A NEW LAYER OF URBAN INFRASTRUCTURE

Low-altitude airspace is becoming an actively used part of the city

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METROPOLITAN UAM

Building the conditions for scalable drone operations in the Helsinki Metropolitan Area

1

ECOSYSTEM

Cities + companies + research + authorities

2

AIRSPACE

U-space + digital air traffic services

3

BUSINESS

From pilots towards scalable commercial operations

PILOTS → **INFRASTRUCTURE** → **SCALABLE SERVICES**

The project connects the pieces that individual operators cannot build alone.

THE CITY AS INFRASTRUCTURE

Cities are building the capabilities that safe drone ecosystems will depend on.

DIGITAL TWINS

- Machine-readable 3D understanding of the city

GROUND RISK

- Detecting and mitigating risks to people and infrastructure

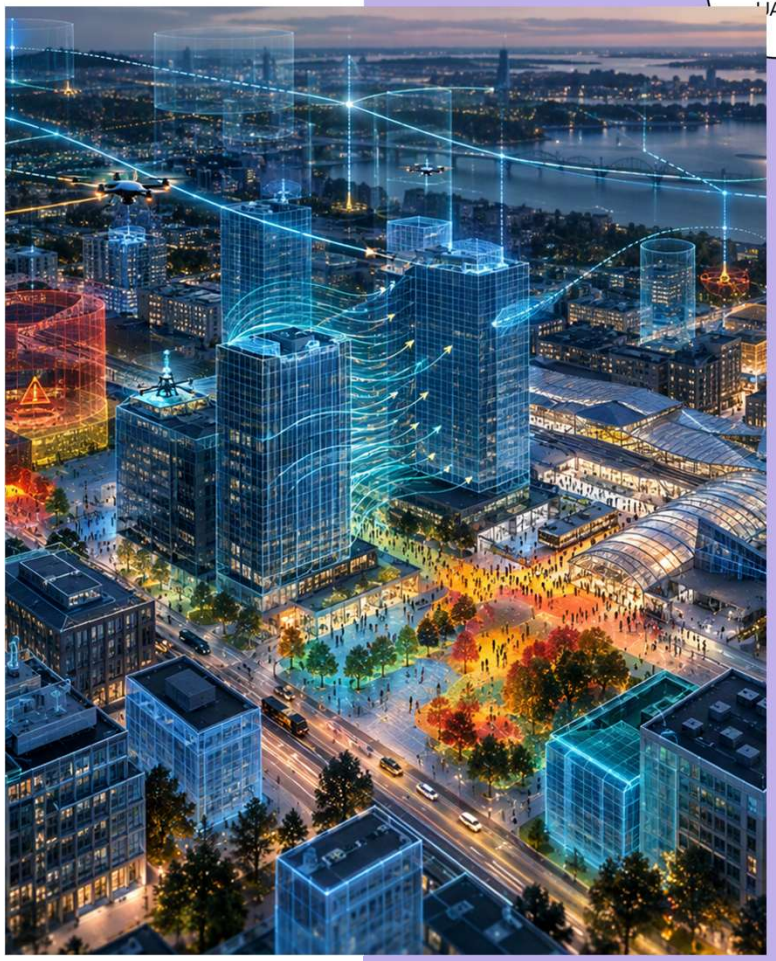
AIRSPACE AWARENESS

- Observing low-altitude traffic and reducing air risk

HYPERLOCAL WEATHER

- Micro-weather forecasts for conditions between buildings

Together, these form a digital infrastructure layer for low-altitude operations.



Metropolitan UAM

USEFUL. SCALABLE. TRUSTED.

Drones have a dual relationship with critical infrastructure.

DRONES SUPPORT INFRASTRUCTURE

Inspection • Monitoring
Logistics • Situational awareness
Emergency response

INFRASTRUCTURE NEEDS PROTECTION FROM DRONES

Airports • Energy
Transport • Communications
Public spaces

CITIES ENABLE SAFE OPERATIONS

City data • Risk awareness
Weather • Connectivity
Coordination and trust

The question is not only how drones become part of cities.
It is whether cities are ready to become part of the drone ecosystem.



Thank you!

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