

# ATM Modernisation through CP1 Deployment

An enabler for TBO

## SESAR 2020 SHOWCASE

# Why are we doing this?

## Global concept = Global Benefits

- Collaborative decision making (CDM)
- More accurate view of Trajectory
- Common view of trajectory of Flight



Discussed and Promoted for Years



Envisaged as a solution to many of today's limitations



CONOPS under development between NM/SDM/SJU

CP1 incl. SWIM & FF-ICE Release1 is an enabler for TBO and the baseline for the full Deployment of TBO



# Transforming Air Traffic Management in Europe

The next step – moving to Trajectory Based Operations

*“Trajectory Based Operations” is an ATM concept – supported by CP1 deployment– designed to enhance strategic air traffic planning, enabling a fully collaborative environment where the precise trajectory data (latitude, longitude, altitude and time) is shared, maintained and used by all concerned actors, during all phases of flights*

## TODAY – Radar Based Operations

**INDIVIDUAL**  
stakeholder view  
of the flight  
trajectory

**ESTIMATE**  
the planned  
aircraft position

## TOMORROW – Trajectory Based Operations

**SYNCRONISED**  
and **Common**  
view of the flight  
trajectory

**KNOW and USE**  
the planned  
aircraft position

- ↑ increased predictability and safety
- ↑ optimised and greener flights
- ↑ fuel and CO<sub>2</sub> savings



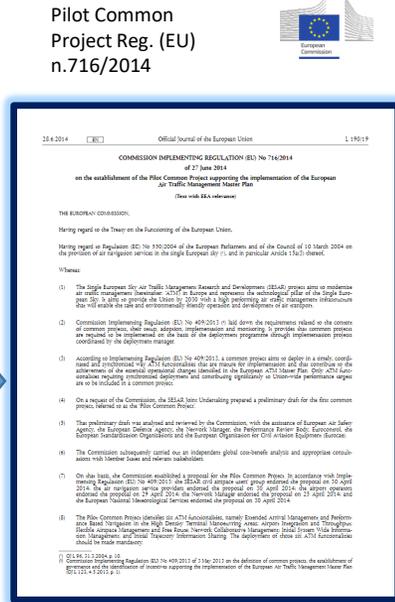
# Regulatory framework

Developed and consulted by all stakeholders



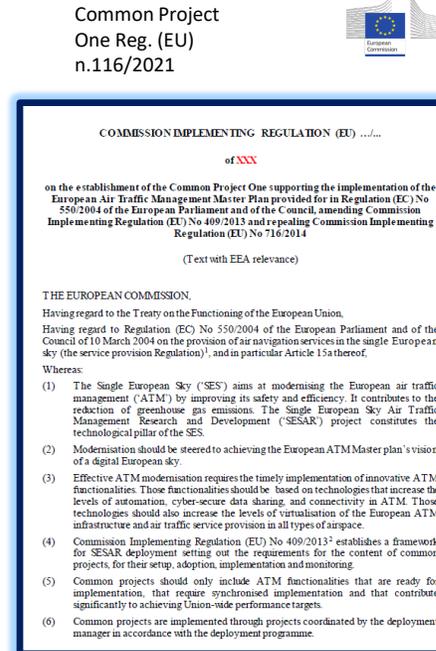
Vision for EU Digital Sky

Essential Operational Changes



Pilot Common Project Reg. (EU) n.716/2014

2014-2021



Common Project One Reg. (EU) n.116/2021

2021-2027

## Framework for SESAR Deployment



#SESARshowcase

#EuropeForAviation



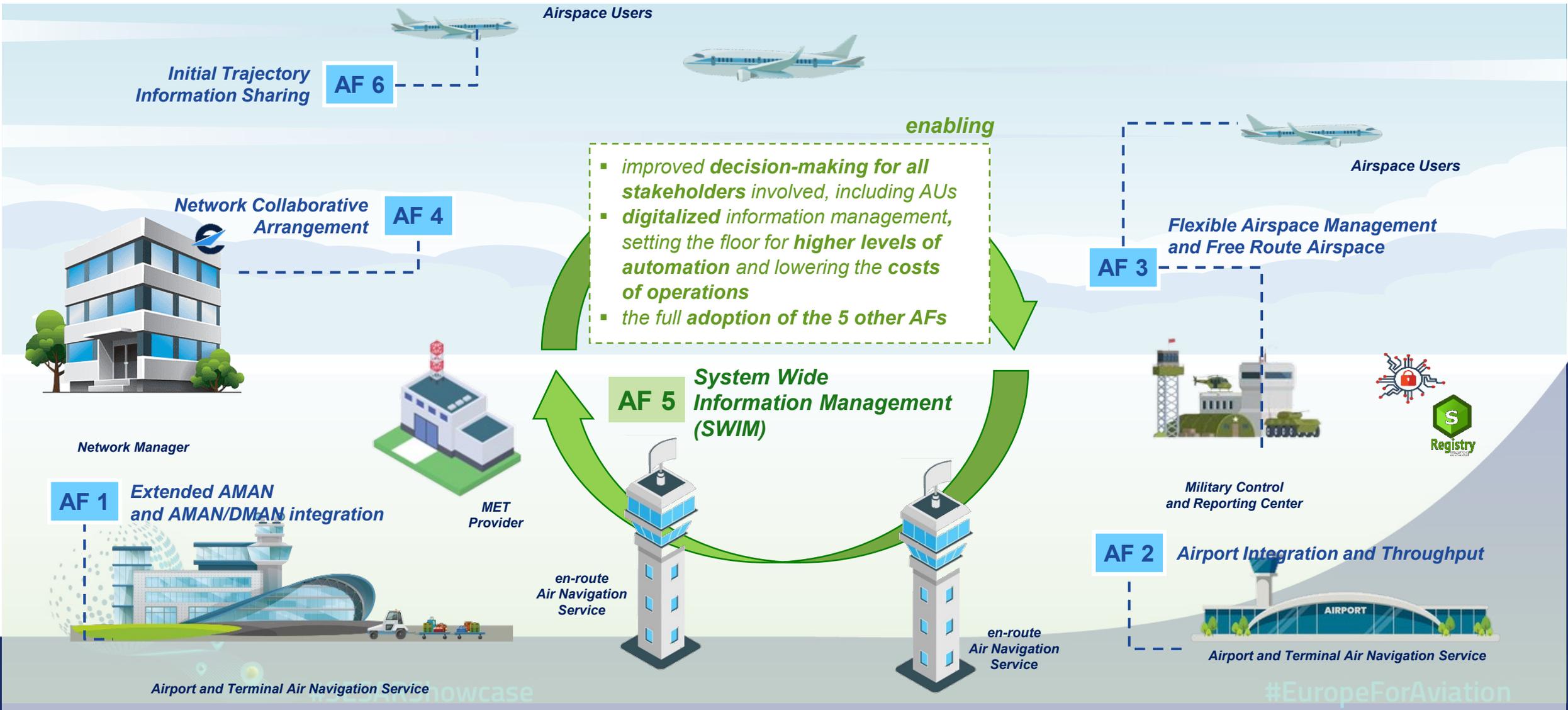
SESAR DEPLOYMENT PROGRAMME



Workplan for CP1 Deployment

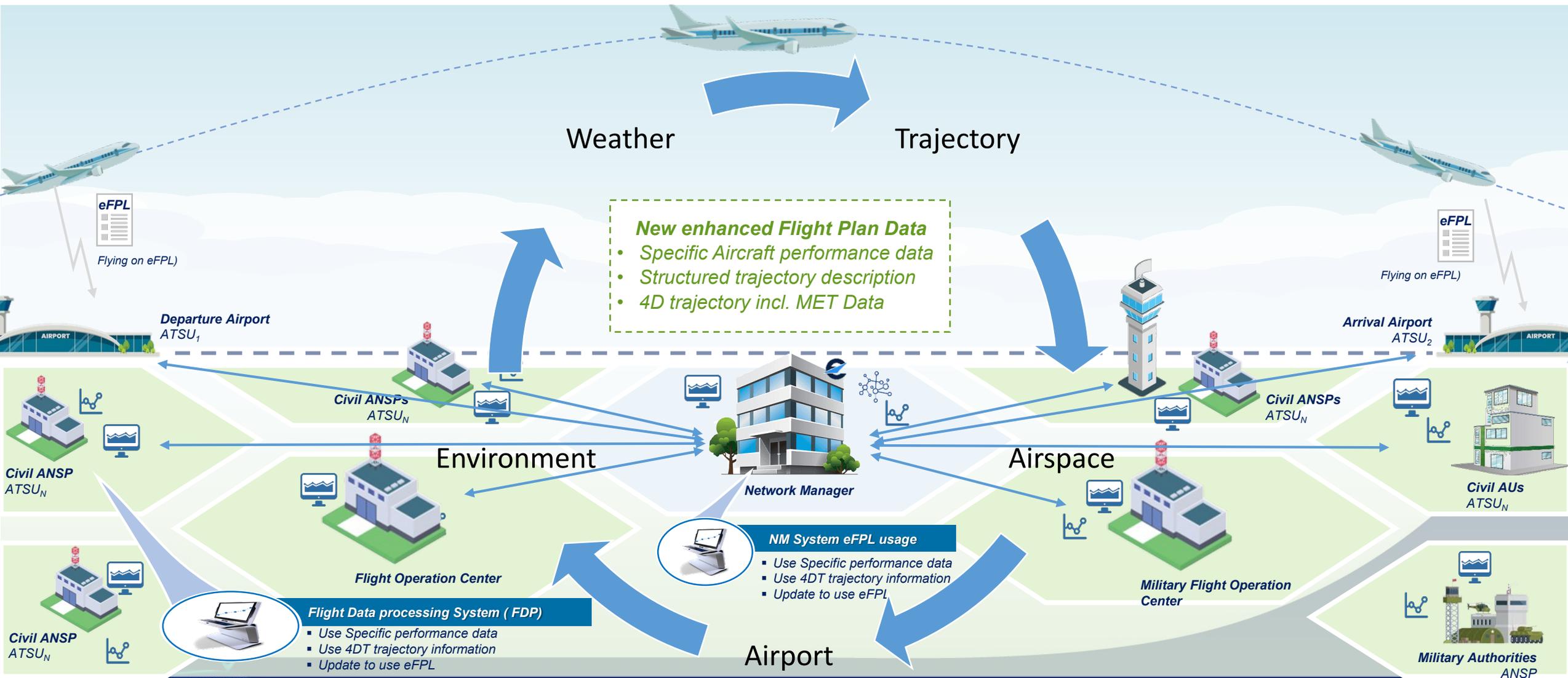
# Common Project 1 Overview

## ATM functionality

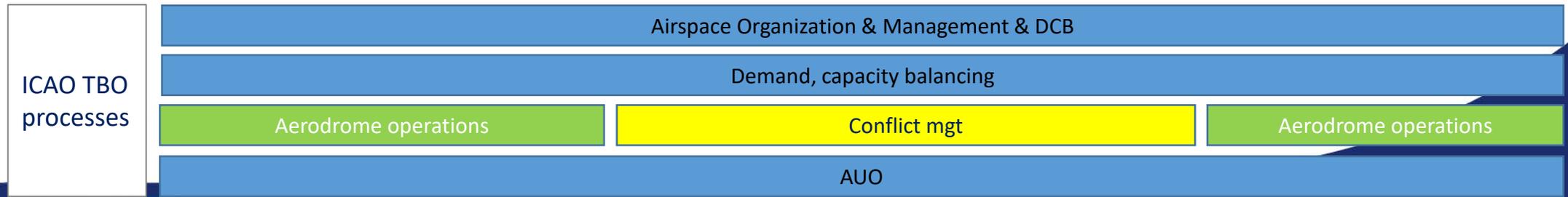
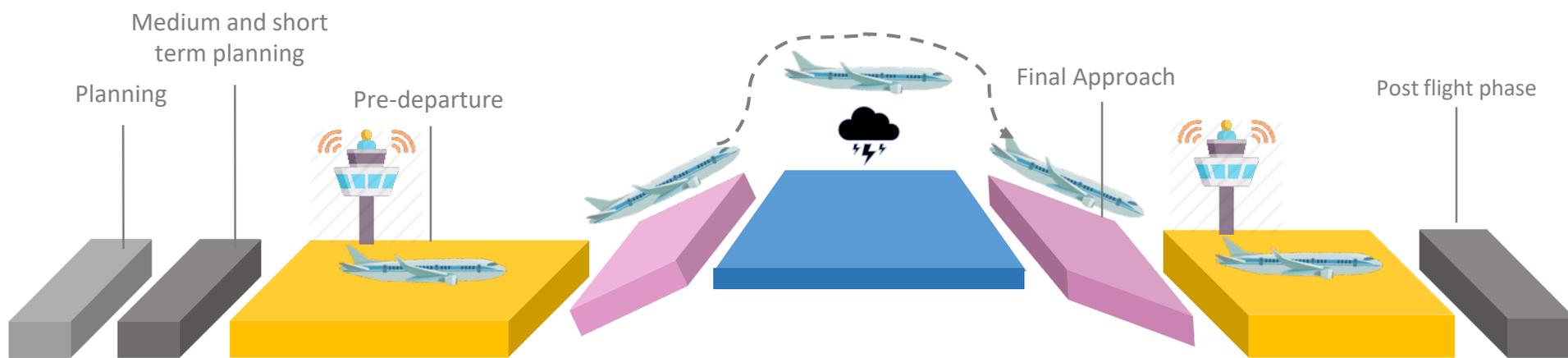


# Flight & Flow information for a collaborative environment (FF-ICE)

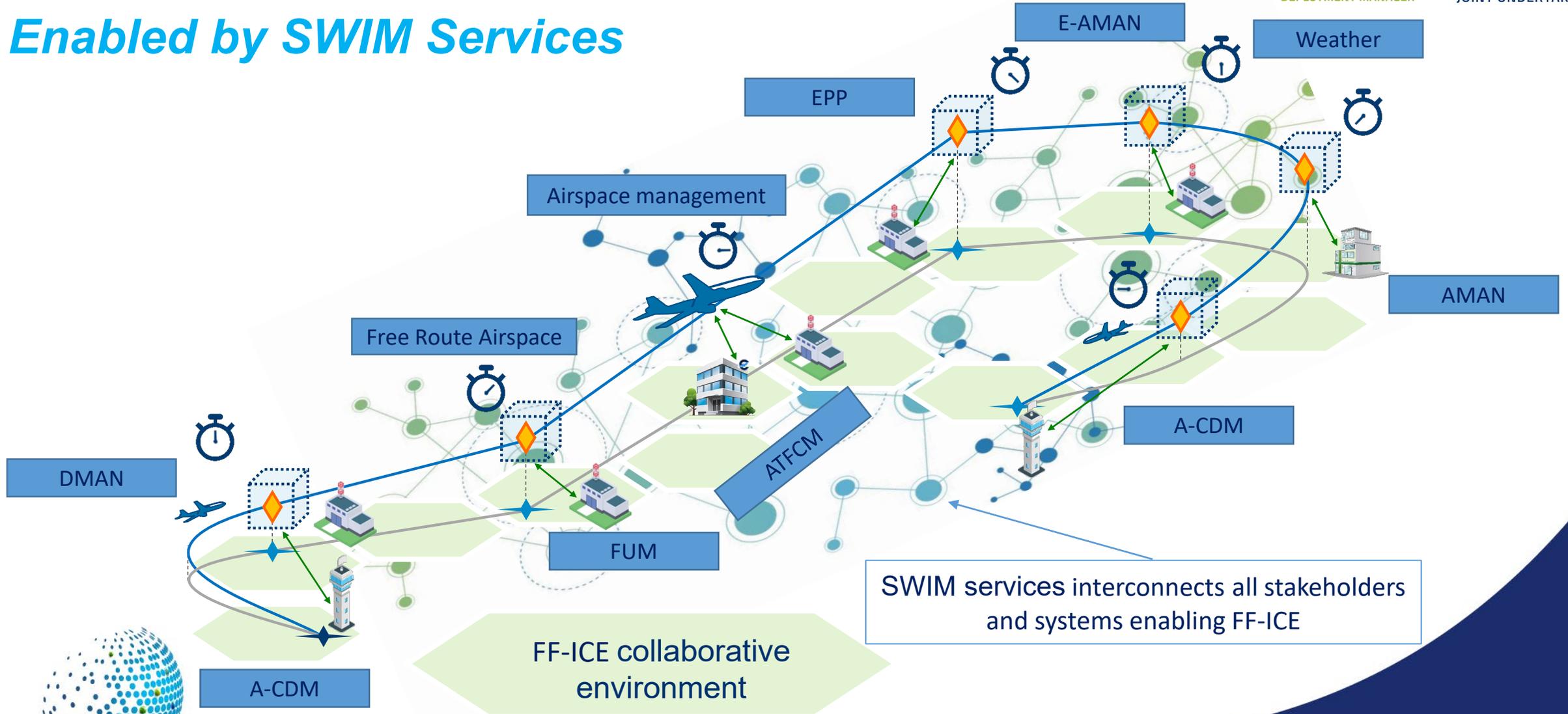
## FF-ICE Release 1 deployment in Europe



# TBO is supported by CP1 in all flight phases



# FF-ICE collaborative environment Enabled by SWIM Services



# TBO Deployment

## FF-ICE Operational in Europe

Is not one deployment but consist of multiple elements and solutions



Is not limited to individual information exchanges such as Air-ground



### Trajectory Based Operations

Europe leading the work globally towards the achievement of TBO



NEWS

15 December 2022

First flight supported by pre-flight 4D-trajectory data exchange performed by Lufthansa in the European Network

THIS COVERS

OPTIMIZES OPERATIONAL PERFORMANCE  
SOCIALIZATION AND INFORMATION MAN.



**First flight supported by pre-flight 4D-trajectory data exchange performed by Lufthansa in the European Network | EUROCONTROL**

