

CORUS-XUAM

Expectations from the SESAR 3 JU

16 March 2022

SESAR 3 Joint Undertaking

AN AVIATION STRATEGY FOR EUROPE
Enabling European aviation to flourish

An ambitious EU external aviation policy

- Negotiating new bilateral aviation agreements
- Providing more consistent and better prices for passengers
- Creating investment opportunities for EU companies
- Better managed traffic in crisis situations

Tackling limits to growth

- Achieving the Single European Sky
- Boosting the efficiency of airport services
- Tackling the capacity crunch
- Improving connectivity to stimulate growth

Maintaining high EU standards

- Environment
- Safety
- Passenger rights
- Social dialogue and quality jobs

Innovation and digital technologies

TACKLING LIMITS TO GROWTH
Single European Sky (SES)

Increasing the overall efficiency and competitiveness of the air traffic management (ATM) system by achieving the Single European Sky.

Reduce impact on the environment: **-10% CO₂**

Reduce costs of air traffic management: **-50%**

Improve air traffic capacity: **x3**

Improve safety for users: **x10**

MODERNIZING ATM IN EUROPE

SUSTAINABLE & SMART MOBILITY STRATEGY

THE TRANSPORT AND MOBILITY SECTOR

OBJECTIVES

- 1 Sustainable Mobility
- 2 Smart Mobility
- 3 Resilient Mobility

#MobilityStrategy



EUROPEAN ATM MASTER PLAN Digitalising Europe's Aviation Infrastructure

Executive view

2020 edition

SESAR Joint Undertaking

Founding members: EASA, EUROCAE, EUROCONTROL, EUROPEAN DEFENCE AGENCY

SECURITY

- Ensuring high levels of security

SAFETY

- Improvement by up to a factor of 4

EFFICIENCY

- Up to 6% reduction in flight time
- Up to 10% reduction in fuel burn
- Up to 30% reduction in departure delays

PASSENGER EXPERIENCE

- 20 minutes shorter door to door travel time
- 10kg in fuel savings per passenger
- EUR 15 in ticket savings

RETURN ON R&D INVESTMENT

- For every EUR 1 investment in SESAR R&D = EUR 6 in benefit**

CAPACITY

- Up to 10% additional flights landing at congested airports
- A system capable of handling up to 100% more traffic

ENVIRONMENT

- Up to 10% reduction in CO₂ emissions
- Positive impact on noise and air quality

GLOBAL COMPETITIVENESS

- Pools the best of minds and ideas from the entire aviation community
- Acts as a global leader on ATM interoperability and harmonisation

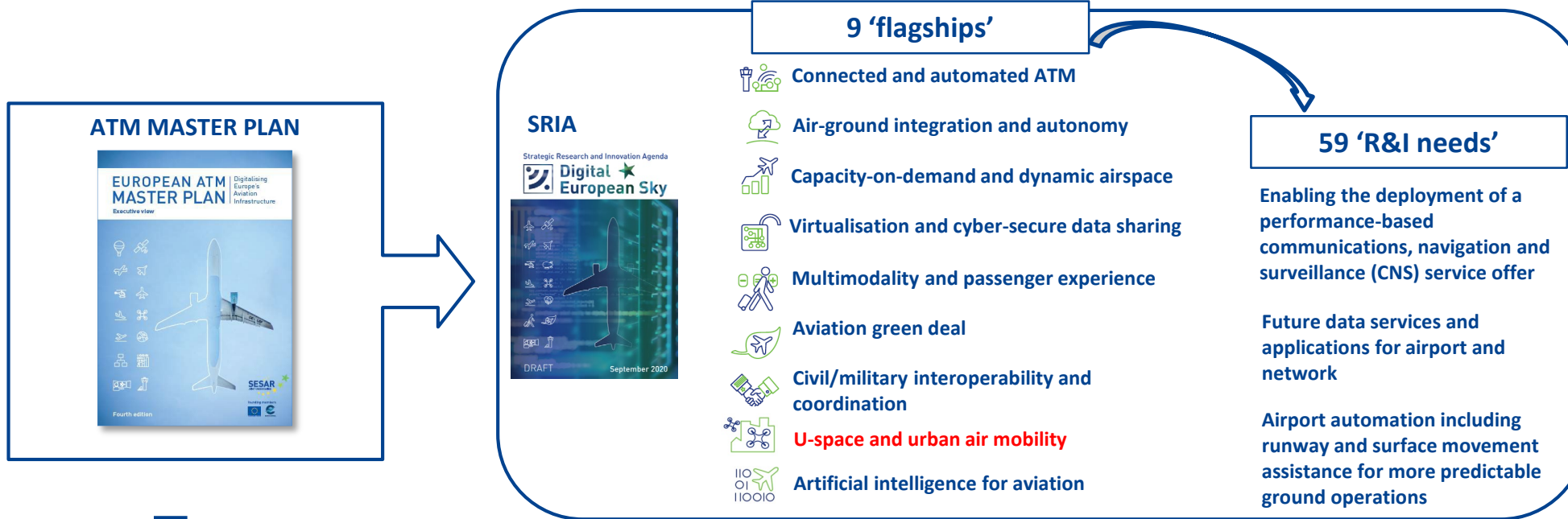
INNOVATION & DIGITALISATION

- A catalyst for innovation and competitiveness in air transport
- Delivers digital and new technologies

SOURCE: 2015 European ATM Master Plan
*European Commission
**Boston Consultant Group

Implementation approach

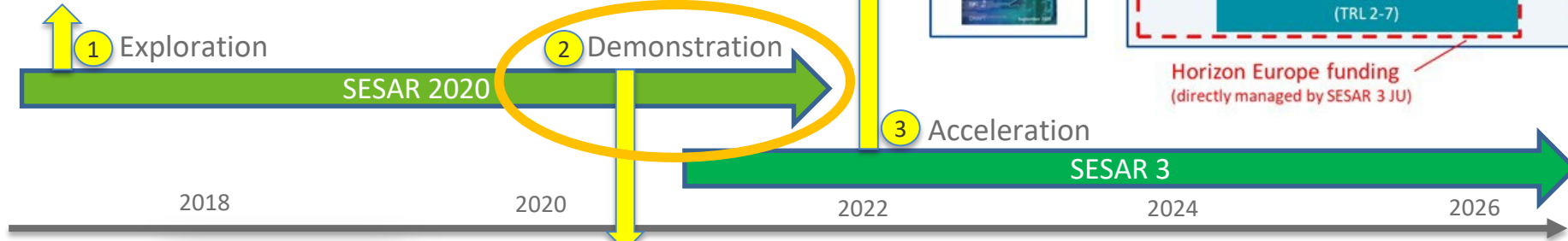
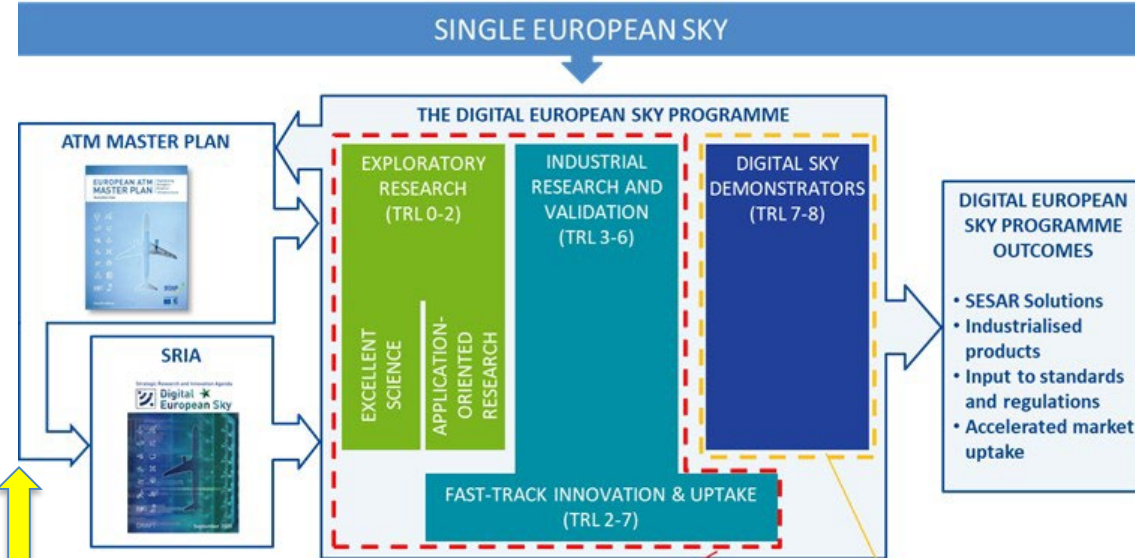
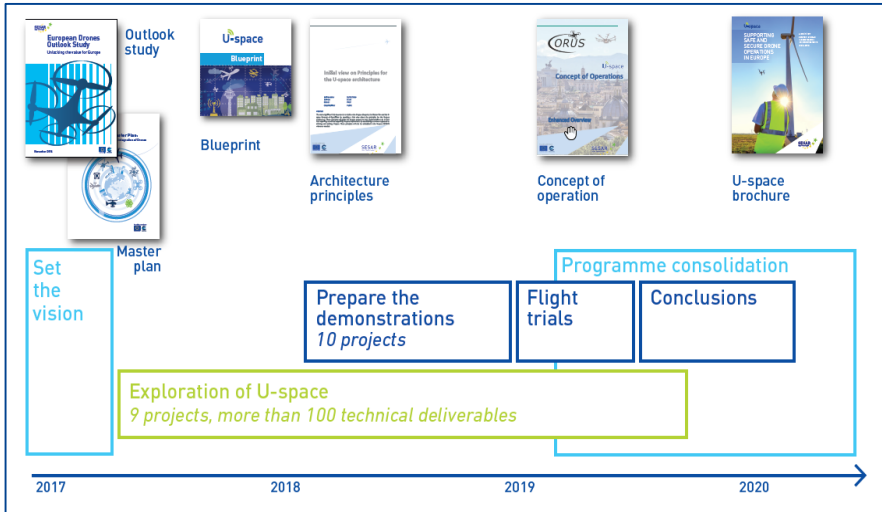
Definition of call content...



SESAR technical content



A growing portfolio of projects



Horizon Europe funding
(directly managed by SESAR 3 JU)

CEF funding
(in cooperation with CINEA)



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| UAM | ER Metropolis 2 VLD CORUS XUAM VLD SAFIR-MED VLD GOF 2.0 VLD AMU-LED VLD TINDAIR VLD U-space4UAM |
| U-space and ATM | IR PJ.34 AURA ER USEPE |
| Advanced Services | ER BUBBLES ER DACUS ER ICARUS |

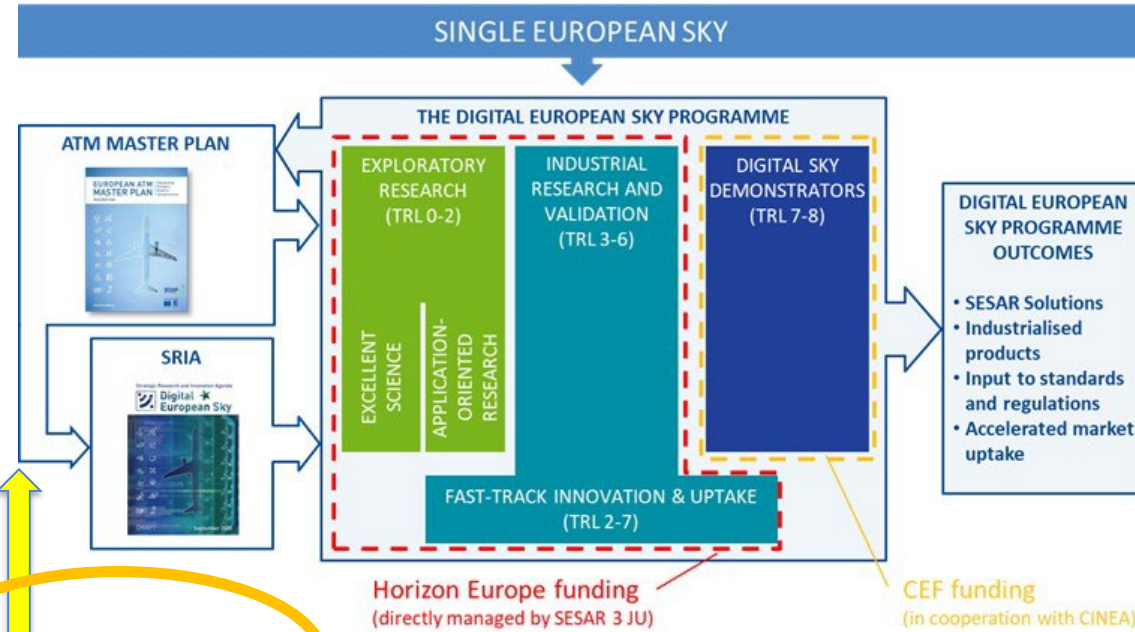
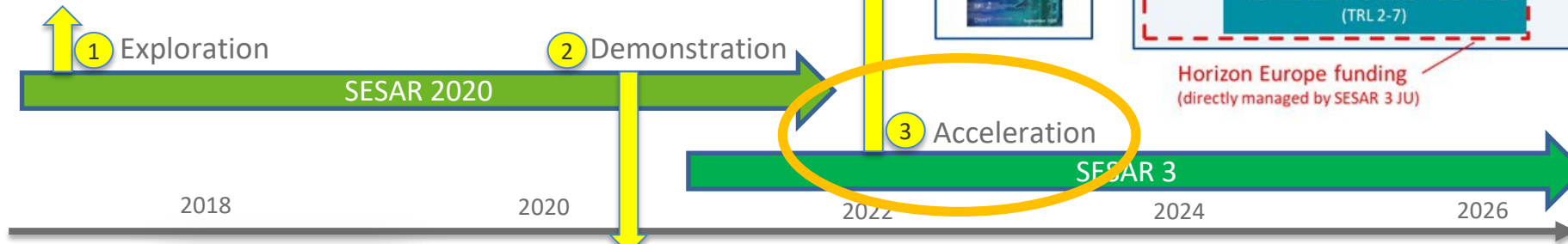
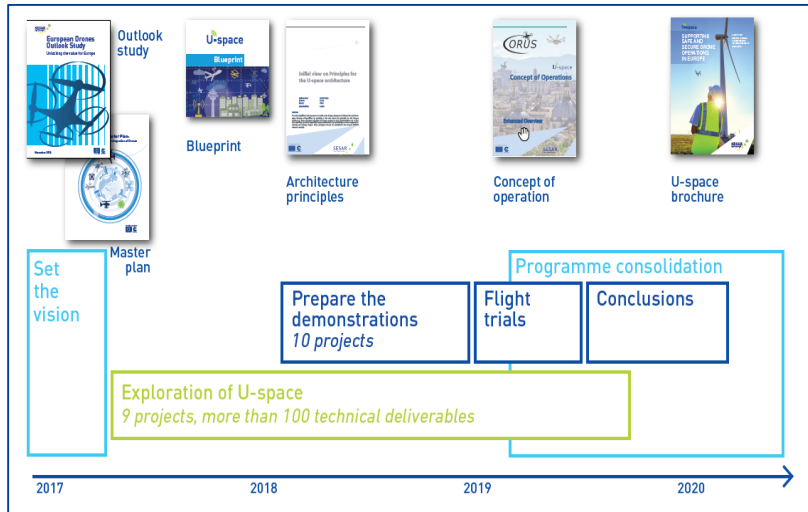
INVIRCAT, FACT, SAFELAND, URclearED

<https://www.sesarju.eu/U-space>

SESAR 3 JU U-space Programme expected BATCH 2 main outcomes:

- *U-space ConOps (CORUS-XUAM)*
- *Recommendation to Standardisation and Regulation*
- *European ATM Master Plan*
- *Consolidated Report*
- *Enhanced CDE activities & Enhanced public awareness*
- *Trigger interest for SESAR 3 JU calls*

A growing portfolio of projects



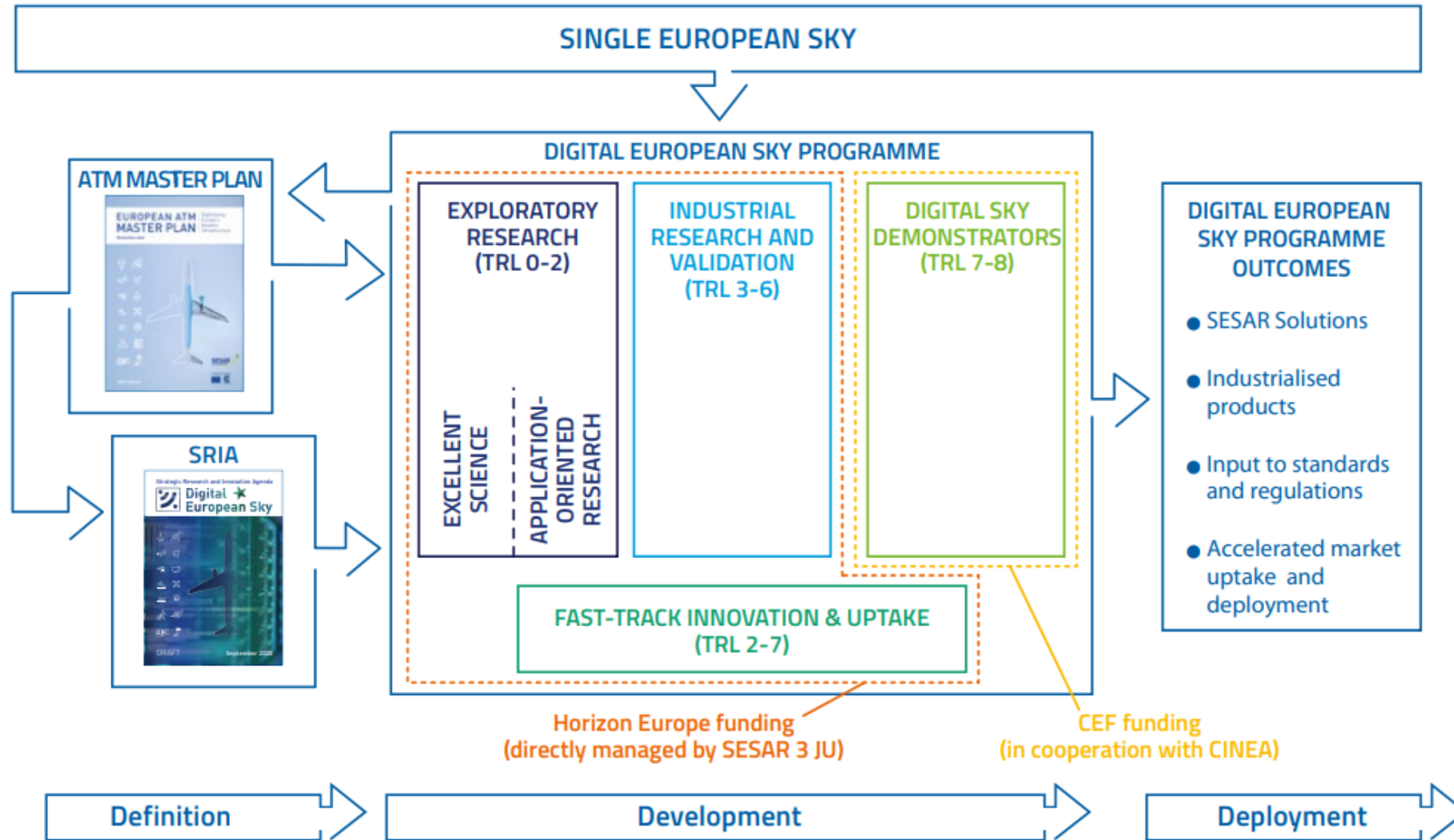
- DIGITAL EUROPEAN SKY PROGRAMME OUTCOMES**
- SESAR Solutions
 - Industrialised products
 - Input to standards and regulations
 - Accelerated market uptake



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SESAR 3 Joint Undertaking



SESAR 3 JU - U-space - Programme



Development of the performance framework

Applicability of U-space automation concepts to ATM/manned aviation

Privacy/regulation

U3/U4 services

U-space extension above VLL

Rotorcraft/General Aviation

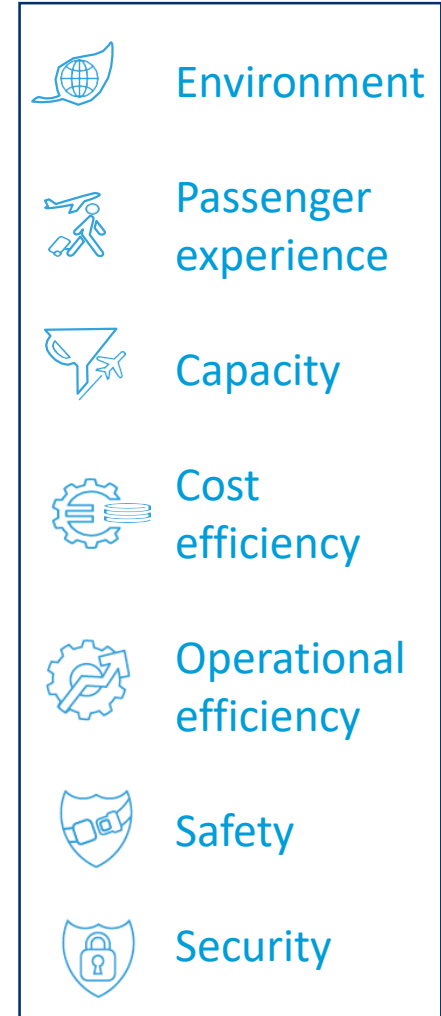
UAM

U1/U2 market uptake

Cross-border services

Initial UAM demonstrators

U1/U2-ATM interoperability



THANK YOU FOR
YOUR ATTENTION

