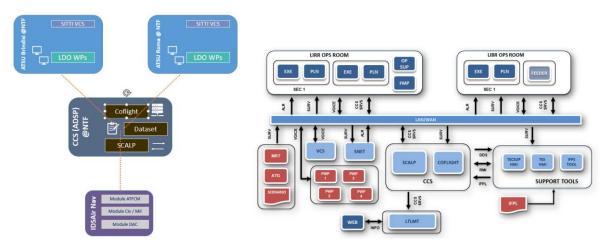




EXE 4 and EXE 1.5 "Delegation of ATM services provision among ATSUs" PJ.10-W2 Solution 93 and Virtual Centre PJ.32-W3 successfully validate solution to delegate air traffic services

A validation campaign in SESAR 2020 W2 based on Virtual Centre Architectures was executed by **ENAV Group (Leader of PJ-10-W2 Solution 93)** as part of the SESAR project PJ.10-W2 PROSA, which is under the lead of German air navigation service provider DFS Deutsche Flugsicherung.), together with their partners **(LEONARDO, SITTI, Coflight Cluod Services, NAIS, BIP, SINTEF and VmWare)**. The experimentation successfully validated the concept of "Delegation of ATM services provision among ATSUs" and Contingency use-cases involving an ATM Data Service Provider (ADSP) and two different air traffic service units (ATSUs) (Rome and Brindisi Area Control Centres) focusing on the coordination of both Air Traffic Flow Capacity Management (ATFCM) with the *Local Traffic Load Management Tool* from the partner IDS AirNav, and civil-military operations.

The exercises were carried out at **ENAV National Test Facility** in Rome using **Coflight Cloud Services**, the **LEONARDO** Controller Working Position and **SITTI** Voice Control Distribution systems. These prototypes were being evolved during the preparatory phase to support the services interfaces with the Virtual Centre architectures compliant with the standard of EUROCAE WG-122.



From the operational perspective the exercises validated the following operational use-cases:

- Delegation of ATM services provision at night;
- Delegation of ATM services provision at fixed time;
- Delegation of ATM services provision on-demand;
- Delegation of ATM services provision between civil and military ATSUs.

By combing the "Y" architectures and testing different traffic load conditions ranging from medium to high density, the exercises developed a total of 15 different delegation and contingency use-cases covering the operational scenarios for PJ.10-W2 Sol 93 EXE 4 and PJ.32-W3 EXE 1.5



















Human performance and safety experts recorded ATCOs' interventions and feedback about their assessment feeling regarding the feasibility and acceptability of the delegation concept and procedures tested, evoking more specifically what they experienced during the exercise (e.g. appropriateness of procedures, problems or difficulties encountered). Results and recommendations gathered with respect to the investigated Key Performances Areas are still under analysis and will be presented in the Validation Report at the end of 2022 year.

Overall, as early findings, involved actors deemed the delegation procedure reasonably feasible and acceptable acknowledging the added value it can provide to the network architectures.



















## **About SESAR HORIZON 2020 PJ.10 PROSA**

The **SESAR 2020 project PJ.10-W2 PROSA**, which is under the lead of DFS Deutsche Flugsicherung, is paving the way for the future of air traffic management by advancing automation technology solutions and procedures.

One focus lies on further maturing the concept of **flight-centric air traffic control**, in which aircraft remain the responsibility of the same air traffic controller instead of referencing on geographical sectors. This is accompanied by examining more flexible non-geographical sector qualifications for controllers. Another part of the project covers **delegation of airspace** among air traffic services units. The **virtual centre concept** will be further validated within a realistic environment. In addition, **human machine interface interaction** and technologies will be addressed to reduce workload and mental strain. In particular, **attention guidance** and **automatic speech recognition** will be explored.

PJ.10-W2 PROSA has received funding from the SESAR Joint Undertaking under the European Union's Horizon 2020 research and innovation programme under grant agreement No 874464. With a funding of €37 million, 28 partners and ten linked third parties, the project is one of the largest in SESAR 2020 Industrial Research.

More information via the website: <a href="https://www.sesarju.eu/projects/prosa">https://www.sesarju.eu/projects/prosa</a>