DEFENCE AND SPACE

Airbus – Emerging Technologies

Safe, secure and reliable commercial UAS.

Fredrik Nordström



High Altitude Pseudo Satellites (HAPS) Zephyr Pioneering the stratosphere

Zephyr is the world's leading solarelectric stratospheric unmanned aerial vehicle. It's a High Altitude Pseudo Satellite, which flies above the weather and regular air traffic, covering distances of over 1,000 nautical miles a day.



Urban Mobility

Cities are home to more than half the world's population accounting for more than 80 percent of world GDP. Four trends are rapidly changing passenger transport: electrification,

- autonomy,
- connectivity, and

sharing.

Commercial traffic in cities will require new technologies, new business models and new regulations

Aerial Cargo

dense urban environment.

Moving physical goods more efficiently for last miledelivery or into remote areas. Airbus is conducting a first pilot in Singapore at National University. Skyways - last mile delivery in



UAS Traffic Management (UTM)

To face today's challenges of drones accessing airspace, UTM is the way forward.



URBAN AIR MOBILITY

Airbus believes that adding the third dimension to multimodal urban transport networks will improve the way we live and offer an alternative to congested megacity transport systems. To that end, the company is working with a diverse ecosystem to develop partnerships and a portfolio of projects to make urban air mobility a reality.

Urban Air Traffic Management

Actively shaping regulations and future air traffic control requirements to safely utilise urban skies

Voom

An on-demand service developed by A³ that allows megacity dwellers to book a helicopter on a shared basis via a mobile app

CityAirbus

A multi-passenger, self-piloted electric vertical take-off and landing (VTOL) demonstrator designed for urban air mobility with cost efficiency, high-volume production and a low environmental footprint in mind

Vahana

A single-passenger, self-piloted electric vertical take-off and landing (VTOL) aircraft being developed by A³ to open up urban airways

Skyways

Collaboration with Airbus Helicopters and the National University of Singapore to test the seamless delivery of small parcels on its campus using unmanned aircraft systems



Regulatory Challenges

- 1. UTM
- 2. DAA (lower and very high airspace)
- 3. Autonomy
- 4. Electrical power system
- 5. Multirotor
- One operator controlling several RPAS/UAS
 Standardized risked based approach





THANKS

