



# SESAR: Supporting global interoperability

Michael Standar  
Chief Strategy & External Affairs  
SESAR Joint Undertaking

18 May 2017

Founding Members



EUROPEAN UNION

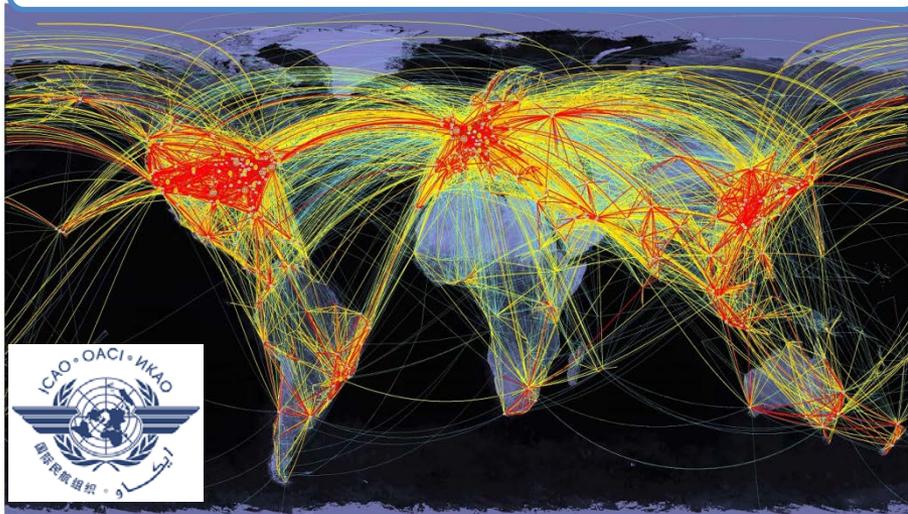


EUROCONTROL

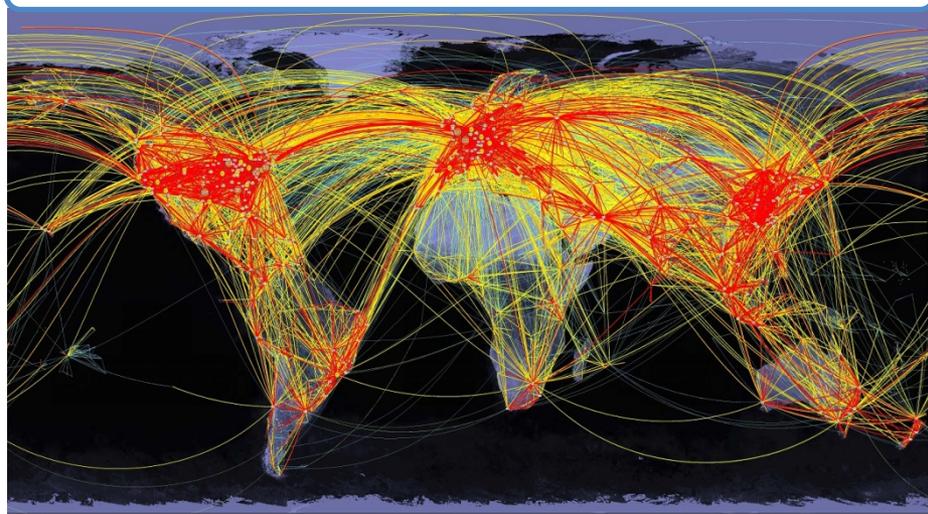
# GLOBAL MOBILITY CHALLENGES AND OPPORTUNITIES



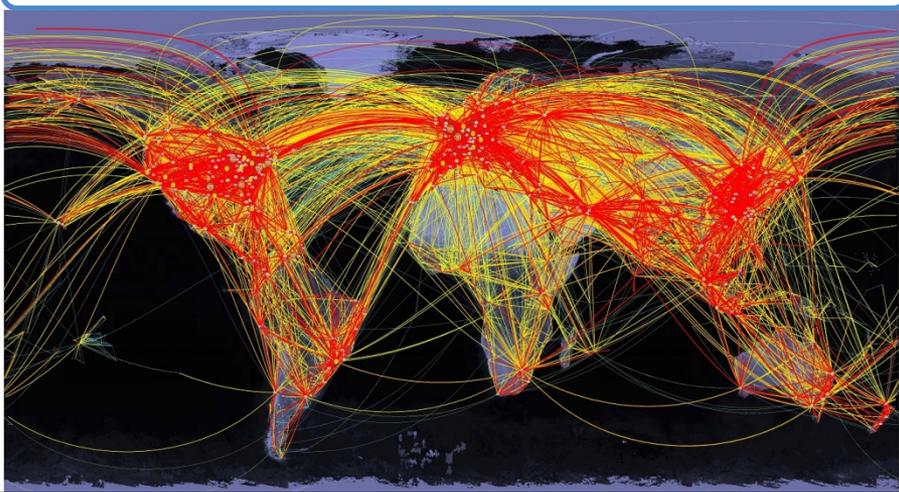
2010



2020



2030

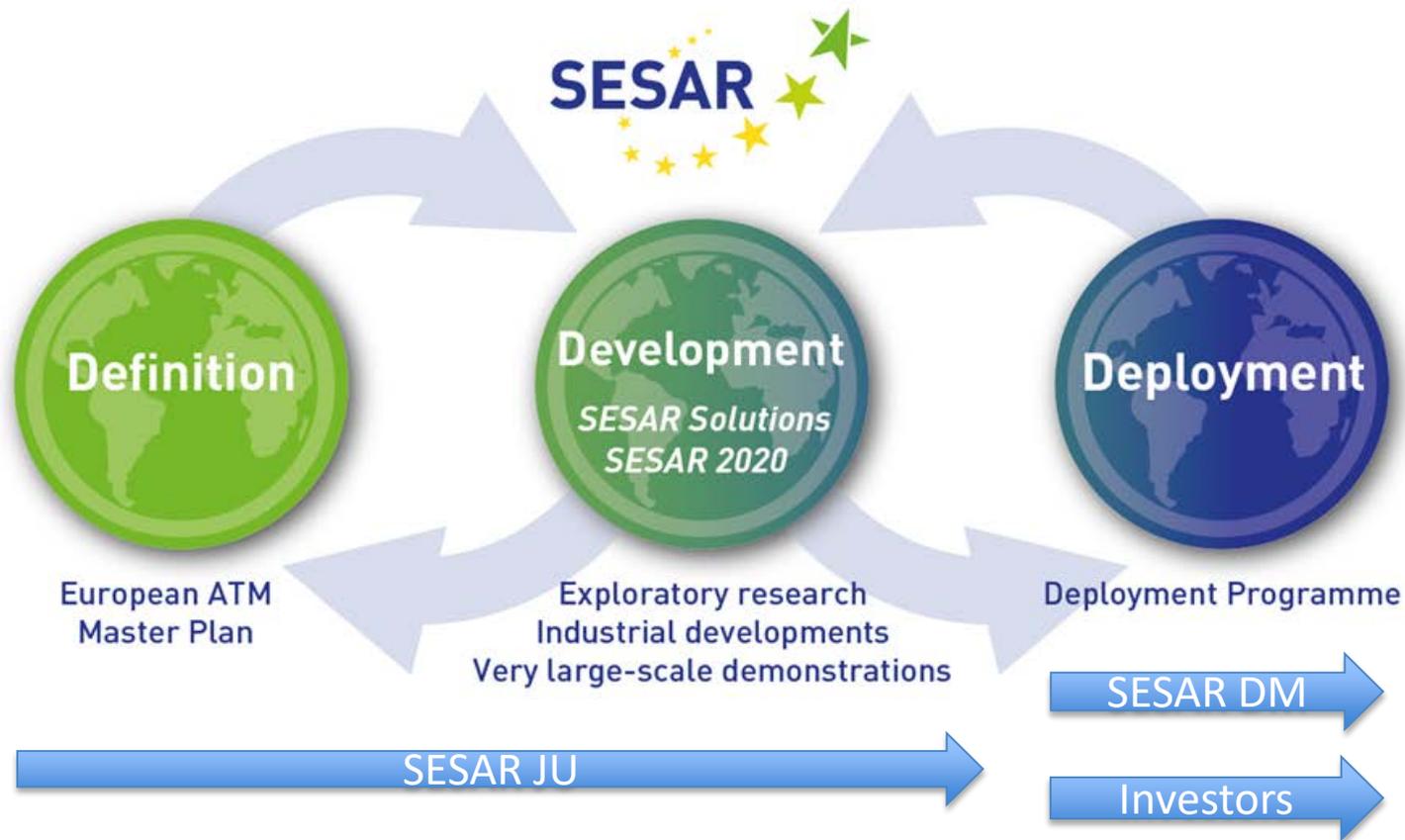


2040



# SESAR ATM Modernisation Lifecycle

Defines, develops and deploys the technology and procedures that are needed to increase ATM performance and build Europe's intelligent air transport system



# The power of partnership



founding members



**AIRBUS**



**Honeywell**



**NATS**



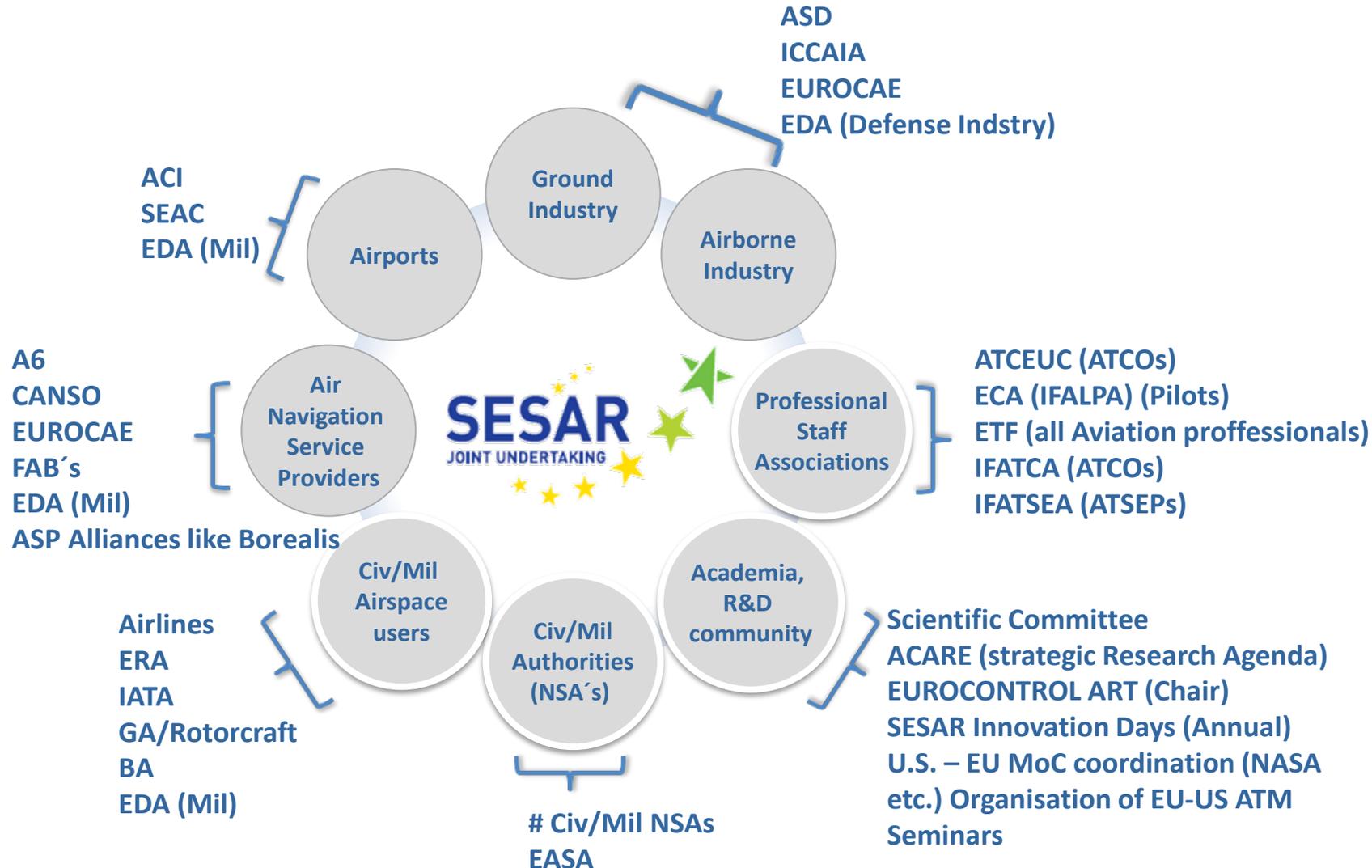
skyguide

**THALES**



# Extending the partnership

## Securing buy-in and operational interoperability



# SESAR vision

Increased **virtualisation**,  
regarding provision of services  
irrespective of the location of  
physical infrastructure

**Integration of all  
vehicles** into Europe's  
airspace, including  
drones

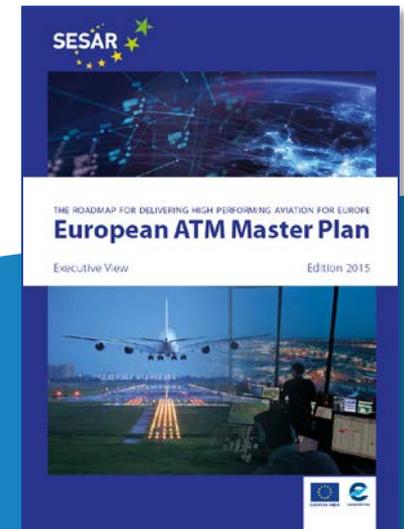
## OUR VISION

With SESAR, the future of  
air traffic management is  
characterised by:

**Flight-centric operations**,  
so airlines can fly their  
preferred routes

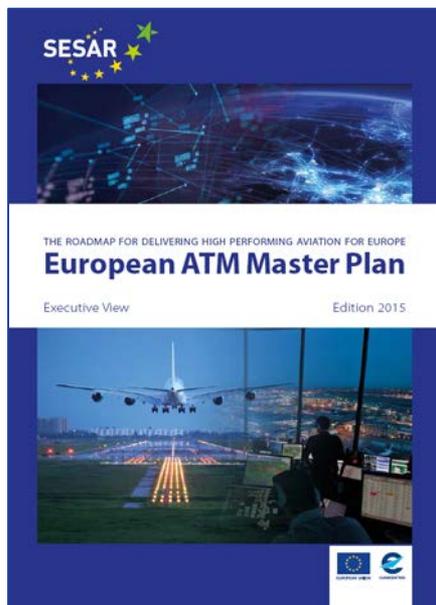
**Improved information sharing**,  
creating an intranet of services and  
applications accessible by all aviation  
stakeholders

**Interoperable systems**, allowing  
connectivity of systems across  
borders



# Delivering the vision at every level

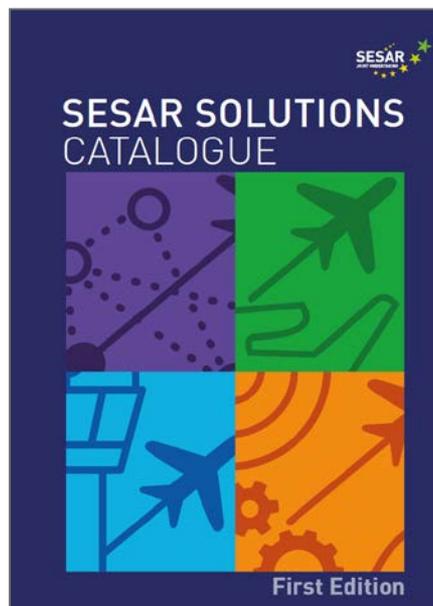
## MP level 1



*Executive view*



## MP Level 2



**eATM PORTAL**  
European ATM Master Plan

*Data pack view*



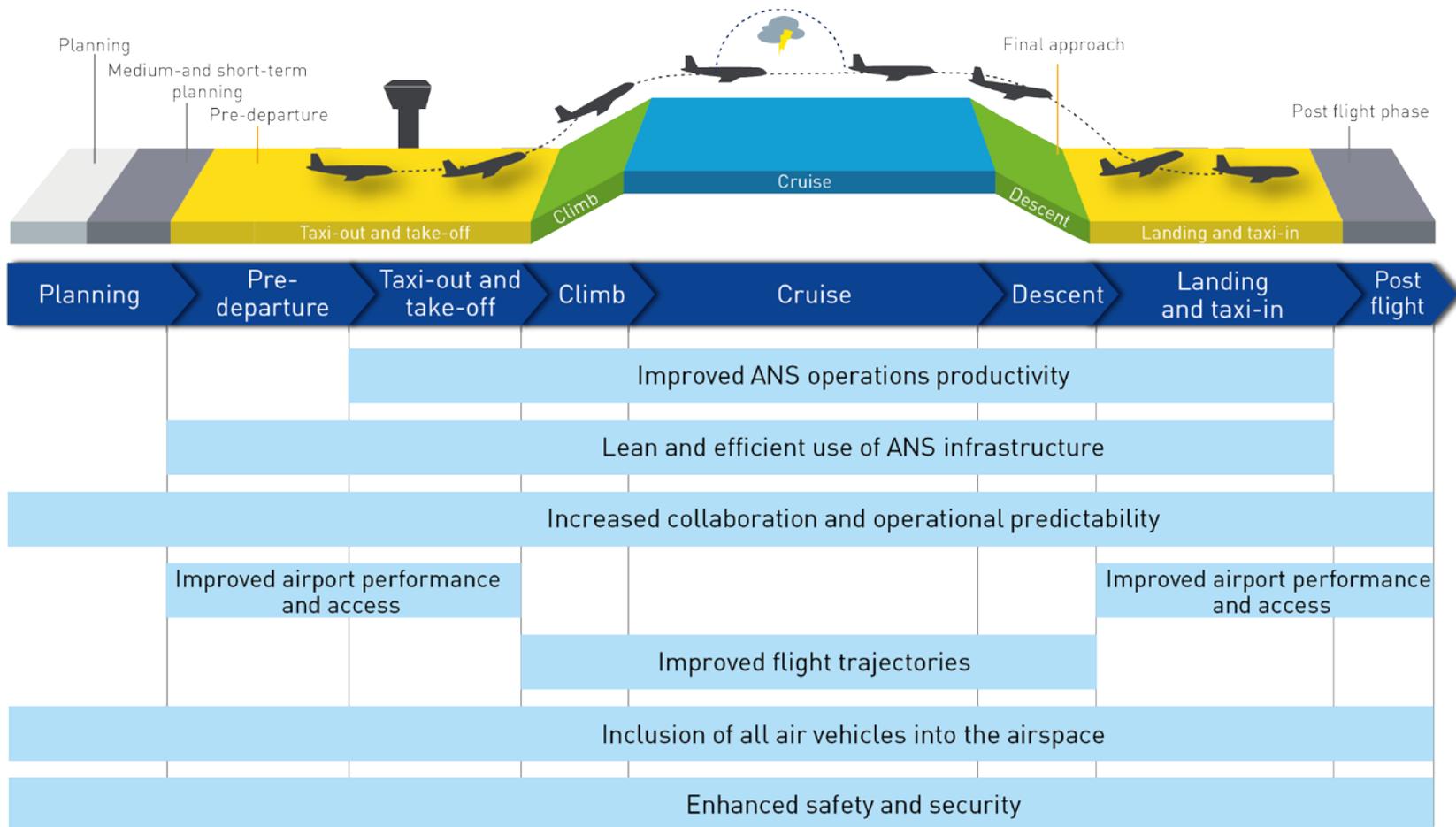
## MP Level 3



*Implementation view*



# Passenger benefits at each stage of the flight



# Best of SESAR 1

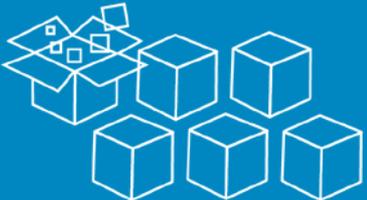
1 unique  
public-private  
partnership

2 founding  
members

+60  
research  
organisations  
Universities/SMEs/  
research centres



+60  
technical & operational  
solutions



15 industry  
members

+20  
million  
hours of work



SESAR  
FROM VISION TO REALITY



+350  
validations



+30,000  
flight trials



+90  
prototypes

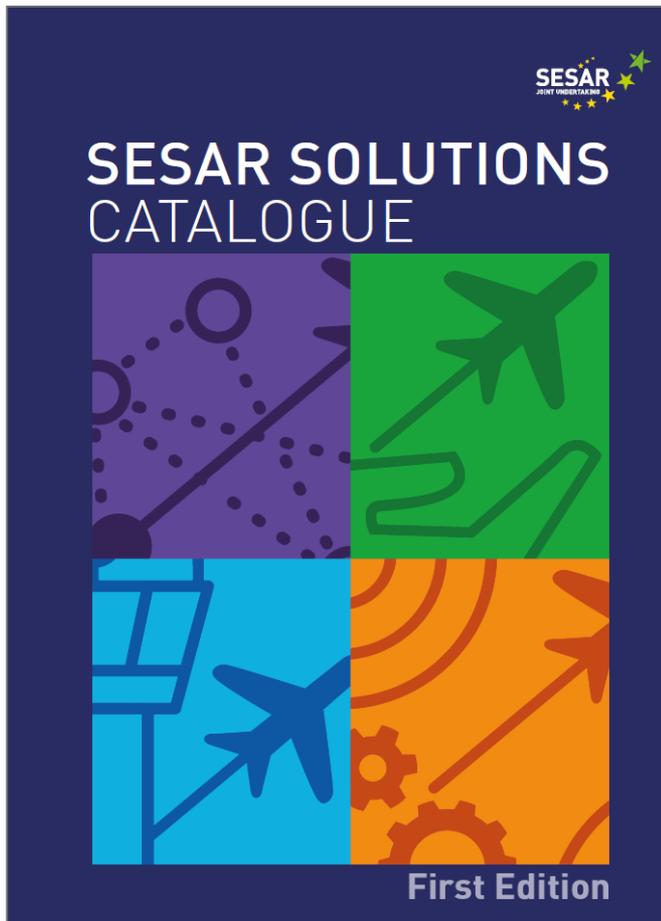


+3,000  
ATM  
experts



+100  
companies





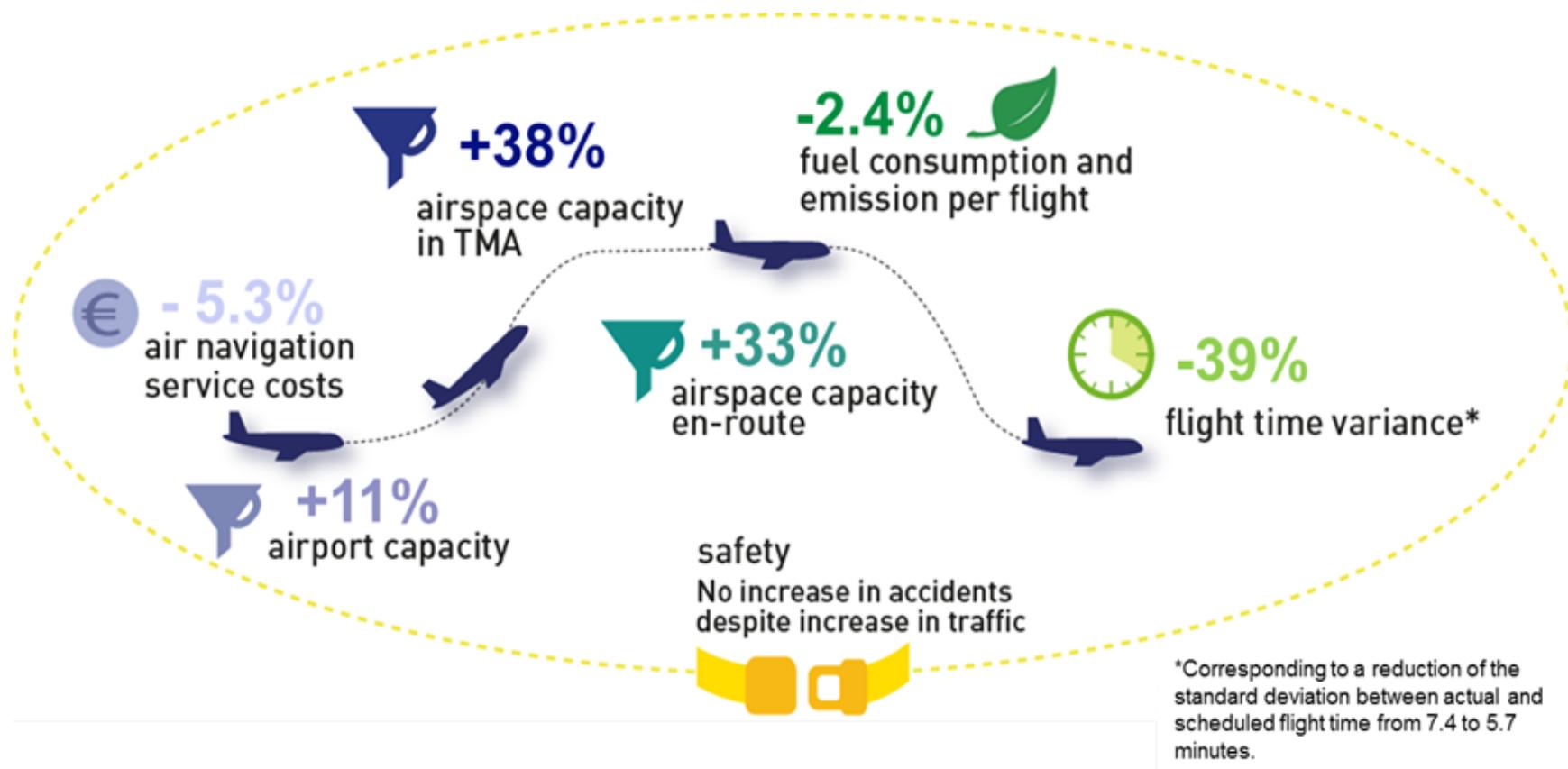
**SESAR Solutions** refer to new or improved operational procedures or technologies that aim to contribute to the modernisation of the European and global ATM system.

- **63 SESAR Solutions**
- divided by 4 areas (Key Features)

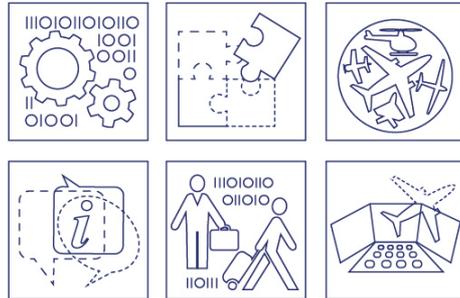
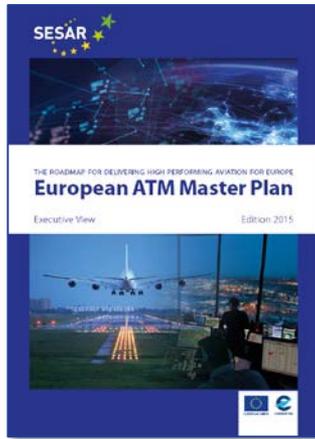


- **24 are already being deployed across Europe**

# Delivering real performance benefits



# SESAR 2020 vision, programme, deliverables



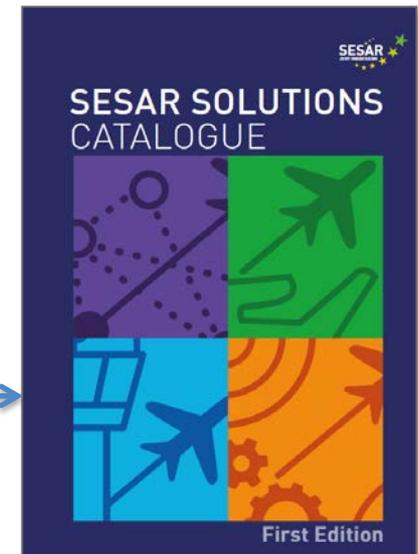
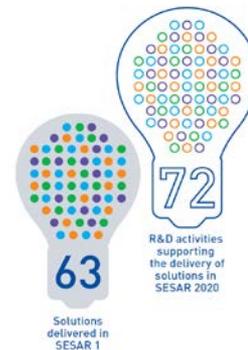
## 4 THEMATIC AREAS



## 3 research strands



**Budget:** EUR 1,6 billion  
**Timeline:** 2016-2024  
**Calls:** open and restricted



# State of Harmonization

- Full lifecycle of ATM modernisation - exploratory R&D and Implementation now embedded
- An ATM Architecture mirroring the ICAO Op. Concept
- Short / medium / long term strategy convergence
  - A/G Data Comm, SWIM, NAV, TBO, SUR
- Standardisation roadmap supporting the GANP/ASBU's
- Cyber security – operational resilience requirements and technical security control
- Integration of UAS/RPAS/Drones
  - Engaging technology & policy/rulemaking experts together providing a clear vision and roadmap for the safe integration of drones - in particular for VLL/UTM/'U-Space').





Delivering High Performing Aviation for Europe  
SESAR Research and Innovation

---

Thank you very much  
for your attention!



Founding Members

