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Building a future we can all trust

EUROPEAN PARTNERSHIP TO OPEN CITIES' AIRSPACE TO DRONES FOR THE FIRST TIME

- **Funded by the European Union Horizon 2020 programme, the SESAR Joint Undertaking (SESAR JU) consortium for this project is made up of 22 companies from 14 countries across Europe**
- **The project will develop the solutions and procedures to integrate both the conventional air traffic management (ATM) system and the U-space control system to allow drone operations in cities**
- **Drones will boost the competitiveness of the entire economy and offer enormous potential for economic development and job creation. Key areas as inspection, logistics and disaster relief, as well as drone-related manufacturing and maintenance and Unmanned Aircraft Traffic Management System (UTM) will benefit from the outcomes of this project**

Madrid, June 10, 2021.- The SESAR JU ATM U-space project, AURA, will tackle one of the main hurdles that prevent drones from taking off in cities: their safe integration into the very low-level airspace without impacting conventional air traffic operations in controlled airspace.

Every major city in the world has one or more airports in its vicinity that establish restrictions on access to their airspace. These limitations can sometimes affect the neighboring city's airspace, which has knock-on effects for the development of urban air mobility and all its economic growth potential and job creation.

This is where AURA comes in, a consortium made by the main air navigation service providers, technology suppliers, and leading research organizations from all over Europe, coordinated by Indra.

Together, they aim to integrate the management of the very low-level airspace (VLL) or U-space as it is also known, with traditional air traffic management systems that use air control centers and airport towers. Seamless interfaces between U-space and ATM/ATC, will also allow managing operations above VLL in a safe way.

This will unleash the development of a completely new sector linked to drones that will boost economy, competitiveness of companies in every sector and improvement of public services. Inspections, logistics,



disaster relief operations, drone-related manufacturing and their maintenance plus UTM services will be among the first activities to benefit.

To bring this into reality, AURA partners will determine the flight information that UTM and ATM systems must exchange in order to guarantee safe air operations.

The consortium will develop procedures and systems to support the needed interface between these two systems to manage high volumes of manned and unmanned traffic operating safely and concurrently in the same airspace.

This information exchange will provide an accurate view of the flight situation at all times ensuring safe operations, even with a high volume of simultaneous operations.

The entire operational concept and system developed within the AURA project will be tested in several validation exercises in different European sites. These validation exercises will combine both real flights and high performance simulations with real traffic to validate solutions and procedures.

The AURA project is the first Industrial Research project managed by the SESAR Joint Undertaking that is dedicated to U-space, the European Commission's initiative for the safe and secure integration of drones into the airspace. The results from these projects will facilitate the work of regulatory bodies, which are working on establishing the rules that will govern urban air mobility, and the development of technological standards and solutions shared by all manufacturers and operators.

About AURA

SESAR JU's AURA (PJ.34) project partners are Indra (Project Coordinator), AIRBUS, ANS CR (B4), Austro Control (COOPANS), DFS, DLR (AT-One), DSNA, ENAIRES, ENAV, EUROCONTROL, FRQ (FSP), HungaroControl (FSP), HONEYWELL, LEONARDO, LFV (COOPANS), NATS, NLR (AT-One), ON (B4), PANSA (B4), SINTEF and THALES.

Different organizations and universities from all over Europe also contribute to the Aura project working side by side with the main beneficiaries. These organizations are AOSL, CRIDA, DRR, D-FLIGHT, E-GEOS, FSO, FCO, FRQ RO, Hlsro, INECO, Indra FT, LDO GMBH, NAIS, TECHNO SKY, TPZ and UPM.

About the SESAR JU



The logo for Indra, consisting of the word "indra" in a bold, lowercase, sans-serif font.

The logo for Airbus, consisting of the word "AIRBUS" in a bold, uppercase, sans-serif font.

The logo for Air Navigation Services of the Czech Republic, featuring a stylized blue and white geometric design to the left of the text "Air Navigation Services of the Czech Republic".

The logo for austro CONTROL, with "austro" in a rounded font above "CONTROL" in a smaller, uppercase font, all within a grey rectangular background.

The logo for dgac, with "dgac" in a blue box above "D S N A" in a smaller blue box.

The logo for DFS Deutsche Flugsicherung, featuring a stylized blue wing icon above the text "DFS Deutsche Flugsicherung".

The logo for DLR, featuring a stylized black and white geometric star shape above the letters "DLR".

The logo for ENAIRES, with "ENAIRES" in a bold, uppercase font followed by a blue geometric icon.

The logo for enav, with a stylized green and red "e" icon followed by the word "enav" in a lowercase font.

The logo for EUROCONTROL, featuring a stylized blue and white circular icon above the word "EUROCONTROL".

The logo for FREQUENTIS, with the word "FREQUENTIS" in a bold, uppercase font.

The logo for HungaroControl, featuring a stylized blue and white geometric icon followed by the text "HungaroControl".

The logo for LEONARDO, with a stylized red and white geometric icon followed by the word "LEONARDO" in a bold, uppercase font.

The logo for Honeywell, with the word "Honeywell" in a bold, lowercase font.

The logo for LFV, with "LFV" in a large, bold, orange font above "AIR NAVIGATION SERVICES OF SWEDEN" in a smaller font.

The logo for nlr, featuring a stylized blue and white circular icon with an arrow above the letters "nlr".

The logo for NATS, with the word "NATS" in a bold, uppercase font.

The logo for ON, with "ON" in a bold, uppercase font above "ORO NAVIGACIJA" in a smaller font.

The logo for the Polish Air Navigation Services Agency, featuring a stylized globe icon above the text "POLSKA AGENCJA ŻEGLUGI POWIETRZNEJ POLISH AIR NAVIGATION SERVICES AGENCY".

The logo for SINTEF, with a stylized blue and white circular icon followed by the word "SINTEF" in a bold, uppercase font.

The logo for THALES, with "THALES" in a bold, uppercase font above the tagline "Building a future we can all trust".

SESAR is the technological pillar of the EU's Single European Sky policy and a key enabler of the EU Aviation Strategy. SESAR defines, develops and deploys technologies to transform air traffic management in Europe. The SESAR Joint Undertaking (SESAR JU) is the public-private partnership set up to define and deliver technological solutions to make this transformation a reality. It works with all actors in the aviation value chain to agree on the research and development priorities, as well as technology roll-out plans, which are documented in the European ATM Master Plan - a collaboratively-agreed roadmap for ATM modernisation.

www.sesarju.eu

This project has received funding from the SESAR Joint Undertaking under the European Union's Horizon 2020 research and innovation program under grant agreement No. 101017521