



SESAR 2020 Very Large Demonstrations Research

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Info Day - Research and Very Large Scale
Demonstrations Call for Proposals H2020-SESAR-
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Founding Members



EUROPEAN UNION



EUROCONTROL

Why VLDs?

**To See is
to Believe**

- Generate further confidence to support buy-in from main stakeholders including regulators for future deployments.
- Significantly reduce the business risks for both operational stakeholders and industry.
- Provide further inputs to related standardisation activities.
- Raise awareness regarding SESAR activities related to ATM performance issues and their results.
- Accompany SESAR pioneers all the way to pre-deployment.
- To assess full-scale deployment readiness.

What are we looking for?

**3 areas
covering
10 topics**

- SESAR Solutions demonstrations for High Performing Aviation in Europe (**6 topics**)
- Global interoperability (**2 topics**)
- Safe Integration of all Air Vehicles (**2 topics**)

SESAR Solutions demonstrations for High Performing Aviation in Europe

Complementing
already awarded
projects to de-risk
the transition to
deployment (PCP)

- Targeting the involvement of **airspace users** on **specific demonstration platforms** already awarded within the PPP (topics 1-4)

(!) aircraft modifications expected

Pushing
virtualization of air
traffic services
beyond remote
towers

- To ensure continuity in the delivery of efficient ATS services **in case of major technical failure at one of the ACCs** (topic 5)

Support safe access
to small and
medium-size
airports

- Through **advanced on-board equipment** and **GNSS augmentation** (topic 6)

Global interoperability

Inter-continental
trajectory based
operations enabled
by Satellite based
CNS

- Using **satellite data communication**, navigation and surveillance as the enabler for seamless transitions (topics 7)

(!) aircraft modifications expected

Improving flight
trajectories using
SWIM B2B
services

- Using **ICAO FF-ICE/1** provisions and the supporting **FIXM 4.0** elements (topics 8)

Safe Integration of all Air Vehicles

Solutions for General Aviation and Rotorcraft

- A range of options can be considered to support better flight planning and execution **using non-certified equipment** (topics 9)

Safe integration of drones

- Demonstrate that quick-wins can be achieved acknowledging the need for urgent action on the development of solutions for low level operations **“U-Space”** (topics 10)

Total budget and number of projects?

No pre-defined
budget per
project

- SESAR Solutions demonstrations for High Performing Aviation in Europe (**6 EUR Million**)
- Global interoperability (**3 EUR Million**)
- Safe Integration of all Air Vehicles (**5 EUR Million**)

Selection based
on “value for
money”

- SESAR Solutions demonstrations for High Performing Aviation in Europe (**10-15 projects**)
- Global interoperability (**2-4 projects**)
- Safe Integration of all Air Vehicles (**7-10 projects**)

Duration of the projects and implementation guidelines

2 years



Implementation guidelines

To be
demonstrated
in project
management
approach

- State compliance with SESAR requirements with regards to e.g. **“proof of concept”**
- Identify and plan effort to provide input to standardisation bodies, link with regulatory authorities/**EASA**)
- Include a comprehensive **communication and risk management plan**
- We only require 2 key deliverables per project besides quarterly reporting, but those shall be **publishable**
- Describe an **effective Interface with the SJU** in line with the guidance (number of meetings, deliverables ...)
- Identify **coordination mechanism** with other projects (when required)
- ...