

AMU-LED:

AIR MOBILITY URBAN - LARGE EXPERIMENTAL DEMONSTRATIONS

Boeing Research & Technology-Europe is a contributor to the European Commission AMU-LED (Air Mobility Urban - Large Experimentation Demonstrations) project which was launched in January 2021. The project will demonstrate the safe integration of different types of operations with piloted and autonomous aircraft in urban environments to achieve more sustainable and intelligent cities.

- The project will combine various exercises, including passenger transport in electrical air taxis (possibly with pilot on-board), the transportation and delivery of goods, infrastructure inspection, surveillance and support for emergency services.
- 2022 will see some of the largest demonstrations ever made, in three European countries: Spain, the United Kingdom and the Netherlands.
- The project involves 17 companies and institutions from Europe.

Air taxis, cargo delivery vehicles or unmanned systems for emergencies is an ever-approaching reality. With this new reality on the horizon, AMU-LED (a H2020 project of the European Commission) aims to demonstrate the feasibility of different types Urban Air Mobility (UAM) operations.

It is an ambitious initiative, which will be built up over two years, with the ultimate goal of showcasing one of the largest demonstrations of mobility services with air vehicles in urban environments by 2022. Several venues have been chosen in three different countries: Santiago de Compostela in Spain, Cranfield in the United Kingdom, Amsterdam/Rotterdam in the Netherlands.

Boeing Research & Technology-Europe (BR&T-E) will lead the definition of a Concept of Operations for Urban Air Mobility which will be demonstrated during the project, building on existing U-Space regulations and addressing the particularities (users, missions, business cases, vehicles etc.) and main challenges of urban scenarios like weather conditions, presence of buildings, integration with manned traffic (for example, emergency helicopters) and safety and societal acceptance aspects.

This Concept of Operations will propose new operating procedures for an effective interface between Air Navigation Service Providers (ANSPs), U-Space service providers (USSPs) and other UAM authorities.

Boeing Research & Technology-Europe will also Support different scenarios for flight demonstrations and corresponding technical requirements, in particular those related to recording and managing flight data. This work is expected to facilitate the development of future European and international standards and regulations for urban air mobility.

For more information: <https://www.sesarju.eu/projects/AMU-LED>



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