



# EU Drone Days

**Launch of the  
European Drone Strategy 2.0**

**SESAR U-space Showcase**

**Brussels, 29-30 November 2022**



**#EUDroneDays**

WP Leaders

Project  
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Technical  
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X Gemeente  
X Amsterdam



Demo Leaders

SPACE53



ENAIRe



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# OBJECTIVES

Define and initially validate a **high-level ConOps** for UAM

Demonstrate **UAM flights safety** and **integration** with other airspace users through flight test campaigns

# ACTIONS

- To generate high-level **Concept of Operations**
- To define **Use Cases**
- To carry out a **Safety Analysis**
- To define a **U-space Architecture** for UAM
- To implement the **Technical Solution**
- To integrate and **deploy** the systems
- To perform **Flight Demonstration** campaigns
- To **disseminate** the project outcomes
- To provide input to **Standardization and Regulation**

## Testing U-space architectures

- ✓ Centralised and decentralised
- ✓ 4 USSPs (up to 3 simultaneously)
- ✓ 3 CISPs & 3 ANSPs
- ✓ Vertiports in U-space

## Technical Solution

- ✓ Operational models (constraints, vertiport, ...)
- ✓ U-space architectures & ICD
- ✓ Standards for U-space services
- ✓ 18 data flows

## Use cases

- ✓ 14 representative mission types
- ✓ Nominal & off-nominal scenarios
- ✓ Vertiport & inf-light scenarios
- ✓ Controlled & un-controlled airspace scenarios

## Standardization & Regulation

- ✓ Gap analysis (vertiport, centralised architecture)
- ✓ Adaptation of ASTM standards (DSS, R-ID)
- ✓ ConOps Coordination Cell support
- ✓ Sharing of lessons learned with EASA & SDOs

## UAM flight demonstrations

- ✓ Flight of large eVTOLs in segregated airspace
- ✓ Integration with ATC - Dynamic Reconfiguration
- ✓ Contingency Management & HEMS integration
- ✓ 6 locations & setups (UK, NL, SP)

## High-level ConOps

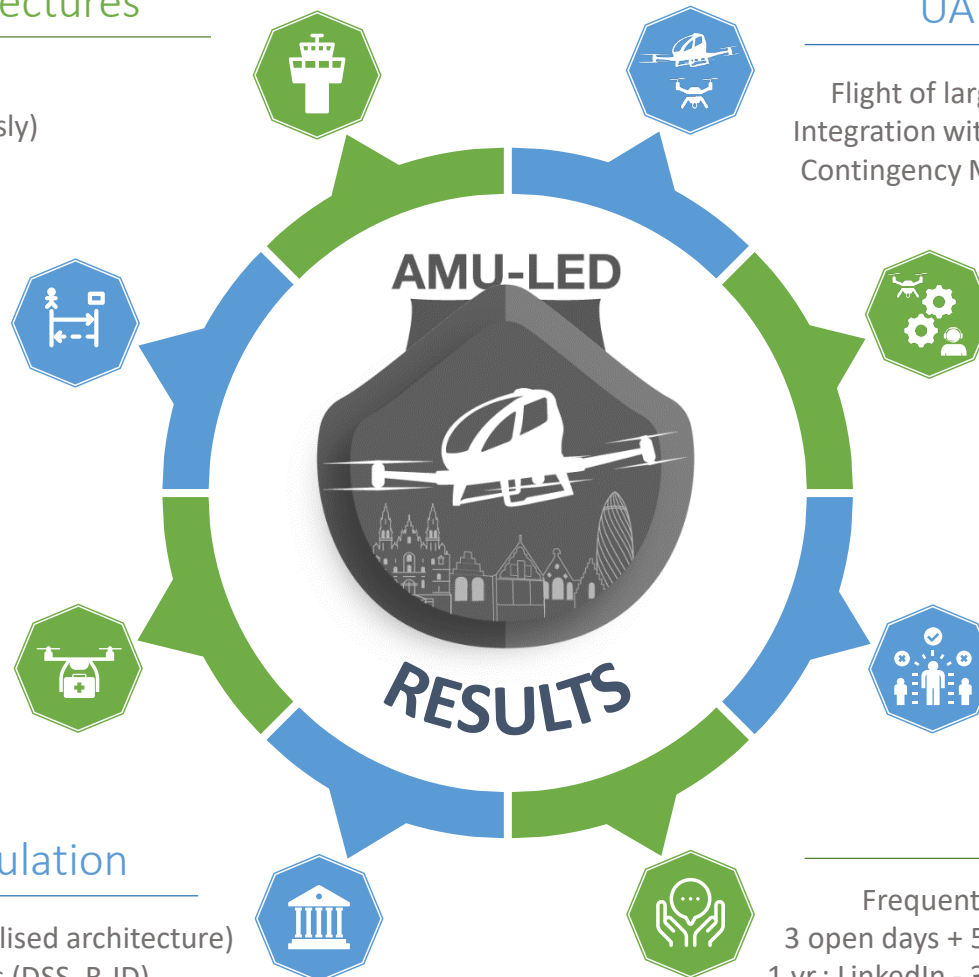
- ✓ Layered airspace structure (sUAS & UAM)
- ✓ Notional architecture (roles & responsibilities)
- ✓ Adaptation of U-space services (i.e., vertiport)
- ✓ Manned aircraft integration

## Social acceptance

- ✓ Focus groups in three European countries
- ✓ Social acceptance survey to ~2500 people
- ✓ Recommendations per demographic group

## Comm., Diss., & Expl.

- ✓ Frequent widespread news dissemination
- ✓ 3 open days + 5 demo days + 2 SEAB workshops
- ✓ 1 yr.: LinkedIn - 365 new followers, 211 mentions & 40.3k impressions | Website – 14k visits
- ✓ 9 papers, 15 publications





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