Autonomous Drone

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Description

**Autonomous drones (UAVs) can have multiple usages incl. cargo delivery. The drones fly autonomously within an aerial network system and deliver lightweight packages to "receiving stations" installed on rooftops. Users can operate the system using an app*

Autonomous drones would replace ground-based vehicles for short-haul delivery of light packages.

1. Expected impact

- Reduced greenhouse gas emissions and energy usage compared to ground-based delivery modes
- Reduced congestion
- Increased speed of cargo delivery
- Limited weight of cargo
- Limited travel distance due to battery life

2. Technology & Infrastructure requirements

Drone technology is available today – challenge lies more in setting up the civil and systems infrastructure, e.g. Goods receiving stations, Distribution hubs, HD air route mapping, Airspace management system, Smart service depots, Parking infrastructure (stabling areas)

3. Regulatory requirements:

- High for traffic and safety/security control
- Authorised areas for drone usage
- Standardisation needed for drone design/speed as well as cargo types

4. Investment requirements:
- mainly covered by private companies

Tags

Future mobility **autonomous** **drones**

STEEP

- Technological

Links

TRENDS

3D Mobility

Ambulance Drones - Remote Healthcare 2.0

New Modes of Public Transport

Self-Driving Transport

Projects

RTA Future Scanning - Information & Trends

Rating criterion	04.06.2020
Importance	