Towards greener and more resilient ATM in Europe

Andreas Boschen, SESAR 3 Joint Undertaking
21 June
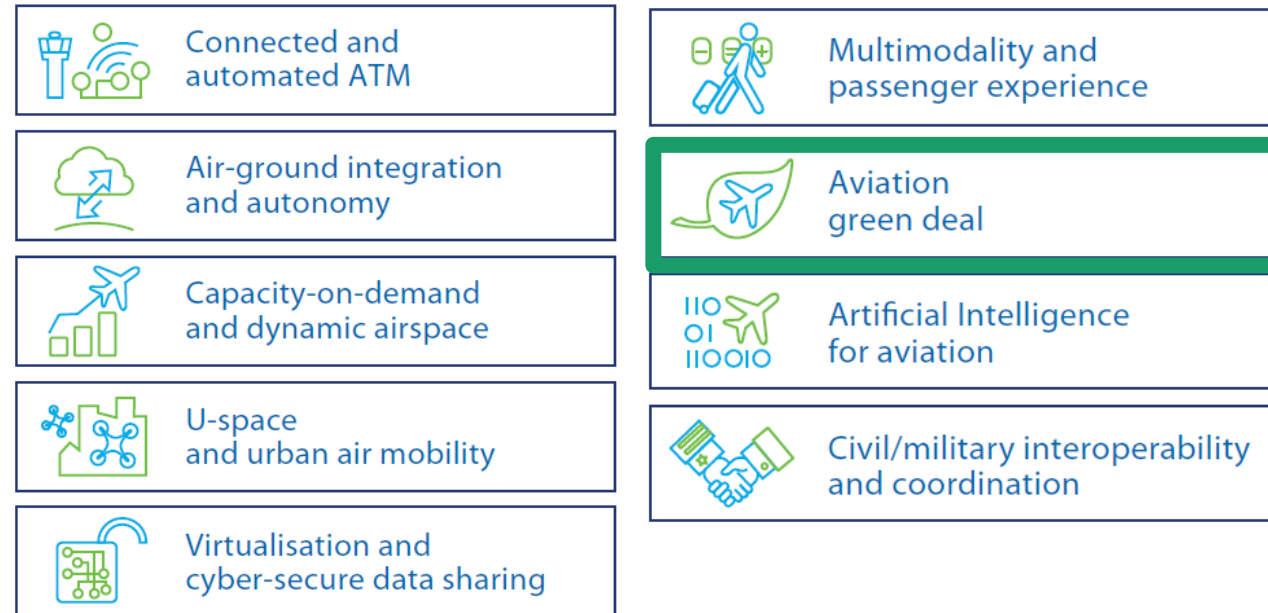
EUROPEAN PARTNERSHIP

Co-funded by
the European Union

Digital European Sky research and innovation flagships

Delivered and in the pipeline

101 solutions **delivered**
80 solutions in the **pipeline**
68 solutions offering specific **environment benefits**

SESAR SOLUTIONS CATALOGUE **2021**

2021

Fourth edition

Digital European Sky research and innovation flagships

Connected and automated ATM

Air-ground integration and autonomy

Capacity-on-demand and dynamic airspace

U-space and urban air mobility

Virtualisation and cyber-secure data sharing

Multimodality and passenger experience

Aviation green deal

Artificial Intelligence for aviation
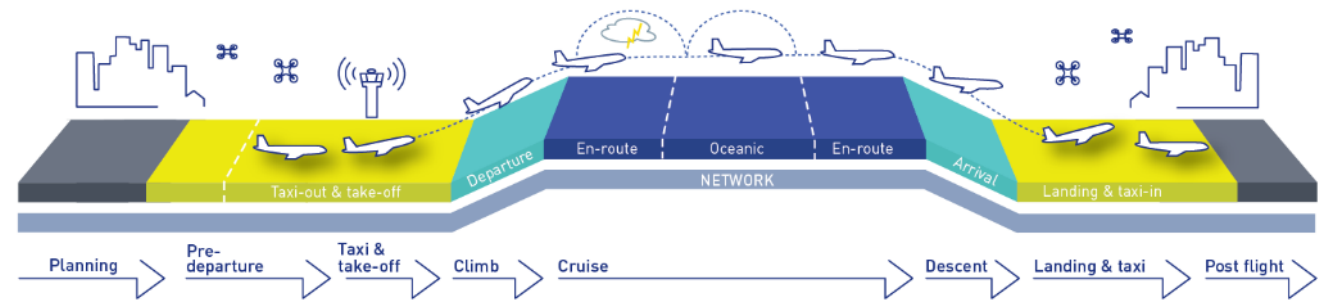
Civil/military interoperability and coordination
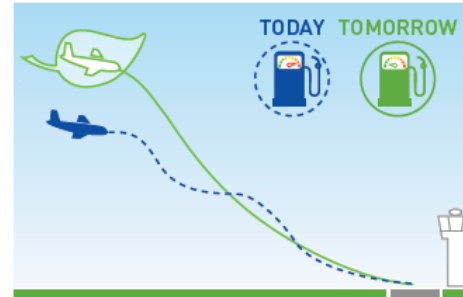
Energy-efficient flying, enabled by ATM

Demonstrating quick wins

Focused on **gate-to-gate efficiency gains** through combining SESAR solutions:

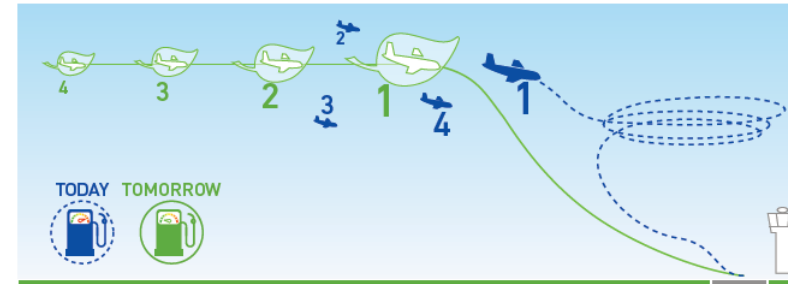- Optimised descent/climb operations
- Automated ground/surface operations (e.g.Taxibots)
- Air-ground data synchronisation/4D management/ADS-C
- Free route
- Extended arrival management

- Designed to be **interoperable** and **adaptable** to diverse operating environments;
- Available for **market uptake** and implementation

Continuous climb operations

Extended arrival management

TODAY TOMORROW

Improved ground/surface operations

Air-ground synchronisation

SESAR 3 JU ALBATROSS large scale demo

- 2-year very large-scale demonstration project
- 1000 gate-to-gate live trials
- Multi-stakeholder effort
- Combining several SESAR Solutions
- Demonstrating potential fuel/CO_2 savings & flight efficiency
- Use of machine learning/big data analytics

Partners: Airbus, EUROCONTROL, Air France, Austro Control, DLR, DSNA, LFV, Lufthansa, NOVAIR, Schiphol, SAS, Swedavia, SWISS, Thales AVS, Wizz Air UK

4

THANK YOU FOR YOUR ATTENTION