5 major demonstration “Use Cases”:

1. Advanced information services for major or medium-size Commercial Airspace Users
   - Involving Air France and Brussels Airlines

2. Advanced information services for ANSPs
   - Involving DSNA, Austrocontrol and Croatia Control

3. Advanced information services in support of Collaborative Airport operations at Paris CDG Airport, between the ANSP, a major Airspace User and the Airport Operator
   - Involving DSNA, Air France and ADP

4. Advanced information services in support of Collaborative operations for Regional Airlines
   - Involving Air Corsica, HOP! and DSNA

5. Demonstration scenario focused on General Aviation flights
   - Involving ENAC

Project background and links with the SESAR programme:
The TOPLINK project makes use of the inputs from a number of ongoing SESAR projects:

- SWIM service and data models (WP 8)
- SWIM technical infrastructure (WP 14)
- Meteorological services (WP 11.2)
- Aeronautical Information Management (P 13.2.2)
- Enhanced DCB (P 13.2.3)
- AIS/MET Services and Data Distribution (P 9.48)

TOPMET Demonstration Project

The project concept and architecture builds on the TOPMET Demonstration Project, addressing essentially the use of MET Information services, and extends towards the whole scope of the PCP AFS (including Aeronautical Information Services, Network services, and – partly- Flight Information services).
The TOPLINK project aims at demonstrating the benefits for ATM stakeholders (ANSPs, Airlines, Airport operators) of the deployment of a new System Wide Information Services, including Meteorological Services, Aeronautical Information Services, Cooperative Network Services, and Flight Information Services (for their non-safety-critical aspects).

The TOPLINK project will demonstrate, based on an end-to-end supporting infrastructure, how Air Traffic Flow Management Controllers, Airport operators, and Commercial Airlines staff (ground Flight Dispatchers, as well as Pilots) could improve their operational performance (especially in terms of safety, efficiency, and capacity) by the use of those new Information Services.

Daniel Muller from Thales, TOPLINK project manager

**Performance expectations of the TOPLINK system**

- Safety
- Airspace capacity
- Runway capacity
- Cost efficiency
- Environmental impact

- Safety
- Passenger comfort
- Cost & Fuel efficiency
- Flight predictability
- Environmental impact

- Safety
- Airport platform capacity
- Cost efficiency
- Environmental impact

**Aircraft categories**
- All aircraft categories involved in the tests:
  - Long-haul air carriers
  - Medium-haul air carriers
  - Regional air carriers
  - General Aviation

**KEY FIGURES**

- **> 7.4 million €** maximum estimated total budget (lot 1+lot 2) co-financed by SESAR JU
- **> 15 demonstration exercises** in live operational conditions, scheduled between 01/2016 and 06/2016
- **> At least 200 flights** over Europe and Africa, involving 5 airspace users, 3 ANSPs and 1 Airport operator
- **> 2 years** project duration (11/2014-10/2016)

**14 PARTNERS**

- Thales
- Airbus
- Météo France
- FMI
- Aéroports de Paris
- ENAC

- DSN
- ICAO
- ACI Europe
- Brussels Airlines
- Air France
- Hop!
- Air Corsica

**IN THE NEXT 2 YEARS**

- open the way to operational deployment and industrialisation of such services
- improve the performance of ATM system and demonstrate direct benefits to Airspace Users
- share same information between all ATM stakeholders
- ensure a large scale demonstration of its technical feasibility and providing a tangible assessment of the resulting benefits
- connect permanently and distribute over a fully interoperable infrastructure
- select, adapt and standardise multiple sources of information
- 2nd objective benefits
- 3rd objective operational deployment

**1st objective information**

- Real time sharing

- ANSPs
- Airlines
- General Aviation operators
- Airport operators

- Meteorological Information
- Flight Information
- Aeronautical Information
- Cooperative Network

**SERVICE providers**

- New System Wide Information Services (SWIM concept)

- IN THE NEXT 2 YEARS

- The TOPLINK project is a great opportunity to confirm the expectations and promises identified in the previous project, called TOPMET (2012-2014). The objectives are to develop the concept and accelerate its operational deployment, particularly through a continued and permanent connectivity between the ground and the cockpit, thanks to satellite communications. TOPLINK also provides an avenue to deeply engage in the joint development of a new Local DCB tool to support FMP operations and to achieve significant progress towards collaborative operations with Airlines and Airport operators.

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