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Aviation in Europe – Innovating for Growth

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L O N D O N



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# ModAir

*Intermodal Airport*

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# Presentation

20-month FP7 Support Action (Sept. 2012 – April 2014)

6 partners (coordinator: Airbus Group Innovations)

800 k€ budget

The logo consists of the word "AIRBUS" in a bold, blue, uppercase, sans-serif font, with the word "GROUP" in a smaller, blue, uppercase, sans-serif font directly below it.The logo features the text "AD CUENTA B.V." in a blue, uppercase, serif font. Below it, in a smaller, blue, uppercase, sans-serif font, is the text "BELEIDS ADVIESBUREAU / CONSULTANTS".The logo features the letters "EIA" in a large, blue, stylized font. Above the "I" is a small yellow circle with a dotted pattern. To the right of "EIA" is the text "EUROPEAN INTERMODAL ASSOCIATION" in a blue, uppercase, sans-serif font.The logo features a stylized blue graphic of a leaf or wing with a small orange star-like shape at its tip. Below the graphic is the text "AÉROPORTS DE PARIS" in a blue, uppercase, sans-serif font.The logo features a stylized blue graphic of a sunburst or fan shape. To the right of the graphic is the text "FUNDACIÓN DE LOS FERROCARRILES ESPAÑOLES" in a blue, uppercase, sans-serif font.The logo features the letters "ALG" in a large, bold, black, uppercase, sans-serif font. To the right of "ALG" is the text "TRANSPORTATION INFRASTRUCTURE & LOGISTICS" in a smaller, black, uppercase, sans-serif font.

# Objectives

ModAir aimed at providing:

- A **clear view** of the current state of intermodality and co-modality in the European airports
- A **roadmap** for future research
- A **structured group of experts** able to help choose the best ways of implementing the connectivity of airports with other transport modes.



# Passenger requirements

- Survey the **existing research studies** and other passenger information sources
- **Analyse and evaluate** the methods and variables used
- Assess **new relevant variables** through the benchmark and analysis of an advisory group
- Develop a **descriptive framework** of the most relevant variables concerning co-modal passenger requirements

# Co-modal mapping of airports

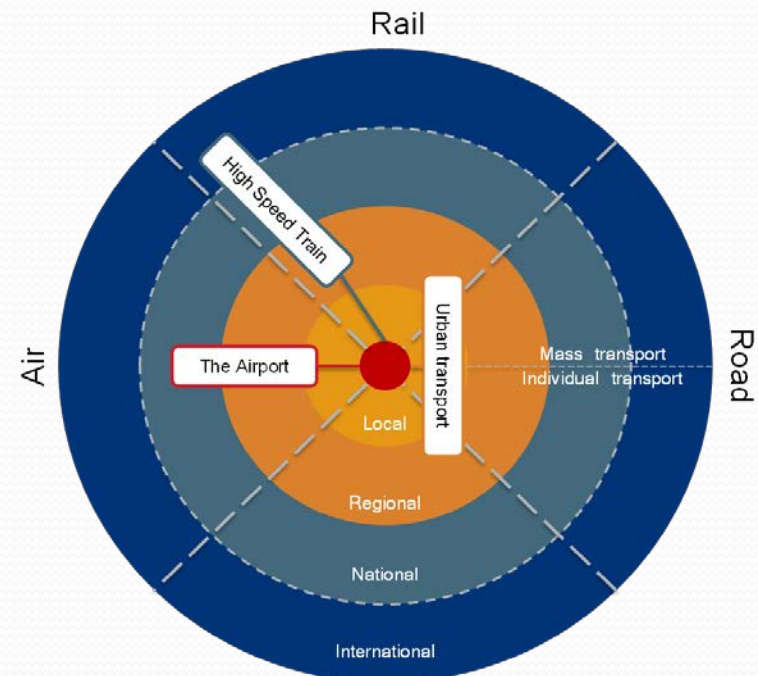


- **Inventory of high speed train** connections and transfer points
- **Inventory of European airports** and their current and planned interconnectivity
- **Workshop** to validate the results and formulate requirements for the identification of R&D needs



# Framework design

- **Methodology** for the case of long distance **high speed trains**
- Inter-platform **definition**
- Institutional and stakeholder **communication**



# Identification of R&D needs



- Single reservation and ticketing
- Luggage transfer
- Consequences on information and communication technologies



# ModAir results: airport connectivity in the EU



- Ground transport direct connections at 543 airports:

Car	Taxi	Bus	Local/ regional rail	Long distance rail
100%	97%	70%	10%	2%
543	525	379	56	11

In addition:

- 17 airports including Brandenburg are planning to have direct metro/ light rail/tram connections

# ModAir results: Critical factors of air/high-speed rail intermodality



Critical factor	Description “Air-rail intermodality is more likely to succeed..”
Infrastructure integration	At airports which have or plan to have railway stations
	At airports where spatial or project design constraints allow for good infrastructure integration, making the transfer between rail station and terminal as short, easy and comfortable as possible for the passenger
Network context	Where there are direct rail connection opportunities (sizeable urban agglomerations) within 3 hours travel time
	Preferably where rail infrastructure is mostly in place, with available train slots
	At airports which offer varied and frequent long-haul flights
	At airports with high passenger volumes to justify rail integration investment
Overall travel time and transfer time	On routes where it is possible to offer overall travel times which are competitive with air-air products
	Where operators agree to coordinate schedules to offer short waiting times at the intermodal transfer
Integrated ticketing	Where operators agree to offer integrated booking and purchase of intermodal tickets – one ticket for the entire intermodal journey
Information	Where operators agree to market their intermodal products adequately and to exchange information for their set up and operation

# ModAir results: Relating critical factors of air/high-speed rail intermodality with actors



Actors	Critical factors				
	Infrastructure integration	Network context	Overall travel time, transfer time	Integrated ticketing	Information
Airlines	•	•••	•••	•••	•••
Airport managers	•••	•••	••	•	••
Rail infrastructure operators	•••	•••	••	•	••
Rail operators	•	•••	•••	•••	•••
City managers	•••	•	•	•	•
Higher level policy makers	•••	•••	•	•	•

••• Strong relation

•• Average relation

• Weak relation