

Passenger-centric planning and management of multimodal transport networks

Brussels, 25th November 2022

EUROCONTROL Headquarters, Rue de la Fusée 96
10:00 – 15:00 CET

Europe's long-term vision on aviation outlined in [ACARE's Flightpath 2050 report](#) and the most recent [Fly the Green Deal document](#) envisage a future in which air transport becomes an integrated part of a multimodal, passenger-centric transport system that takes travellers from their origin to their destination in a seamless, efficient, predictable, environmentally friendly and resilient manner. Under this vision, the airport of the future is expected to become a multimodal connection platform, creating the conditions for travellers to reach their destination by the most efficient and sustainable combination of modes and allowing the airport and its surrounding region to make a better use of their resources.

Coordinated planning and collaborative decision-making between air transport and other transport modes are key enablers of this vision. For the past two years, two SESAR Exploratory Research projects, [TRANSIT](#) and [IMHOTEP](#), have investigated the potential of multimodal coordination mechanisms based on information sharing and common situational awareness across transport modes to increase the efficiency and resilience of the transport network. TRANSIT has developed a set of multimodal key performance indicators, data analysis methods and simulation tools that enable the evaluation of new multimodal transport solutions on the door-to-door passenger journey; this framework has been used to assess different multimodal solutions that range from strategic planning (e.g., air-rail schedule synchronisation) through tactical management of operations (e.g., disruption management). IMHOTEP has proposed a concept of operations for information sharing, common situational awareness and collaborative decision-making between airports and ground transport stakeholders, and has prototyped a set of decision support tools that enable the proposed concept; the new tools have been tested by applying them to the management of different types of disruptions at the Palma de Mallorca and London City airports.

The TRANSIT-IMHOTEP Final Dissemination Event will take place at EUROCONTROL Headquarters in Brussels, on Friday 25 November 2022 from 10.00 to 15.00. The event will include several technical sessions aimed at presenting the main results from both projects and clarify questions from the audience. The day will conclude with a round table where panelists will reflect on the contents of the technical sessions and will discuss with the audience the main research challenges and opportunities related to airport intermodality in Europe.

➤ Register: bit.ly/transit-imhotep-event

Registration is free of charge. Places are limited and will be assigned in order of registration.

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Programme

9.30 - 10.00

Registration

10.00 - 10.30

Welcome and introduction to the day

Ricardo Herranz (Nommon, TRANSIT and IMHOTEP Project Coordinator)

10.30 - 11.15

Characterising long-distance multimodal travel

- A proposal for a multimodal performance framework
- New big data sources and measurement mechanisms for the analysis of multimodal travel

Javier Burrieza (Nommon)

11.15 - 12.15

Modelling and evaluating multimodal solutions

- The TRANSIT simulation framework
- Application to the evaluation of two intermodal solutions: strategic timetable synchronisation and tactical disruption management

Clarissa Livingston (ETH), Jerónimo Bueno (Nommon), Clara Buire (ENAC)

Lunch break

13.15 - 14.15

Towards common situational awareness and collaborative decision-making across transport modes

- The IMHOTEP ConOps for the extension of A-CDM to ground transport modes
- Case studies: application to Palma de Mallorca and London City airports

Edgar Jiménez/Henrik Rothe (Cranfield University), Juan Blasco (Nommon), Marcel Sala (Aimsun), Miguel Mújica (Amsterdam University of Applied Sciences)

14.15 - 15.00

Round table: The role of airports in the future European multimodal transport system: research challenges and opportunities

Chair: Ricardo Herranz (Nommon, TRANSIT and IMHOTEP Project Coordinator)

Panel: Markus Brachner (SINTEF), Sergi Alegre (Airport Regions Council), Luis Willumsen (Nommon), Elke Bossaert (Brussels Airport).

TRANSIT Consortium

NOMMON

ETH zürich



IMHOTEP Consortium

NOMMON



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