Ride2Rail

JOINING TOGETHER THE FORCES OF RIDE-SHARING AND PUBLIC TRANSPORT

BUDGET
€3 MILLION

DURATION
41 MONTHS
December 2019 – April 2023

COORDINATOR
UITP
the International Association of Public Transport

The RIDE2RAIL project aimed to develop and test solutions and tools enabling passengers to compare and choose between multiple transport options and services, that way making ride-sharing a (more) attractive way to move passengers, becoming a feeder for public transport.

ADVANCING INTELLIGENT MOBILITY SOLUTIONS

RIDE2RAIL's main objective was to further enhance the Travel Companion, a travel application developed by the Shift2Rail Joint Undertaking under its Innovation Programme 4, dedicated to addressing and designing innovative IT solutions for attractive railway services. Besides testing already available technologies such as navigation, journey planner, trip tracking and group traveling, RIDE2RAIL also developed new functionalities:

> **Driver Companion:** an application enabling car drivers to share their rides with other passengers, a major project result.

> **Crowd based Travel Service Provider:** a system that publishes available shared rides, and that allows a driver to make visible on the Travel Companion the available seats in his/her car.

> **Offer Categoriser:** a tool that allows to give a 'score' to the travel options, based on different categories such as speed, reliability, pricing, making it easier for passengers to make a choice.

> **Offer Matcher & Ranker + Incentive Provider:** through a machine learning mechanism, this functionality learns the passengers' travel preferences (in terms of number of changes, overall travel time, etc.) and ranks options accordingly when searching for a travel solution on the Travel Companion. This allows users to receive offers classified accordingly to their own preferences

> **Agreement Ledger:** a tool that allows the secure storing of travel related records using blockchain to ensure transparency and trust of operations.

While mass public transport is the backbone of mobility systems in our cities, combined mobility is an unmissable tool in providing the flexibility people are looking for in public transport. The RIDE2RAIL project capatalised on this complementarity between the different modes of transport and provided an even more accessible and flexible mobility from door to door.

Giuseppe Rizzi, UITP, Project Coordinator

TESTING IN FOUR EU SITES

The Driver Companion and Travel Companion apps were tested in four locations in Europe: **Athens**, **Helsinki**, **Brno**, and **Padua**. Transport service providers in these sites were integrated into the Shift2Rail ecosystem.

HELSINKI FINLAND

The Helsinki demo consisted of two parts.

1. Testing an automated robobus as last-mile journey, integrated into the HSL (Helsinki Regional Transport Authority) travel planning application.

> **Outcomes:** The 1,112 passengers were mostly satisfied with the service, and hoped to see the bus become a permanent service in the area

2. Testing the Driver Companion and the Travel Companion apps.

> **Outcomes:** The 30 testers found the apps interesting, in particular because ridesharing could reduce the number of vehicles in the streets, allowing better connections with low-demand areas not well-served by public transport.

ATHENS GREECE

The Athens demo focused on improving the connection of the low-density Attica Region areas with public transport modes – particularly metro - through the provision of demand responsive ridesharing services.

The demo focused on the 20km air-rail corridor Airport - Doukissis Plakentias. Target users were solo parkers at Park & Ride Plakentias and Koropi Stations.

> **Outcomes:** Approximately 30 participants. Users mentioned they would be happy to use and support a well-functioning ridesharing app in combination with public transport.

PADUA ITALY

The demo focused on commuters and students in the Padua province travelling to and from the University of Ca' Foscari.

> **Outcomes:** Users very much appreciated the application, as it improved the urban-rural connections and reduced emissions. The functionality "travellers' feedback" was particularly appreciated as it allowed to inform other travellers about the status of the trip, increasing the user experience.

BRNO CZECH REPUBLIC

This demo focused on commuters travelling from the Znojmo district to the city of Brno, with the main aim of encouraging solo car drivers to share the unused capacity of their cars with other travellers.

> **Outcomes:** The main findings from the 60 testers were that that apps are user-friendly, there is integration of all transport modes into a single travel solution and there is also the opportunity for sharing rides and saving costs.

CONCLUSIONS

> **In total, over 2,000 trips were organised during the RIDE2RAIL demos, including 170 trips completed as multi-occupancy vehicle trips.**

> **Usability of the applications was rated by demo participants using the standardised System Usability Scale. The Driver companion scored 58% and the Travel Companion 57%, both of which suggest good usability for a demonstration application.**

> **The survey held among participants showed that quick, reliable and cheap journeys were most important to them.**

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