

## **CORRIDOROS**

# Infrastructure Tooling for Air Corridor Planning & Uspace Compliance

A digital planning interface that enables European cities and authorities to design Urban Air Mobility corridors that are safe, compliant, and socially acceptable.

Urban Air Mobility is accelerating, but cities, hospitals, and regional authorities lack the digital tools to define where these aircraft can fly.

- Current State: U-space systems focus on tactical deconfliction (USSPs), but there is no standardized
  way for cities to input strategic constraints (noise limits, hospital buffers, operating hours) into the
  system.
- The Result: Regulators face a massive administrative burden coordinating with local stakeholders (Article 18(f)), and cities fear losing control of their low-altitude airspace.

#### What CorridorOS Does

CorridorOS is the digital architect tool for U-space. It allows authorities to intake, validate, and standardize local constraints into machine-readable data that U-space service providers can use.

- 1. Digital Corridor Design: Maps safe and acceptable flight routes using 3D building data, noise sensitivity layers, and population density models.
- 2. Compliance & Policy Engine: Translates local rules (e.g., "No flights over schools during exams") into standardized U-space constraints that are fully traceable to EASA regulations.
- 3. Capacity & Slot Management: Calculates safe throughput and allocates protected access windows for critical missions (e.g., medical transport) so hospitals have predictable service.

### Positioning in the U-space Ecosystem

CorridorOS operates as a neutral planning layer.

- It validates data for the Competent Authority.
- It standardizes inputs for USSPs.
- It does NOT perform tactical air traffic control or flight authorization.

We do not replace the regulator; we provide the digital tooling they need to scale.

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**Route:** CHL (City) ↔ CHL Nord (Ettelbruck) **Mission:** Critical Tissue & Blood Transport **Validation:** We are modeling this corridor to demonstrate how **Noise Budgeting** and **Protected Slots** can make urgent drone logistics politically and operationally viable in a dense European environment.

