

# IC-IC: Enhancing interconnectivity through info-connectivity



Enhancing interconnectivity of short and long distance transport networks through passenger focused interlinked information-connectivity.

Project 266250. Duration: 2011–2014. Coordinator: Star Engineering GmbH

## Background

If you arrive by air in Europe, information is provided in the local language and - usually - also in English. Our information systems are hostile to visitors who do not speak these two languages. Can Europe afford to disregard all possible visitors (many of them potential tourists) who neither speak English nor the local language?

The aging population is steadily growing. Should older people just not travel, because information and its conveying media is not adequate for their special needs?

A traveller who needs to transverse from one transport system to another is expected to adjust to infrastructures determined by technological principles at interfaces at given borderlines where he/she enters a new world in which other rules and conventions apply. A traveller has no chance to get information beforehand - if we exclude finding it on the Internet, without it you have difficulties, and even if you have it - or parts of it - prior to departure, you might get lost.

The effectiveness of public transport often depends on changing between different modes/lines of transport in time. This is even more critical when it comes to transferring from long to short-distance transport networks and vice versa. If "interconnectivity/intermodality" between transport networks is to be enhanced, measures of improving "InfoConnectivity" between transport networks and their customers are indispensable.

## Objectives

Highest possible effects in improving passenger transfers may be expected by introducing the concept of "InfoConnectivity" between transport networks, considering problems encountered by old age pas-

sengers, by visitors unfamiliar with local conventions and by travellers who neither understand the local language nor English, which usually is provided, at least in air terminals.

Designing information (systems) for people on the move, able to access information at the time, place and in the situation where it is needed (the concept of InfoConnectivity) is a design challenge worth taking on. By providing currently missing information, which travellers wish to have on facilities and services of their next immediate step of the journey, it is expected to improve the travelling experience and ease of change between transport modes. Much of such information can be provided while being idle, e.g. while waiting in the airport train/bus, the lounge, the airplane, utilizing e.g. camera mobile phones to connect to information provided by QR (Quick Response) codes, and smart phones fitted with NFC (Near Field Communication) able to connect to respective tags.

## Description of Work

As the basis for further development, a GfK study is carried out in Poland, Russia and Spain, establishing information requirements of air travellers coming to or travelling within Europe. This is accompanied by a survey on literature and standards, and interviews with stakeholders of the airport regions of Amsterdam, Frankfurt, Paris and Vienna. In the following step, considering the airport regions, hypothetical "journeys" of "personas" (hypothetical passengers bearing the qualities and features of travellers most in need of InfoConnectivity) are created as the frame of reference for work to come. Then, on site investigations at the airport regions provide insights on the quality of information provided to travellers. A special suit simulating old age is additionally used

to gain knowledge on the age-friendliness of services and infrastructure.

Accumulating previous work, InfoConnectivity model applications are planned, relating to the airport regions, to showcase the use of the "ICS" (InfoConnectivitySystem), which is geared to bring the concept of InfoConnectivity to life.

## Expected results

- Identification of current practice in passenger focused information in interconnections between short- and long-distance transport networks
- Suggestions of innovative passenger focused information supply
- Suggestions of mobility enhancing concepts of interaction between transport networks and their passengers in zones of intertwined information
- Model applications to show how InfoConnectivity (intertwined information, designed for all in a multitude of languages) and the "ICS" (InfoConnectivitySystem) could work
- InfoConnectivity guidelines for optimization of existing interfaces between transport networks and passenger target groups addressing design, planning and deployment aspects

Beyond this project, it is proposed to establish InfoConnectivity in all European airport regions via the ICS as a platform for continuous development of traveller friendly information environments. Doing so, it is expected to have a positive impact on numbers of tourists revisiting Europe, and improve the use of public transport for all. This should lead to higher numbers of passengers choosing public transport, leading to a cut in emissions generated by private cars.

## Project stakeholders

### Umbrella organisations

ARC.....Airport Regions Conference  
ACI.....Airports Council International  
EDF.....European Disability Forum  
ETC.....European Travel Commission  
UITP.....International Association of  
Public Transport

### Airports

Airport Vienna plc..... AT  
ADP (Aéroports de Paris).....FR  
Amsterdam Schiphol Airport (ASA)..... NL  
Frankfurt Airport.....DE

### Surface and air transport

Verkehrsverbund Ost-Region (VOR)..... AT  
ÖBB-Personenverkehr AG..... AT  
RATP..... FR  
Keolis Group..... FR  
Veolia Transport..... FR  
SNCF..... FR  
Rhein-Main-Verkehrsverbund (RMV)..... DE  
Deutsche Bahn (DB)..... DE  
NS: Nederlandse Spoorwegen N.V..... NL  
Austrian Airlines..... AT  
Air France..... FR  
KLM Royal Dutch Airlines (KLM)..... NL  
Deutsche Lufthansa AG..... DE  
Airbus S.A.S..... FR

## Project Partners

Star Engineering GmbH (Coordinator)..... DE  
Attoma sarl..... FR  
Ecole Nationale des Arts Décoratifs..... FR  
Espí Designers B.V..... NL  
FH JOANNEUM University of  
Applied Sciences..... AT  
Fluidtime Data Services GmbH..... AT  
Fuenwerken Design AG..... DE  
Hochschule der Medien..... DE  
Hogeschool voor de Kunsten Utrecht..... NL  
IIID - International Institute for Information  
Design..... AT  
IN2 search interfaces development Ltd..... UK

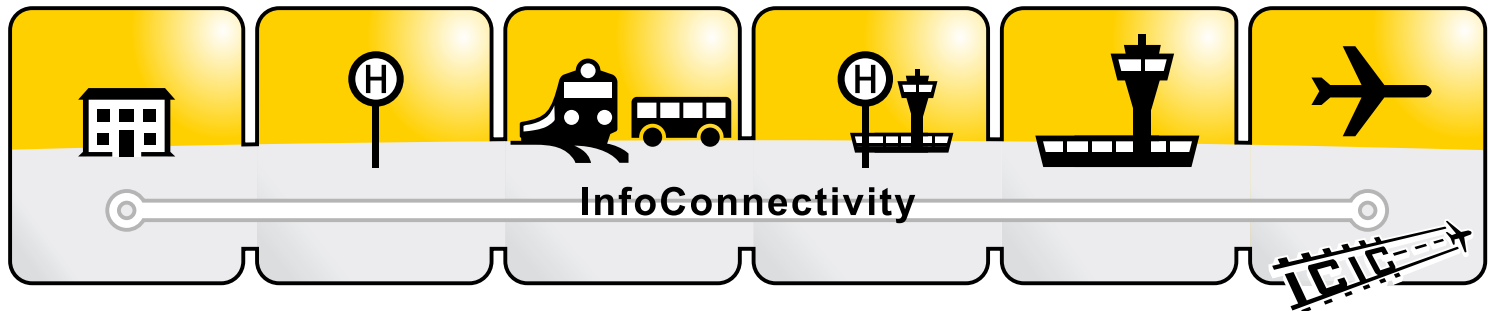
## Further information

Internet: <http://www.ic-ic.eu>  
Twitter: @ICICfp7  
Facebook: ICICfp7

## Contact (Project Coordinator)

Ms Nuray Kous-Giousouf  
Star Engineering GmbH  
Otto-Lilienthal-Straße 5  
Böblingen, 71034 Germany

[Nuray.Kous-Giousouf@star-cooperation.com](mailto:Nuray.Kous-Giousouf@star-cooperation.com)



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