PROJECT

**WISETRIP**

**Wide Scale Network of E-systems for Multimodal Journey Planning and Delivery of Trip Intelligent Personalised Data**

**Funding:** European (7th RTD Framework Programme)

**Duration:** Feb 2008 - Nov 2010

**Status:** Complete with results

**Total project cost:** €2,128,917

**EU contribution:** €1,436,216

**Call for proposal:** FP7-TPT-2007-RTD-1

**CORDIS RCN:** 89641

**Background & policy context:**

Mobility and demand trends of tourism, travel and citizen transport need data from various transportation actors for information and route guidance. Getting the right information is complex and must consider all alternatives and special factors like time and cost related user preferences, number of hops, and other. Moreover, information about dynamic conditions (delays, traffic, weather) that affect the trip are also necessary for the user on time.

Existing systems provide such services at a single transport level, but the combination of multi-level (urban and interurban) information at wider scale and the delivery of dynamic personalized data has not been addressed. Complexity arises when either city/nation or transport network system boundaries have to be crossed, to form a path that includes destinations, intermediaries, transit points, types of moves and changes of transport mode. This project aims to co-ordinate systems which provide journey planner services to cooperate and form complex answers, produce real-time personalized information and deliver it at crucial points during the trip. The project will: -Design/implement a network of interconnected Journey Planner systems to combine urban and Long-Distance Transport information services.

- Define a uniform information delivery service with personalised features via multiple devices for information push and pull. Personalisation will be achieved with rule-based processing of the data based on a trip cycle model and personal editable preferences.

- Combine information delivery with transactioning for personalized needs including booking & payment, definition of alert rules and profiles for automated suggestions on selected trips and frequent traveller profiles.

- Demonstrate the service. A demonstrator is envisaged to cover at least three countries.

**Objectives:**

The overall objective of the project is to develop and validate an innovative mobility service platform, which provides and personalises multi-modal travel information sourced from connected variant journey planners and is accessible by travellers through various mobile or fixed devices before and during the journey.

**Related Projects:**

ENHANCED WISETRIP

**Parent Programmes:**

FP7-TRANSPORT - Transport (Including Aeronautics) - Horizontal activities for implementation of the
**transport programme (TPT)**

**Institute type:** Public institution  
**Institute name:** The European Commission  
**Funding type:** Public (EU)

### Lead Organisation:

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### Partner Organisations:

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<tr>
<td>Memex S.r.l.</td>
<td>Via Cairoli 30, 57123 Livorno, Italy</td>
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**Organisation Website: [http://www.grupoetra.com](http://www.grupoetra.com)**
Technologies:

- Information systems
- Sustainable urban mobility planning

Development phase: Validation

Key Results:

An international multimodal door to door journey planner was successfully developed and deployed. The performance of the system was assessed in three ways:

- Technical assessment aiming at verifying the integrity and reliability of the functions and services of the system
- User acceptance assessment aiming at exploring system performance from users' perspective
- Willingness to pay assessment for specifying the users' willingness to use the system under various levels of charges

The technical assessment of the system functionalities verified the integrity, stability and computational time efficiency of the functions comprising the WISETRIP system. Technical reliability of system functions was validated with the use of hypothesis testing wherever appropriate. The technical assessment of the system services was done in a similar way.

User acceptance assessment was done in two stages, a pre-demo phase and a demonstration phase. Both assessments showed that the system was found to be user friendly and would help reduce the time and cognitive effort requirements for journey planning, in addition to reducing traveller uncertainty during the journey.

A stated choice model was developed and calibrated to assess users' willingness to pay. It was found that a substantial percentage of potential end-users would be willing to use the system services for a small fee (€0.80). The common parameters affecting the choice probabilities are cost, travel frequency and availability and quality of real time information.

Innovation aspects

The current commercial systems available provide transport planning services adequately within a city or at a regional level, but the combination of multi-source and multi-level information (urban level and long distance level) at a wider scale and the formation of dynamic personalised information delivery during the whole trip process (pre-trip and on-trip) was never addressed.

The main innovation in WISETRIP is to combine existing independent systems for journey planning to create a 'global' journey planner system that provides and personalises multi-modal travel information and is accessible by travellers at any place and time through various mobile and fixed terminals/devices before and during the journey.

Technical Implications
From a technical point of view the WISETRIP system constitutes a platform of various interconnected Internet-based journey planners. For any trip request, WISETRIP communicates with the relevant journey planners getting itineraries for specific segments which at a second stage are combined in order to produce feasible solutions. WISETRIP is also provided with real time travel information received by external information sources or the participating journey planners. The system offers to the user personalised journey planning services and real time travel alerts in any phase of his/her journey. Two WISETRIP applications have been developed: i) a desktop application offered to the user through the internet, and ii) a mobile application accessible from the mobile phone of the end-user.

Twelve technical reliability indicators were defined to assess the various system services:

- Reliability of urban trip planning
- Reliability of interurban trip planning
- Reliability of interurban trip re-planning
- Reliability of international trip planning
- Reliability of international trip re-planning (automatic)
- Reliability of alerting for any trip segment disruption
- Reliability of alerting for any trip segment cancellation
- Reliability of travel reminders on selected itineraries
- Reliability of information updates for selected trips
- Response time for international trip planning
- Response time for international trip re-planning
- Alert processing time

The reliability indicators that could be assessed in the first version of WISETRIP were assessed positively. Success rates were higher than 98% and response times were at an acceptable level.

**Strategy targets**

- Innovating for the future: deployment of a smart mobility system for multimodal transport management

**Readiness**

A version of WISETRIP is online now at [www.wisetrip.travel](http://www.wisetrip.travel)

Officially it is still in pilot operation and undergoing tests and evaluation. A follow-up project is planned to develop a new version.

Documents:
- WISETRIP - D7.2 Dissemination report (Other project deliverable)

**STRIA Roadmaps:** Network and traffic management systems, Smart mobility and services

**Transport mode:** Multimodal transport

**Transport sectors:** Passenger transport

**Transport policies:** Digitalisation, Decarbonisation, Societal/Economic issues

**Geo-spatial type:** Other