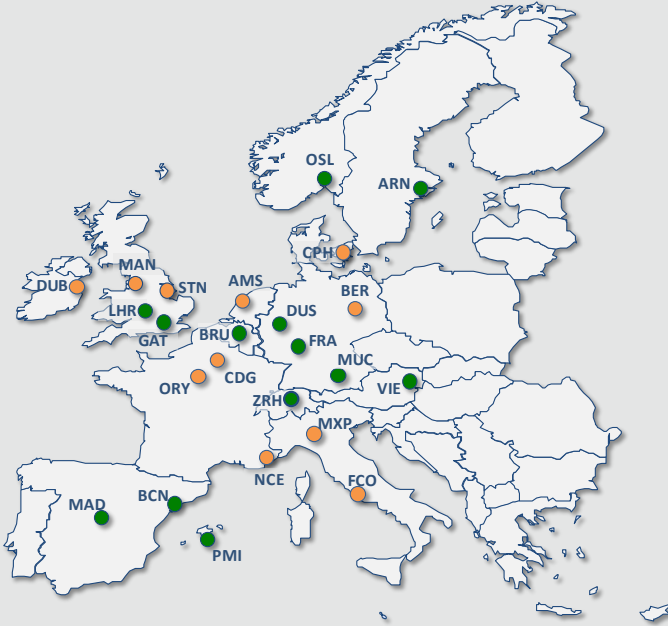


Airport	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder' Category		
			Stakeholders considered as Gaps		
			ANSPs	Network Manager	Military Authorities
Amsterdam Schiphol	0%	0%	Submitted projects (full coverage)	Implementation in progress	No information available
Barcelona El Prat	0%	0%	Implementation in progress	Implementation in progress	No information available
Berlin Brandenburg Airport	0%	0%	Submitted projects (full coverage)	Implementation in progress	No information available
Brussels National	0%	0%	Complete lack of any implementation initiative	Implementation in progress	No information available
Copenhagen Kastrup	0%	0%	Complete lack of any implementation initiative	Implementation in progress	No information available
Dublin Airport	-	-	Not applicable	Not applicable	Not applicable
Dusseldorf International	0%	0%	Submitted projects (full coverage)	Implementation in progress	No information available
Frankfurt International	0%	0%	Submitted projects (full coverage)	Implementation in progress	No information available
Istanbul Ataturk Airport	-	-	No information available	No information available	No information available
London Gatwick	-	-	No information available	Implementation in progress	No information available
London Heathrow	-	-	No information available	Implementation in progress	No information available
London Stansted	-	-	No information available	Implementation in progress	No information available
Madrid Barajas	0%	0%	Implementation in progress	Implementation in progress	No information available
Manchester Ringway	-	-	No information available	Implementation in progress	No information available
Milan Malpensa	0%	0%	Implementation planned	Implementation in progress	No information available
Munich Franz Josef Strauss	0%	0%	Submitted projects (full coverage)	Implementation in progress	No information available
Nice Cote D'Azur	0%	0%	Complete lack of any implementation initiative	Implementation in progress	No information available
Oslo Gardermoen	0%	0%	Complete lack of any implementation initiative	Implementation in progress	No information available
Palma de Mallorca Son San Juan	0%	0%	Implementation in progress	Implementation in progress	No information available
Paris Charles De Gaulle	0%	0%	Complete lack of any implementation initiative	Implementation in progress	No information available
Paris Orly	0%	0%	Complete lack of any implementation initiative	Implementation in progress	No information available
Rome Fiumicino	0%	0%	Implementation planned	Implementation in progress	No information available
Stockholm Arlanda	0%	0%	Complete lack of any implementation initiative	Implementation in progress	No information available
Vienna Schwechat	0%	0%	Complete lack of any implementation initiative	Implementation in progress	No information available
Zurich Kloten	0%	0%	Complete lack of any implementation initiative	Implementation in progress	No information available

## AF 2 – Airport Integration and Throughput

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### 2.1.1 Initial DMAN



**Chart Key - Overall Implementation Status**  
 The chart reflects the overall implementation status of the Family, taking into account all inputs coming from involved Stakeholders

- 0% (Orange)
- 1-25% (Light Blue)
- 26-50% (Medium Blue)
- 51-75% (Dark Blue)
- 76-99% (Darkest Blue)
- 100% - Operational Deployment Achieved (Green)
- No information (White)
- Not applicable (Grey)

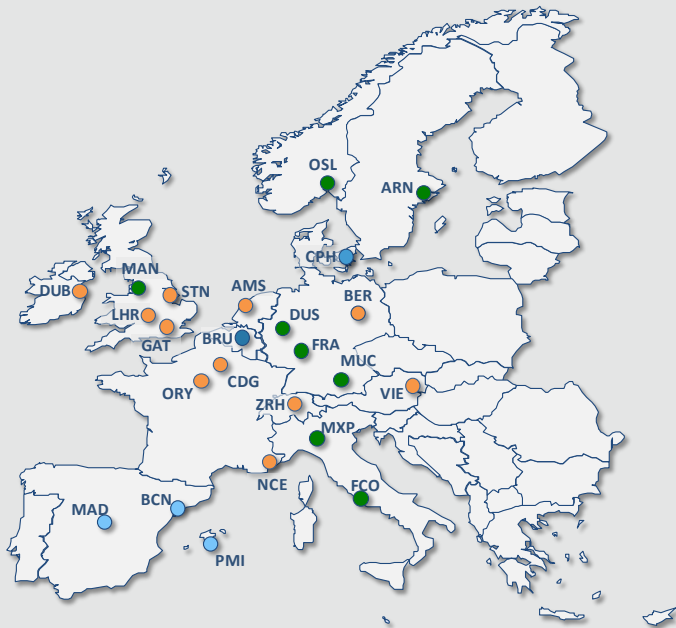
**Chart Key per Stakeholders**

- Family's scope fully implemented (Dark Green)
- Submitted projects (full coverage) (Medium Green)
- Submitted projects (partial coverage) (Light Green)
- Implementation planned (no CEF funding requested/awarded) (Purple)
- Implementation in progress (no CEF funding requested/awarded) (Dark Purple)
- Complete lack of any implementation initiative (Yellow)
- Not applicable (Grey)
- No information available (White)

Airport	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder Category		
			Stakeholders considered as Gaps		Other stakeholders involved
			ANSPs	Airport Operators	Military Authorities
Amsterdam Schiphol	0%	0%	Green	Green	White
Barcelona El Prat	100%	100%	Green	Grey	White
Berlin Brandenburg Airport	0%	0%	Purple	Green	White
Brussels National	100%	100%	Green	Green	White
Copenhagen Kastrup	0%	0%	Grey	Green	White
Dublin Airport	0%	0%	Light Green	Grey	White
Dusseldorf International	100%	100%	Green	Green	White
Frankfurt International	100%	100%	Green	Green	White
Istanbul Ataturk Airport	-	-	White	White	White
London Gatwick	100%	100%	Green	Green	White
London Heathrow	100%	100%	Green	Green	White
London Stansted	0%	0%	Grey	Purple	White
Madrid Barajas	100%	100%	Green	Grey	White
Manchester Ringway	0%	0%	Grey	Purple	White
Milan Malpensa	0%	0%	Purple	Grey	White
Munich Franz Josef Strauss	100%	100%	Green	Green	White
Nice Cote D'Azur	0%	0%	Light Green	Light Green	White
Oslo Gardermoen	100%	100%	Green	Green	White
Palma de Mallorca Son San Juan	100%	100%	Green	Grey	White
Paris Charles De Gaulle	0%	0%	Light Green	Dark Purple	White
Paris Orly	0%	0%	Light Green	Dark Purple	White
Rome Fiumicino	0%	0%	Purple	Grey	White
Stockholm Arlanda	100%	100%	Green	Green	White
Vienna Schwechat	100%	100%	Green	Grey	White
Zurich Kloten	100%	100%	Green	Green	White

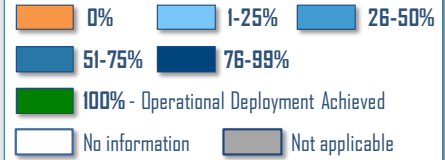
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### 2.1.2 Electronic Flight Strips (EFS)



#### Chart Key - Overall Implementation Status

The chart reflects the overall implementation status of the Family, taking into account all inputs coming from involved Stakeholders



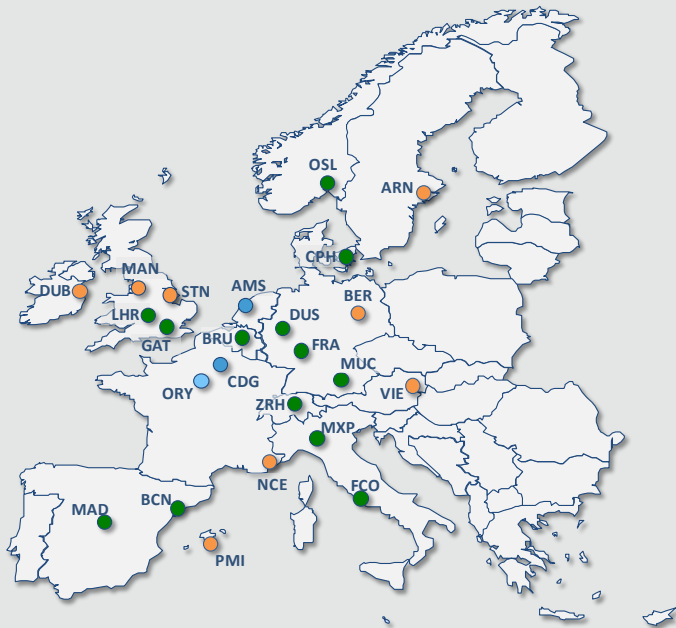
#### Chart Key per Stakeholders



Airport	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder' Category		
			Stakeholders considered as Gaps		Other stakeholders involved
			ANSPs	Airport Operators	Military Authorities
Amsterdam Schiphol	0%	0%			
Barcelona El Prat	20%	20%			
Berlin Brandenburg Airport	0%	0%			
Brussels National	75%	75%			
Copenhagen Kastrup	45%	45%			
Dublin Airport	0%	0%			
Dusseldorf International	100%	100%			
Frankfurt International	100%	100%			
Istanbul Ataturk Airport	-	-			
London Gatwick	0%	0%			
London Heathrow	0%	0%			
London Stansted	0%	0%			
Madrid Barajas	20%	20%			
Manchester Ringway	100%	100%			
Milan Malpensa	100%	100%			
Munich Franz Josef Strauss	100%	100%			
Nice Cote D'Azur	0%	0%			
Oslo Gardermoen	100%	100%			
Palma de Mallorca San Juan	20%	20%			
Paris Charles De Gaulle	0%	0%			
Paris Orly	0%	0%			
Rome Fiumicino	100%	100%			
Stockholm Arlanda	100%	100%			
Vienna Schwechat	0%	0%			
Zurich Kloten	0%	0%			

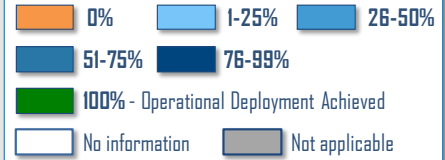
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### 2.1.3 Basic A-CDM

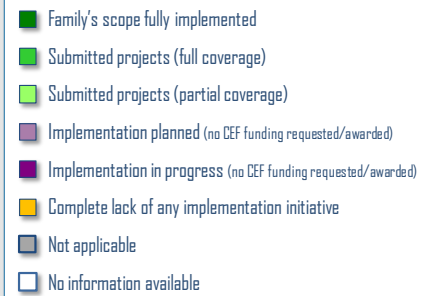


#### Chart Key - Overall Implementation Status

The chart reflects the overall implementation status of the Family, taking into account all inputs coming from involved Stakeholders



#### Chart Key per Stakeholders

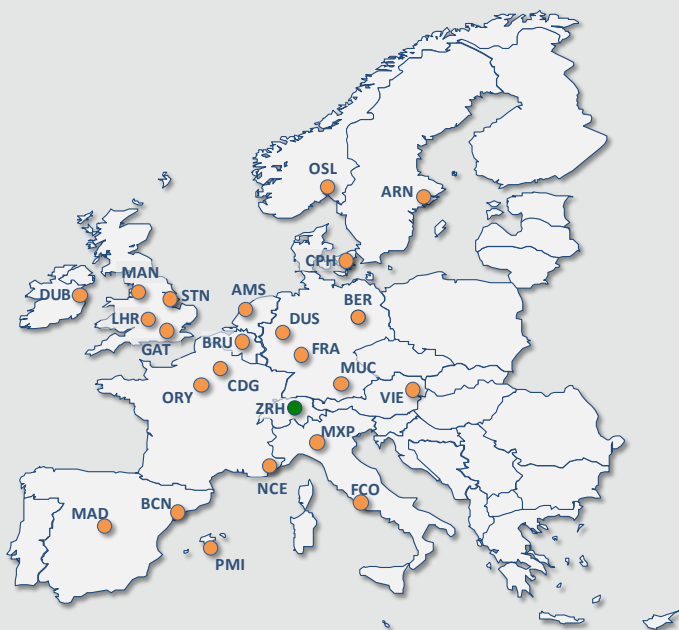


Airport	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder' Category			
			Stakeholders considered as Gaps		Other stakeholders involved in the Family deployment	
			ANSPs	Airport Operators	Network Manager	Military Authorities
Amsterdam Schiphol	35%	35%	Green	Green	Green	White
Barcelona El Prat	100%	100%	Green	Green	Green	White
Berlin Brandenburg Airport	0%	0%	White	Green	Yellow	White
Brussels National	100%	100%	Green	Green	Green	White
Copenhagen Kastrup	100%	100%	Green	Green	Green	White
Dublin Airport	0%	0%	Light Green	Purple	Purple	White
Dusseldorf International	100%	100%	Green	Green	Green	White
Frankfurt International	100%	100%	Green	Green	Green	White
Istanbul Ataturk Airport	-	-	White	White	White	White
London Gatwick	100%	100%	Green	Green	Green	White
London Heathrow	100%	100%	Green	Green	Green	White
London Stansted	0%	0%	White	Purple	White	White
Madrid Barajas	100%	100%	Green	Green	Green	White
Manchester Ringway	0%	0%	White	Purple	White	White
Milan Malpensa	100%	100%	Green	Green	Green	White
Munich Franz Josef Strauss	100%	100%	Green	Green	Green	White
Nice Cote D'Azur	0%	0%	Light Green	Light Green	White	White
Oslo Gardermoen	100%	100%	Green	Green	Green	White
Palma de Mallorca San Juan	0%	0%	Purple	Purple	White	White
Paris Charles De Gaulle	35%	35%	Purple	Light Green	Green	White
Paris Orly	5%	5%	Purple	Light Green	Purple	White
Rome Fiumicino	100%	100%	Green	Green	Green	White
Stockholm Arlanda	0%	0%	White	Light Green	Purple	White
Vienna Schwechat	0%	0%	Light Green	Purple	White	White
Zurich Kloten	100%	100%	Green	Green	Green	White



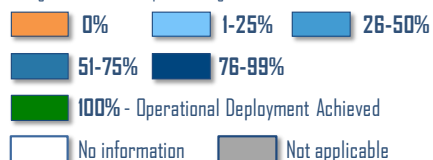
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### 2.1.4 Initial Airport Operations Plan (AOP)

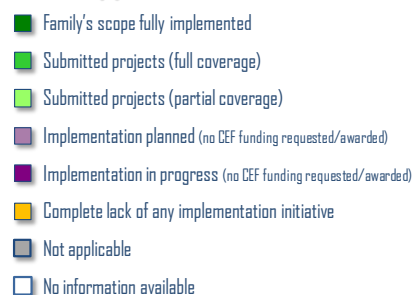


#### Chart Key - Overall Implementation Status

The chart reflects the overall implementation status of the Family, taking into account all inputs coming from involved Stakeholders



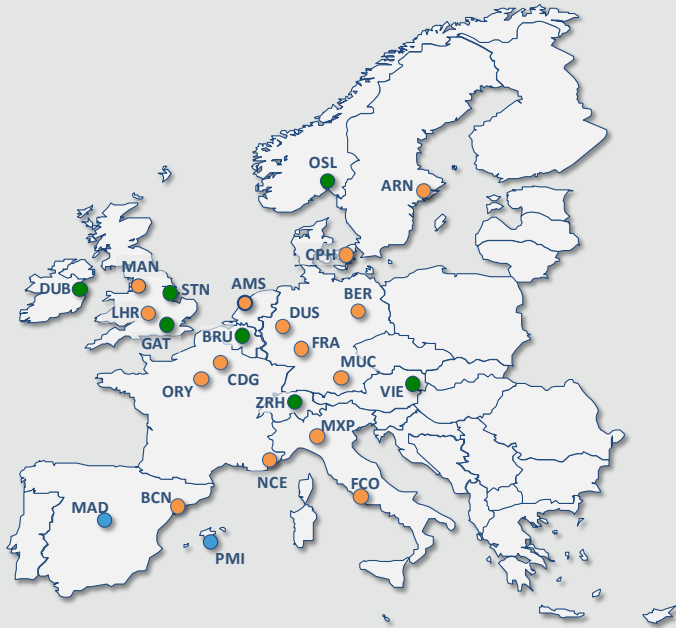
#### Chart Key per Stakeholders



Airport	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder' Category			
			Stakeholders considered as Gaps		Other stakeholders involved in the Family deployment	
			ANSPs	Airport Operators	Military Authorities	MET Providers
Amsterdam Schiphol	0%	0%	Green	Green	White	Green
Barcelona El Prat	0%	0%	Grey	Yellow	White	Yellow
Berlin Brandenburg Airport	0%	0%	Grey	Purple	White	Yellow
Brussels National	0%	0%	Purple	Light Green	White	Purple
Copenhagen Kastrup	0%	0%	Grey	Purple	White	Yellow
Dublin Airport	0%	0%	Yellow	Yellow	White	Purple
Dusseldorf International	0%	0%	Green	Purple	White	Yellow
Frankfurt International	0%	0%	Green	Light Green	White	Yellow
Istanbul Ataturk Airport	No information	-	White	White	White	White
London Gatwick	0%	0%	Grey	Light Green	White	Grey
London Heathrow	0%	0%	Grey	Green	White	Grey
London Stansted	0%	0%	Grey	Yellow	White	Grey
Madrid Barajas	0%	0%	Grey	Yellow	White	Yellow
Manchester Ringway	0%	0%	Grey	Yellow	White	Grey
Milan Malpensa	0%	0%	Purple	Purple	White	White
Munich Franz Josef Strauss	0%	0%	Green	Light Green	White	Yellow
Nice Cote D'Azur	0%	0%	Light Green	Light Green	White	White
Oslo Gardermoen	0%	0%	Yellow	Yellow	White	Yellow
Palma de Mallorca Son San Juan	0%	0%	Grey	Yellow	White	Yellow
Paris Charles De Gaulle	0%	0%	Light Green	Light Green	White	Yellow
Paris Orly	0%	0%	Light Green	Light Green	White	Yellow
Rome Fiumicino	0%	0%	Purple	Purple	White	White
Stockholm Arlanda	0%	0%	Grey	Light Green	White	Yellow
Vienna Schwechat	0%	0%	Grey	Purple	White	Grey
Zurich Kloten	100%	100%	Grey	Green	White	White

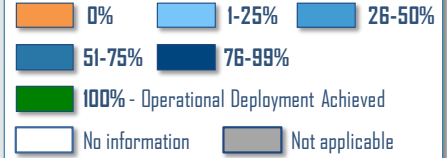
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2.2.1 A-SMGCS Level 1 and 2

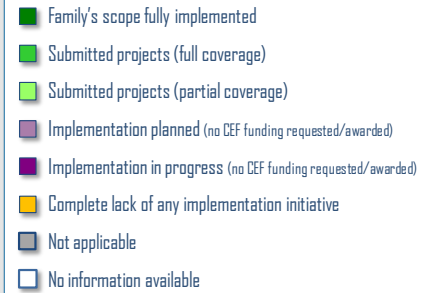


**Chart Key – Overall Implementation Status**

The chart reflects the overall implementation status of the Family, taking into account all inputs coming from involved Stakeholders



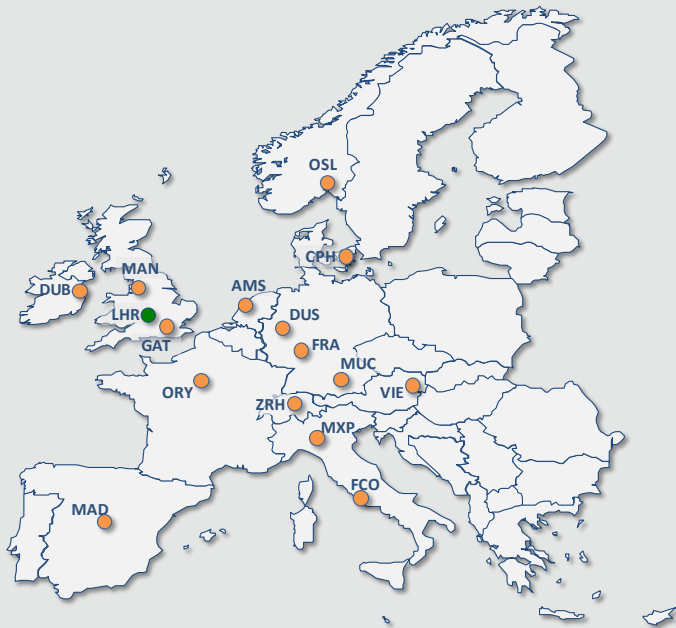
**Chart Key per Stakeholders**



Airport	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder' Category		
			Stakeholders considered as Gaps		Other stakeholders involved
			ANSPs	Airport Operators	Military Authorities
Amsterdam Schiphol	0%	0%	Green	Red	White
Barcelona El Prat	0%	0%	Light Green	Green	White
Berlin Brandenburg Airport	0%	0%	Light Green	Light Green	White
Brussels National	100%	100%	Green	Green	White
Copenhagen Kastrup	40%	40%	Grey	Green	White
Dublin Airport	100%	100%	Green	Green	White
Dusseldorf International	0%	0%	Light Green	Light Green	White
Frankfurt International	0%	0%	Light Green	Light Green	White
Istanbul Ataturk Airport	-	-	White	White	White
London Gatwick	100%	100%	Green	Green	Green
London Heathrow	0%	0%	Light Green	Green	White
London Stansted	100%	100%	Green	Green	Green
Madrid Barajas	30%	30%	Light Green	Green	White
Manchester Ringway	0%	0%	Grey	Light Green	White
Milan Malpensa	0%	0%	Light Green	Light Green	White
Munich Franz Josef Strauss	0%	0%	Green	Light Green	Green
Nice Cote D'Azur	0%	0%	Green	Light Green	White
Oslo Gardermoen	100%	100%	Green	Green	Green
Palma de Mallorca San Juan	30%	30%	Light Green	Green	White
Paris Charles De Gaulle	0%	0%	Green	Green	White
Paris Orly	0%	0%	Green	Green	White
Rome Fiumicino	0%	0%	Light Green	Light Green	White
Stockholm Arlanda	0%	0%	Grey	Light Green	White
Vienna Schwechat	100%	100%	Green	Green	White
Zurich Kloten	100%	100%	Green	Green	Green

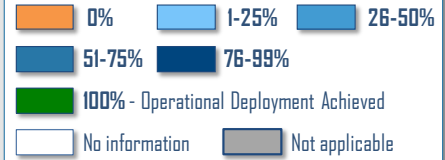
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### 2.3.1 Time Based Separation (TBS)

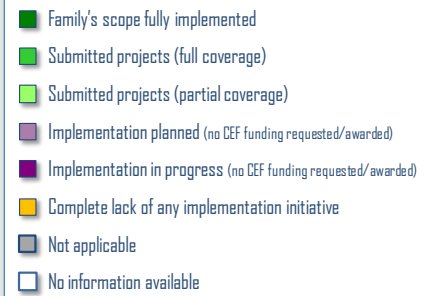


#### Chart Key - Overall Implementation Status

The chart reflects the overall implementation status of the Family, taking into account all inputs coming from involved Stakeholders



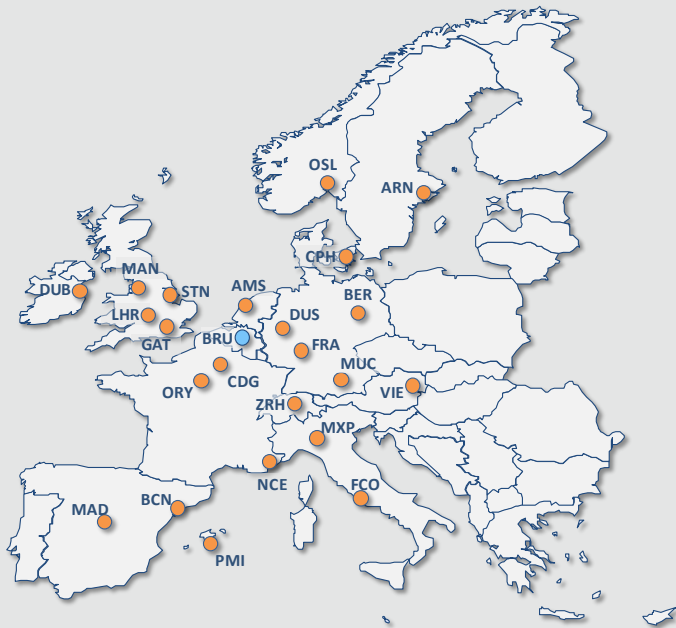
#### Chart Key per Stakeholders



Airport	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder' Category	
			Stakeholders considered as Gaps	Other stakeholders involved in the Family deployment
			ANSIPs	Airport Operators
Amsterdam Schiphol	0%	0%	Implementation planned	Implementation planned
Copenhagen Kastrup	0%	0%	Implementation planned	Implementation in progress
Dublin Airport	0%	0%	Implementation planned	Implementation planned
Dusseldorf International	0%	0%	Complete lack of any implementation initiative	Complete lack of any implementation initiative
Frankfurt International	0%	0%	Complete lack of any implementation initiative	Not applicable
Istanbul Ataturk Airport	-	-	No information available	No information available
London Gatwick	0%	0%	Not applicable	Submitted projects (partial coverage)
London Heathrow	100%	100%	Family's scope fully implemented	Family's scope fully implemented
Madrid Barajas	0%	0%	Implementation planned	Not applicable
Manchester Ringway	0%	0%	Not applicable	Complete lack of any implementation initiative
Milan Malpensa	0%	0%	Complete lack of any implementation initiative	Not applicable
Munich Franz Josef Strauss	0%	0%	Complete lack of any implementation initiative	Not applicable
Oslo Gardermoen	0%	0%	Complete lack of any implementation initiative	Complete lack of any implementation initiative
Paris Orly	0%	0%	Complete lack of any implementation initiative	Complete lack of any implementation initiative
Rome Fiumicino	0%	0%	Complete lack of any implementation initiative	Complete lack of any implementation initiative
Vienna Schwechat	0%	0%	Submitted projects (partial coverage)	Implementation planned
Zurich Kloten	0%	0%	Complete lack of any implementation initiative	Complete lack of any implementation initiative

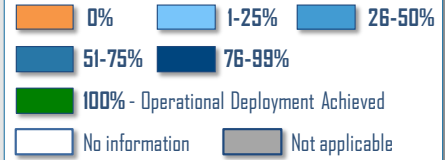
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### 2.4.1 A-SMGCS Routing and Planning Functions

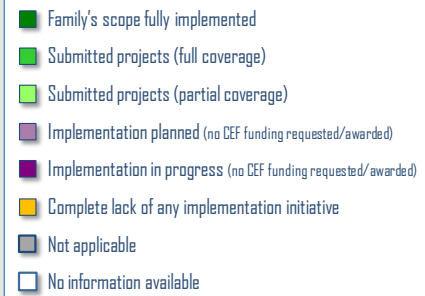


#### Chart Key – Overall Implementation Status

The chart reflects the overall implementation status of the Family, taking into account all inputs coming from involved Stakeholders



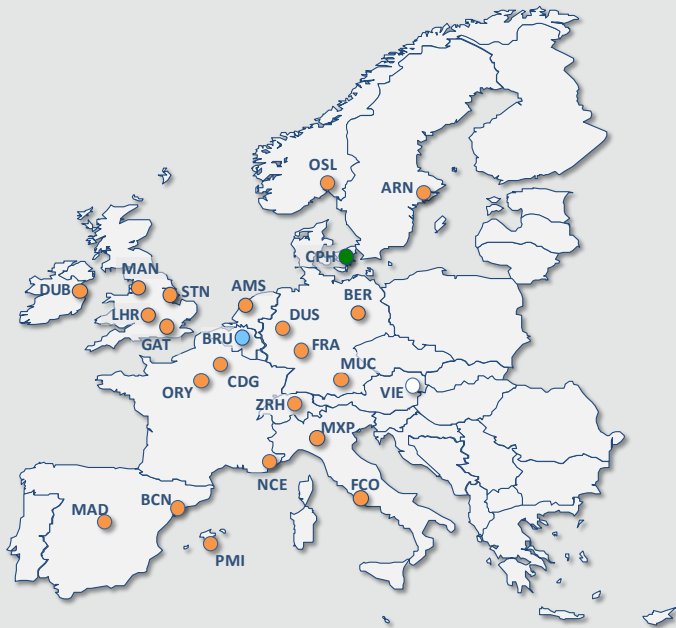
#### Chart Key per Stakeholders



Airport	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder' Category	
			Stakeholders considered as Gaps	Other stakeholders involved in the Family deployment
			ANSIPs	Airport Operators
Amsterdam Schiphol	0%	0%		
Barcelona El Prat	0%	0%		
Berlin Brandenburg Airport	0%	0%		
Brussels National	10%	10%		
Copenhagen Kastrup	0%	0%		
Dublin Airport	0%	0%		
Dusseldorf International	0%	0%		
Frankfurt International	0%	0%		
Istanbul Ataturk Airport	-	-		
London Gatwick	0%	0%		
London Heathrow	0%	0%		
London Stansted	0%	0%		
Madrid Barajas	0%	0%		
Manchester Ringway	0%	0%		
Milan Malpensa	0%	0%		
Munich Franz Josef Strauss	0%	0%		
Nice Cote D'Azur	0%	0%		
Oslo Gardermoen	0%	0%		
Palma de Mallorca San Juan	0%	0%		
Paris Charles De Gaulle	0%	0%		
Paris Orly	0%	0%		
Rome Fiumicino	0%	0%		
Stockholm Arlanda	0%	0%		
Vienna Schwechat	0%	0%		
Zurich Kloten	0%	0%		

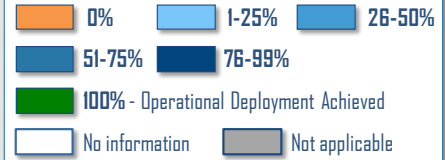
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### 2.5.1 Airport Safety Nets associated with A-SMGCS (Level 2)

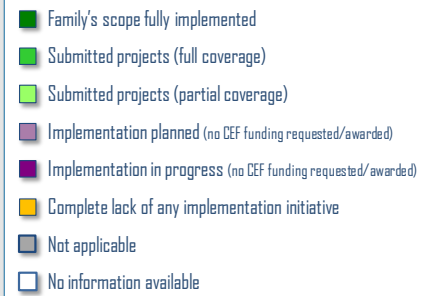


#### Chart Key – Overall Implementation Status

The chart reflects the overall implementation status of the Family, taking into account all inputs coming from involved Stakeholders



#### Chart Key per Stakeholders



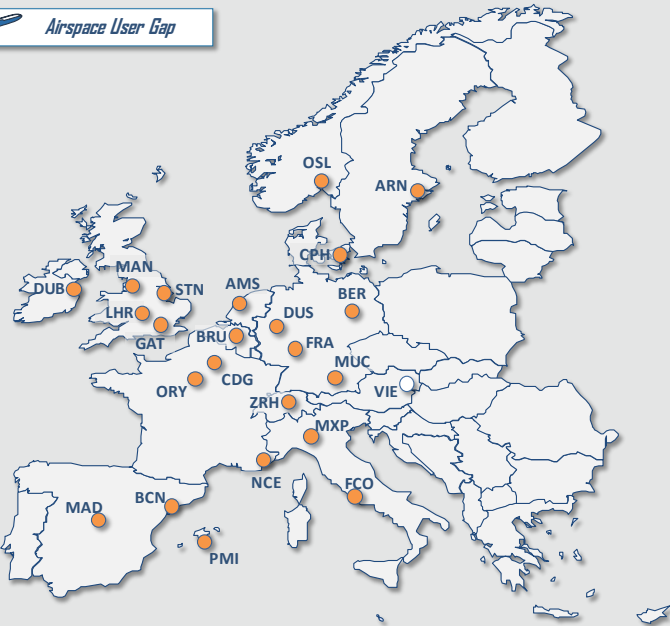
Airport	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder' Category	
			Stakeholders considered as Gaps	
			ANSPs	Airport Operators
Amsterdam Schiphol	0%	0%	Submitted projects (full coverage)	Implementation planned (no CEF funding requested/awarded)
Barcelona El Prat	0%	0%	Implementation planned (no CEF funding requested/awarded)	Not applicable
Berlin Brandenburg Airport	0%	0%	Implementation planned (no CEF funding requested/awarded)	Implementation planned (no CEF funding requested/awarded)
Brussels National	25%	25%	Submitted projects (full coverage)	Submitted projects (full coverage)
Copenhagen Kastrup	100%	100%	Submitted projects (full coverage)	Submitted projects (full coverage)
Dublin Airport	0%	0%	Implementation planned (no CEF funding requested/awarded)	Implementation planned (no CEF funding requested/awarded)
Dusseldorf International	0%	0%	Implementation planned (no CEF funding requested/awarded)	Implementation planned (no CEF funding requested/awarded)
Frankfurt International	0%	0%	Implementation planned (no CEF funding requested/awarded)	Submitted projects (partial coverage)
Istanbul Ataturk Airport	-	-	No information available	No information available
London Gatwick	0%	0%	Not applicable	Submitted projects (full coverage)
London Heathrow	0%	0%	Not applicable	Submitted projects (full coverage)
London Stansted	0%	0%	Not applicable	Implementation planned (no CEF funding requested/awarded)
Madrid Barajas	0%	0%	Implementation planned (no CEF funding requested/awarded)	Not applicable
Manchester Ringway	0%	0%	Not applicable	Complete lack of any implementation initiative
Milan Malpensa	0%	0%	Implementation planned (no CEF funding requested/awarded)	Implementation planned (no CEF funding requested/awarded)
Munich Franz Josef Strauss	0%	0%	Implementation planned (no CEF funding requested/awarded)	Complete lack of any implementation initiative
Nice Cote D'Azur	0%	0%	Submitted projects (partial coverage)	Complete lack of any implementation initiative
Oslo Gardermoen	0%	0%	Implementation in progress (no CEF funding requested/awarded)	Implementation in progress (no CEF funding requested/awarded)
Palma de Mallorca San Juan	0%	0%	Implementation planned (no CEF funding requested/awarded)	Not applicable
Paris Charles De Gaulle	0%	0%	Submitted projects (partial coverage)	Submitted projects (partial coverage)
Paris Orly	0%	0%	Submitted projects (partial coverage)	Submitted projects (partial coverage)
Rome Fiumicino	0%	0%	Implementation planned (no CEF funding requested/awarded)	Implementation planned (no CEF funding requested/awarded)
Stockholm Arlanda	0%	0%	Not applicable	Submitted projects (partial coverage)
Vienna Schwechat	-	-	Implementation in progress (no CEF funding requested/awarded)	No information available
Zurich Kloten	0%	0%	Implementation in progress (no CEF funding requested/awarded)	Implementation in progress (no CEF funding requested/awarded)

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## 2.5.2 Implement vehicle and aircraft systems contributing to Airport Safety Nets

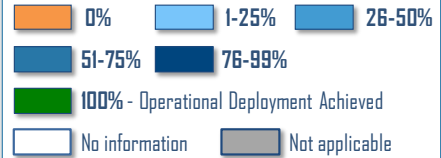


Airspace User Gap

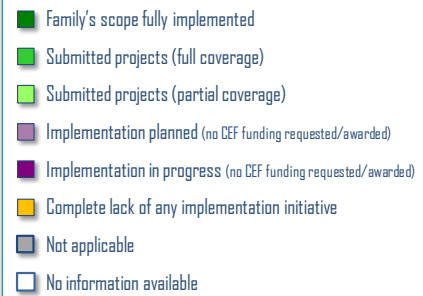


### Chart Key - Overall Implementation Status

The chart reflects the overall implementation status of the Family, taking into account all inputs coming from involved Stakeholders



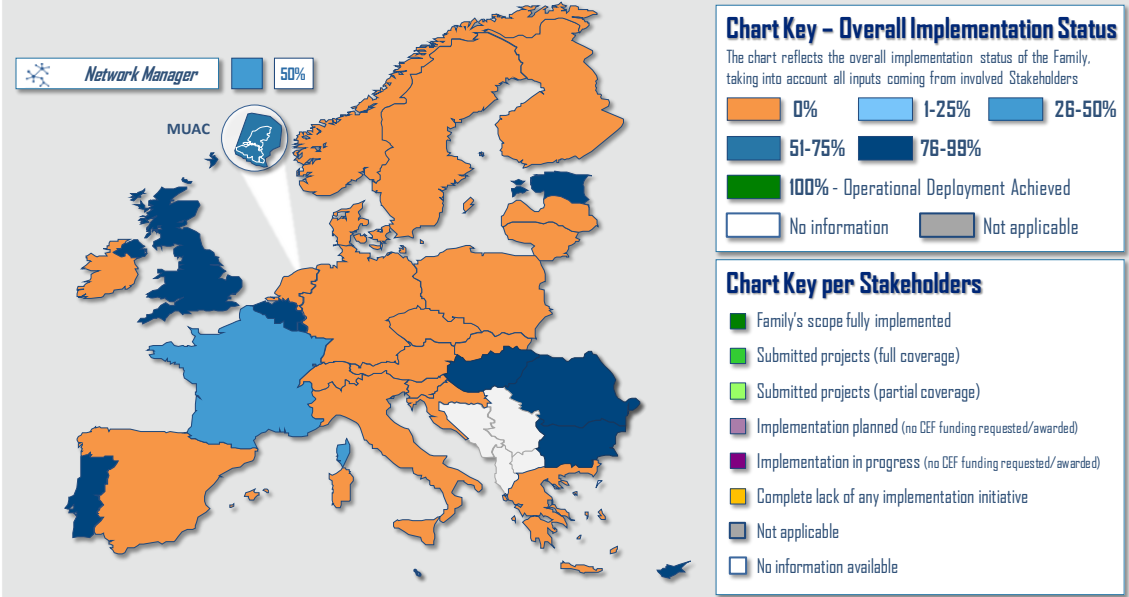
### Chart Key per Stakeholders



Airport	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder' Category		
			Stakeholders considered as Gaps		
			ANSPs	Airport Operators	Military Authorities
Amsterdam Schiphol	0%	0%	Yellow	Purple	White
Barcelona El Prat	0%	0%	Dark Purple	Dark Purple	White
Berlin Brandenburg Airport	0%	0%	Grey	Yellow	White
Brussels National	0%	0%	Yellow	Light Green	White
Copenhagen Kastrup	0%	0%	Grey	Yellow	White
Dublin Airport	0%	0%	Purple	Purple	White
Dusseldorf International	0%	0%	Grey	Light Green	White
Frankfurt International	0%	0%	Grey	Light Green	White
Istanbul Ataturk Airport	No information	-	White	White	White
London Gatwick	0%	0%	Grey	Yellow	White
London Heathrow	0%	0%	Grey	Purple	White
London Stansted	0%	0%	Grey	Purple	White
Madrid Barajas	0%	0%	Dark Purple	Dark Purple	White
Manchester Ringway	0%	0%	Grey	Yellow	White
Milan Malpensa	0%	0%	Grey	Purple	White
Munich Franz Josef Strauss	0%	0%	Grey	Purple	White
Nice Cote D'Azur	0%	0%	Yellow	Light Green	White
Oslo Gardermoen	0%	0%	Dark Purple	Dark Purple	White
Palma de Mallorca San Juan	0%	0%	Dark Purple	Dark Purple	White
Paris Charles De Gaulle	0%	0%	Yellow	Green	White
Paris Orly	0%	0%	Yellow	Green	White
Rome Fiumicino	0%	0%	Grey	Yellow	White
Stockholm Arlanda	0%	0%	Grey	Purple	White
Vienna Schwechat	No information	-	Dark Purple	White	White
Zurich Kloten	0%	0%	Grey	Yellow	White

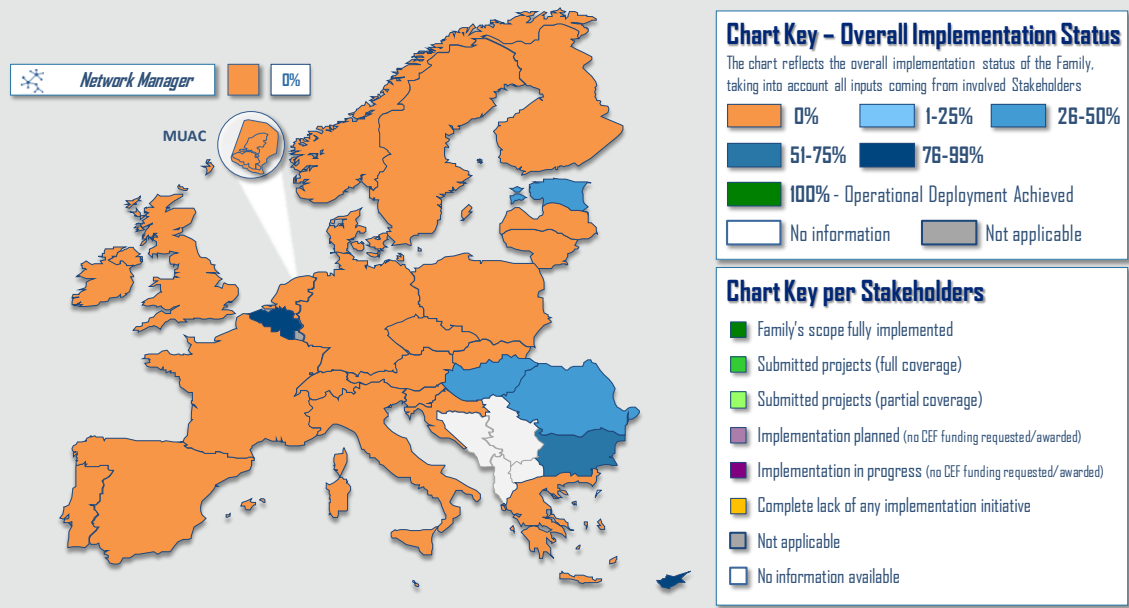
# AF3 – Flexible Airspace Management and Free Route

## 3.1.1 ASM Tool to support AFUA



Country	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder Category		
			Stakeholders considered as Gaps		
			ANSPs	Network Manager	Military Authorities
Austria	0%	0%	Not applicable	Implementation in progress	Implementation planned
Belgium	85%	85%	Submitted projects (full coverage)	Implementation in progress	Submitted projects (full coverage)
Bulgaria	95%	95%	Submitted projects (full coverage)	Implementation in progress	Submitted projects (full coverage)
Croatia	0%	0%	Implementation planned	Implementation in progress	Implementation planned
Cyprus	95%	95%	Submitted projects (full coverage)	Implementation in progress	Submitted projects (full coverage)
Czech Republic	0%	0%	Submitted projects (full coverage)	Implementation in progress	Submitted projects (partial coverage)
Denmark	0%	0%	Implementation planned	Implementation in progress	Implementation planned
Estonia	95%	95%	Submitted projects (full coverage)	Implementation in progress	Submitted projects (full coverage)
Finland	0%	0%	Submitted projects (partial coverage)	Implementation in progress	Implementation planned
France	50%	50%	Implementation in progress	Implementation in progress	Implementation planned
Germany	0%	0%	Submitted projects (partial coverage)	Implementation in progress	Implementation planned
Greece	0%	0%	Implementation planned	Implementation in progress	Complete lack of any implementation initiative
Hungary	95%	95%	Submitted projects (full coverage)	Implementation in progress	Submitted projects (full coverage)
Ireland	0%	0%	Implementation planned	Implementation in progress	Implementation planned
Italy	0%	0%	Submitted projects (full coverage)	Implementation in progress	Complete lack of any implementation initiative
Latvia	0%	0%	Implementation in progress	Implementation in progress	Implementation in progress
Lithuania	0%	0%	Implementation in progress	Implementation in progress	Implementation planned
Luxembourg	95%	95%	Submitted projects (full coverage)	Implementation in progress	Submitted projects (full coverage)
Malta	0%	0%	Complete lack of any implementation initiative	Implementation in progress	Complete lack of any implementation initiative
MUAC	60%	60%	Submitted projects (full coverage)	Implementation in progress	Submitted projects (full coverage)
Netherlands	0%	0%	Implementation planned	Implementation in progress	Implementation in progress
Norway	0%	0%	Implementation in progress	Implementation in progress	Implementation planned
Poland	0%	0%	Implementation in progress	Implementation in progress	Implementation in progress
Portugal	95%	95%	Submitted projects (full coverage)	Implementation in progress	Submitted projects (full coverage)
Romania	95%	95%	Submitted projects (full coverage)	Implementation in progress	Submitted projects (full coverage)
Slovak Republic	0%	0%	Implementation in progress	Implementation in progress	Implementation in progress
Slovenia	0%	0%	Implementation planned	Implementation in progress	Complete lack of any implementation initiative
Spain	0%	0%	Implementation planned	Implementation in progress	Implementation planned
Sweden	0%	0%	Implementation planned	Implementation in progress	Complete lack of any implementation initiative
Switzerland	0%	0%	Complete lack of any implementation initiative	Implementation in progress	Implementation planned
United Kingdom	95%	95%	Submitted projects (full coverage)	Implementation in progress	Submitted projects (full coverage)

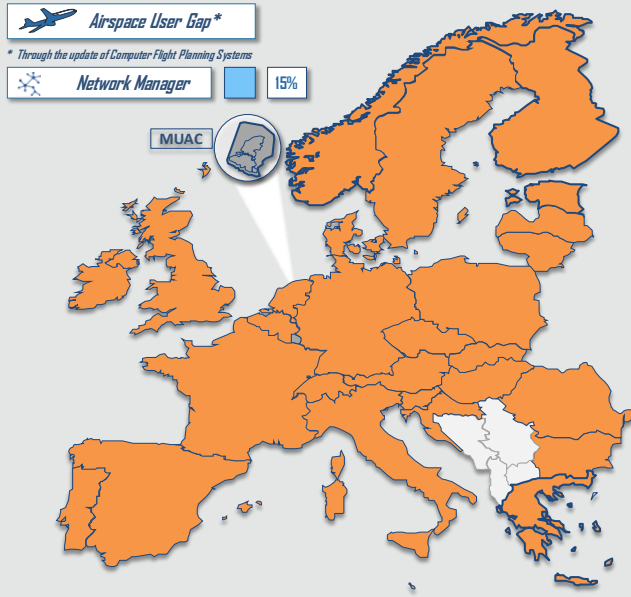
**3.1.2 ASM Management of real time airspace data**



Country	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder Category		
			Stakeholders considered as Gaps		
			ANSPs	Network Manager	Military Authorities
Austria	0%	0%	Implementation planned	Implementation in progress	Implementation planned
Belgium	85%	85%	Submitted projects (full coverage)	Implementation in progress	Family's scope fully implemented
Bulgaria	55%	55%	Submitted projects (partial coverage)	Implementation in progress	Family's scope fully implemented
Croatia	0%	0%	Implementation planned	Implementation in progress	Implementation planned
Cyprus	95%	95%	Submitted projects (full coverage)	Implementation in progress	Family's scope fully implemented
Czech Republic	0%	0%	Submitted projects (partial coverage)	Implementation in progress	Submitted projects (partial coverage)
Denmark	0%	0%	Implementation planned	Implementation in progress	Implementation planned
Estonia	30%	30%	Implementation in progress	Implementation in progress	Family's scope fully implemented
Finland	0%	0%	Submitted projects (partial coverage)	Implementation in progress	Implementation planned
France	0%	0%	Implementation in progress	Implementation in progress	Complete lack of any implementation initiative
Germany	0%	0%	Submitted projects (partial coverage)	Implementation in progress	Implementation in progress
Greece	0%	0%	Submitted projects (partial coverage)	Implementation in progress	Complete lack of any implementation initiative
Hungary	50%	50%	Implementation in progress	Implementation in progress	Family's scope fully implemented
Ireland	0%	0%	Implementation planned	Implementation in progress	Implementation planned
Italy	0%	0%	Submitted projects (partial coverage)	Implementation in progress	Complete lack of any implementation initiative
Latvia	0%	0%	Complete lack of any implementation initiative	Implementation in progress	Implementation in progress
Lithuania	0%	0%	Implementation in progress	Implementation in progress	Implementation planned
Luxembourg	-	-	Not applicable	Not applicable	Not applicable
Malta	0%	0%	Complete lack of any implementation initiative	Implementation in progress	Complete lack of any implementation initiative
MUAC	0%	0%	Implementation planned	Implementation in progress	Implementation planned
Netherlands	0%	0%	Submitted projects (partial coverage)	Implementation in progress	Implementation planned
Norway	0%	0%	Submitted projects (full coverage)	Implementation in progress	Implementation planned
Poland	0%	0%	Implementation in progress	Implementation in progress	Implementation planned
Portugal	0%	0%	Implementation in progress	Implementation in progress	Implementation in progress
Romania	30%	30%	Implementation in progress	Implementation in progress	Implementation planned
Slovak Republic	0%	0%	Implementation planned	Implementation in progress	Implementation planned
Slovenia	0%	0%	Implementation planned	Implementation in progress	Complete lack of any implementation initiative
Spain	0%	0%	Implementation planned	Implementation in progress	Implementation planned
Sweden	0%	0%	Implementation in progress	Implementation in progress	Implementation planned
Switzerland	0%	0%	Complete lack of any implementation initiative	Implementation in progress	Implementation planned
United Kingdom	0%	0%	Implementation planned	Implementation in progress	Family's scope fully implemented

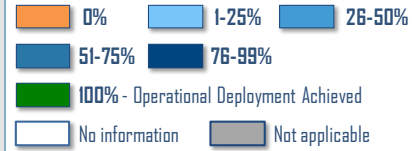


### 3.1.3 Full rolling ASM/ATFCM process and ASM information sharing

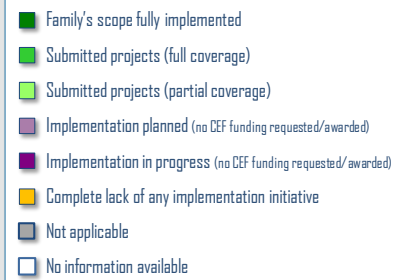


#### Chart Key - Overall Implementation Status

The chart reflects the overall implementation status of the Family, taking into account all inputs coming from involved Stakeholders



#### Chart Key per Stakeholders



Country	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder* Category		
			Stakeholders considered as Gaps		
			ANSPs	Network Manager	Military Authorities
Austria	0%	0%	Implementation in progress	Submitted projects (full coverage)	Implementation planned
Belgium	0%	0%	Implementation in progress	Submitted projects (full coverage)	Implementation planned
Bulgaria	0%	0%	Implementation in progress	Submitted projects (full coverage)	Implementation planned
Croatia	0%	0%	Implementation planned	Submitted projects (full coverage)	Implementation planned
Cyprus	0%	0%	Complete lack of any implementation initiative	Submitted projects (full coverage)	Implementation planned
Czech Republic	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	Submitted projects (full coverage)
Denmark	0%	0%	Implementation planned	Submitted projects (full coverage)	Implementation planned
Estonia	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	Implementation planned
Finland	0%	0%	Submitted projects (partial coverage)	Submitted projects (full coverage)	Not applicable
France	0%	0%	Implementation in progress	Submitted projects (full coverage)	Complete lack of any implementation initiative
Germany	0%	0%	Implementation planned	Submitted projects (full coverage)	Implementation planned
Greece	0%	0%	Implementation planned	Submitted projects (full coverage)	Implementation planned
Hungary	0%	0%	Implementation planned	Submitted projects (full coverage)	Implementation planned
Ireland	0%	0%	Implementation planned	Submitted projects (full coverage)	Complete lack of any implementation initiative
Italy	0%	0%	Implementation planned	Submitted projects (full coverage)	Implementation planned
Latvia	0%	0%	Complete lack of any implementation initiative	Submitted projects (full coverage)	Implementation planned
Lithuania	0%	0%	Implementation planned	Submitted projects (full coverage)	Complete lack of any implementation initiative
Luxembourg	-	-	Not applicable	Not applicable	Not applicable
Malta	0%	0%	Complete lack of any implementation initiative	Submitted projects (full coverage)	Complete lack of any implementation initiative
MUAC	-	-	Not applicable	Submitted projects (full coverage)	Implementation planned
Netherlands	0%	0%	Complete lack of any implementation initiative	Submitted projects (full coverage)	Not applicable
Norway	0%	0%	Implementation in progress	Submitted projects (full coverage)	Implementation planned
Poland	0%	0%	Implementation in progress	Submitted projects (full coverage)	Implementation planned
Portugal	0%	0%	Implementation in progress	Submitted projects (full coverage)	Implementation planned
Romania	0%	0%	Implementation in progress	Submitted projects (full coverage)	Implementation planned
Slovak Republic	0%	0%	Implementation planned	Submitted projects (full coverage)	Complete lack of any implementation initiative
Slovenia	0%	0%	Implementation planned	Submitted projects (full coverage)	Complete lack of any implementation initiative
Spain	0%	0%	Implementation planned	Submitted projects (full coverage)	Implementation planned
Sweden	0%	0%	Implementation in progress	Submitted projects (full coverage)	Implementation planned
Switzerland	0%	0%	Complete lack of any implementation initiative	Submitted projects (full coverage)	Implementation planned
United Kingdom	0%	0%	Implementation in progress	Submitted projects (full coverage)	Implementation planned

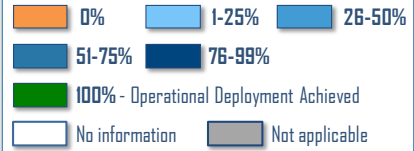
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### 3.1.4 Management of Dynamic Airspace Configurations

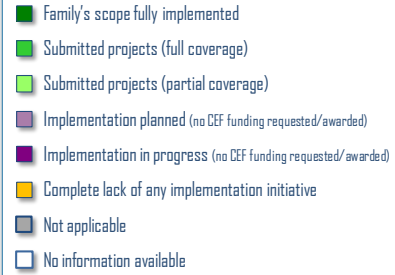


#### Chart Key - Overall Implementation Status

The chart reflects the overall implementation status of the Family, taking into account all inputs coming from involved Stakeholders



#### Chart Key per Stakeholders



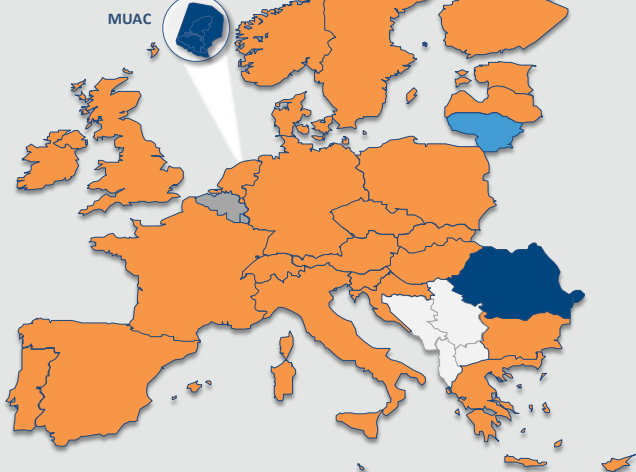
Country	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder* Category		
			Stakeholders considered as Gaps		Other stakeholders involved
			ANSPs	Network Manager	Military Authorities
Austria	0%	0%	Submitted projects (partial coverage)	Implementation planned (no CEF funding requested/awarded)	Complete lack of any implementation initiative
Belgium	0%	0%	Complete lack of any implementation initiative	Implementation planned (no CEF funding requested/awarded)	Complete lack of any implementation initiative
Bulgaria	0%	0%	Implementation in progress (no CEF funding requested/awarded)	Implementation planned (no CEF funding requested/awarded)	Complete lack of any implementation initiative
Croatia	0%	0%	Submitted projects (partial coverage)	Implementation planned (no CEF funding requested/awarded)	Complete lack of any implementation initiative
Cyprus	0%	0%	Complete lack of any implementation initiative	Implementation planned (no CEF funding requested/awarded)	Complete lack of any implementation initiative
Czech Republic	0%	0%	Implementation planned (no CEF funding requested/awarded)	Submitted projects (partial coverage)	Complete lack of any implementation initiative
Denmark	0%	0%	Submitted projects (partial coverage)	Implementation planned (no CEF funding requested/awarded)	Complete lack of any implementation initiative
Estonia	0%	0%	Implementation planned (no CEF funding requested/awarded)	Submitted projects (partial coverage)	Complete lack of any implementation initiative
Finland	0%	0%	Submitted projects (partial coverage)	Implementation planned (no CEF funding requested/awarded)	Not applicable
France	0%	0%	Implementation in progress (no CEF funding requested/awarded)	Implementation planned (no CEF funding requested/awarded)	Complete lack of any implementation initiative
Germany	0%	0%	Submitted projects (partial coverage)	Implementation planned (no CEF funding requested/awarded)	Complete lack of any implementation initiative
Greece	0%	0%	Implementation planned (no CEF funding requested/awarded)	Implementation planned (no CEF funding requested/awarded)	Complete lack of any implementation initiative
Hungary	0%	0%	Implementation planned (no CEF funding requested/awarded)	Implementation planned (no CEF funding requested/awarded)	Complete lack of any implementation initiative
Ireland	0%	0%	Submitted projects (partial coverage)	Implementation planned (no CEF funding requested/awarded)	Complete lack of any implementation initiative
Italy	0%	0%	Implementation planned (no CEF funding requested/awarded)	Implementation planned (no CEF funding requested/awarded)	Complete lack of any implementation initiative
Latvia	0%	0%	Complete lack of any implementation initiative	Implementation planned (no CEF funding requested/awarded)	Complete lack of any implementation initiative
Lithuania	0%	0%	Implementation planned (no CEF funding requested/awarded)	Implementation planned (no CEF funding requested/awarded)	Complete lack of any implementation initiative
Luxembourg	-	-	Not applicable	Not applicable	Not applicable
Malta	0%	0%	Complete lack of any implementation initiative	Implementation planned (no CEF funding requested/awarded)	Complete lack of any implementation initiative
MUAC	0%	0%	Implementation in progress (no CEF funding requested/awarded)	Implementation planned (no CEF funding requested/awarded)	Not applicable
Netherlands	0%	0%	Submitted projects (partial coverage)	Implementation planned (no CEF funding requested/awarded)	Not applicable
Norway	0%	0%	Complete lack of any implementation initiative	Implementation planned (no CEF funding requested/awarded)	Complete lack of any implementation initiative
Poland	0%	0%	Implementation planned (no CEF funding requested/awarded)	Implementation planned (no CEF funding requested/awarded)	Complete lack of any implementation initiative
Portugal	0%	0%	Implementation in progress (no CEF funding requested/awarded)	Implementation planned (no CEF funding requested/awarded)	Complete lack of any implementation initiative
Romania	0%	0%	Submitted projects (partial coverage)	Implementation planned (no CEF funding requested/awarded)	Complete lack of any implementation initiative
Slovak Republic	0%	0%	Implementation planned (no CEF funding requested/awarded)	Implementation planned (no CEF funding requested/awarded)	Complete lack of any implementation initiative
Slovenia	0%	0%	Implementation planned (no CEF funding requested/awarded)	Implementation planned (no CEF funding requested/awarded)	Complete lack of any implementation initiative
Spain	0%	0%	Submitted projects (partial coverage)	Implementation planned (no CEF funding requested/awarded)	Complete lack of any implementation initiative
Sweden	0%	0%	Submitted projects (partial coverage)	Implementation planned (no CEF funding requested/awarded)	Complete lack of any implementation initiative
Switzerland	0%	0%	Complete lack of any implementation initiative	Implementation planned (no CEF funding requested/awarded)	Not applicable
United Kingdom	0%	0%	Submitted projects (partial coverage)	Implementation planned (no CEF funding requested/awarded)	Complete lack of any implementation initiative

**3.2.1 Upgrade of ATM systems (NM, ANSPs, AUs) to support Direct Routings and Free Route Airspace**

**Airspace User Gap\***

\* Through the update of Computer Flight Planning Systems

**Network Manager** 50%



**Chart Key - Overall Implementation Status**

The chart reflects the overall implementation status of the Family, taking into account all inputs coming from involved Stakeholders

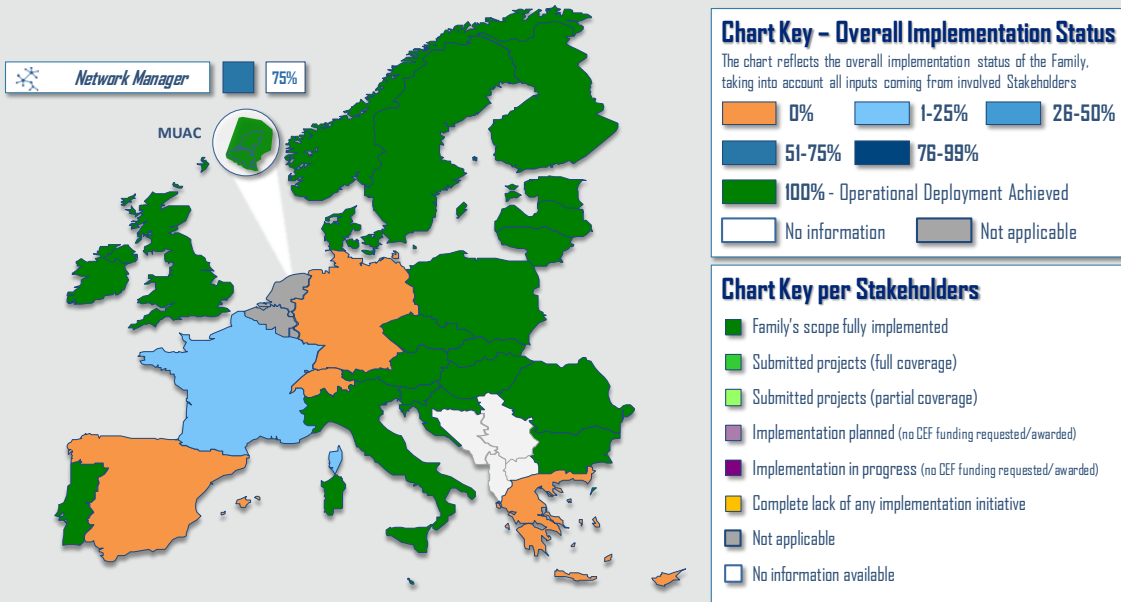
- 0% (Orange)
- 1-25% (Light Blue)
- 26-50% (Medium Blue)
- 51-75% (Dark Blue)
- 76-99% (Very Dark Blue)
- 100% - Operational Deployment Achieved (Green)
- No information (White)
- Not applicable (Grey)

**Chart Key per Stakeholders**

- Family's scope fully implemented (Dark Green)
- Submitted projects (full coverage) (Light Green)
- Submitted projects (partial coverage) (Medium Green)
- Implementation planned (no CEF funding requested/awarded) (Purple)
- Implementation in progress (no CEF funding requested/awarded) (Dark Purple)
- Complete lack of any implementation initiative (Yellow)
- Not applicable (Grey)
- No information available (White)

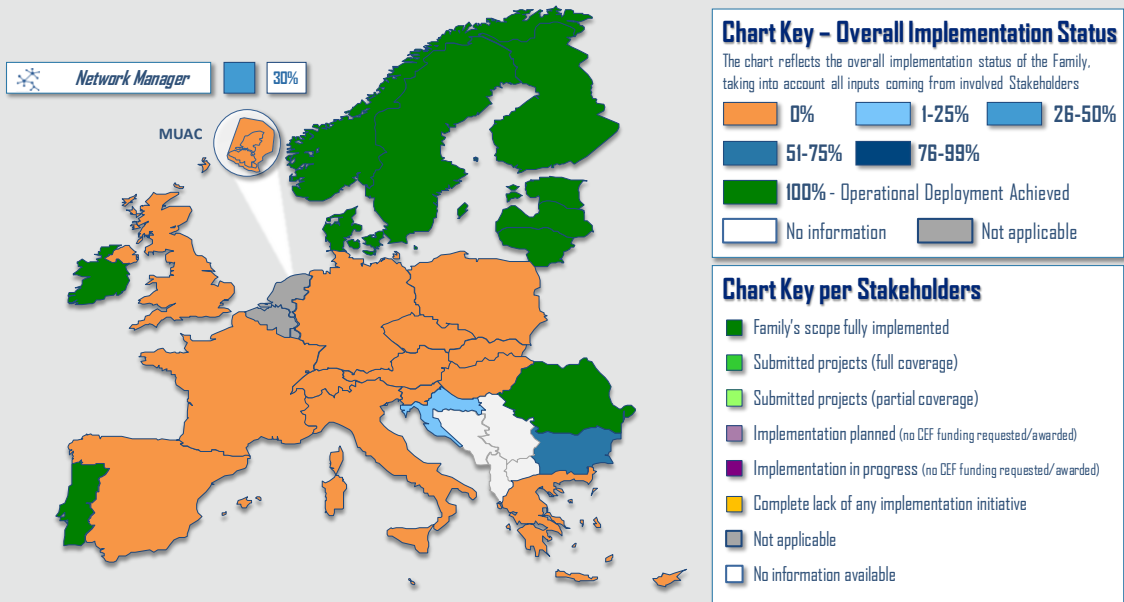
Country	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder* Category		
			Stakeholders considered as Gaps		
			ANSPs	Network Manager	Military Authorities
Austria	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	Implementation planned
Belgium	-	-	Not applicable	Not applicable	Not applicable
Bulgaria	0%	0%	Implementation in progress	Submitted projects (full coverage)	Implementation planned
Croatia	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	Implementation planned
Cyprus	0%	0%	Implementation planned	Submitted projects (full coverage)	Implementation planned
Czech Republic	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	Implementation planned
Denmark	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	Implementation planned
Estonia	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	Implementation planned
Finland	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	Implementation planned
France	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	Implementation planned
Germany	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	Implementation planned
Greece	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	Implementation planned
Hungary	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	Implementation planned
Ireland	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	Implementation planned
Italy	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	Implementation planned
Latvia	0%	0%	Implementation planned	Submitted projects (full coverage)	Implementation planned
Lithuania	30%	30%	Submitted projects (full coverage)	Submitted projects (full coverage)	Implementation planned
Luxembourg	-	-	Not applicable	Not applicable	Not applicable
Malta	0%	0%	Implementation planned	Submitted projects (full coverage)	Implementation planned
MUAC	95%	95%	Family's scope fully implemented	Submitted projects (full coverage)	Not applicable
Netherlands	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	Implementation planned
Norway	0%	0%	Implementation in progress	Submitted projects (full coverage)	Implementation planned
Poland	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	Implementation planned
Portugal	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	Implementation in progress
Romania	95%	95%	Family's scope fully implemented	Submitted projects (full coverage)	Submitted projects (full coverage)
Slovak Republic	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	Implementation planned
Slovenia	0%	0%	Implementation in progress	Submitted projects (full coverage)	Implementation planned
Spain	0%	0%	Implementation planned	Submitted projects (full coverage)	Implementation planned
Sweden	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	Implementation planned
Switzerland	0%	0%	Implementation in progress	Submitted projects (full coverage)	Not applicable
United Kingdom	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	Implementation planned

**3.2.3 - Implement Published Direct Routings (DCTs)**



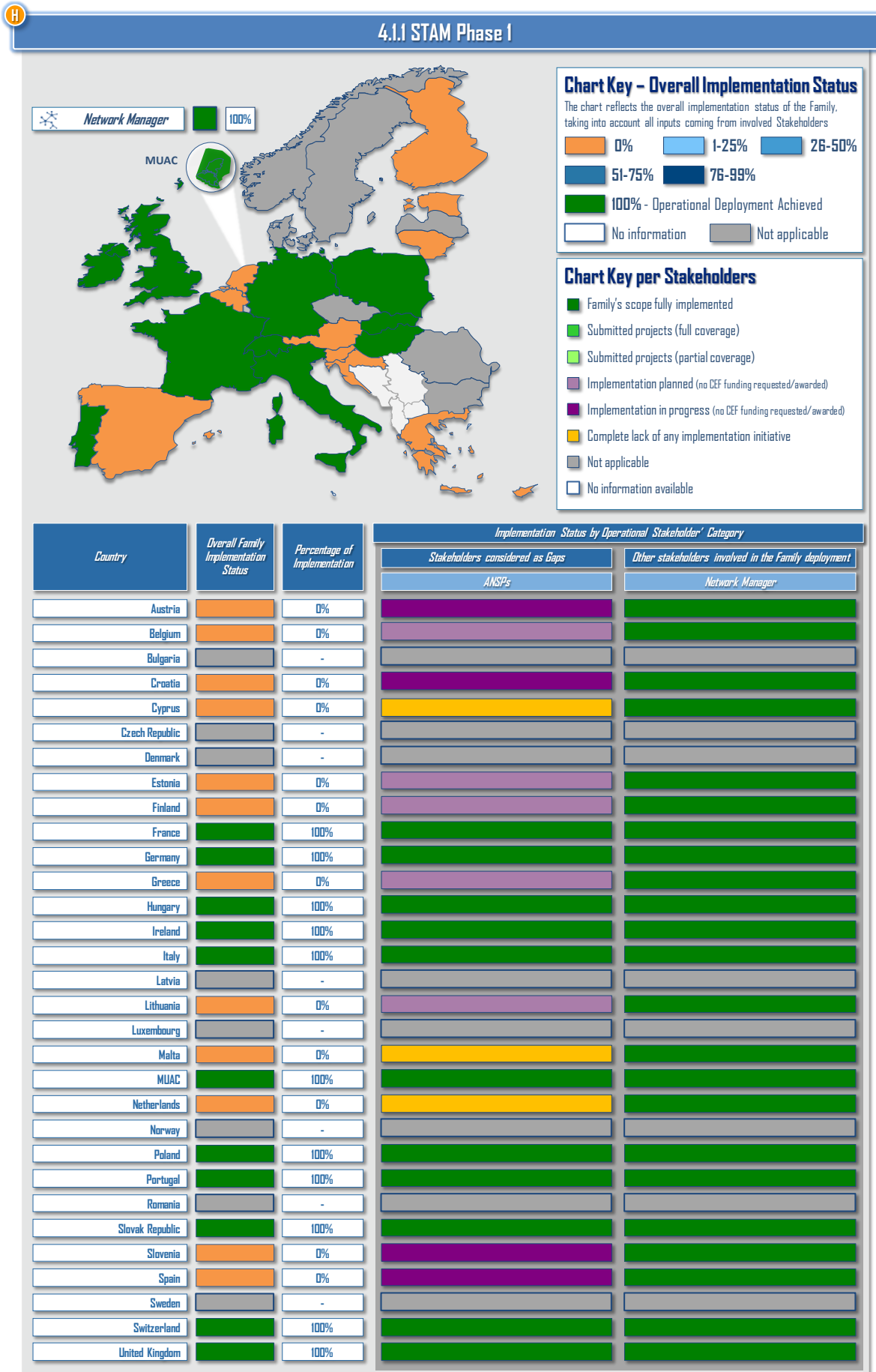
Country	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder* Category		
			Stakeholders considered as Gaps		Other stakeholders involved
			ANSPs	Network Manager	Military Authorities
Austria	100%	100%	Dark Green	Dark Purple	Dark Green
Belgium	-	-	Grey	Grey	Grey
Bulgaria	100%	100%	Dark Green	Dark Purple	Dark Green
Croatia	100%	100%	Dark Green	Dark Purple	Dark Green
Cyprus	0%	0%	Dark Purple	Dark Purple	Dark Green
Czech Republic	100%	100%	Dark Green	Dark Purple	Dark Green
Denmark	100%	100%	Dark Green	Dark Purple	Dark Green
Estonia	100%	100%	Dark Green	Dark Purple	Dark Green
Finland	100%	100%	Dark Green	Dark Purple	Dark Green
France	15%	15%	Light Green	Dark Purple	Purple
Germany	0%	0%	Light Green	Dark Purple	Purple
Greece	0%	0%	Dark Purple	Dark Purple	Purple
Hungary	100%	100%	Dark Green	Dark Purple	Dark Green
Ireland	100%	100%	Dark Green	Dark Purple	Dark Green
Italy	100%	100%	Dark Green	Dark Purple	Dark Green
Latvia	100%	100%	Dark Green	Dark Purple	Dark Green
Lithuania	100%	100%	Dark Green	Dark Purple	Dark Green
Luxembourg	-	-	Grey	Grey	Grey
Malta	100%	100%	Dark Green	Dark Purple	Dark Green
MUAC	100%	100%	Dark Green	Dark Purple	Dark Green
Netherlands	-	-	Grey	Grey	Grey
Norway	100%	100%	Dark Green	Dark Purple	Dark Green
Poland	100%	100%	Dark Green	Dark Purple	Dark Green
Portugal	100%	100%	Dark Green	Dark Purple	Dark Green
Romania	100%	100%	Dark Green	Dark Purple	Dark Green
Slovak Republic	100%	100%	Dark Green	Dark Purple	Dark Green
Slovenia	100%	100%	Dark Green	Dark Purple	Dark Green
Spain	0%	0%	Dark Purple	Dark Purple	Purple
Sweden	100%	100%	Dark Green	Dark Purple	Dark Green
Switzerland	0%	0%	Dark Purple	Dark Purple	Purple
United Kingdom	100%	100%	Dark Green	Dark Purple	Dark Green

**3.2.4 - Implement Free Route Airspace**



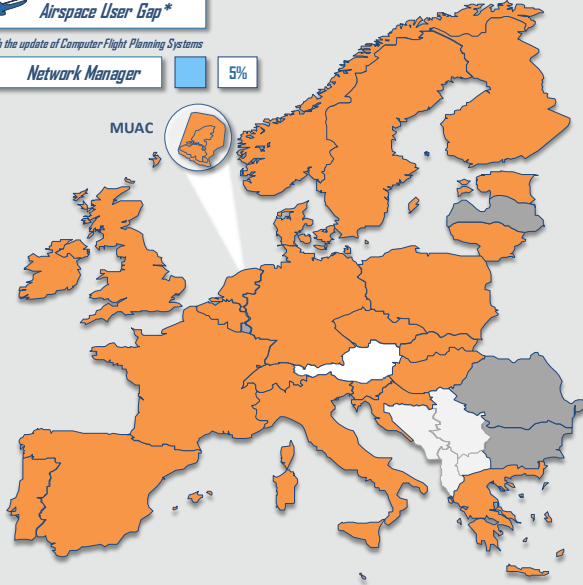
Country	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder Category		
			Stakeholders considered as Gaps		Other stakeholders involved
			ANSPs	Network Manager	Military Authorities
Austria	0%	0%	Implementation in progress	Implementation in progress	Implementation in progress
Belgium	-	-	Not applicable	Not applicable	Not applicable
Bulgaria	60%	60%	Implementation in progress	Implementation in progress	Implementation in progress
Croatia	20%	20%	Submitted projects (partial coverage)	Implementation in progress	Implementation in progress
Cyprus	0%	0%	Implementation planned	Implementation in progress	Complete lack of any implementation initiative
Czech Republic	0%	0%	Submitted projects (partial coverage)	Implementation in progress	Submitted projects (partial coverage)
Denmark	100%	100%	Family's scope fully implemented	Implementation in progress	Family's scope fully implemented
Estonia	100%	100%	Family's scope fully implemented	Implementation in progress	Family's scope fully implemented
Finland	0%	0%	Submitted projects (partial coverage)	Implementation in progress	Not applicable
France	0%	0%	Submitted projects (partial coverage)	Implementation in progress	Complete lack of any implementation initiative
Germany	0%	0%	Submitted projects (partial coverage)	Implementation in progress	Implementation planned
Greece	0%	0%	Submitted projects (partial coverage)	Implementation in progress	Family's scope fully implemented
Hungary	0%	0%	Submitted projects (partial coverage)	Implementation in progress	Family's scope fully implemented
Ireland	100%	100%	Family's scope fully implemented	Implementation in progress	Family's scope fully implemented
Italy	0%	0%	Submitted projects (partial coverage)	Implementation in progress	Implementation planned
Latvia	100%	100%	Family's scope fully implemented	Implementation in progress	Family's scope fully implemented
Lithuania	100%	100%	Family's scope fully implemented	Implementation in progress	Family's scope fully implemented
Luxembourg	-	-	Not applicable	Not applicable	Not applicable
Malta	0%	0%	Implementation in progress	Implementation in progress	Not applicable
MUAC	0%	0%	Implementation in progress	Implementation in progress	Not applicable
Netherlands	-	-	Not applicable	Not applicable	Not applicable
Norway	100%	100%	Family's scope fully implemented	Implementation in progress	Family's scope fully implemented
Poland	0%	0%	Implementation in progress	Implementation in progress	Implementation planned
Portugal	100%	100%	Family's scope fully implemented	Implementation in progress	Family's scope fully implemented
Romania	100%	100%	Family's scope fully implemented	Implementation in progress	Family's scope fully implemented
Slovak Republic	0%	0%	Submitted projects (partial coverage)	Implementation in progress	Complete lack of any implementation initiative
Slovenia	0%	0%	Submitted projects (partial coverage)	Implementation in progress	Implementation planned
Spain	0%	0%	Implementation in progress	Implementation in progress	Complete lack of any implementation initiative
Sweden	0%	0%	Submitted projects (partial coverage)	Implementation in progress	Family's scope fully implemented
Switzerland	0%	0%	Implementation in progress	Implementation in progress	Implementation planned
United Kingdom	0%	0%	Submitted projects (partial coverage)	Implementation in progress	Implementation planned

# AF4 – Network Collaborative Management



**4.1.2 STAM Phase 2**

**Airspace User Gap\***  
 \* Through the update of Computer Flight Planning Systems  
**Network Manager** 5%



**Chart Key - Overall Implementation Status**  
 The chart reflects the overall implementation status of the Family, taking into account all inputs coming from involved Stakeholders

- 0% (Orange)
- 1-25% (Light Blue)
- 26-50% (Medium Blue)
- 51-75% (Dark Blue)
- 76-99% (Very Dark Blue)
- 100% - Operational Deployment Achieved (Green)
- No information (White)
- Not applicable (Grey)

**Chart Key per Stakeholders**

- Family's scope fully implemented (Dark Green)
- Submitted projects (full coverage) (Light Green)
- Submitted projects (partial coverage) (Very Light Green)
- Implementation planned (no CEF funding requested/awarded) (Purple)
- Implementation in progress (no CEF funding requested/awarded) (Dark Purple)
- Complete lack of any implementation initiative (Yellow)
- Not applicable (Grey)
- No information available (White)

Country	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder* Category			
			Stakeholders considered as Gaps			Other stakeholders involved
			ANSPs	Airport Operators	Network Manager	Military Authorities
Austria		-				
Belgium		0%				
Bulgaria		-				
Croatia		0%				
Cyprus		0%				
Czech Republic		0%				
Denmark		0%				
Estonia		0%				
Finland		0%				
France		0%				
Germany		0%				
Greece		0%				
Hungary		0%				
Ireland		0%				
Italy		0%				
Latvia		-				
Lithuania		0%				
Luxembourg		-				
Malta		0%				
MUAC		0%				
Netherlands		0%				
Norway		0%				
Poland		0%				
Portugal		0%				
Romania		-				
Slovak Republic		0%				
Slovenia		0%				
Spain		0%				
Sweden		0%				
Switzerland		0%				
United Kingdom		0%				

**4.2.2 Interactive Rolling NDP**

**Airspace User Gap\***

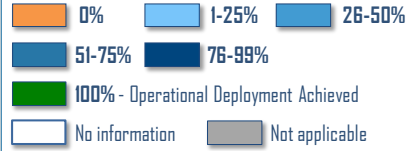
\* Through the update of Computer Flight Planning Systems

**Network Manager** 10%

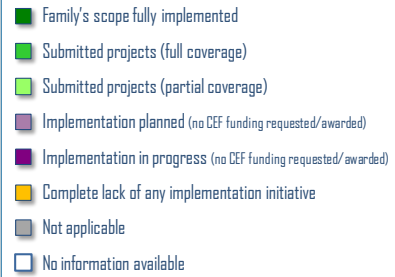


**Chart Key - Overall Implementation Status**

The chart reflects the overall implementation status of the Family, taking into account all inputs coming from involved Stakeholders



**Chart Key per Stakeholders**

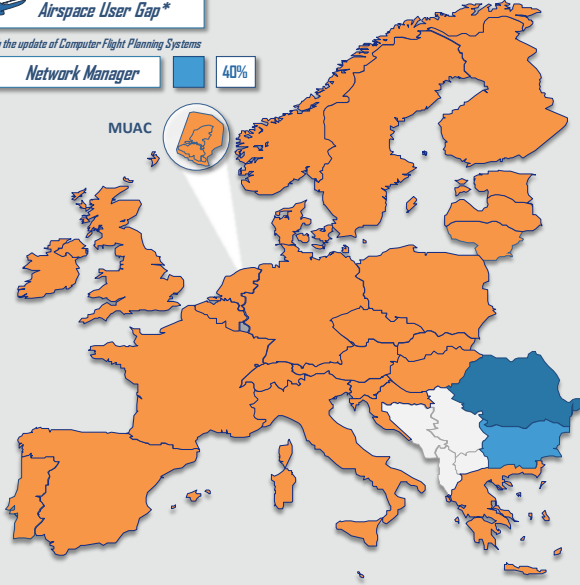


Country	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder Category			
			Stakeholders considered as Gaps		Other stakeholders involved in the Family deployment	
			ANSPs	Network Manager	Airport Operators	Military Authorities
Austria	Not applicable	-	Not applicable	Submitted projects (full coverage)	Not applicable	Not applicable
Belgium	0%	0%	Implementation planned	Submitted projects (full coverage)	Not applicable	Not applicable
Bulgaria	0%	0%	Complete lack of any implementation initiative	Submitted projects (full coverage)	Not applicable	Not applicable
Croatia	0%	0%	Implementation planned	Submitted projects (full coverage)	Not applicable	Not applicable
Cyprus	0%	0%	Complete lack of any implementation initiative	Submitted projects (full coverage)	Not applicable	Not applicable
Czech Republic	0%	0%	Implementation planned	Submitted projects (full coverage)	Not applicable	Implementation in progress
Denmark	0%	0%	Complete lack of any implementation initiative	Submitted projects (full coverage)	Not applicable	Not applicable
Estonia	0%	0%	Implementation planned	Submitted projects (full coverage)	Not applicable	Not applicable
Finland	0%	0%	Implementation planned	Submitted projects (full coverage)	Not applicable	Not applicable
France	51-75%	95%	Family's scope fully implemented	Submitted projects (full coverage)	Complete lack of any implementation initiative	Not applicable
Germany	0%	0%	Implementation planned	Submitted projects (full coverage)	Implementation in progress	Not applicable
Greece	0%	0%	Implementation planned	Submitted projects (full coverage)	Not applicable	Not applicable
Hungary	0%	0%	Complete lack of any implementation initiative	Submitted projects (full coverage)	Not applicable	Not applicable
Ireland	0%	0%	Complete lack of any implementation initiative	Submitted projects (full coverage)	Family's scope fully implemented	Not applicable
Italy	0%	0%	Implementation planned	Submitted projects (full coverage)	Complete lack of any implementation initiative	Not applicable
Latvia	0%	0%	Implementation planned	Submitted projects (full coverage)	Not applicable	Not applicable
Lithuania	0%	0%	Implementation planned	Submitted projects (full coverage)	Not applicable	Not applicable
Luxembourg	Not applicable	-	Not applicable	Not applicable	Not applicable	Not applicable
Malta	0%	0%	Complete lack of any implementation initiative	Submitted projects (full coverage)	Not applicable	Not applicable
MUAC	Not applicable	-	Not applicable	Submitted projects (full coverage)	Not applicable	Not applicable
Netherlands	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	Family's scope fully implemented	Implementation planned
Norway	0%	0%	Complete lack of any implementation initiative	Submitted projects (full coverage)	Complete lack of any implementation initiative	Not applicable
Poland	0%	0%	Complete lack of any implementation initiative	Submitted projects (full coverage)	Not applicable	Not applicable
Portugal	0%	0%	Implementation planned	Submitted projects (full coverage)	Not applicable	Not applicable
Romania	0%	0%	Complete lack of any implementation initiative	Submitted projects (full coverage)	Not applicable	Not applicable
Slovak Republic	0%	0%	Implementation planned	Submitted projects (full coverage)	Not applicable	Complete lack of any implementation initiative
Slovenia	0%	0%	Complete lack of any implementation initiative	Submitted projects (full coverage)	Not applicable	Not applicable
Spain	0%	0%	Implementation planned	Submitted projects (full coverage)	Complete lack of any implementation initiative	Not applicable
Sweden	0%	0%	Complete lack of any implementation initiative	Submitted projects (full coverage)	Complete lack of any implementation initiative	Not applicable
Switzerland	0%	0%	Implementation planned	Submitted projects (full coverage)	Not applicable	Not applicable
United Kingdom	No information	-	Not applicable	Submitted projects (full coverage)	Not applicable	Not applicable



**4.2.3 Interface ATM systems to NM systems**

**Airspace User Gap\***  
 \* Through the update of Computer Flight Planning Systems  
**Network Manager** 40%



**Chart Key - Overall Implementation Status**  
 The chart reflects the overall implementation status of the Family, taking into account all inputs coming from involved Stakeholders

- 0%
- 1-25%
- 26-50%
- 51-75%
- 76-99%
- 100% - Operational Deployment Achieved
- No information
- Not applicable

**Chart Key per Stakeholders**

- Family's scope fully implemented
- Submitted projects (full coverage)
- Submitted projects (partial coverage)
- Implementation planned (no CEF funding requested/awarded)
- Implementation in progress (no CEF funding requested/awarded)
- Complete lack of any implementation initiative
- Not applicable
- No information available

Country	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder* Category		
			Stakeholders considered as Gaps		
			ANSPs	Network Manager	Military Authorities
Austria	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	No information available
Belgium	0%	0%	Implementation in progress (no CEF funding requested/awarded)	Submitted projects (full coverage)	No information available
Bulgaria	27%	27%	Implementation in progress (no CEF funding requested/awarded)	Submitted projects (full coverage)	No information available
Croatia	0%	0%	Implementation in progress (no CEF funding requested/awarded)	Submitted projects (full coverage)	No information available
Cyprus	0%	0%	Implementation in progress (no CEF funding requested/awarded)	Submitted projects (full coverage)	No information available
Czech Republic	0%	0%	Implementation planned (no CEF funding requested/awarded)	Submitted projects (full coverage)	Implementation planned (no CEF funding requested/awarded)
Denmark	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	No information available
Estonia	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	No information available
Finland	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	No information available
France	0%	0%	Implementation in progress (no CEF funding requested/awarded)	Submitted projects (full coverage)	Complete lack of any implementation initiative
Germany	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	No information available
Greece	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	No information available
Hungary	0%	0%	Implementation in progress (no CEF funding requested/awarded)	Submitted projects (full coverage)	No information available
Ireland	0%	0%	Complete lack of any implementation initiative	Submitted projects (full coverage)	No information available
Italy	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	No information available
Latvia	0%	0%	Implementation in progress (no CEF funding requested/awarded)	Submitted projects (full coverage)	No information available
Lithuania	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	No information available
Luxembourg	-	-	Not applicable	Not applicable	Not applicable
Malta	0%	0%	Complete lack of any implementation initiative	Submitted projects (full coverage)	No information available
MUAC	0%	0%	Implementation in progress (no CEF funding requested/awarded)	Submitted projects (full coverage)	Not applicable
Netherlands	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	Not applicable
Norway	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	No information available
Poland	0%	0%	Implementation in progress (no CEF funding requested/awarded)	Submitted projects (full coverage)	No information available
Portugal	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	No information available
Romania	58%	58%	Implementation in progress (no CEF funding requested/awarded)	Submitted projects (full coverage)	No information available
Slovak Republic	0%	0%	Implementation planned (no CEF funding requested/awarded)	Submitted projects (full coverage)	Complete lack of any implementation initiative
Slovenia	0%	0%	Implementation in progress (no CEF funding requested/awarded)	Submitted projects (full coverage)	No information available
Spain	0%	0%	Implementation in progress (no CEF funding requested/awarded)	Submitted projects (full coverage)	No information available
Sweden	0%	0%	Implementation in progress (no CEF funding requested/awarded)	Submitted projects (full coverage)	No information available
Switzerland	0%	0%	Implementation in progress (no CEF funding requested/awarded)	Submitted projects (full coverage)	Implementation planned (no CEF funding requested/awarded)
United Kingdom	0%	0%	Implementation planned (no CEF funding requested/awarded)	Submitted projects (full coverage)	No information available

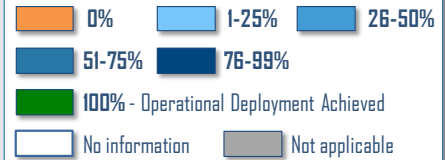
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### 4.2.4 ADP/NOP Information Sharing

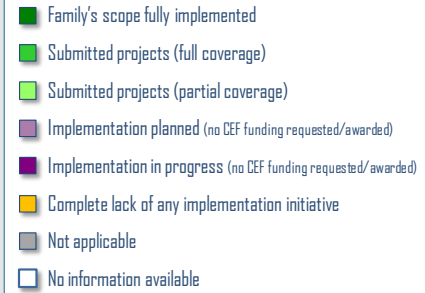


#### Chart Key - Overall Implementation Status

The chart reflects the overall implementation status of the Family, taking into account all inputs coming from involved Stakeholders



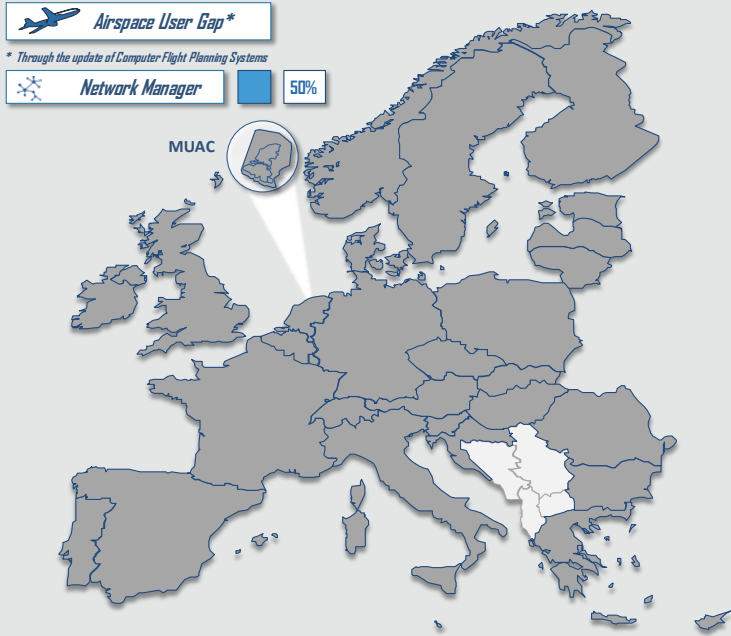
#### Chart Key per Stakeholders



Airport	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder' Category				
			Stakeholders considered as Gaps		Other stakeholders involved in the Family deployment		
			Network Manager	Airport Operators	ANSPs	Military Authorities	MET Providers
Amsterdam Schiphol	0%	0%	Submitted projects (full coverage)	Implementation planned	Submitted projects (partial coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)
Barcelona El Prat	0%	0%	Submitted projects (full coverage)	Implementation in progress	Submitted projects (full coverage)	Submitted projects (full coverage)	Submitted projects (partial coverage)
Berlin Brandenburg Airport	0%	0%	Submitted projects (full coverage)	Implementation in progress	Submitted projects (partial coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)
Brussels National	0%	0%	Submitted projects (full coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)
Copenhagen Kastrup	0%	0%	Submitted projects (full coverage)	Submitted projects (partial coverage)	Implementation in progress	Submitted projects (partial coverage)	Submitted projects (partial coverage)
Dublin Airport	0%	0%	Submitted projects (full coverage)	Implementation planned	Submitted projects (partial coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)
Dusseldorf International	0%	0%	Submitted projects (full coverage)	Implementation planned	Submitted projects (partial coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)
Frankfurt International	0%	0%	Submitted projects (full coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)
Istanbul Ataturk Airport		-	No information available	No information available	No information available	No information available	No information available
London Gatwick	0%	0%	Submitted projects (full coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)
London Heathrow	0%	0%	Submitted projects (full coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)
London Stansted	0%	0%	Submitted projects (full coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)
Madrid Barajas	0%	0%	Submitted projects (full coverage)	Submitted projects (partial coverage)	Submitted projects (full coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)
Manchester Ringway	0%	0%	Submitted projects (full coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)
Milan Malpensa	0%	0%	Submitted projects (full coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)
Munich Franz Josef Strauss	0%	0%	Submitted projects (full coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)
Nice Cote D'Azur	0%	0%	Submitted projects (full coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)
Oslo Gardermoen	0%	0%	Submitted projects (full coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)
Palma de Mallorca Son San Juan	0%	0%	Submitted projects (full coverage)	Submitted projects (partial coverage)	Submitted projects (full coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)
Paris Charles De Gaulle	0%	0%	Submitted projects (full coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)
Paris Orly	0%	0%	Submitted projects (full coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)
Rome Fiumicino	0%	0%	Submitted projects (full coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)
Stockholm Arlanda	0%	0%	Submitted projects (full coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)
Vienna Schwechat	0%	0%	Submitted projects (full coverage)	Implementation planned	Submitted projects (partial coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)
Zurich Kloten	0%	0%	Submitted projects (full coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)	Submitted projects (partial coverage)

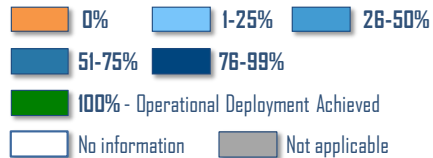
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### 4.3.1 Target Time for ATFCM purposes

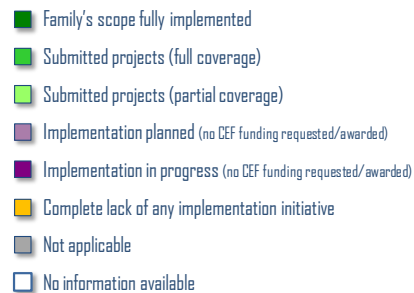


#### Chart Key - Overall Implementation Status

The chart reflects the overall implementation status of the Family, taking into account all inputs coming from involved Stakeholders

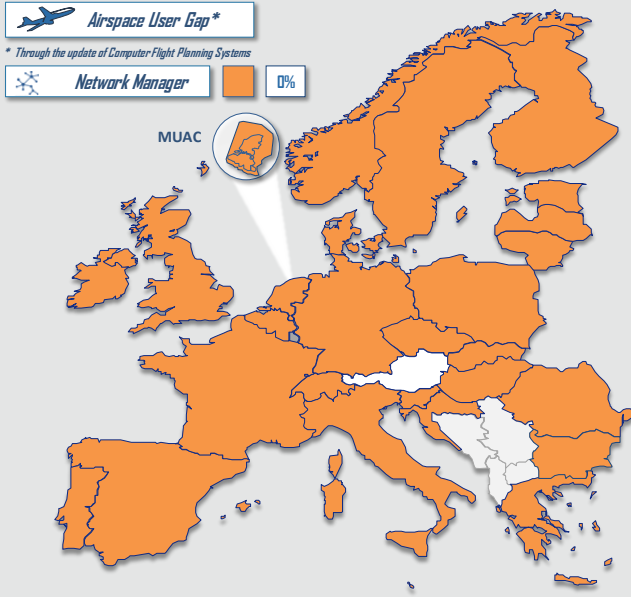


#### Chart Key per Stakeholders

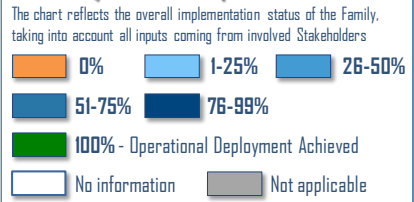


The Stakeholders considered as Gaps in Family 4.3.1 are the Network Manager and the Airspace Users.  
 All the others Stakeholder Categories, namely the ANSPs, the Airport Operators and the Military Authorities, are considered as involved in the Family deployment.

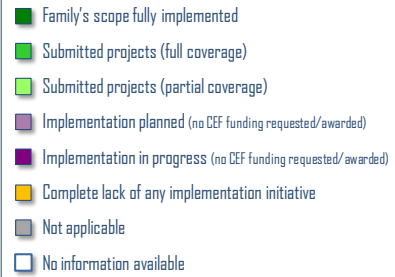
### 4.3.2 Reconciled Target Times for ATFCM and Arrival Sequencing



#### Chart Key - Overall Implementation Status

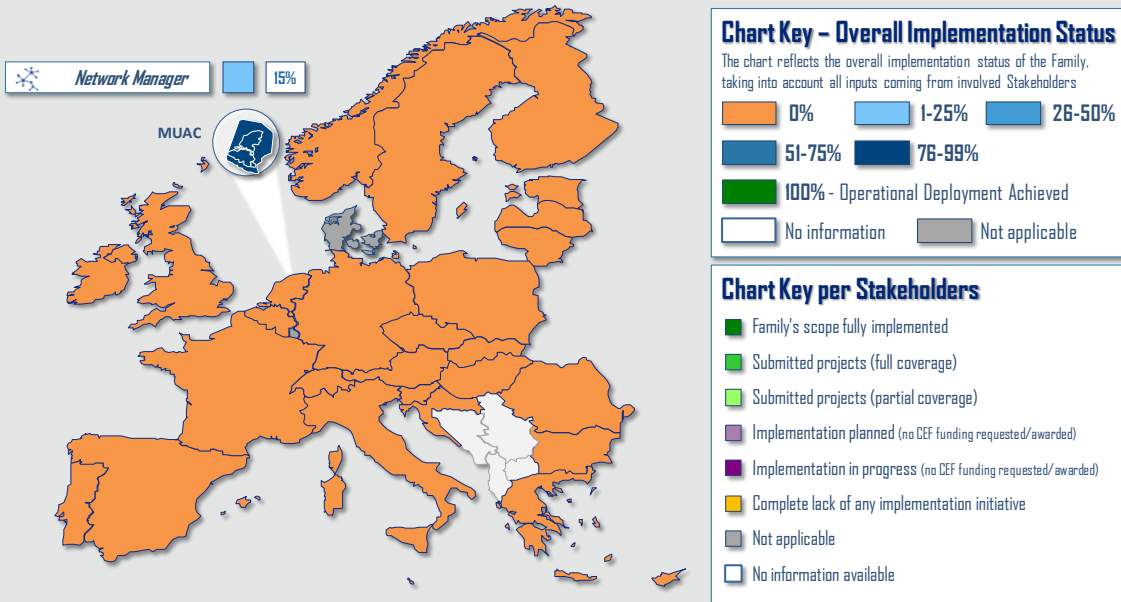


#### Chart Key per Stakeholders



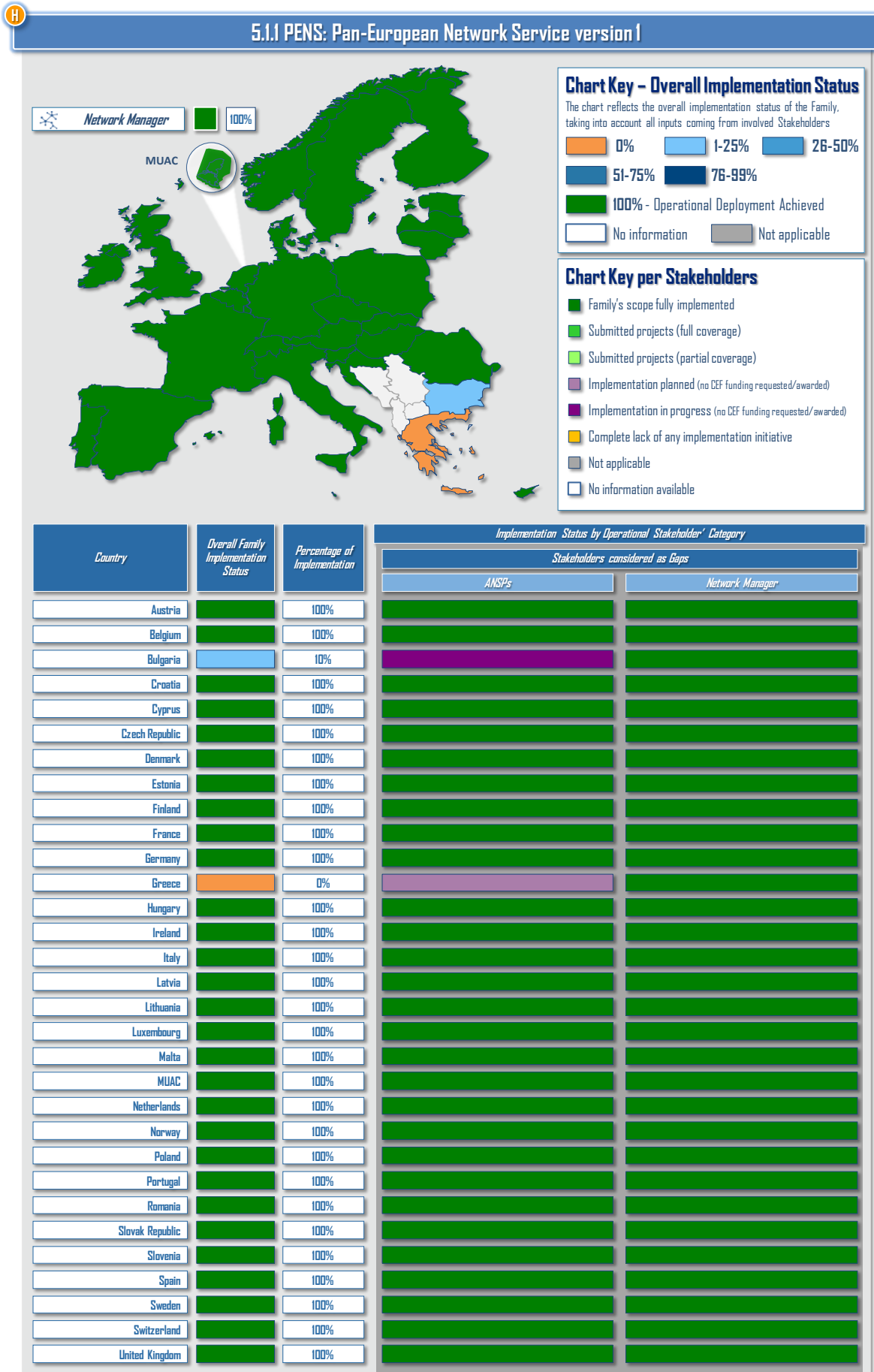
Country	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder Category			
			Stakeholders considered as Gaps			Other stakeholders involved
			ANSPs	Airport Operators	Network Manager	Military Authorities
Austria		-				
Belgium		0%				
Bulgaria		0%				
Croatia		0%				
Cyprus		0%				
Czech Republic		0%				
Denmark		0%				
Estonia		0%				
Finland		0%				
France		0%				
Germany		0%				
Greece		0%				
Hungary		0%				
Ireland		0%				
Italy		0%				
Latvia		0%				
Lithuania		0%				
Luxembourg		-				
Malta		0%				
MUAC		0%				
Netherlands		0%				
Norway		0%				
Poland		0%				
Portugal		0%				
Romania		0%				
Slovak Republic		0%				
Slovenia		0%				
Spain		0%				
Sweden		0%				
Switzerland		0%				
United Kingdom		0%				

**4.4.2 Traffic Complexity Tools**

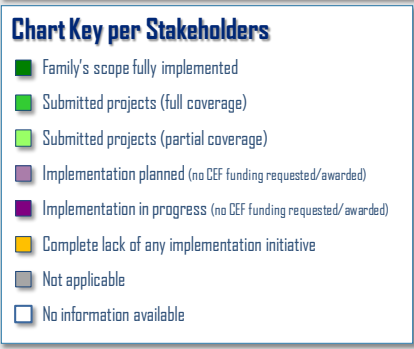
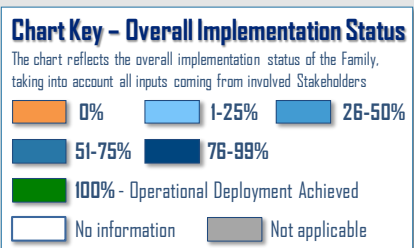
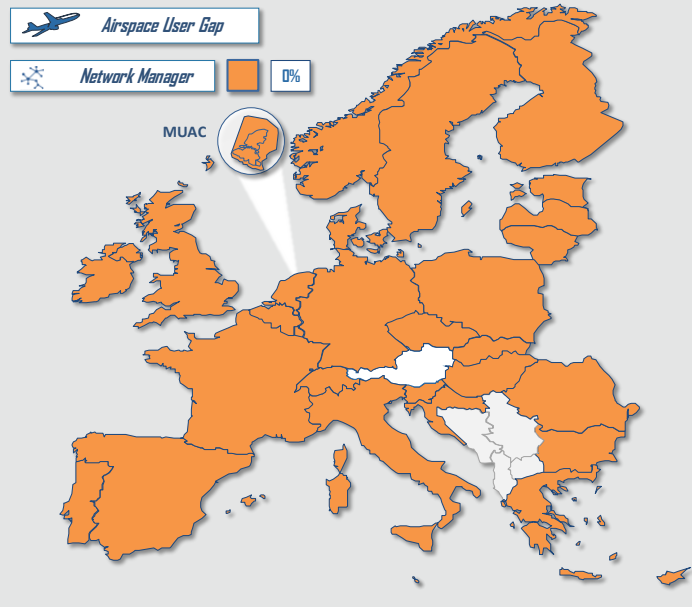


Country	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder* Category		
			Stakeholders considered as Gaps		Other stakeholders involved
			ANSPs	Network Manager	Military Authorities
Austria	0%	0%	Not applicable	Submitted projects (full coverage)	No information available
Belgium	0%	0%	Not applicable	Submitted projects (full coverage)	No information available
Bulgaria	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	No information available
Croatia	0%	0%	Not applicable	Submitted projects (full coverage)	No information available
Cyprus	0%	0%	Complete lack of any implementation initiative	Submitted projects (full coverage)	No information available
Czech Republic	0%	0%	Submitted projects (full coverage)	Submitted projects (full coverage)	No information available
Denmark	-	-	Not applicable	Submitted projects (full coverage)	Not applicable
Estonia	0%	0%	Not applicable	Submitted projects (full coverage)	No information available
Finland	0%	0%	Not applicable	Submitted projects (full coverage)	Not applicable
France	0%	0%	Implementation in progress (no CEF funding requested/awarded)	Submitted projects (full coverage)	Complete lack of any implementation initiative
Germany	0%	0%	Not applicable	Submitted projects (full coverage)	No information available
Greece	0%	0%	Submitted projects (partial coverage)	Submitted projects (full coverage)	No information available
Hungary	0%	0%	Complete lack of any implementation initiative	Submitted projects (full coverage)	No information available
Ireland	0%	0%	Complete lack of any implementation initiative	Submitted projects (full coverage)	No information available
Italy	0%	0%	Not applicable	Submitted projects (full coverage)	No information available
Latvia	0%	0%	Not applicable	Submitted projects (full coverage)	No information available
Lithuania	0%	0%	Submitted projects (partial coverage)	Submitted projects (full coverage)	No information available
Luxembourg	-	-	Not applicable	Submitted projects (full coverage)	No information available
Malta	0%	0%	Complete lack of any implementation initiative	Submitted projects (full coverage)	No information available
MUAC	95%	95%	Family's scope fully implemented	Submitted projects (full coverage)	Not applicable
Netherlands	0%	0%	Submitted projects (partial coverage)	Submitted projects (full coverage)	Not applicable
Norway	0%	0%	Complete lack of any implementation initiative	Submitted projects (full coverage)	No information available
Poland	0%	0%	Not applicable	Submitted projects (full coverage)	No information available
Portugal	0%	0%	Not applicable	Submitted projects (full coverage)	No information available
Romania	0%	0%	Complete lack of any implementation initiative	Submitted projects (full coverage)	Complete lack of any implementation initiative
Slovak Republic	0%	0%	Not applicable	Submitted projects (full coverage)	No information available
Slovenia	0%	0%	Complete lack of any implementation initiative	Submitted projects (full coverage)	No information available
Spain	0%	0%	Implementation in progress (no CEF funding requested/awarded)	Submitted projects (full coverage)	No information available
Sweden	0%	0%	Complete lack of any implementation initiative	Submitted projects (full coverage)	No information available
Switzerland	0%	0%	Implementation in progress (no CEF funding requested/awarded)	Submitted projects (full coverage)	Not applicable
United Kingdom	0%	0%	Not applicable	Submitted projects (full coverage)	No information available

AF5 – Initial SWIM

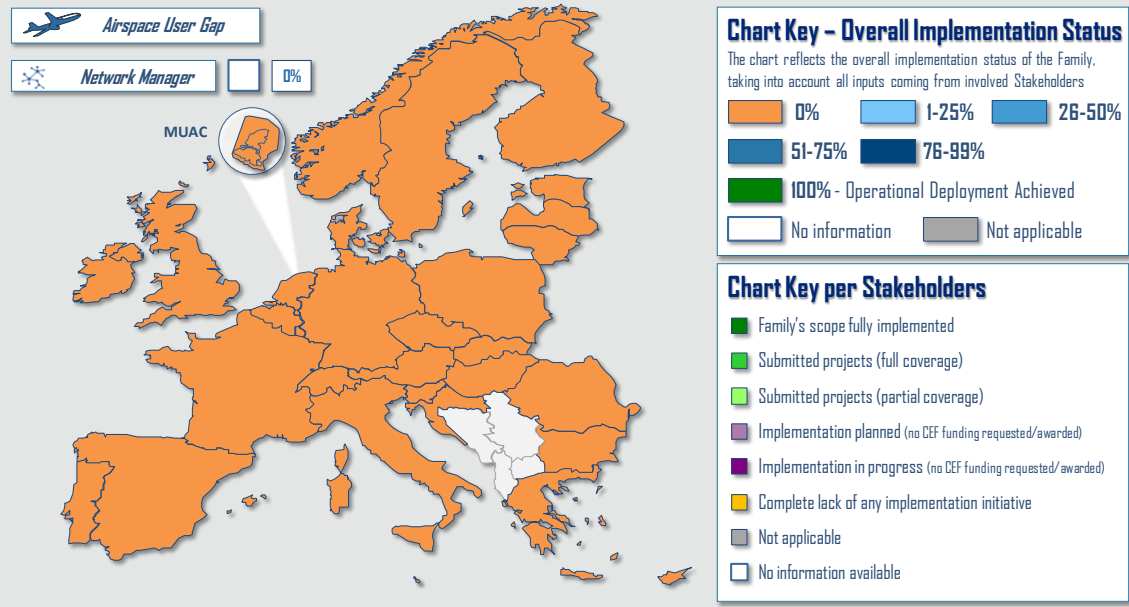


**5.1.2 NewPENS: New Pan-European Network Service**



Country	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder* Category						
			Stakeholders considered as Gaps						
			ANSPs	Airport Operators	Network Manager	Military Authorities	MET Providers		
Austria	No information	-	Submitted projects (full coverage)	No information available	Submitted projects (full coverage)	No information available	Submitted projects (full coverage)	No information available	Submitted projects (full coverage)
Belgium	0%	0%	Submitted projects (full coverage)	Not applicable	Submitted projects (full coverage)	No information available	Submitted projects (full coverage)	Submitted projects (full coverage)	Submitted projects (full coverage)
Bulgaria	0%	0%	Submitted projects (full coverage)	Not applicable	Submitted projects (full coverage)	No information available	Submitted projects (full coverage)	Implementation in progress (no CEF funding requested/awarded)	Submitted projects (full coverage)
Croatia	0%	0%	Submitted projects (full coverage)	Not applicable	Submitted projects (full coverage)	No information available	Submitted projects (full coverage)	Submitted projects (full coverage)	Submitted projects (full coverage)
Cyprus	0%	0%	Implementation planned (no CEF funding requested/awarded)	Not applicable	Submitted projects (full coverage)	No information available	Submitted projects (full coverage)	Not applicable	Not applicable
Czech Republic	0%	0%	Submitted projects (full coverage)	Not applicable	Submitted projects (full coverage)	No information available	Submitted projects (full coverage)	Submitted projects (full coverage)	Submitted projects (full coverage)
Denmark	0%	0%	Submitted projects (full coverage)	Not applicable	Submitted projects (full coverage)	No information available	Submitted projects (full coverage)	Complete lack of any implementation initiative	Submitted projects (full coverage)
Estonia	0%	0%	Implementation planned (no CEF funding requested/awarded)	Not applicable	Submitted projects (full coverage)	No information available	Submitted projects (full coverage)	Complete lack of any implementation initiative	Submitted projects (full coverage)
Finland	0%	0%	Submitted projects (full coverage)	Not applicable	Submitted projects (full coverage)	Not applicable	Submitted projects (full coverage)	Complete lack of any implementation initiative	Submitted projects (full coverage)
France	0%	0%	Submitted projects (full coverage)	Submitted projects (partial coverage)	Submitted projects (full coverage)	Complete lack of any implementation initiative	Submitted projects (full coverage)	Not applicable	Submitted projects (full coverage)
Germany	0%	0%	Implementation in progress (no CEF funding requested/awarded)	Implementation in progress (no CEF funding requested/awarded)	Submitted projects (full coverage)	No information available	Submitted projects (full coverage)	Not applicable	Submitted projects (full coverage)
Greece	0%	0%	Implementation planned (no CEF funding requested/awarded)	Not applicable	Submitted projects (full coverage)	No information available	Submitted projects (full coverage)	Complete lack of any implementation initiative	Submitted projects (full coverage)
Hungary	0%	0%	Implementation planned (no CEF funding requested/awarded)	Not applicable	Submitted projects (full coverage)	No information available	Submitted projects (full coverage)	Complete lack of any implementation initiative	Submitted projects (full coverage)
Ireland	0%	0%	Submitted projects (full coverage)	Not applicable	Submitted projects (full coverage)	No information available	Submitted projects (full coverage)	Not applicable	Submitted projects (full coverage)
Italy	0%	0%	Implementation planned (no CEF funding requested/awarded)	Complete lack of any implementation initiative	Submitted projects (full coverage)	No information available	Submitted projects (full coverage)	No information available	Submitted projects (full coverage)
Latvia	0%	0%	Implementation planned (no CEF funding requested/awarded)	Not applicable	Submitted projects (full coverage)	No information available	Submitted projects (full coverage)	Complete lack of any implementation initiative	Submitted projects (full coverage)
Lithuania	0%	0%	Implementation planned (no CEF funding requested/awarded)	Not applicable	Submitted projects (full coverage)	No information available	Submitted projects (full coverage)	Not applicable	Submitted projects (full coverage)
Luxembourg	0%	0%	Implementation planned (no CEF funding requested/awarded)	Not applicable	Submitted projects (full coverage)	No information available	Submitted projects (full coverage)	Implementation planned (no CEF funding requested/awarded)	Submitted projects (full coverage)
Malta	0%	0%	Implementation planned (no CEF funding requested/awarded)	Not applicable	Submitted projects (full coverage)	No information available	Submitted projects (full coverage)	Not applicable	Submitted projects (full coverage)
MUAC	0%	0%	Submitted projects (full coverage)	Not applicable	Submitted projects (full coverage)	Not applicable	Submitted projects (full coverage)	Not applicable	Submitted projects (full coverage)
Netherlands	0%	0%	Submitted projects (full coverage)	Complete lack of any implementation initiative	Submitted projects (full coverage)	No information available	Submitted projects (full coverage)	Not applicable	Submitted projects (full coverage)
Norway	0%	0%	Implementation in progress (no CEF funding requested/awarded)	Not applicable	Submitted projects (full coverage)	No information available	Submitted projects (full coverage)	Complete lack of any implementation initiative	Submitted projects (full coverage)
Poland	0%	0%	Implementation planned (no CEF funding requested/awarded)	Not applicable	Submitted projects (full coverage)	No information available	Submitted projects (full coverage)	Complete lack of any implementation initiative	Submitted projects (full coverage)
Portugal	0%	0%	Submitted projects (full coverage)	Not applicable	Submitted projects (full coverage)	No information available	Submitted projects (full coverage)	Complete lack of any implementation initiative	Submitted projects (full coverage)
Romania	0%	0%	Submitted projects (full coverage)	Not applicable	Submitted projects (full coverage)	No information available	Submitted projects (full coverage)	No information available	Submitted projects (full coverage)
Slovak Republic	0%	0%	Submitted projects (full coverage)	Not applicable	Submitted projects (full coverage)	Complete lack of any implementation initiative	Submitted projects (full coverage)	Complete lack of any implementation initiative	Submitted projects (full coverage)
Slovenia	0%	0%	Submitted projects (full coverage)	Not applicable	Submitted projects (full coverage)	No information available	Submitted projects (full coverage)	Not applicable	Submitted projects (full coverage)
Spain	0%	0%	Submitted projects (full coverage)	Not applicable	Submitted projects (full coverage)	No information available	Submitted projects (full coverage)	Complete lack of any implementation initiative	Submitted projects (full coverage)
Sweden	0%	0%	Submitted projects (full coverage)	Complete lack of any implementation initiative	Submitted projects (full coverage)	No information available	Submitted projects (full coverage)	Complete lack of any implementation initiative	Submitted projects (full coverage)
Switzerland	0%	0%	Implementation planned (no CEF funding requested/awarded)	Not applicable	Submitted projects (full coverage)	Not applicable	Submitted projects (full coverage)	Not applicable	Submitted projects (full coverage)
United Kingdom	0%	0%	Submitted projects (full coverage)	Not applicable	Submitted projects (full coverage)	No information available	Submitted projects (full coverage)	Complete lack of any implementation initiative	Submitted projects (full coverage)

**5.1.3 Common SWIM Infrastructure Components**

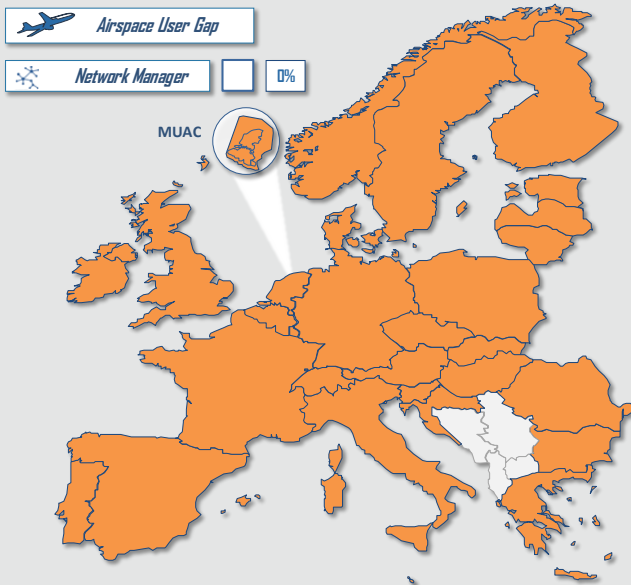


Country	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder* Category				
			Stakeholders considered as Gaps				
			ANSPs	Airport Operators	Network Manager	Military Authorities	MET Providers
Austria	0%	0%	Implementation in progress	Complete lack of any implementation initiative	Implementation in progress	Complete lack of any implementation initiative	Complete lack of any implementation initiative
Belgium	0%	0%	Complete lack of any implementation initiative	Complete lack of any implementation initiative	Implementation in progress	Complete lack of any implementation initiative	Complete lack of any implementation initiative
Bulgaria	0%	0%	Complete lack of any implementation initiative	Not applicable	Implementation in progress	Complete lack of any implementation initiative	Complete lack of any implementation initiative
Croatia	0%	0%	Complete lack of any implementation initiative	Not applicable	Implementation in progress	Complete lack of any implementation initiative	Complete lack of any implementation initiative
Cyprus	0%	0%	Complete lack of any implementation initiative	Not applicable	Implementation in progress	Complete lack of any implementation initiative	Complete lack of any implementation initiative
Czech Republic	0%	0%	Complete lack of any implementation initiative	Not applicable	Implementation in progress	Complete lack of any implementation initiative	Complete lack of any implementation initiative
Denmark	0%	0%	Complete lack of any implementation initiative	Complete lack of any implementation initiative	Implementation in progress	Complete lack of any implementation initiative	Complete lack of any implementation initiative
Estonia	0%	0%	Complete lack of any implementation initiative	Not applicable	Implementation in progress	Complete lack of any implementation initiative	Complete lack of any implementation initiative
Finland	0%	0%	Implementation planned	Not applicable	Implementation in progress	Complete lack of any implementation initiative	Complete lack of any implementation initiative
France	0%	0%	Implementation in progress	Not applicable	Implementation in progress	Complete lack of any implementation initiative	Complete lack of any implementation initiative
Germany	0%	0%	Implementation in progress	Complete lack of any implementation initiative	Implementation in progress	Complete lack of any implementation initiative	Complete lack of any implementation initiative
Greece	0%	0%	Complete lack of any implementation initiative	Not applicable	Implementation in progress	Complete lack of any implementation initiative	Complete lack of any implementation initiative
Hungary	0%	0%	Complete lack of any implementation initiative	Not applicable	Implementation in progress	Complete lack of any implementation initiative	Complete lack of any implementation initiative
Ireland	0%	0%	Complete lack of any implementation initiative	Complete lack of any implementation initiative	Implementation in progress	Complete lack of any implementation initiative	Complete lack of any implementation initiative
Italy	0%	0%	Implementation in progress	Complete lack of any implementation initiative	Implementation in progress	Complete lack of any implementation initiative	Complete lack of any implementation initiative
Latvia	0%	0%	Complete lack of any implementation initiative	Not applicable	Implementation in progress	Complete lack of any implementation initiative	Complete lack of any implementation initiative
Lithuania	0%	0%	Complete lack of any implementation initiative	Not applicable	Implementation in progress	Complete lack of any implementation initiative	Complete lack of any implementation initiative
Luxembourg	0%	0%	Complete lack of any implementation initiative	Not applicable	Implementation in progress	Complete lack of any implementation initiative	Complete lack of any implementation initiative
Malta	0%	0%	Complete lack of any implementation initiative	Not applicable	Implementation in progress	Complete lack of any implementation initiative	Complete lack of any implementation initiative
MUAC	0%	0%	Complete lack of any implementation initiative	Not applicable	Implementation in progress	Not applicable	Not applicable
Netherlands	0%	0%	Complete lack of any implementation initiative	Complete lack of any implementation initiative	Implementation in progress	Complete lack of any implementation initiative	Complete lack of any implementation initiative
Norway	0%	0%	Complete lack of any implementation initiative	Complete lack of any implementation initiative	Implementation in progress	Complete lack of any implementation initiative	Complete lack of any implementation initiative
Poland	0%	0%	Implementation in progress	Not applicable	Implementation in progress	Complete lack of any implementation initiative	Complete lack of any implementation initiative
Portugal	0%	0%	Complete lack of any implementation initiative	Not applicable	Implementation in progress	Complete lack of any implementation initiative	Complete lack of any implementation initiative
Romania	0%	0%	Complete lack of any implementation initiative	Not applicable	Implementation in progress	Complete lack of any implementation initiative	Complete lack of any implementation initiative
Slovak Republic	0%	0%	Complete lack of any implementation initiative	Not applicable	Implementation in progress	Complete lack of any implementation initiative	Complete lack of any implementation initiative
Slovenia	0%	0%	Complete lack of any implementation initiative	Not applicable	Implementation in progress	Complete lack of any implementation initiative	Complete lack of any implementation initiative
Spain	0%	0%	Implementation planned	Complete lack of any implementation initiative	Implementation in progress	Complete lack of any implementation initiative	Complete lack of any implementation initiative
Sweden	0%	0%	Implementation in progress	Complete lack of any implementation initiative	Implementation in progress	Complete lack of any implementation initiative	Complete lack of any implementation initiative
Switzerland	0%	0%	Complete lack of any implementation initiative	Complete lack of any implementation initiative	Implementation in progress	Complete lack of any implementation initiative	Complete lack of any implementation initiative
United Kingdom	0%	0%	Implementation in progress	Complete lack of any implementation initiative	Implementation in progress	Complete lack of any implementation initiative	Complete lack of any implementation initiative



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### 5.1.4 Common SWIM PKI and Cybersecurity



#### Chart Key - Overall Implementation Status

The chart reflects the overall implementation status of the Family, taking into account all inputs coming from involved Stakeholders

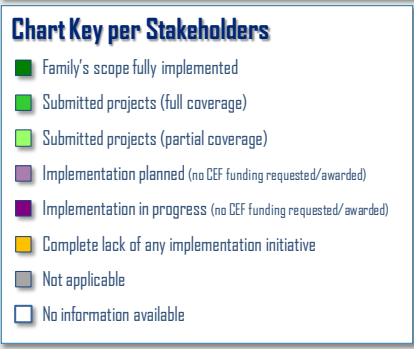
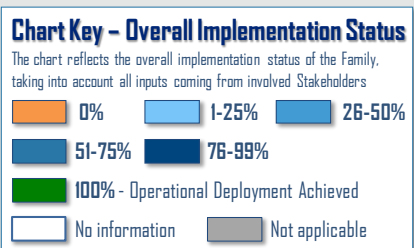
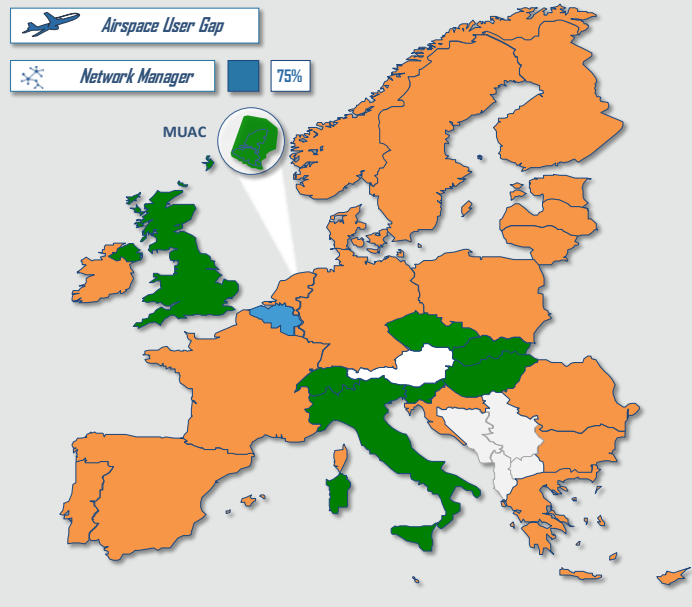
- 0%
- 1-25%
- 26-50%
- 51-75%
- 76-99%
- 100% - Operational Deployment Achieved
- No information
- Not applicable

#### Chart Key per Stakeholders

- Family's scope fully implemented
- Submitted projects (full coverage)
- Submitted projects (partial coverage)
- Implementation planned (no CEF funding requested/awarded)
- Implementation in progress (no CEF funding requested/awarded)
- Complete lack of any implementation initiative
- Not applicable
- No information available

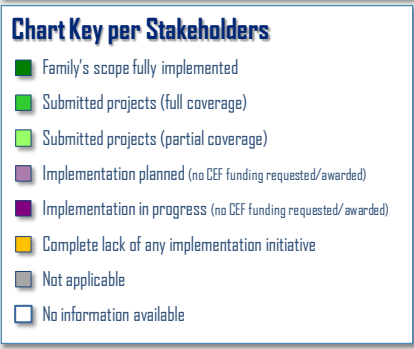
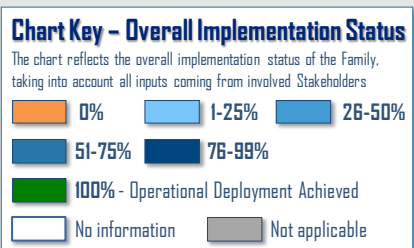
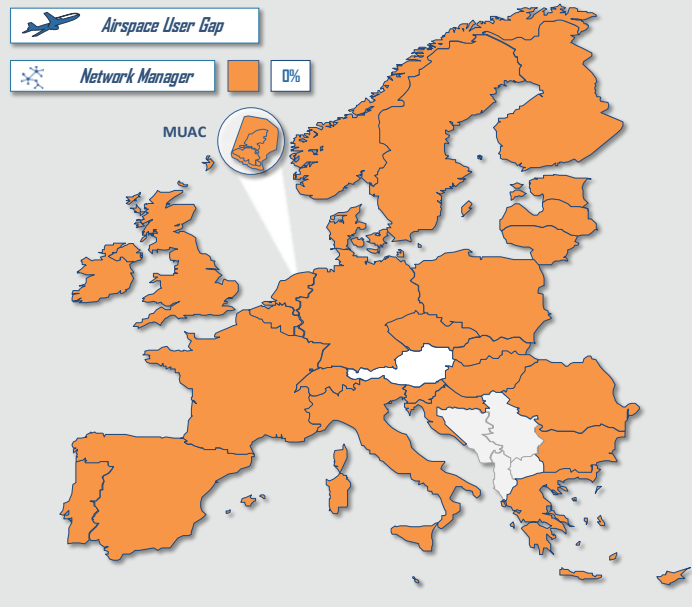
Country	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder* Category				
			Stakeholders considered as Gaps				
			ANSPs	Airport Operators	Network Manager	Military Authorities	MET Providers
Austria	Orange	0%	Yellow	Yellow	Yellow	Yellow	Yellow
Belgium	Orange	0%	Yellow	Yellow	Yellow	Yellow	Yellow
Bulgaria	Orange	0%	Yellow	Gray	Yellow	Yellow	Yellow
Croatia	Orange	0%	Yellow	Gray	Yellow	Yellow	Yellow
Cyprus	Orange	0%	Yellow	Gray	Yellow	Yellow	Yellow
Czech Republic	Orange	0%	Yellow	Gray	Yellow	Yellow	Yellow
Denmark	Orange	0%	Yellow	Yellow	Yellow	Yellow	Yellow
Estonia	Orange	0%	Yellow	Gray	Yellow	Yellow	Yellow
Finland	Orange	0%	Yellow	Gray	Yellow	Yellow	Yellow
France	Orange	0%	Yellow	Yellow	Yellow	Yellow	Yellow
Germany	Orange	0%	Yellow	Yellow	Yellow	Yellow	Yellow
Greece	Orange	0%	Yellow	Gray	Yellow	Yellow	Yellow
Hungary	Orange	0%	Yellow	Gray	Yellow	Yellow	Yellow
Ireland	Orange	0%	Yellow	Yellow	Yellow	Yellow	Yellow
Italy	Orange	0%	Yellow	Yellow	Yellow	Yellow	Yellow
Latvia	Orange	0%	Yellow	Gray	Yellow	Yellow	Yellow
Lithuania	Orange	0%	Yellow	Gray	Yellow	Yellow	Yellow
Luxembourg	Orange	0%	Yellow	Yellow	Yellow	Yellow	Yellow
Malta	Orange	0%	Yellow	Gray	Yellow	Yellow	Yellow
MUAC	Orange	0%	Yellow	Gray	Yellow	Yellow	Yellow
Netherlands	Orange	0%	Yellow	Yellow	Yellow	Yellow	Yellow
Norway	Orange	0%	Yellow	Yellow	Yellow	Yellow	Yellow
Poland	Orange	0%	Yellow	Gray	Yellow	Yellow	Yellow
Portugal	Orange	0%	Yellow	Gray	Yellow	Yellow	Yellow
Romania	Orange	0%	Yellow	Gray	Yellow	Yellow	Yellow
Slovak Republic	Orange	0%	Yellow	Gray	Yellow	Yellow	Yellow
Slovenia	Orange	0%	Yellow	Gray	Yellow	Yellow	Yellow
Spain	Orange	0%	Yellow	Yellow	Yellow	Yellow	Yellow
Sweden	Orange	0%	Yellow	Yellow	Yellow	Yellow	Yellow
Switzerland	Orange	0%	Yellow	Yellow	Yellow	Yellow	Yellow
United Kingdom	Orange	0%	Yellow	Yellow	Yellow	Yellow	Yellow

**5.2.1 Stakeholders Internet Protocol Compliance**



Country	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder* Category				
			Stakeholders considered as Gaps				
			ANSPs	Airport Operators	Network Manager	Military Authorities	MET Providers
Austria	No information	-	Dark Green	White	Dark Purple	White	Dark Green
Belgium	26-50%	30%	Light Green	Light Green	Dark Purple	Light Green	Light Green
Bulgaria	0%	0%	Dark Green	Grey	Dark Purple	White	Purple
Croatia	0%	0%	Light Green	Grey	Dark Purple	White	Light Green
Cyprus	0%	0%	Purple	Grey	Dark Purple	White	Yellow
Czech Republic	100%	100%	Dark Green	Grey	Dark Purple	Dark Green	Dark Green
Denmark	0%	0%	Light Green	Grey	Dark Purple	White	Light Green
Estonia	0%	0%	Dark Purple	Grey	Dark Purple	White	Light Green
Finland	0%	0%	Light Green	Grey	Dark Purple	Grey	Light Green
France	0%	0%	Dark Purple	Dark Purple	Dark Purple	Light Green	Yellow
Germany	0%	0%	Light Green	Grey	Dark Purple	Purple	Purple
Greece	0%	0%	Purple	Grey	Dark Purple	White	White
Hungary	100%	100%	Dark Green	Grey	Dark Purple	Dark Green	Dark Green
Ireland	0%	0%	Purple	Grey	Dark Purple	White	Purple
Italy	100%	100%	Dark Green	Dark Green	Dark Purple	Dark Green	Dark Green
Latvia	0%	0%	Dark Green	Grey	Dark Purple	White	Yellow
Lithuania	0%	0%	Purple	Grey	Dark Purple	White	Grey
Luxembourg	0%	0%	Purple	Grey	Dark Purple	White	Purple
Malta	0%	0%	Purple	Grey	Dark Purple	Grey	Grey
MUAC	100%	100%	Dark Green	Grey	Dark Purple	Grey	Grey
Netherlands	0%	0%	Light Green	Yellow	Dark Purple	Grey	Light Green
Norway	0%	0%	Yellow	Grey	Dark Purple	White	Yellow
Poland	0%	0%	Light Green	Grey	Dark Purple	White	Purple
Portugal	0%	0%	Yellow	Grey	Dark Purple	Purple	Purple
Romania	0%	0%	Dark Green	Grey	Dark Purple	White	White
Slovak Republic	100%	100%	Dark Green	Grey	Dark Purple	Dark Green	Dark Green
Slovenia	100%	100%	Dark Green	Grey	Dark Purple	Dark Green	Dark Green
Spain	0%	0%	Light Green	Dark Green	Dark Purple	White	White
Sweden	0%	0%	Light Green	Dark Purple	Dark Purple	White	Purple
Switzerland	100%	100%	Dark Green	Dark Green	Dark Purple	Dark Green	Dark Green
United Kingdom	100%	100%	Dark Green	Dark Green	Dark Purple	Dark Green	Dark Green

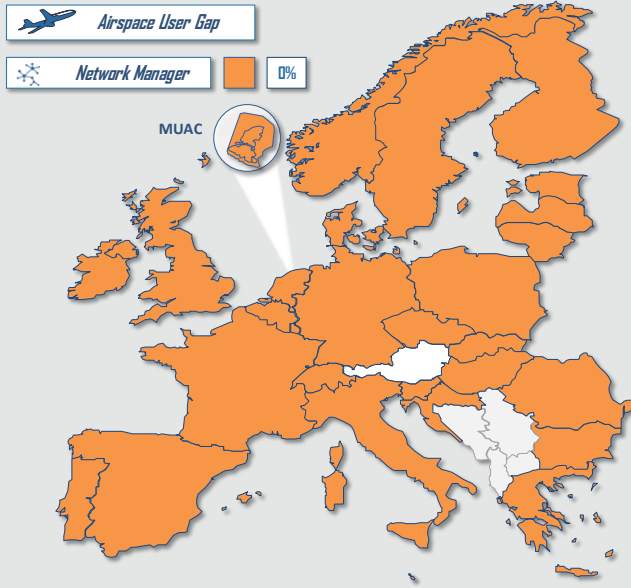
**5.2.2 Stakeholders SWIM Infrastructure Components**



Country	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder* Category						
			Stakeholders considered as Gaps						
			ANSPs	Airport Operators	Network Manager	Military Authorities	MET Providers		
Austria		-							
Belgium		0%							
Bulgaria		0%							
Croatia		0%							
Cyprus		0%							
Czech Republic		0%							
Denmark		0%							
Estonia		0%							
Finland		0%							
France		0%							
Germany		0%							
Greece		0%							
Hungary		0%							
Ireland		0%							
Italy		0%							
Latvia		0%							
Lithuania		0%							
Luxembourg		0%							
Malta		0%							
MUAC		0%							
Netherlands		0%							
Norway		0%							
Poland		0%							
Portugal		0%							
Romania		0%							
Slovak Republic		0%							
Slovenia		0%							
Spain		0%							
Sweden		0%							
Switzerland		0%							
United Kingdom		0%							

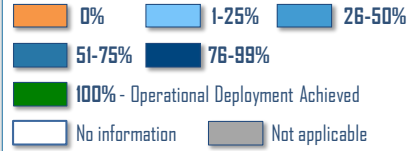


### 5.2.3 Stakeholders SWIM PKI and Cybersecurity

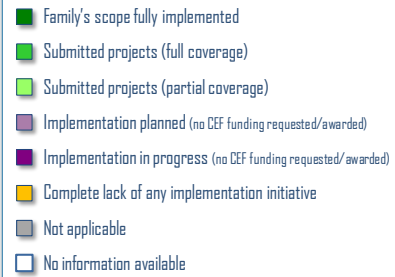


#### Chart Key - Overall Implementation Status

The chart reflects the overall implementation status of the Family, taking into account all inputs coming from involved Stakeholders

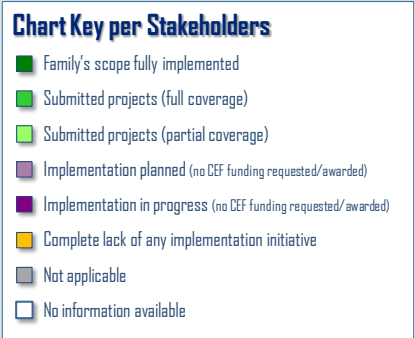
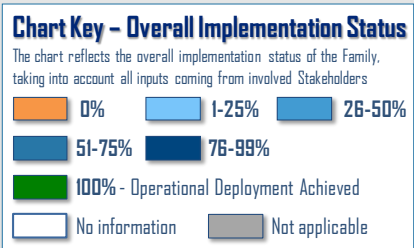
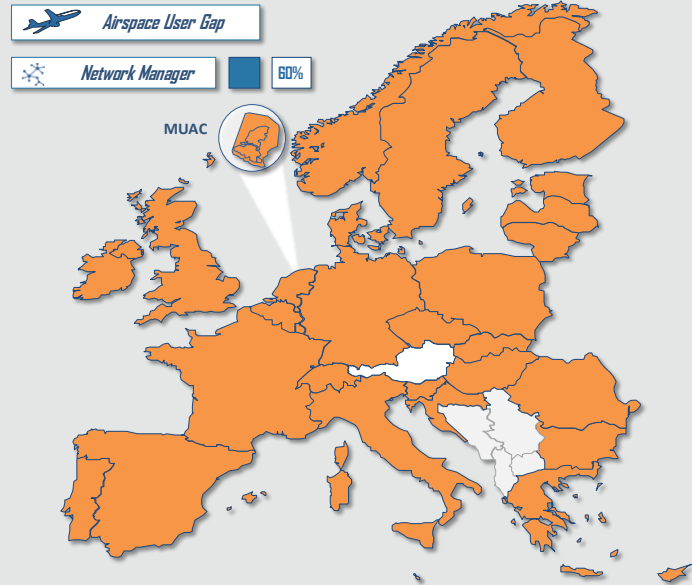


#### Chart Key per Stakeholders



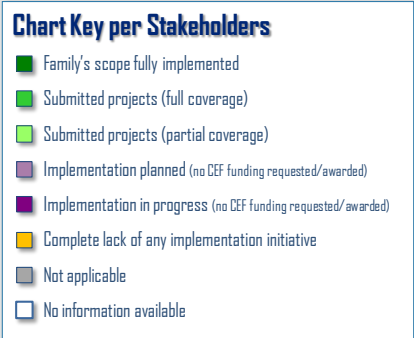
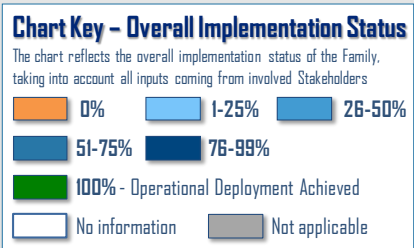
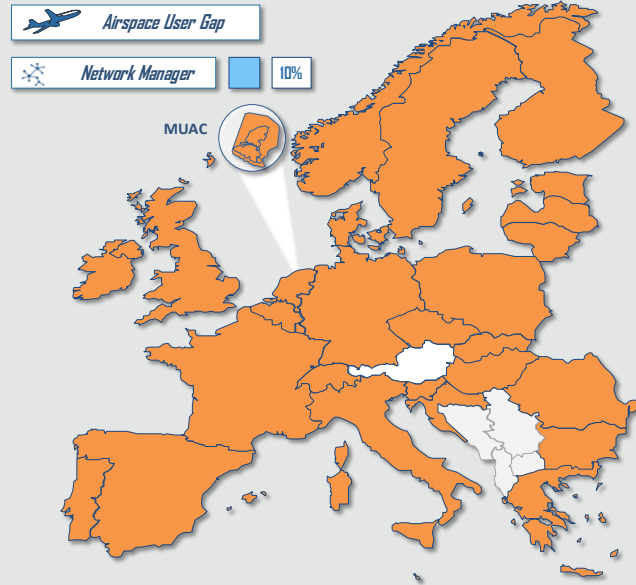
Country	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder Category					
			Stakeholders considered as Gaps					
			ANSPs	Airport Operators	Network Manager	Military Authorities	MET Providers	
Austria		-						
Belgium		0%						
Bulgaria		0%						
Croatia		0%						
Cyprus		0%						
Czech Republic		0%						
Denmark		0%						
Estonia		0%						
Finland		0%						
France		0%						
Germany		0%						
Greece		0%						
Hungary		0%						
Ireland		0%						
Italy		0%						
Latvia		0%						
Lithuania		0%						
Luxembourg		0%						
Malta		-						
MUAC		0%						
Netherlands		0%						
Norway		0%						
Poland		0%						
Portugal		0%						
Romania		0%						
Slovak Republic		0%						
Slovenia		0%						
Spain		0%						
Sweden		0%						
Switzerland		0%						
United Kingdom		0%						

**5.3.1 Upgrade / Implement Aeronautical Information Exchange system / service**



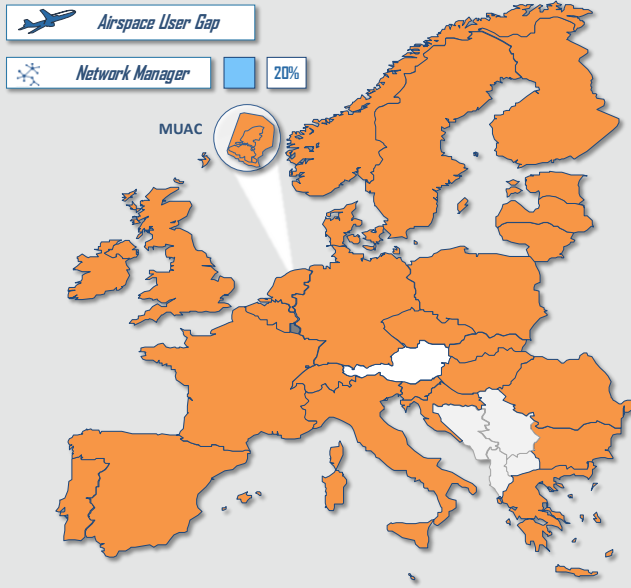
Country	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder Category			
			Stakeholders considered as Gaps			
			ANSPs	Airport Operators	Network Manager	Military Authorities
Austria		-				
Belgium		0%				
Bulgaria		0%				
Croatia		0%				
Cyprus		0%				
Czech Republic		0%				
Denmark		0%				
Estonia		0%				
Finland		0%				
France		0%				
Germany		0%				
Greece		0%				
Hungary		0%				
Ireland		0%				
Italy		0%				
Latvia		0%				
Lithuania		0%				
Luxembourg		0%				
Malta		0%				
MUAC		0%				
Netherlands		0%				
Norway		0%				
Poland		0%				
Portugal		0%				
Romania		0%				
Slovak Republic		0%				
Slovenia		0%				
Spain		0%				
Sweden		0%				
Switzerland		0%				
United Kingdom		0%				

**5.4.1 Upgrade / Implement Meteorological Information Exchange system / service**



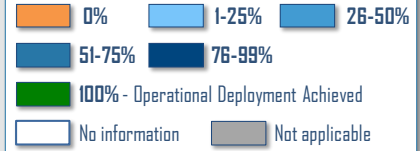
Country	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder Category						
			Stakeholders considered as Gaps						
			ANSPs	Airport Operators	Network Manager	Military Authorities	MET Providers		
Austria		-							
Belgium		0%							
Bulgaria		0%							
Croatia		0%							
Cyprus		0%							
Czech Republic		0%							
Denmark		0%							
Estonia		0%							
Finland		0%							
France		0%							
Germany		0%							
Greece		0%							
Hungary		0%							
Ireland		0%							
Italy		0%							
Latvia		0%							
Lithuania		0%							
Luxembourg		0%							
Malta		0%							
MUAC		0%							
Netherlands		0%							
Norway		0%							
Poland		0%							
Portugal		0%							
Romania		0%							
Slovak Republic		0%							
Slovenia		0%							
Spain		0%							
Sweden		0%							
Switzerland		0%							
United Kingdom		0%							

**5.5.1 Upgrade / Implement Cooperative Network Information Exchange system / service**

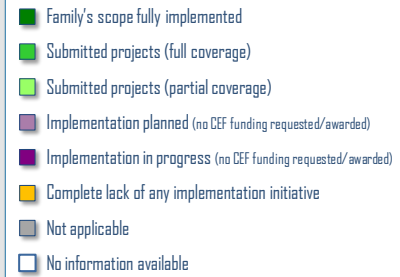


**Chart Key - Overall Implementation Status**

The chart reflects the overall implementation status of the Family, taking into account all inputs coming from involved Stakeholders

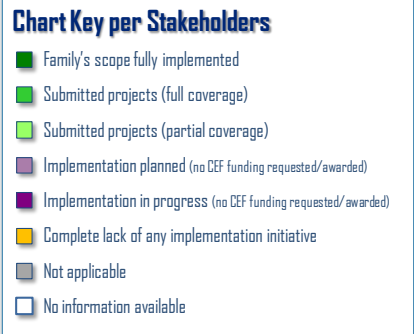
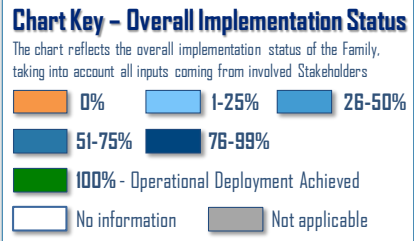
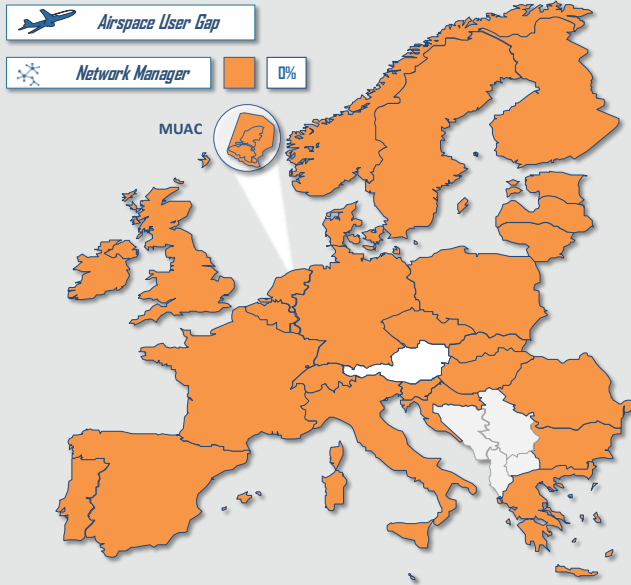


**Chart Key per Stakeholders**



Country	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder Category			
			Stakeholders considered as Gaps			
			ANSPs	Airport Operators	Network Manager	Military Authorities
Austria		-				
Belgium		0%				
Bulgaria		0%				
Croatia		0%				
Cyprus		0%				
Czech Republic		0%				
Denmark		0%				
Estonia		0%				
Finland		0%				
France		0%				
Germany		0%				
Greece		0%				
Hungary		0%				
Ireland		0%				
Italy		0%				
Latvia		0%				
Lithuania		0%				
Luxembourg		-				
Malta		0%				
MUAC		0%				
Netherlands		0%				
Norway		0%				
Poland		0%				
Portugal		0%				
Romania		0%				
Slovak Republic		0%				
Slovenia		0%				
Spain		0%				
Sweden		0%				
Switzerland		0%				
United Kingdom		0%				

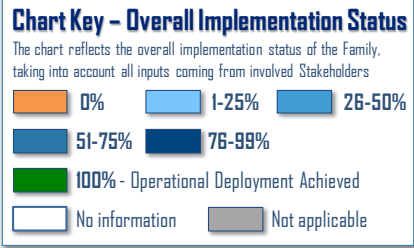
**5.6.1 Upgrade / Implement Flights Information Exchange system / service supported by Yellow Profile**



Country	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder Category			
			Stakeholders considered as Gaps			
			ANSPs	Airport Operators	Network Manager	Military Authorities
Austria	No information	-	Implementation in progress	No information	Submitted projects (full coverage)	No information
Belgium	0%	0%	Complete lack of any implementation initiative	No information	Submitted projects (full coverage)	Not applicable
Bulgaria	0%	0%	Complete lack of any implementation initiative	No information	Submitted projects (full coverage)	No information
Croatia	0%	0%	Implementation in progress	No information	Submitted projects (full coverage)	No information
Cyprus	0%	0%	Complete lack of any implementation initiative	No information	Submitted projects (full coverage)	No information
Czech Republic	0%	0%	Implementation planned	No information	Submitted projects (full coverage)	Complete lack of any implementation initiative
Denmark	0%	0%	Implementation planned	No information	Submitted projects (full coverage)	No information
Estonia	0%	0%	Implementation planned	No information	Submitted projects (full coverage)	No information
Finland	0%	0%	Implementation planned	No information	Submitted projects (full coverage)	No information
France	0%	0%	Implementation in progress	Submitted projects (full coverage)	Submitted projects (full coverage)	Complete lack of any implementation initiative
Germany	0%	0%	Implementation planned	No information	Submitted projects (full coverage)	No information
Greece	0%	0%	Implementation planned	No information	Submitted projects (full coverage)	No information
Hungary	0%	0%	Complete lack of any implementation initiative	No information	Submitted projects (full coverage)	No information
Ireland	0%	0%	Implementation planned	No information	Submitted projects (full coverage)	No information
Italy	0%	0%	Implementation in progress	Complete lack of any implementation initiative	Submitted projects (full coverage)	No information
Latvia	0%	0%	Implementation in progress	No information	Submitted projects (full coverage)	No information
Lithuania	0%	0%	Implementation in progress	No information	Submitted projects (full coverage)	No information
Luxembourg	0%	0%	Complete lack of any implementation initiative	No information	Submitted projects (full coverage)	No information
Malta	0%	0%	No information	No information	Submitted projects (full coverage)	No information
MUAC	0%	0%	Implementation in progress	No information	Submitted projects (full coverage)	No information
Netherlands	0%	0%	Implementation planned	Implementation planned	Submitted projects (full coverage)	No information
Norway	0%	0%	Complete lack of any implementation initiative	Complete lack of any implementation initiative	Submitted projects (full coverage)	No information
Poland	0%	0%	Complete lack of any implementation initiative	No information	Submitted projects (full coverage)	No information
Portugal	0%	0%	Complete lack of any implementation initiative	No information	Submitted projects (full coverage)	Implementation in progress
Romania	0%	0%	Complete lack of any implementation initiative	No information	Submitted projects (full coverage)	No information
Slovak Republic	0%	0%	Complete lack of any implementation initiative	No information	Submitted projects (full coverage)	Complete lack of any implementation initiative
Slovenia	0%	0%	Complete lack of any implementation initiative	No information	Submitted projects (full coverage)	No information
Spain	0%	0%	Implementation planned	No information	Submitted projects (full coverage)	No information
Sweden	0%	0%	Implementation in progress	Complete lack of any implementation initiative	Submitted projects (full coverage)	No information
Switzerland	0%	0%	Implementation in progress	No information	Submitted projects (full coverage)	No information
United Kingdom	0%	0%	Implementation planned	Implementation planned	Submitted projects (full coverage)	No information



**M** 5.6.2 Upgrade / Implement Flights Information Exchange system / service supported by Blue Profile

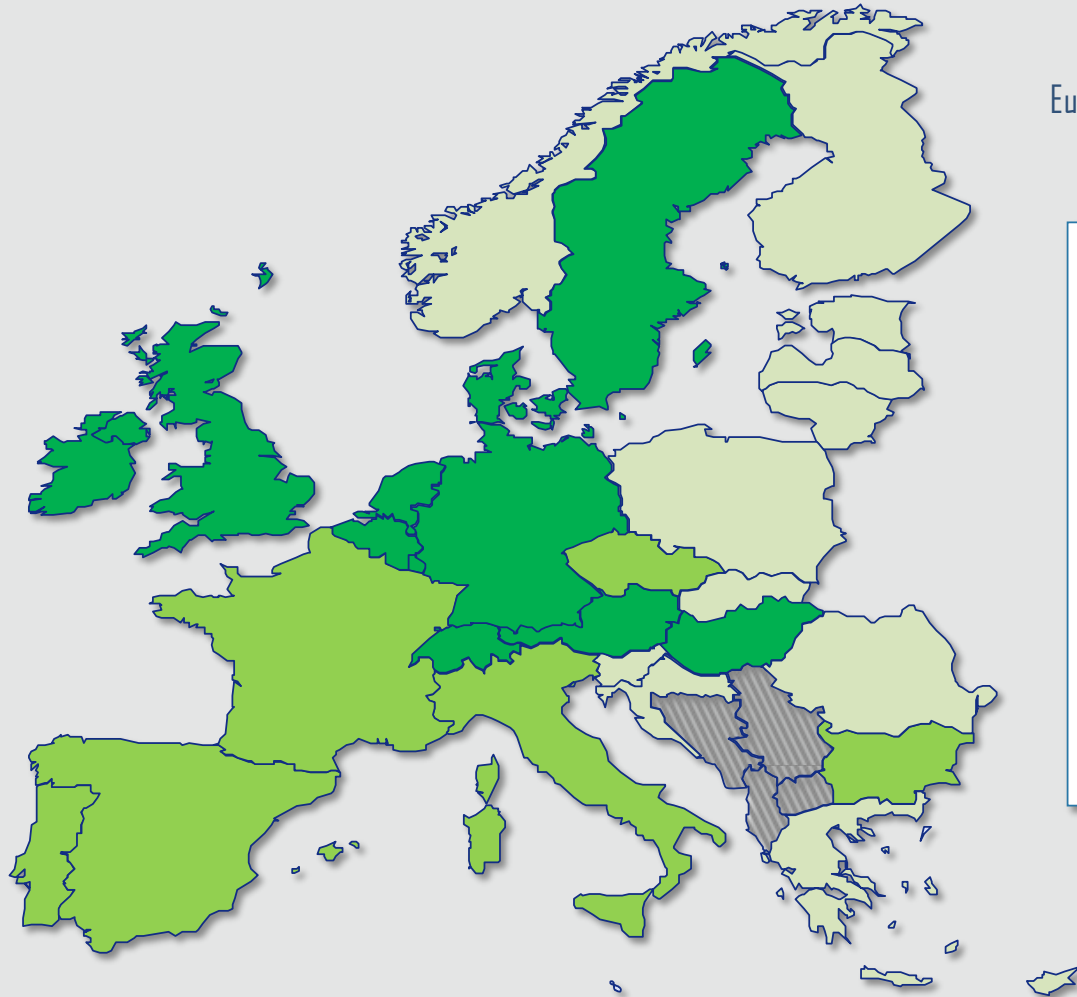


Country	Overall Family Implementation Status	Percentage of Implementation	Implementation Status by Operational Stakeholder Category			
			Stakeholders considered as Gaps			Other stakeholders
			ANSPs	Airport Operators	Network Manager	Military Authorities
Austria	0%	0%	Yellow	Grey	Yellow	Yellow
Belgium	0%	0%	Yellow	Grey	Yellow	Yellow
Bulgaria	0%	0%	Yellow	Grey	Yellow	Yellow
Croatia	0%	0%	Yellow	Grey	Yellow	Yellow
Cyprus	0%	0%	Yellow	Grey	Yellow	Yellow
Czech Republic	0%	0%	Yellow	Grey	Yellow	Yellow
Denmark	0%	0%	Yellow	Grey	Yellow	Yellow
Estonia	0%	0%	Yellow	Grey	Yellow	Yellow
Finland	0%	0%	Yellow	Grey	Yellow	Yellow
France	0%	0%	Light Green	Grey	Yellow	Yellow
Germany	0%	0%	Dark Purple	Yellow	Yellow	Yellow
Greece	0%	0%	Yellow	Grey	Yellow	Yellow
Hungary	0%	0%	Yellow	Grey	Yellow	Yellow
Ireland	0%	0%	Yellow	Grey	Yellow	Yellow
Italy	0%	0%	Light Green	Yellow	Yellow	Yellow
Latvia	0%	0%	Yellow	Grey	Yellow	Yellow
Lithuania	0%	0%	Yellow	Grey	Yellow	Yellow
Luxembourg	0%	0%	Yellow	Grey	Yellow	Yellow
Malta	0%	0%	Yellow	Grey	Yellow	Yellow
MUAC	0%	0%	Yellow	Grey	Yellow	Yellow
Netherlands	0%	0%	Yellow	Grey	Yellow	Yellow
Norway	0%	0%	Yellow	Grey	Yellow	Yellow
Poland	0%	0%	Yellow	Grey	Yellow	Yellow
Portugal	0%	0%	Yellow	Grey	Yellow	Yellow
Romania	0%	0%	Yellow	Grey	Yellow	Yellow
Slovak Republic	0%	0%	Yellow	Grey	Yellow	Yellow
Slovenia	0%	0%	Yellow	Grey	Yellow	Yellow
Spain	0%	0%	Dark Purple	Yellow	Yellow	Yellow
Sweden	0%	0%	Yellow	Grey	Yellow	Yellow
Switzerland	0%	0%	Yellow	Grey	Yellow	Yellow
United Kingdom	0%	0%	Yellow	Grey	Yellow	Yellow

**AF6 – Initial Trajectory Information Sharing**

**Data Link Services Implementation Status**

Due to the new structure of AFG, this picture of the current status of implementation of Data Link Services throughout Europe supports the identification of the main gaps associated to Family 6.1.1 and 6.1.3



**Overall Implementation Status – June 2016**

The chart reflects the inputs gathered from the responses to the dedicated DLS Survey, issued by SDM in June and distributed to all European Air Navigation Service Providers

- Data Link Services currently in operations
- Data Link Services partially implemented or not yet in operations (A/G VDLM2 Network in place)
- No A/G VDLM2 Network in place
- Not applicable

*NB.* The present picture and the following table have been prepared only by consolidating the information provided by the recipients of the DLS survey, without any direct cross-check of the feedback from SDM

Deployment Programme 2016

Country	Air Navigation Service Provider	DLS in operations	ATM Systems Upgrade			At least one VDL M2 A/G comm. Network in place	Updated ATC Procedures	ATCOs training completed	Starting Model**
			Front End Processor	FDP System	HMI Interface				
Austria	Austro Control		✓	✓	✓	✓	✓	✓	Model A
Bulgaria	BULATSA	By 2017	✓	✓	✓	✓	✓	✓	Model A
Croatia	Croatia Control	By 2017	✓	✓	✓				No implementation yet
Cyprus	DCAC	No date available							No implementation yet
Czech Republic	ANS CR	No date available	✓	✓	✓	✓			Model A
Denmark	Naviar		✓	✓	✓	✓	✓	✓	Model A
Estonia	EANS	By 2018	✓	✓	✓				No implementation yet
Finland	Finavia	By 2019	✓	✓	✓				No implementation yet
France	DSNA*	By 2019	✓	✓	✓	✓	✓	✓	Model A
Germany	DFS		✓	✓	✓	✓	✓	✓	Model A
Greece	HCAA	No date available							No implementation yet
Hungary	Hungaro Control		✓	✓	✓	✓	✓	✓	Model A
Ireland	IAA		✓	✓	✓	✓	✓	✓	Model A
Italy	ENAV	By 2016	✓	✓	✓	✓	✓		Model C
Latvia	LGS	By 2018		✓	✓				No implementation yet
Lithuania	Orla Navigacija	By 2018							No implementation yet
Malta	MATS	No date available							No implementation yet
MUAC Region	MUAC		✓	✓	✓	✓	✓	✓	Model A
Norway	Avinor	By 2020							No implementation yet
Poland	PANSA	By 2018							No implementation yet
Portugal	NAV Portugal*	No date available	✓	✓	✓	✓			Model A
Romania	ROMATSA	By 2017							No implementation yet
Slovak Republic	LPS	By 2018							No implementation yet
Slovenia	Slovenia Control	By 2018							No implementation yet
Spain	ENAIRE	No date available	✓	✓	✓	✓			Model A
Sweden	LFV		✓	✓	✓	✓	✓	✓	Model A
Switzerland	skyguide		✓	✓	✓	✓	✓	✓	Model A
United Kingdom	NATS		✓	✓	✓	✓	✓	✓	Model A

\*NB. According to their feedback, DSNA and Nav Portugal are currently providing only a subset of Data Link Services (respectively DLIC, AMC and ACM for France and DLIC Logon for Portugal)

\*\*NB. Assumptions by SDM on the basis of the feedbacks provided by the ANSPs through the DLS Surveys

## 5.1.2 Airspace Users Gaps – View per Family

### High-level Conclusions of AU Gap Analysis Surveys

Around 40 airlines have provided feedback to the SDM between the 2015 and 2016 exercise, including **all major European hub carriers and point-to-point carriers**. With respect to the number of commercial aircraft, number of departures/arrivals and market share, the outcome of this survey reflects a representative snap-shot of the current state-of-play on airspace user side, which will however be constantly kept updated through SDM synchronization and monitoring of the Programme.

Taking into account the **gap analysis performed on current aircraft capabilities and associated operational readiness**, the differences between the percentage of aircraft equipped and the percentage of crews trained and their operational approvals highlights the need of considering the airlines crew training as part of the overall PCP implementation.

The increasing pace of change that SESAR is bringing to the ATM modernisation (e.g. switching from legacy radar-based navigation and radio communications environment to a new satellite-based navigation and digital communications environment), creates a need to train flight crew for what could be an extended transitional period, whereby both legacy and higher technological systems are in simultaneous operational use. With this significant step change and growing flight crew training burden on the airlines, there could also be a significant impact on the current training simulator capability and overall operational capacity across Europe. Therefore, consideration should be given to a wide ranging and careful logistical training plan, including the provision of additional simulator availability and capability.

Having in mind that crew training is a costly process for the airlines and would be only performed if the approaches / procedures can be actually **used in the network wide operational environment**, the synchronized implementation of the respective families together with ANSPs and airports are key factors for successful implementation again.

Regarding the **gap analysis on flight planning capabilities** most airlines refer to the need for synchronized implementation of the Network Manager systems, the ANSPs systems and their Computer Flight Planning System Providers (CFSPs) systems. So the involvement of the airspace users to upgrade their flight plan systems capabilities would **become a key factor for success**. Due to the nature of the airlines, using the whole European airspace, the NM system availability for AF4 families and the ANSPs readiness throughout the network are key factors. The **synchronization task of the SDM** towards ANSPs, AUs and NM will therefore have the highest priority in planning, executing and monitoring a harmonized implementation.

As a general recap, Airspace Users have to be considered as significantly affected by the deployment of the following families, and – in accordance to the PCP regulatory framework – are to be considered as potentially eligible for co-funding under upcoming CEF Transport Calls:

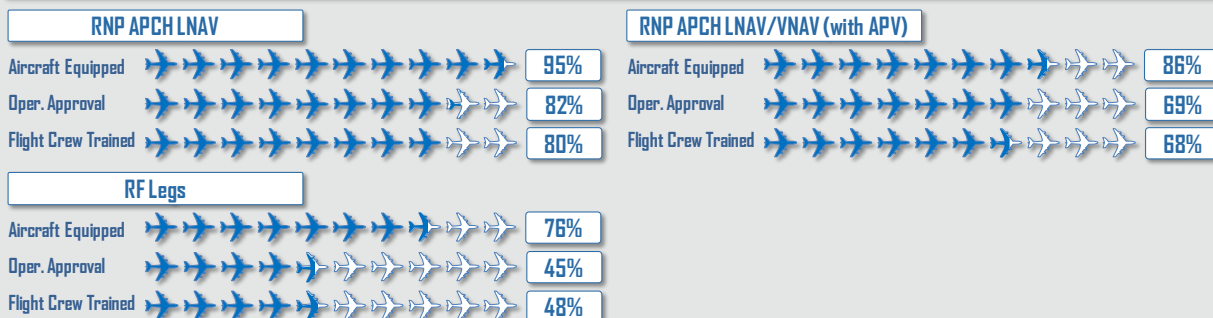
- **1.2.1** RNP Approaches with vertical guidance
- **1.2.4** RNP1 operations in high density TMAs (aircraft capabilities)

- **2.5.2** Vehicle and aircraft systems contributing to Airport Safety Nets
- **3.1.3** Full rolling ASM/ATFCM process and ASM information sharing
- **3.2.1** Upgrade of ATM systems (NM, ANSPs, AUs) to support Direct Routings (DCT) and Free Route Airspace (FRA)
- **4.1.2** STAM Phase 2
- **4.2.2** Interactive Rolling NOP
- **4.2.3** Interface ATM systems to NM systems
- **4.3.1** Target Time for ATCFM purposes
- **4.3.2** Reconciled Target Times for ATFCM and Arrival Sequencing
- **5.1.2** NewPENS: New Pan-European Network Service
- **5.1.3** Common SWIM Infrastructure Components
- **5.1.4** Common SWIM PKI and Cybersecurity
- **5.2.1** Stakeholders Internet Protocol Compliance
- **5.2.2** Stakeholders SWIM Infrastructures Components
- **5.2.3** Stakeholders SWIM PKI and Cybersecurity
- **5.3.1** Upgrade/Implement Aeronautical Information Exchange System/Service
- **5.4.1** Upgrade/Implement Meteorological Information Exchange System/Service
- **5.5.1** Upgrade/Implement Cooperative Network Information Exchange System/Service
- **5.6.1** Upgrade/Implement Flight Information Exchange System/Service supported by Yellow Profile
- **6.1.4** ATN B1 capability in Multi Frequency environment in aircraft domain
- **6.1.5** ATN B2 in aircraft domain

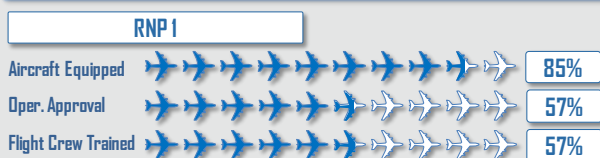
The following charts indicate the **percentage of fleet** operated by the survey respondents **already compliant with the PCP Regulation framework**, both in terms of aircraft equipage and flight crew trained, clustered by Family. Such inputs, which are considered as resulting into **a representative snap-shot of the current state-of-play** on airspace user side, have been elaborated on the basis of the feedback gathered from airlines headquartered in EU.

### Airspace Users' Gaps - Overall Outlook

#### Family 1.2.1 - RNP Approaches with vertical guidance



#### Family 1.2.4 - RNP1 Operations in high density TMAs (aircraft capabilities)



The chart takes into account inputs gathered from Airspace Users (headquartered in EU) which replied to the SDM Survey; it indicates the percentage of fleet already compliant with PCP Regulation.

#### Family 6.1.4 - ATN B1 capability in Multi Frequency environment in aircraft domain



The chart takes into account inputs gathered from Airspace Users (headquartered in EU) which replied to the SDM Survey; it indicates the percentage of fleet already compliant with DLS Regulation.

## 5.2 DP Execution Status – Overview

The present chapter aims at providing an overview of the progress achieved by PCP-related projects awarded in the CEF framework. In particular, the contents of this chapter build on the analyses performed for the elaboration of the DP Execution Progress Report N. 2016-2, released on the 31<sup>st</sup> of May 2016, reflecting the progress status by the 31<sup>st</sup> of March 2016.

Specifically, the DP Execution Progress Report represents the reference document for this section as it outlines the status of the DP execution, which is provided hereinafter, and provides the detail of the main achievements and major misalignments.

For the time being, only Implementation Projects awarded as a result from the **CEF Transport General Call 2014** are considered, as they are being executed as part of the sole active implementation Action within the framework of the DP (Specific Grant Agreement for Implementation Projects 2014 – SGA IP 2014); in the future, information related to projects awarded in the next Calls will be included in the present section.

The **main figures** related to the implementation phase of the Action are reported below:

- **Period of execution:** from the 1<sup>st</sup> of January 2014 to the 31<sup>st</sup> of December 2020;
- **Number of Implementation Projects:** 84 (out of which 3 are split into two different parts due to application of different co-funding rates, making the total number of Implementation Projects rise to 87);
- **Number of multi-stakeholder projects:** 10;
- **Number of European Union Member States involved:** 23 Member States and 2 neighbouring States;
- **Number of Implementing Partners:** 45;
- **Number of planned milestones:** 1.258;
- **Number of planned deliverables:** 738.

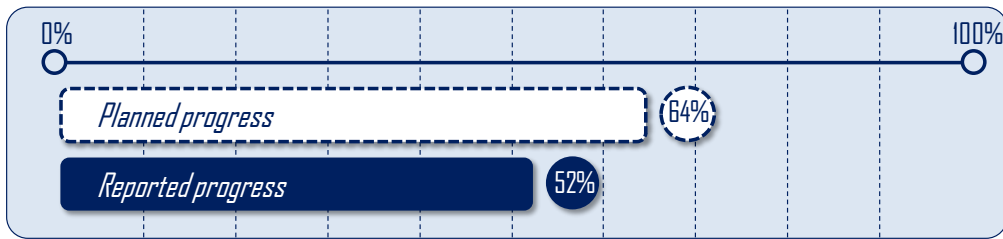
The Implementation Projects address **5 different ATM Functionalities** (AFs) as follows:

- **12** projects in AF1 (“Extended AMAN and PBN in high density TMA”);
- **38** projects in AF2 (“Airport Integration and Throughput”);
- **13** projects in AF3 (“Flexible ASM and Free Route”);
- **5** projects in AF4 (“Network Collaborative Management”);
- **16** projects in AF5 (“Initial SWIM”).

The analysis of the **progress reported by the Implementing Partners**, and reviewed by the SDM, shows that the technical progress of the Action is substantially in line with the planned progress. The gap between planned and reported progress amounts to 12 percentage points (64% vs. 52%<sup>41</sup>); this does not result in shifting the overall end date of the Action, despite the postponement/rescheduling of some projects, milestones and

<sup>41</sup> The outlined progress computation does not take into account Action coordination and project management sub-activities, but only sub-activities including Implementation Projects. Furthermore, it is worth noting that the progress calculation takes into account, as “end date” of each AF, the expected “end date” of the last project included in each of them.

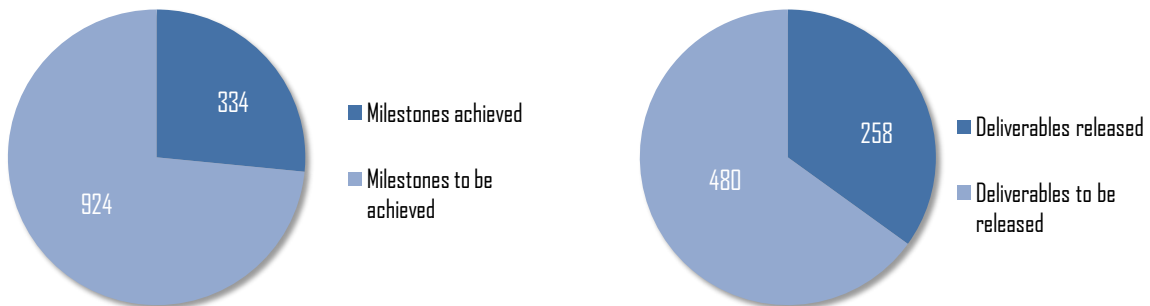
deliverables proposed by the Implementing Partners. Moreover, no Implementation Project is expected to end beyond the timeframe of the related AF as specified in the PCP, and no implications are envisaged in terms of timely achievement of the expected operational targets and benefits.



The planned and reported progress related to each AF is outlined in the following table.

	AF1	AF2	AF3	AF4	AF5
Planned progress	60%	68%	66%	65%	60%
Reported progress	53%	51%	55%	47%	53%

Concerning the **milestones**, 27% of them (334 out of 1.258) have been already achieved and validated by the SDM. With regards to **deliverables**, 35% of them (258 out of 738) have been successfully released by the Implementing Partners and validated by the SDM.



Both milestones' and deliverables' completion has been reported by the Implementing Partners though the submission of appropriate "supporting documents" to be verified and validated by the SDM. Likewise, supporting documents have been provided also to describe the reasons for postponements and deviations, with related rescheduling needs. On this last point, with specific reference to milestones and deliverables to be achieved and released by 31<sup>st</sup> of March 2016:

- 36% of planned milestones have been postponed;
- 34% of planned deliverables have been postponed.

It is worth noting that the postponements of milestones and deliverables do not affect the final date of the Action, which is safeguarded.



As outlined in the DP EPR N. 2016-2, the execution of Implementation Projects has brought to the achievement of **concrete results** providing tangible benefits to the aviation sector, and the community at large. Some projects have already been completed:

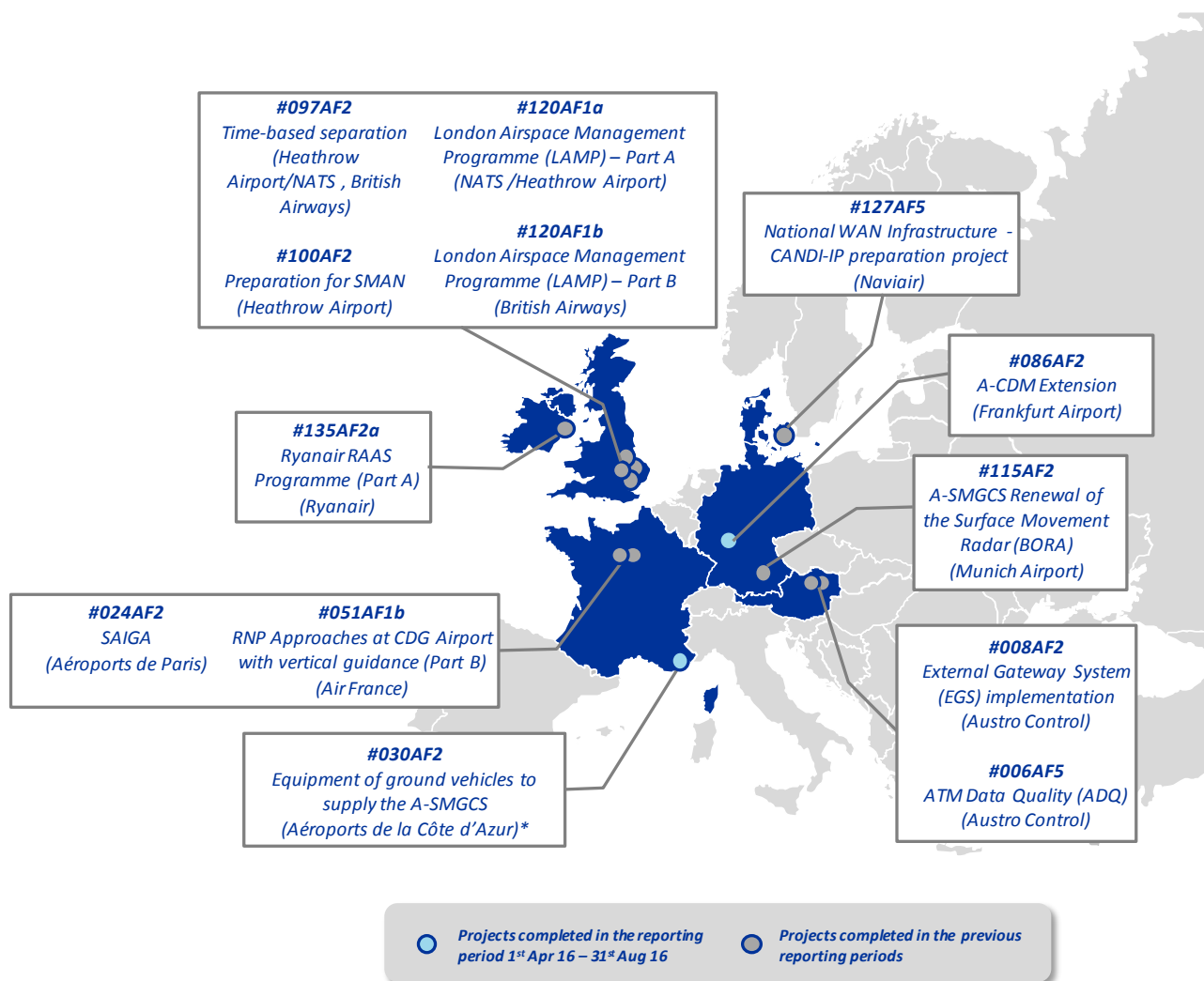
- **3 Implementation Projects in AF1:**
  - o **#051AF1b:** RNP Approaches at CDG Airport with vertical guidance (Part B), deployed by Air France;
  - o **#120AF1a:** London Airspace Management Programme (LAMP)- Part A, deployed by NATS and Heathrow Airport;
  - o **#120AF1b:** London Airspace Management Programme (LAMP), deployed by British Airways;
- **6 Implementation Projects in AF2:**
  - o **#008AF2:** External Gateway System (EGS) implementation, deployed by Austro Control;
  - o **#024AF2:** SAIGA, deployed by Aéroports De Paris;
  - o **#097AF2:** Time-based separation, deployed by Heathrow Airport, NATS and British Airways;
  - o **#100AF2:** Preparation for SMAN, deployed by Heathrow Airport;
  - o **#115AF2:** A-SMGCS Renewal of the Surface Movement Radar (BORA), deployed by Munich Airport;
  - o **135AF2a:** Ryanair RAAS Programme (Part A), deployed by Ryanair;
- **2 Implementation Projects in AF5:**
  - o **#006AF5:** ATM Data Quality (ADQ), deployed by Austro Control;
  - o **#127AF5:** National WAN Infrastructure - CANDI-IP preparation project, deployed by Naviair.

In addition, two additional Implementation Projects in AF2 have been **successfully completed after the 31<sup>st</sup> of March 2016:**

- **#030AF2:** Equipment of ground vehicles to supply the A-SMGCS, deployed by Aéroports de la Côte d'Azur;
- **#086AF2:** A-CDM Extension, deployed by Fraport.

It is worth mentioning that the completion of the last Implementation Project will be reported in the next DP Execution Progress Report (DP EPR N. 2016-3) to be delivered by the 30<sup>th</sup> of September 2016.

The following map illustrates the **geographical distribution** of the 13 Implementation Projects completed until September 30<sup>th</sup>, 2016.

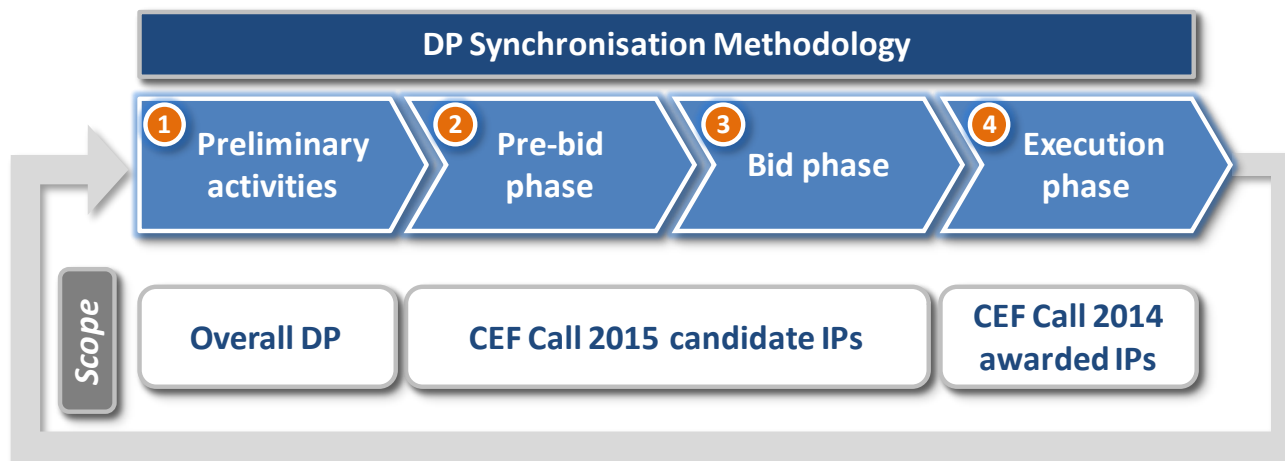


In addition, a comprehensive list of **risks** at AF level has been identified by the SDM in cooperation with the Activity leaders, building on the list of risks detailed in the DP 2015 and linking them to the risks at IP level reported by the Implementing Partners. *Ad-hoc mitigation actions* are associated to each risk<sup>42</sup>.

<sup>42</sup> The list of risks and related mitigation actions is provided in the DP Execution Progress Report (DP EPR N. 2016-2)

### 5.3 SDM Synchronisation and Monitoring Approach

An overview of the key features of the synchronization and monitoring methodological approach applied by the SDM is provided in the following paragraph, along with the main results achieved. The synchronization approach applied by the SDM encompasses four phases, as outlined in the following chart.



**Fig. 47 – Overall DP Synchronization Methodology**

In particular, the SDM methodology aims at ensuring that:

- the synchronization needs at Family level are effectively identified (phase 1);
- the content of indication of interests (phase 2) and IP templates (phase 3) submitted by the operational stakeholders is consistent with the need to ensure a synchronized deployment of the Programme (e.g. all the concerned stakeholders have been involved, the start and end dates of the candidate IPs are consistent, etc.);
- the implementation of awarded IPs (phase 4) is effectively monitored and the most suitable coordination mechanisms are identified and put in place by the SDM.

An overview of the methodology phases is provided hereinafter.

- 1. Preliminary activities:** during the DP 2015 elaboration, some key principles to be applied to the overall Deployment Programme, in order to ensure its **synchronised implementation**, were identified by the SDM. In particular, the SDM has identified the sequencing and synchronization needs at Family level and defined the relevant milestones to be monitored to ensure a coordinated deployment. Specifically:
  - **synchronization needs at Family level:** the Families included into the DP have been analysed in order to identify the synchronisation needs related to the affected Stakeholders groups as well as to the sequencing of the Families themselves;
  - **milestones to be monitored to ensure a coordinated deployment:** in order to facilitate the synchronised and coordinated deployment of the Programme, the SDM identified a set of “common” milestones to be monitored during the execution phase; such set includes milestones to be applied to all the

IPs and milestones which are specific on the basis of the Family to which each IP belongs.

Such principles, defined in the context of the DP2015, have been reviewed before the elaboration of the DP 2016, in order to confirm their applicability.

- 2. Pre-bid phase:** during the pre-bid phase, the “**Indications of Interest**” provided by the operational stakeholders have been analysed by SDM in order to **verify that synchronization needs at “IP level” have been taken in duly account**; it is worth noting that, during this phase, the **SDM interacted directly with operational stakeholders**, providing tailored suggestions and guidance in order to support stakeholders in the subsequent elaboration of IP proposals.

The 2015 Indications of Interest exercise was conducted by SDM in the weeks ahead of the launch of 2015 CEF Call and resulted in a **massive participation of operational stakeholders, despite being on a completely voluntary basis**. More than **380 Indications of Interest** were submitted to SDM until the end of October **by all relevant Stakeholder categories** (i.e. ANSPs, Airspace Users, Airport Operators, MET Providers, Military authorities, Industry/providers, the Network Manager, EUROCONTROL, etc.). It is worth mentioning that also Military stakeholders demonstrated a significant participation, by submitting 91 Indications of interest under the coordination of European Defence Agency.

The SESAR Deployment Manager provided each individual submitter with targeted formal feedback, having regard to technical elements, as well as to planning/sequencing of the initiatives.

Specifically, the **activities performed by SDM aimed at:**

- **Checking projects compliance to PCP Regulation and the association to the Programme’s Families**, in order to ensure alignment of implementation projects with the DP and provisions for easier coordination and synchronisation by the SDM in the execution phase;
- **Raising Quality of the future proposals to a common high level standard**, in particular through the harmonisation of descriptions of the projects and continuous interactions with the operational stakeholders to provide feedback and comments, setting the way for a more efficient monitoring of the activities;
- **Supporting cooperation and dialogue among individual stakeholders** with closely related projects to **favour merging of IPs and defragmentation of PCP implementation** as a whole;
- **Identifying how submitted initiatives planned to cover the identified Family level “gaps”** with an impact on the synchronisation dimension;
- **Triggering proposals where relevant gaps identified in the Programme appeared partially uncovered**, with potential consequences on other implementation initiatives.

Considering the success of the exercise for CEF Call 2015, the **SESAR Deployment Manager plans to replicate and enhance these activities in 2016**, in order to support Stakeholders in preparing the ground for future CEF Transport Calls. The available timeframe will also enable a **wider and less challenging roadmap**,

which will give operational stakeholders **more time to take into account SDM suggestions in the project proposal elaboration** for upcoming Calls.

- 3. Bid phase:** during the so called "bid phase", a significant effort was devoted by the SDM in the analysis of the "**IP Templates**" submitted by the operational stakeholders in the framework of the CEF Call 2015. The activities performed by SDM were mainly aimed at ensuring that the adequate level of detail was provided, with specific regard to monitoring milestones and synchronization/coordination needs. It is important to stress that, as for the "pre-bid" phase, also in the bid Phase continuous interactions with the operational stakeholders took place, also to enhance the quality of the proposal.

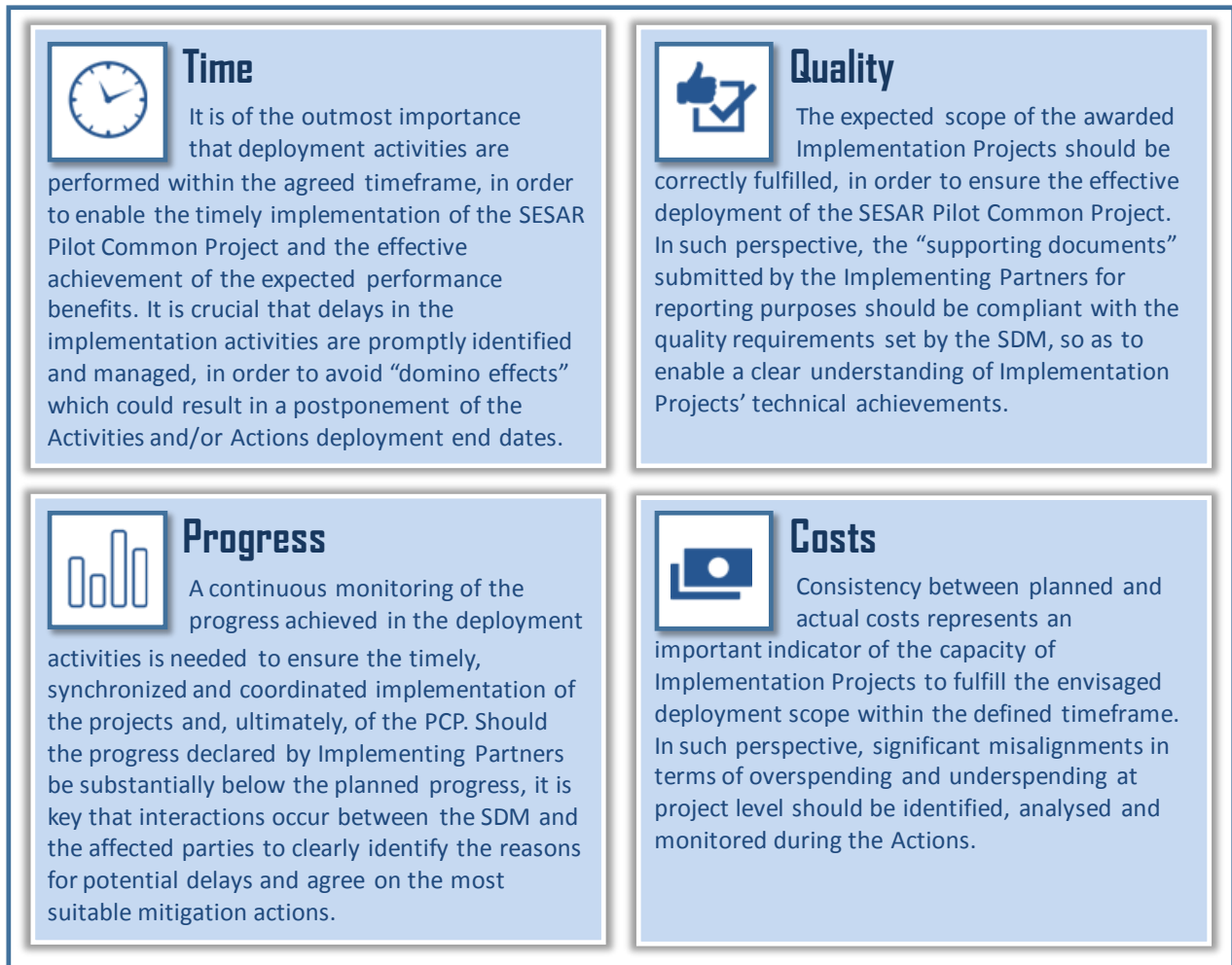
The noteworthy participation of operational stakeholders to the initiative is demonstrated by the following figures:

- **223** IP templates were submitted;
- The total costs of candidate IPs exceed **€ 2.4 bln**, for a total funding need of around **€ 1.2 bln**.

In order both to secure the most relevant projects for a timely and effective PCP implementation and to allow for the smooth execution of monitoring synchronization activities, the candidate projects were assessed by SDM through **5 key items**, identified on the basis of the Project view content included in DP 2015:

- o Continuity of implementation with projects already awarded through 2014 CEF Call ("Phase 2" of "Phase 1" projects which are already in the DP);
- o Level of readiness and nature of the relevant Family associated to the implementation activities;
- o Link to and coverage of one of the gaps identified in DP 2015;
- o Timeframe of the implementation initiative;
- o Multi-stakeholder involvement.

- 4. Execution phase:** the SDM, in coordination with the Action leader and Activity leaders and supported by the PMO, has monitored the achievements of the 2014 CEF Call awarded projects and proposed, where necessary, the most convenient mitigation actions to ensure a synchronized implementation of the Programme. In particular, the **high-level principles** underpinning the execution phase as a whole are reported in figure 37, in the following page.



**Fig. 48 – High-level Principles**

The monitoring and coordination activities performed by the SDM leveraged on data provided by the operational stakeholders, which led to the elaboration of the first DP Execution Progress Report (see Chapter 5.2). Moreover, the coordinating activities performed by the SDM facilitated the elaboration of the Action Status Reports by the Implementing Partners, through the provision of guidance and support.

The monitoring activities performed by the SDM were undertaken in line with the principles described in the “Guidelines for Execution Phase”; moreover, such principles were also described in the DP 2015, in which the monitoring process was outlined in terms of “what”, “who”, “how” and “when”.

In particular, the analysis of the progress achieved by the IPs was made possible through the submission of “supporting documents” by the operational stakeholders, providing:

- Information on tasks, milestones and deliverables accomplished;
- Rationales for delays in tasks, milestones and deliverables.

In such perspective, the SDM, supported by the PMO, has gathered from the operational stakeholders the relevant information concerning:

- **Tasks:** interactions have been performed to gather the progress of all the **tasks (537)** expected to be started within the **87 Implementation Projects** of the **CEF 2014 Action**; for the completed tasks, as well as for tasks expected to be completed by the 31/12/2015 but not accomplished yet, the SDM has analysed the “supporting documents” submitted by the operational stakeholders, in order to verify the actual results achieved and, where necessary, the rationales for delays;
- **Milestones:** the SDM has verified, through the relevant supporting documents submitted by the operational stakeholders, the actual achievement of milestones expected to be accomplished by the 31<sup>st</sup> of December 2015; such activity included both the milestones which are specific for each IP and the “common milestones” proposed by the SDM (in particular, those to be applied by all the IPs and those which are “Family specific”); in such framework, the SDM has:
  - Reviewed and validated the achievement of **255 milestones** accomplished by the end of 2015;
  - Interacted with the operational stakeholders to investigate delays in the achievement of expected milestones and agree on the relevant mitigation actions.
- **Deliverables:** the SDM has validated the completion of **195 deliverables** through the analysis of the relevant supporting documents provided by the operational stakeholders; moreover, in case of delays in the submission of deliverables expected to be completed by the 31<sup>st</sup> of December 2015, the SDM has identified, through the submitted supporting documents, the reasons for the delays, analysed potential impacts and defined mitigation actions;
- **Costs:** the SDM, supported by the PMO, has gathered and analysed the actual costs sustained by the operational stakeholders in the 2014 and 2015 timeframe, in order to detect misalignments vis-à-vis the planned costs; in such circumstances, the relevant justifications have been requested to the implementing partners and analysed by the SDM.

It is worth noting that:

- the gathering of consistent information concerning the IPs achievements has been made possible through the **active involvement** of **all the parties** within the **Action** (SDM, Implementing partners, Action leader, Activity leaders, PMO) and continuous interactions among them;
- the collection of monitoring information has been performed through the **STAR tool**, which represents the main reporting and communication tool within the Action; in particular, a significant effort was devoted by SDM in the configuration, implementation and testing of the tool, in order to create an effective common platform for monitoring and coordinating the DP across Europe;
- **67** “discrepancies” (i.e. potential misalignments between actual and planned data) have been identified starting from the gathered data and evaluated by the SDM in order to assess their impact and define the most suitable mitigation actions.