AGENDA

14:00  Building blocks for ATM modernisation
       *Maurizio Castelletti, DG MOVE, European Commission*

14:15  Delivering SESAR Solutions and the R&I innovation pipeline
       *Florian Guillermet, Executive Director, SESAR JU*

14:30  Deploying SESAR
       *Massimo Garbini, Managing Director, SESAR Deployment Manager*

14:45  Mastering the future of Air Traffic Management
       *Alain Siebert, Chief Economist and Master Planning, SESAR JU*
       *Nicolas Warinsko, Director Technical and Operations, SESAR Deployment Manager*

15:00  Reaching the next level of performance
       *Q&A with Florian Guillermet and Massimo Garbini*

15:30  Wrap up and close
The Single **European** Sky

Building **blocks** for ATM **modernisation**

WAC 2015 – Madrid, 10 March 2015

Maurizio Castelletti
Head of the Single European Sky Unit
European Commission DG MOVE
High performing aviation in Europe

for people

without barriers

contributing to growth
A highly performing **ATM system** can contribute to competitiveness of EU aviation

Cost efficiency
Flight efficiency
Defragmentation
Technological innovation
The Single European Sky

Driven by performance
- Increased capacity
- greater Safety
- Lower Costs
- Lower Environmental impact

A holistic approach
- Safety, Technology, service provision
- Civil & military users, providers
- Human factor
- 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

European Commission - DG MOVE – Directorate Aviation and International Transport Affairs
The Single European Sky

2 main threads

Institutional

Reforming ATM organisation & management

Service provision
airspace regulation

Technological

SESAR

Modernising & harmonising ATM systems & operational procedures

Safety

Common modernisation roadmap
Coordinated R&D and validation
Synchronised deployment
Interoperability
Single European Sky Building blocks

- Performance scheme
- Performance review Body
- EU-wide Performance targets
- Functional Airspace Blocks
- Charging scheme
- Network Strategy Plan
- Network Operations Plan
- Airspace classification
- Flexible use of airspace
- Network Manager
- Network Operations Manager
- SESAR Deployment Manager
- Implementation projects
- Common Projects
- Deployment programme
- SESAR Solutions
- European ATM Master Plan
- SESAR Joint Undertaking
- AUR
- ATCO licences
- ATM/ANS oversight

Service Provision
Airspace regulation
Technology
Safety
European ATM Master plan

Common Projects
Deployment Programme
Implementation projects

1 project
3 interrelated processes

SESAR solutions

SES Performance targets

10

European Commission - DG MOVE – Directorate Aviation and International Transport Affaires
DELIVERING SESAR SOLUTIONS AND THE R&I INNOVATION PIPELINE

Florian Guillermet, SESAR JU

World ATM Congress
9 March 2015, Madrid
Sequence of events: moving an ATM operational improvement from its definition to its validation/pre-industrialisation to deployment.
Industrial Research

MASTER PLAN
- PERFORMANCE NEEDS
- OPERATIONAL IMPROVEMENTS & ENABLERS
- HIGH LEVEL DEPLOYMENT & DEVELOPMENT TIMELINE

PROGRAMME
- PERFORMANCE VALIDATION TARGETS
- CONCEPT & ARCHITECTURE
- OPERATIONAL & TECHNOLOGY SOLUTIONS
- CASES
- STANDARDISATION & REGULATION PREP.

R&D PROJECTS
- OPERATIONAL REQUIREMENTS
- SYSTEM PROTOTYPES
- VALIDATION ACTIVITIES & RESULTS
SESAR results so far

• **68 validation exercises** completed with results published indicating cost-efficiency, environmental and safety benefits
• **20 new validation exercises** underway (Release 4)
• **Preparations for Release 5 (PCP focussed)**

• **17 SESAR Solutions** (building blocks for deployment planning):
  • Moving from Airspace to 4D trajectory Management
  • Traffic Synchronization
  • Network Collaborative Management and DCB
  • Airport Integration and Throughput
  • SWIM
  • Conflict Management and Automation

Download SESAR Solution Packs
www.sesarju.eu
Demonstrating SESAR Solutions Worldwide
Demonstrating SESAR Solutions Worldwide

- 66 demonstration projects
- 30,000+ flight trials
- More than 50 locations
Connecting the dots …

- WHY WE NEED TO ACT
- WHAT NEEDS TO BE DONE
- WHEN IT NEEDS TO BE DONE

Updated plan submitted for formal consultation
June 2015
Scope of cooperation

1. Alignment of the ATM Master Plan and the Deployment Programme (incl. support to the definition of Common Projects)
2. Exchange of information to ensure effective bridging of R&D and deployment activities
3. External relations making best use of existing EU or SJU arrangements
4. Joint positions to support critical harmonization, interoperability and standardisation activities
5. Common communication strategy under the brand of “SESAR”
DEPLOYING SESAR

Massimo Garbini, SESAR Deployment Manager

World ATM Congress
9 March 2015, Madrid
MASTERING THE FUTURE OF ATM

Alain Siebert, SESAR JU

World ATM Congress
9 March 2015, Madrid
Why we need to act

The European ATM Master Plan gives us the opportunity to review and eventually rethink the various elements of the design of our future
What needs to be done

Delivering best-in-class, globally interoperable and high-performing Air Transport for Airspace Users and Citizens

High Performing Airport Operations
Connected airports, optimised operations

Optimised ATM Network Services
Collaborative decision making, Balancing Demand & Capacity

Advanced Air Traffic Services
Synchronisation, Increased automated support

Enabling the Aviation Infrastructure
- Providing shared technical services across the aviation domain
- Communications, positioning, navigation, timing and SWIM information
When it needs to be done

Paving the way for timely, synchronised & coordinated deployment

ATM Master Plan
Planning view

Common project
Business view

Deployment programme
Project view

Implementation projects
P1 P2 ... Pn
A solid and forward looking roadmap leading through research activities to deployment

7 agreed campaign objectives geared at enabling high performing aviation for Europe

1. Ensure the necessary alignment with SESAR 2020
2. Strengthen **performance driven** approach towards “performance needs” in pre-determined time horizons and take into account related priorities
3. Identify the **perimeter of future Common Projects**
4. Provide high-level view of **architecture evolution options** and impact on business models
5. Provide greater levels of **predictability & confidence with regards to deployment dates** (taking into account in particular industrialization phase)
6. Include **RPAS** integration and stronger focus on **cybersecurity** aspects
7. **Emphasize SESAR achievements** to further build momentum
A transparent and collaborative process

**Broad stakeholder involvement**

- EC
- PRB
- EASA
- EUROCAE
- SDM
- EDA
- Eurocontrol
- Operational stakeholders
- Manufacturing industry

**Partnership as the key to success**

- Agree where there is a need to act
- Articulate a clear vision
- Set the right priorities
MASTERING THE FUTURE OF ATM

Nicolas Warinsko, SESAR Deployment Manager

World ATM Congress
9 March 2015, Madrid
OUR MISSION

TOGETHER

DELIVER

CONSULT

PLAN

PERFORMANCE

LET'S DELIVER TOGETHER
The Pilot Common Project

WHAT
1. Extended AMAN and PBN in high density traffic
2. Airport Integration and Throughput Functions
3. Flexible Airspace Management and Free Route Airspace
4. Network Collaborative Management (Flow Management)
5. iSWIM: ground-ground integration and aeronautical data management and sharing
6. Initial Trajectory Information Sharing: air-ground integration towards i4D

WHERE

WHEN

WHO
The Deployment Programme

Building on industry’s experience

... a robust “project view” to deliver PCP timely through families of synchronised and coordinated implementation projects
The Deployment Programme
Not just another plan…

PLAN
CALL
AWARD
EXECUTE

CEF programme

PRELIMINARY DP V0
INEA CALL 2014
FULL DP V1
NEXT INEA CALL

.... the specification for the CEF calls through which the budget for SESAR deployment will be allocated to projects
Massimo Garbini, SESAR Deployment Manager
Florian Guillermet, SESAR JU

Q&A
Thanks for your attention