



SESAR 3 JU: Delivering the Digital European Sky

Monday 19 June

10:00 - 11:00

ADSCENSIO – on trajectory to greater flight efficiency

This SESAR project demonstrated the efficiency and robustness of a technological infrastructure to support datalink communications between the aircraft and various ground systems for real-time transmission of four-dimensional trajectory data.

The aim is to support the industrial implementation of the use of automatic dependent surveillance-contract extended projected profile (ADS-C–EPP) data downlinked from aircraft – the target is for 45% of all flights in Europe to have the capacity to share their trajectories.

Join this briefing to understand more and get a chance to see live traffic demonstrations and view the potential operational benefits offered by ADS-C–EPP.

Read more about the project

14:00 - 15:00

URClearED - A Unified Integrated Remain Well Clear Concept in Airspace

As more certified remotely piloted aircraft systems (RPAS) take to the skies to serve as vehicles for civil and military purposes, ensuring they carry out their business safely and securely becomes ever more important.

The URClearED project addressed a key technological issue that will allow certified RPAS to carry out services, such as monitoring, surveillance, and cargo delivery, while sharing airspace with other users.

URClearED investigated the concept of a remain-well-clear (RWC) function of a detect and avoid system for certified unmanned air vehicles flying instrument flight rules (IFR) in airspace classes D to G. Well below the typical cruise altitudes of commercial airlines, the airspace is used by small and medium-sized aircraft like helicopters, general aviation, and unmanned systems.

Read more about the project

Tuesday 20 June

14:00 - 16:00

SAFIR - Showcasing U-space services for medical air mobility

Join us to find out more about award winning SAFIR-Med Very Large-Scale Demonstration project, which researched effective medical flights using the first digital U-space services. You will also have a chance to hear about the newly launched SAFIR-Ready sequel project, which will focus on developing advanced and full U-space services (U3 and U4).

Drone agnostics fleet management (Command & Control Center: C2C) and drone agnostic automated ground handling (Drone Cargo Port: DCP) systems form an open platform that enable advanced drone services in a safe and mission ready way. Join us to find out more about this groundbreaking research and how it has made a difference to medical air mobility.

Read more about the project





SESAR 3 JU: Delivering the Digital European Sky

Wednesday 21 June

10:00 - 11:00

EALU-AER - Ireland's first Digital Sky Demonstrator for eVTOL aircraft

EALU-AER is a technology infrastructure integration and demonstration project. EALU-AER aims to prove the feasibility, reliability and operational efficiency of transport services provided by various eVTOL (electric vertical take-off/landing) aircraft for a variety of use cases and applications.

The project aims to develop, deploy, and continually test the use of urban air mobility (UAM), rural/remote air transport/freight delivery, and unmanned air traffic management (UTM) systems in support of eVTOL services. Ultimately, the project aims to secure access to airspace for large numbers of drones and eVTOL aircraft, resulting in safe, cost-effective and sustainable transport of freight and people in the future. Read more about the project

12:00 - 13:00

U-ELCOME - 15 locations in Italy, Spain and France to test and mature U-space solutions

Drones, or unmanned aircraft systems (UAS), have the potential to greatly support Europe's shift towards a green and digital economy. Addressing safety, security, privacy, social acceptance, and environmental concerns while creating a sustainable economic environment for the growth of the European drone industry is crucial. Uspace services and smart traffic management solutions will be key in enabling drone operations and reaching the necessary high level of integration with air traffic management (ATM).

U-ELCOME is a 3-year Digital Sky Demonstrator project, involving 51 partners, whose overall aim is to support the market uptake of U1 and U2 services. With demonstrations taking place in three European countries, the project aims to develop interoperability and support EU harmonisation of U-space services. Taking into consideration the various U-space actors and stakeholders this project values collaboration and information-sharing.

Join us to find out more about the research project and what activities are planned and how the project hopes to make U-space a European reality. Read more about the project

13:00 - 14:00

Total airport management - SESAR environmental performance management

Total airport management (TAM) is a European-funded project aimed at making airports smarter, greener, better connected and more resilient. One of its seven solutions on environmental performance is a hybrid dashboard to monitor taxiing emissions and to factor in environmental considerations in the operational decision making.

The dashboard was evaluated at Paris Orly, where it was showed how emissions (CO2, NOx) could be factored into the planning and execution phases. Read more about the project





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Thursday 22 June

10:00 - 11:00

A novel ATM U-space interface – making a new "aura" in air mobility

The AURA project aimed to lay the foundations for the integration of new entrants in current and future air traffic environment, developing the required concept of operations and validating U-space services information exchanges with ATM systems. Join us to find out more about the project, the exercises that were undertaken and the validation of five basic services which make up the main interactions expected between U-space and ATM users. We will be pleased to answer any questions you may have about this big step towards drone integration!

Read more about the project

14:00 - 15:00

4D Skyways - Improving trajectory management for European air transport

This project researched trajectory management (TM) solutions in support of the roll-out of trajectory-based operations (TBO). Join us to find out more about how the project developed solutions in support of more efficient operations. The presentation will show how with automatic dependent surveillance – contract (ADS-C) and extended project profile (EPP) becoming available, aircraft have the capability to downlink and share their predicted trajectory (extended project profile, speed schedule) from the flight management system (FMS) to the ground system tools. This data is very valuable since it offers an accurate picture in real time of the aircraft's intentions and performance (lateral & vertical profiles). At the same time controller-pilot data link communications, CPDLC, allow for a fast exchange of text messages via data link between air traffic controllers and pilots and the ability to optimise the trajectories in real time. Read more about the project

Friday 23 June

10:00 - 11:00

ALBATROSS: joining forces to further reduce aviation's environmental impact

ALBATROSS, united multiple actors from the aviation industry to demonstrate the potential of commercial aviation to reduce the environmental impact of air traffic.

Airlines, air navigation service providers, airport operators, military, the Network Manager, controllers, pilots, airframe manufacturers, suppliers and scientists took a holistic approach, collaborating on a range activities to improve flight efficiency, and to save fuel and reduce emissions as much as possible.

Join us to find out what the project has achieved and what further research is needed, as well as what comes next. Read more about the project

14:00 - 15:00

Airside, Airport and Runway Throughput: improving the efficiency and resilience of arrival and departure operations

This Airside, Airport and Runway Throughput (AART) project focused on the optimisation of ground management and separation minima, addressing constraints such as weather, environment, noise, runway configuration, mixed mode operations, surveillance and traffic mix, with a view to optimising airport operations with existing infrastructure, improving safety and environment. Read more about the project