

PROJECT

AMU-LED

Air Mobility Urban - Large Experimental Demonstrations

Funding: European (Horizon 2020)

Duration: Jan 2021 - Dec 2022

Status: Ongoing

Total project cost: €4,806,523

EU contribution: €3,997,415



Call for proposal: H2020-SESAR-2020-1

[CORDIS RCN : 232892](#)

Objectives:

The revolution of Urban Air Mobility encompasses new concepts of operations, business cases, applicable regulations, and stakeholders and end users. This new business sector needs to be secured, invented, refined, structured and industrialized while staying sustainable and interoperable within the U-space framework.

U-space and Urban Air Mobility (UAM) are topics where a fast increase in research, innovation and real use implementation is previewed in this project, where SESAR is highly interested to foster and facilitate the development of avant-garde solutions in UAM.

In the near future, safe, secure, green and acceptable UAM solutions will bring seamless freight, emergency, security and mobility services. Operators, Regulators, Traffic Management, End Users, Public and Airborne industry must collaborate to ensure UAM vehicle airworthiness and viable operations.

The consortium is composed of all relevant stakeholders:

- Aerospace Research Institutes
- Aerospace Universities
- UAS and eVTOLs (Air Taxis)
- Aviation and air traffic management engineering and consultancy
- Aviation data management
- Air Navigation Service Providers
- Airport Authorities
- U-Space Service Providers
- UAS operators
- Ground Infrastructure Providers (vertiports...)
- Mobile Communication Service Providers
- Advisory Board: National Civil Aviation Authorities, City Councils and Regional Governments, European bodies

The study proposes to design and deliver a detailed concept of operations and definition of urban air missions followed by simulations and a large real flight demonstration campaign to verify and validate the concepts. Our project will allow UAM stakeholders to specify various use cases applicable to logistics and urban transport of passengers, to design or integrate UAM environment, to test the UAS ground and airborne platforms and finally, to assess safety, security, sustainability and public acceptance.

The flight demonstrations will accumulate more than 100 hours and flights.

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-VLD2-03-2020 U-space capabilities and services to enable Urban Air Mobility

Lead Organisation:

Everis Spain SI

Address:

CAMINO FUENTE DE LA MORA 1
28050 MADRID
Spain

Organisation Website:

<http://www.everis.com>

EU Contribution: €144,594

Partner Organisations:

Ingenieria Y Economía Del Transporte S.a.

Address:

Paseo Habana 138
28036 MADRID
Spain

Organisation Website:

<http://www.ineco.es>

EU Contribution: €139,795

Fundacion Andaluza Para El Desarrollo Aeroespacial

Address:

CALLE WILBUR Y ORVILLE WRIGHT NUM 17, PARQUE AEROP
41039 LA RINCONADA SEVILLA
Spain

Organisation Website:

<http://www.catec.aero>

EU Contribution: €176,796

Stichting Nationaal Lucht En-Ruimtevaartlaboratorium

Address:

Anthony Fokkerweg 2
1059CM AMSTERDAM
Netherlands

Organisation Website:

<http://www.nlr.nl>

EU Contribution: €313,022

Anra Technologies Uk Ltd

Address:

114 HIGH STREET
CRANFIELD, BEDS
MK43 0DG
United Kingdom

EU Contribution: €290,626

Fundacion Tecnalía Research & Innovation**Address:**

PARQUE CIENTIFICO Y TECNOLOGICO DE GIPUZKOA PASEO MIKELETEGI 2
20009 DONOSTIA/SAN SEBASTIAN (GIPUZKOA)
Spain

Organisation Website:

<http://www.tecnalia.com>

EU Contribution: €455,458

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: €99,264

Stichting Space53**Address:**

HENGELOSESTRAAT 500
7521 AN ENSCHEDE
Netherlands

EU Contribution: €159,688

Jeppesen Gmbh**Address:**

Frankfurter Strasse 233
63263 Neu-Isenburg
Germany

Organisation Website:

<http://www.jeppesen.de>

EU Contribution: €270,001

Altitude Angel Limited**Address:**

DAVIDSON HOUSE, THE FORBURY
READING
RG1 3EU
United Kingdom

EU Contribution: €85,007

Boeing Research & Technology Center**Address:**

Cañada Real de las Merinas 1-3, Edificio 4
28042 MADRID
Spain

Organisation Website:

<http://www.boeing.com>

EU Contribution: €215,283

Gemeente Amsterdam

Address:

Amstel
1011 PN Amsterdam
Netherlands

Organisation Website:

<http://www.amsterdam.nl>

EU Contribution: €86,000

Airbus Operations S. L.

Address:

John Lennon, S/N
28906 GETAFE (MADRID)
Spain

Organisation Website:

<http://www.airbus.com>

EU Contribution: €193,638

Ehang Technologies Spain SI

Address:

CALLE PUERTA DE ALCALA 13
28905 GETAFE MADRID
Spain

EU Contribution: €152,950

Fundacion Instituto Tecnologico De Galicia

Address:

CALLE CANTON GRANDE 9, PLANTA 3
15003 A CORUNA
Spain

EU Contribution: €387,225

Cranfield University

Address:

College Road
CRANFIELD - BEDFORDSHIRE
MK43 0AL
United Kingdom

Organisation Website:

<http://www.cranfield.ac.uk>

EU Contribution: €602,915

Airhub Bv

Address:

ZUIDEPARK 7

9724AD GRONINGEN
Netherlands

EU Contribution: €225,155

Technologies:

Information systems
Sustainable urban mobility planning

Development phase: Demonstration/prototyping/Pilot Production

Aircraft design and manufacturing
Aircraft as a combination of a carrier and a passenger pod

Development phase: Demonstration/prototyping/Pilot Production

Vehicle design and manufacturing, Other

STRIA Roadmaps: specified

Transport mode: Air transport

Transport sectors: Passenger transport, Freight transport

Transport policies:

Societal/Economic issues, Environmental/Emissions aspects, Safety/Security, Deployment planning/Financing/Market roll-out

Geo-spatial type: Urban