AIRPORT ACCESS IDEAS FORUM

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Urban Turbine research project – taking on the future of airports

Urban Turbine aims to gradually develop principles of future airports evolving from the airport community in their search for new relationships with the city and in response to societal changes.

Many of the challenges are global and too big to be carried out by one single airport. The project suggests the set-up of a pool-funded research consortia, with an annual financial contribution from each participating airports. Each contribution would be in proportion to the airport's transport units, enabling a fair share for the participants to benefit from this work and allow airport to request particular research topics.

The research will focus on the following key aspects:

- Simplify the passenger process - abandon triple waiting, detach bags from passengers, enhance quality dwell times at the airport and in the city, retail as a joint business of the airport, airlines and the city;
- Movement to and from the airport - shared live-work-travel arrangements, swap car park revenues for alternative people-focused activities, contextualise driverless car operation to reduce congestion, empty journeys and non-productive time for people travelling to and working at the airport;
- Terminal to aircraft - faster boarding, new generation and electric aircraft and drones, driverless pods connecting to aircraft, robotized passenger stairs and remote bussing gates.

The research will be run by conducting several smaller studies over a period of two to three years.

"At the Airport Access Ideas Forum I would like to identify the technology available for different approach clusters and discuss the integration of airport processes with planning and transport management professionals at local municipalities. I would also like to contemplate the suburbia versus inner city application - how suitable is the business case of autonomous vehicles serving the wider community?"

Three key challenges for airports in preparing for autonomous vehicles and MaaS

Redefine the entire value chain of the airport model as revenues based on airport real estate is shifting towards mobility providers.

Automate the curb for driverless passenger drop-off and pick-up.

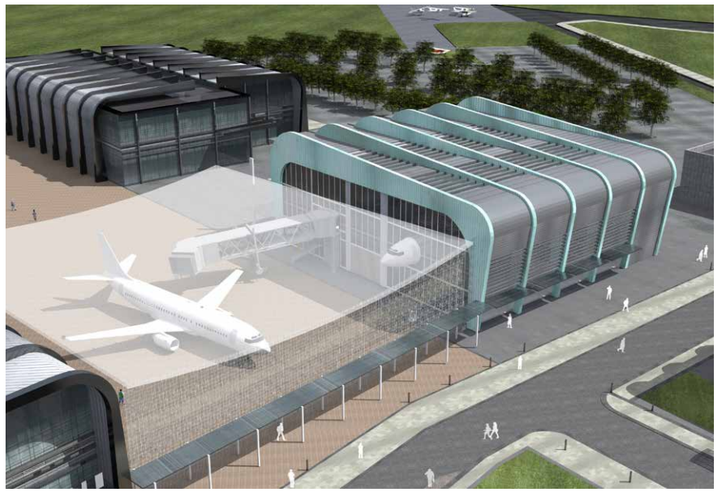
Manage the unthinkable: system failure, resilience.

Three key opportunities for airports having autonomous vehicles and MaaS

Remove passengers uncertainty approaching the terminal by technology based vehicle guidance.

Free land currently occupied by car parks for alternative, more profitable businesses.

Potentially better control over traffic jams on the path towards the airport.



The Global AirRail Alliance