awiloc®
CONVENIENT AND
ECO-FRIENDLY TRAVEL

In promoting mobility, it is crucial to take account of people's needs and preferences. No matter how efficient a given concept, system or vehicle may be – ultimately, it is up to each individual to decide which means of transportation they want to use. For instance, a person who sets out on a journey by car will typically prefer to arrive at their destination in that vehicle; they will not be prepared to switch to another along the way unless transfers are made attractive and convenient to them. This includes allowing them to quickly find a good parking spot at a rail or subway station as well as the right train.

Pervasive personal navigation using awiloc® can facilitate the use of all transportation modes. Once all options are straightforward to use and combine, travel can become more efficient and flexible as well as safer and greener. Intermodal journey-planning incorporates all available means of private and public transportation, ranging from automobile to rail and subway. Thanks to seamless personal navigation covering all modes of transportation, including rail and subway stations, travelers can easily locate a particular stop or platform and even the right train car and seat. Examples are:

NADINE: Door-to-Door Personal Navigation for Public Transit Users

There are a multitude of systems that provide information about transit schedules and stops. Some of them use dynamic real-time information while others involve pre-installed static databases. However, there is as yet no all-in-one application capable of integrating all data and services.

Fraunhofer Institute for Integrated Circuits IIS
Communication Networks Department

Nordostpark 93
90411 Nürnberg

Dipl.-Ing. (FH) Dipl.-Wirt.Ing. (FH) Karin Loidl
+49 (0) 911/58061-9413
awiloc-info@iis.fraunhofer.de

www.awiloc.com

Intermodal Mobility with awiloc®: pervasive personal navigation using awiloc® can facilitate the use of all transportation modes.

Therefore NADINE has the mission to implement a fare-aware, door-to-door personal navigation solution for transit users which can be adapted for other regions and contexts. Thanks to integration with other applications, users will be able to access a completely personalized solution on their mobile device that will handle everything from wayfinding to ticket purchasing.

Innovation: An open, modular service architecture uniquely provides existing applications such as city information systems with transparent access to a new, easy-to-use pervasive personal navigation solution. This will include a fare-aware journey-planning and wayfinding application with mobile ticketing functionality. Route suggestions will take account of the validity of mobile tickets already purchased and, if necessary, be coupled with a recommendation that these be renewed or added to.

Project partners are transit provider Verkehrs-Aktiengesellschaft Nürnberg (VAG), Fraunhofer Institute for Integrated Circuits IIS, HanseCom GmbH, Hamburg, Fraunhofer Institute for Transportation and Infrastructure Systems IVI, University of Regensburg (UNIR) and transit provider Erfurter Verkehrsbetriebe AG (EVAG).

DIMIS: Pervasive Intermodal Mobility Information System

For public transit users, even a slight error or uncertainty can mean arriving late at their destination. For example, failing to find the right platform or stop in time may result in the inconvenience of a missed connection. It is therefore unsurprising that people's willingness to use public transit has not significantly improved over the past few years. Mission of DIMIS is to use information, awiloc® positioning and wayfinding services to provide transit users with needed information, e.g. when switching from road to rail or vice versa.

Innovation of DIMIS is the deep integration of multiple transportation modes with mobility applications for personalized use. User preferences and activities will be incorporated into journey planning using an activity planner.

Project partners are Deutsche Bahn AG (consortium leader), Fraunhofer Institute for Integrated Circuits IIS, HaCon GmbH, InnoZ GmbH and the associated partners regional transit associations Rhein-Main-Verkehrsverbund (RMV) and Verkehrsverbund Berlin-Brandenburg (VBB).