

PROJECT

AERFOR

Advanced Forecasting System for Proactive Airport Passenger Flow Management

Funding: European (Horizon 2020)

Duration: Nov 2016 - Jan 2019

Status: Complete

Total project cost: €2,090,000

EU contribution: €1,463,000



Call for proposal: H2020-SMEINST-2-2016-2017

[CORDIS RCN : 205015](#)

Objectives:

Amorph Systems has developed AMORPH.aero, a solution able to provide continuous, accurate, near-term forecasts of passenger flows. Unlike competitors using process flow-oriented models based on static mathematical values, the solution supports dynamic calculations based on the actual demand of passengers compared with the available resources. This is critical for airport operations to get always accurate information based on the current availability and schedule of staff and the results of operational actions regarding the passenger flow.

The business case developed for Frankfurt Airport showed that the solution can increase maximum passenger capacity by 15% and passenger average throughput by 10%, leading to a 28% reduction in infrastructure expansion costs. In addition, the solution showed it can decrease passenger processing time by up to 20%, thus increasing retail dwelling time, retail spending and passenger satisfaction. The accuracy of the prototype was verified at 90% for the nearest 2 hours, allowing operations management to avoid forecasted problems in time.

A phase 1 market feasibility study conducted in 2015 identified 3 airports that will deploy a large-scale trial of the solution (Stuttgart, Milan and Manchester) in phase 2. In addition, SITA, the leading airport IT system integrator, will integrate the solution into its business intelligence portal and manage one of the trials with the aim to become a distributor for the solution worldwide, supporting a revenue forecast of €9M by 2020, 3 years after market launch. The project has a duration of 24 months and a requested EC contribution of €1.5M

Parent Programmes:

[H2020-EU.3.4. - Horizon 2020: Smart, Green and Integrated Transport](#)

Institute type: Public institution

Institute name: European Commission

Funding type: Public (EU)

Lead Organisation:

Amorph Systems Gmbh

Address:

Handwerkstr. 29
70565 Stuttgart
Germany

EU Contribution: €1,463,000

Technologies:

Aircraft operations and safety
Future-proof airport

Development phase: Demonstration/prototyping/Pilot Production

STRIA Roadmaps: Network and traffic management systems

Transport mode: Air transport

Transport sectors: Passenger transport

Transport policies: Societal/Economic issues

Geo-spatial type: Infrastructure Node