

PROJECT

VLD2 - VOICE

Reduced separations and improved efficiency based on Vhf cOmmunICations over LEO satEllites

Funding: European (Horizon 2020)

Duration: Jan 2021 - Dec 2022

Status: Ongoing

Total project cost: €5,905,552

EU contribution: €3,989,808



Call for proposal: H2020-SESAR-2020-1

[CORDIS RCN : 232896](#)

Objectives:

Communication, Navigation and Surveillance (CNS) systems are key in the provision of safe and efficient traffic management for air traffic. These systems have traditionally been ground-based and generally installed on mountain tops or at airports. Performance of these ground-based systems is limited by topography and availability of land.

“New Space” and its two pillars (increasing availability and competition in the launch market increasing number of Low Earth Orbit satellites) is dropping the price of new constellations opening up for new and more cost-efficient solutions in the provision of new services models. This is the case for global and seamless CNS services to be used in ATM.

With requirements for Air Traffic to increase capacity and safety in the years to come, new solutions need to be deployed to ensure the correct management of Air traffic. The use of space-based infrastructure is a necessary step towards the provision of Air Traffic Services in remote areas or big sectors where they are not available today due to geographical constraints of terrestrial-based systems. In this sense solutions towards the improvement of efficiency, safety and capacity of aviation, where Reduced Minima Separations in remote Airspace based on Satellite VHF Voice and Data Communications systems propose the answer. Other satellite-based technologies cannot provide a complete and integrated solution in terms of performances necessary to reduce separation.

The objective of VLD2 - VOICE is to demonstrate that with the use of Satellite-based VHF systems providing Voice and Datalink ATS traffic in remote airspace can be handled as in continental, and current separation can be reduced non compromising safety. In addition, we will perform some cross-border operations between adjacent FIR belonging to different countries. Demonstration will cover operations in CANARIAS and SAL FIRs where ATCOs communicating in real-time with Aircraft at distances bigger than 1500km.

Parent Programmes:

[H2020-EU.3.4. - Horizon 2020: Smart, Green and Integrated Transport](#)

Institute type: Public institution

Institute name: European Commission

Funding type: Public (EU)

Other programmes: SESAR-VLD2-01-2020 Optimised use of Airspace

Lead Organisation:

Indra Sistemas Sa

Address:

AVENIDA DE BRUSELAS 35
28108 ALCOBENDAS MADRID

Spain

Organisation Website:

<http://www.indra.es>

EU Contribution: €2,033,675

Partner Organisations:

Enaire

Address:

AVENIDA DE ARAGON S/N BLOQUE 330, PORTAL 2 PARQUE EMPRESARIAL LAS MERCEDES
28022 MADRID
Spain

Organisation Website:

<http://www.aena.es>

EU Contribution: €688,214

Eurocontrol - European Organisation For The Safety Of Air Navigation

Address:

Rue De La Fusée 96
1130 Bruxelles
Belgium

Gomspace As

Address:

LANGAGERVEJ 6
9220 AALBORG
Denmark

Organisation Website:

<http://www.gomspace.com>

EU Contribution: €916,431

Gomspace Luxembourg Sarl

Address:

11 BOULEVARD DU JAZZ
4370 ESCH-SUR-ALZETTE
Luxembourg

EU Contribution: €351,488

Technologies:

Satellite navigation
Satellite navigation for
aviation

Development phase: Demonstration/prototyping/Pilot Production

STRIA Roadmaps: Network and traffic management systems

Transport mode: Air transport

Transport sectors: Passenger transport, Freight transport
Societal/Economic issues,

Transport policies: Safety/Security

Geo-spatial type: Other

