Airbus – Emerging Technologies

Safe, secure and reliable commercial UAS.

Fredrik Nordström
Zephyr is the world’s leading solar-electric 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.
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

Moving physical goods more efficiently for last mile-delivery or into remote areas. Airbus is conducting a first pilot in Singapore at National University. Skyways - last mile delivery in dense urban environment.
To face today’s challenges of drones accessing airspace, UTM is the way forward.
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
6. One operator controlling several RPAS/UAS
7. Standardized risked based approach
8. .....