SESAR
European ATM Master Plan & SESAR2020

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EUROCONTROL

ICNS 2017
GLOBAL MOBILITY CHALLENGES AND OPPORTUNITIES

2010

2020

2030

2040

European ATM Master Plan & 2020
SINGLE EUROPEAN SKY - SES

Driven by performance

- Increased Capacity
- Greater Safety
- Lower Costs
- Lower Environmental impact

A holistic approach

- Safety, Technology, Service provision
- Civil & military users, providers
- Human factors
- Global interoperability

Challenge

- Implementing & managing change in a complex multi-national environment

Dedicated & evolving legal framework

- Binding EU Regulations/Decisions
- Implementing instruments & mechanisms

Involving & supporting stakeholders

- Civil-Military cooperation
- Governance
- Cooperative mechanisms
- Incentives
SESAR Public Private Partnership

- European Aviation Safety Authority (EASA)
- European Defence Agency (EDA)
- European Space Agency (ESA)
- Galileo Supervisory Authority (GSA)
- Clean Sky
SESAR lifecycle

To define, develop and deploy the technology that is needed to increase ATM performance and build Europe’s intelligent air transport system

1. **Definition**
   - European ATM Master Plan

2. **Development**
   - SESAR Solutions
   - SESAR 2020
   - Exploratory research
   - Industrial developments
   - Very large-scale demonstrations

3. **Deployment**
   - Deployment Programme

**Technology is like fish**

The longer it stays on the shelf, the less desirable it becomes
THE EUROPEAN ATM MASTER PLAN

The roadmap driving the modernisation of the European ATM system

- Not a paper “fire and forget” exercise
- Defining the vision and connecting R&D to it
- Driving at top level all EU funding priorities for both ATM development and deployment

- Containing:
  - Performance ambitions (The Why)
  - Description and prioritisation of technical solutions (The What)
  - Deployment scenarios per stakeholders (The Where and When)
  - Investment needs (The How Much)
  - Standardisation and regulatory roadmap (The How)
The Master Plan organises the priorities for the future

**DEVELOPMENT**

**Future SESAR Solutions in 4 Key areas, e.g.:**

- UDPP, Mgt of dynamic airspace configuration...
- AMAN / DMAN integration, Sector team operations...
- LVP using GBAS, integrated surface management, incl. safety nets...
- CNS rationalisation, 4D, Mission trajectory...

**Stimulate innovative ideas to help address the performance challenges**

**DEPLOYMENT**

- **Coordinated & synchronised**
  1. pragmatic and short term improvements
  2. investing towards more efficient infrastructure
- **Local, e.g.**
  - remote towers
  - airport safety nets...
- **Next mature & performing solutions, e.g.**
  - multi-sector planning,
  - slot swapping...

**Realistic and pragmatic approach**
Getting ready for the future!
Virtualisation - ATM Cloud Services
European ATM Master Plan Edition 2018

• CNS+S(pectrum) roadmaps/rationalisation

• Safe integration of drones

• Next steps in automation & digitalisation

• Further support / alignment towards global interoperability & harmonisation in ATM modernisation

• Reassess impact of SESAR on the EU economy, employment and mobility
Global Interoperability & Coordination

Int. Cooperation under the EU framework
Global Market for European Industry
A final thought for consideration
Thank you very much for your attention!