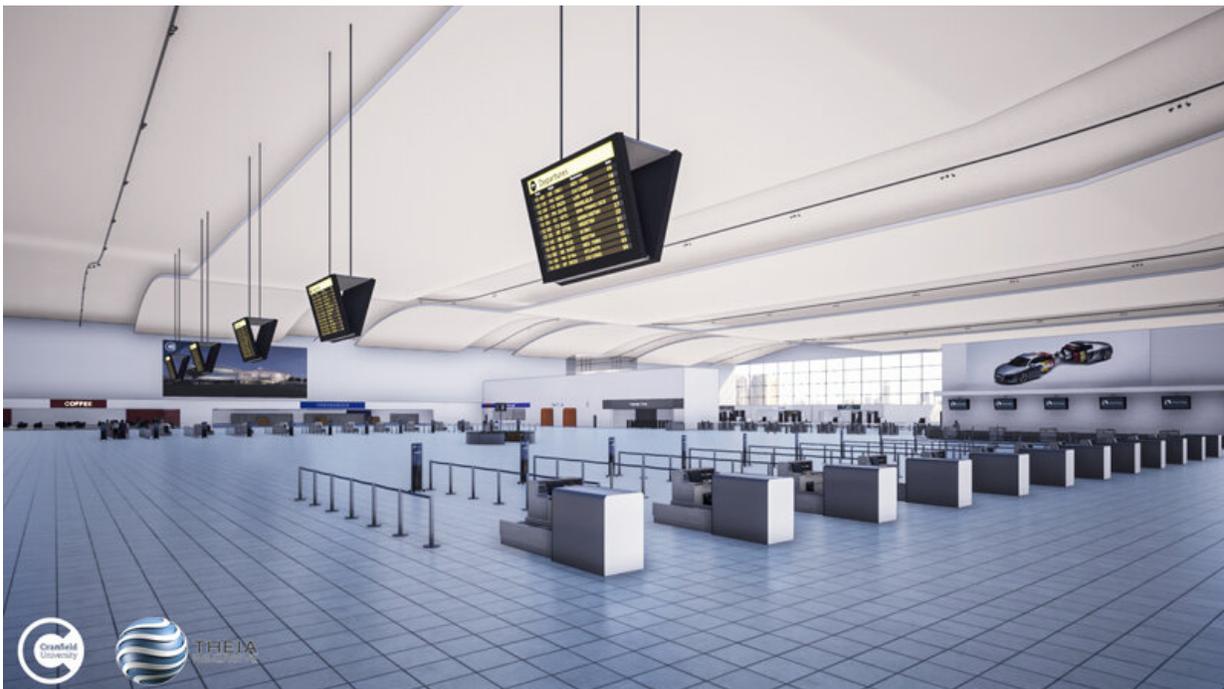


# Virtual airport to improve accessibility for passengers with additional mobility needs

September 26 2019



Credit: Cranfield University

Researchers at Cranfield University have created a virtual airport environment to study and improve the air travel experience for passengers with additional mobility needs.

The virtual [airport](#), one of the first of its kind, will be used to conduct research as part of the Passenger experience laboratory in the new £67

million Digital Aviation Research and Technology Centre (DARTeC), currently under construction at Cranfield.

One of the first uses of the environment will be to help improve wayfinding and navigation provision for passengers with additional mobility needs, including those with unseen disabilities.

Dr. Thomas Budd, Lecturer in Airport Planning and Management and Academic Lead of the Passenger experience laboratory, said: "For passengers with additional mobility needs, navigating a busy airport can be an especially tiring and stressful experience. Using [immersive technologies](#) in this way enables us to experiment with different designs and new technologies to improve the [passenger](#) experience in a way that is safe, time and cost efficient."

The 3-D [environment](#) can be configured to replicate different design layouts, [ambient conditions](#) and levels of activity within a bespoke or simulated real world airport.

Cranfield is working with Theia Immersive, a spin-out company from the Connected Places Catapult, which specialises in the use of immersive technology for designing inclusive and accessible spaces.

Michael Calver, Co-founder and CEO of Theia Immersive, said: "Immersive technology is set to help change the way in which spaces, places, products and services are designed, enabling designers to better consider the needs of each end user."

Dr. Budd and Mr Calver recently presented their project at IATA's Aviation XR Weekend in Crans-Montana, Switzerland.

**More information:** A mobile and web browser version of the virtual airport environment—showing a full range of airport spaces, features

and facilities—can be accessed [here](#).

Provided by Cranfield University

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