Smart Mobility in Smart Cities
WALK. RIDE. DRIVE. FLY

DIGITAL TRANSPORT DAYS
FINLANDIA HALL, HELSINKI
7-9 OCTOBER 2019

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Typical multimodal mobility solutions in megacities do not consider air mobility.
EU Urban Air Mobility

FrontRunners [•] 12 demonstrator projects (17 cities / regions, incl. 2 Cross-border)

Fellows [•] (25 cities / regions)

Madrid (ES), Oxfordshire County (UK), County Durham (UK), Skyros Island (GR), Amsterdam (NL), Region of Peloponnese (GR), Ionian Islands Region (GR), Turin (IT), Trikala (GR), Euroitmetrope: Lille-Kortrijk-Tournai (BE-FR), Tampere (FI), Stockholm (SE), Region Ile de France (Paris Region – FR), Padua (IT), Ljubljana (SI), Oulu (FI), Málaga (ES), Metropoles GZM (FR), Le Havre Metropole (FR), Turnhout (BE), Líria (ES), Seville (ES), Benidorm (ES), Aix-Marseille Métropole & Region Sud (FR), Porto (PT)

More than 500 diverse stakeholders mobilised across Europe to work on bringing urban mobility to the 3rd dimension!

EIP-SCC: European Innovation Partnership on Smart Cities and Communities

UIC²

UAM Initiative Cities Community
Scope of the UAM Initiative

1. UAM interfaces with public transport*
2. Mobility as a Service
3. Ground infrastructure for UAM
4. ATM / UTM concepts for UAM in accordance with the U-Space framework

* Or other interfaces: e.g. logistics platform, emergency services hubs, etc.

Smart Mobility demonstrators interfacing/enabling UAM by addressing:

City-centric & citizen-driven
Opportunities for logistics

Benefits from complementary, or stand-alone drone solutions?

ORDER & DELIVERY PROCESS

Customer places order → Deliverer selected * → Product(s) picked up from merchant(s) → Product(s) delivered to customer → Customer receives products

SUPPORTING ALGORITHMS AND ANALYTICS

- Integrated inventory management
- Task-courier matching
- Determining delivery price
- Courier selection
- Dynamic routing
- Dynamic routing
- Communication with customers
- Demand forecast
- Rating system

Source: TELANAVIS

Trial of GOF USPACE Project in August 2019

1. International drone logistic flight from Estonia to Finland.
2. Flight distance 80km and altitude of 2000m.

Drone parcel trial in Aviapolis in April 2019

1. During three days, drones were carrying consumers parcels (80 in total) from two grocery stores.
2. Public's experience for drone logistic was very positive.

Source:

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8th October 2019, Helsinki, Digital Transport Days
Urban traffic goes to the third dimension!

‘Urban’ implies more than increased levels of safety and security

Urban air traffic sets a new ‘status quo’

- Airspace digitalisation
- New infrastructure (aviation + mobility)
- New interfaces (aviation + mobility)
- New business / services
- New mindset

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8th October, 2019, Helsinki, Digital Transport Days
A three-fold approach is required for integrating air-vehicles / drones in urban environments

- **ESTABLISH** public & private support
- **SEEK** ground & air synergies
- **CO-CREATE** with citizens

**Sustainable and socially embraced integration of urban air mobility**

**Reminder**

- integrated sustainable urban mobility solutions
- demonstrable benefits to citizens
- socially & environmentally acceptable solutions

**It’s not about** what technology *can do* for us but *what we want* technology to do for us

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