Optimised Co-modal Passenger Transport for Reducing Carbon Emissions

Welcome to the COMPASS project, co-funded by the European Commission within the Seventh Framework Programme. The project started on 1st November 2011 and will run for 25 months. The project consortium comprises nine partners from six European countries.

Project Overview

The research to be undertaken in the COMPASS project will recommend solutions that will allow improvements to the planning and operation of the passenger transport network to enhance co-modality in transport thus contributing to the reduction of carbon emissions.

COMPASS aims to provide an overall picture of what travellers require from the transport system at the present time and what they will require in the future based on an investigation of key socio-economic trends. COMPASS will analyse how solutions based on ICT (information and computer technology) and ITS (intelligent transport systems) applications can meet the future demands identified, in particular to provide for the integration of multi-modal and co-modal transport solutions, and will then assess how these solutions can contribute to the de-carbonisation of transport activities.

In COMPASS co-modality is defined as "using the transport system so that a particular mode is used when it is the most appropriate one for a particular journey; this can involve multi-modal trips, but may also involve single-mode trips". Solutions for optimised co-modality will be identified and assessed, so that policy recommendations can be made.

February 2012 Update

The COMPASS project officially launched on 1st November 2011. Project partners started working on the early tasks in the project, with the first overview of ICT solutions identified.

The first consortium meeting for COMPASS was held in Edinburgh on 23rd to 25th November 2011. Representatives from each of the nine project partners, as well as the EC Project Officer and the coordinator of sister-project OPTIMISM, met to discuss plans to carry out all tasks in the project.

The project website at www.fp7-compass.eu was established and went live in December 2011.

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Project Approach and Objectives

COMPASS will look at the existing information available on passenger journeys in Europe, drawing extensively on work that has been undertaken in previous European-funded projects. Existing sources of information and data will be used to identify and describe the key trends in mobility patterns in the 21st century, based on current and future passenger needs. Existing sources of travel survey data will be exhaustively researched, with a particular focus on the role of ICT in data collection and management, and recommendations will be made on improving data collection in passenger transport so that future traveller needs can be better identified.

COMPASS will then identify ICT and ITS-based solutions that have the potential to improve co-modality in passenger transport and these potential solutions will be assessed through a number of case studies. This assessment will be based on a framework that emphasises the contribution of each solution to reduced carbon emissions. There will also be an investigation into how best to present solutions for improved co-modality to those stakeholders in transport operations and planning who will be responsible for their implementation, to ensure the best possible take-up of recommended solutions.

Finally COMPASS will derive conclusions and recommendations for national and EU transport policy and actions, and will disseminate the findings widely amongst policy makers and other stakeholders.

The main outputs of COMPASS will be the Handbook of ICT solutions for improving co-modality in passenger transport (D5.1, October 2013) and An assessment of the potential impact of ICT solutions on a co-modal transport system (D6.1, October 2013).

The key objectives of the COMPASS project are to:
- identify key trends (demographic, societal, economical, policy) that will affect mobility now and in the future and thus to identify the mobility needs of current and future travellers;
- identify the potential role of ICT in promoting co-modality and data collection;
- identify the information that would be needed from data (travel statistics and survey results) in order to properly understand mobility, to optimise a future co-modal transport system and to assess the impact of new solutions;
- analyse existing surveys to assess what data is available concerning long-distance, rural and urban travel;
- identify solutions to improve behavioural data availability (from ICT or elsewhere) and opportunities for harmonisation of the data collected, in particular in the various national surveys (this also includes new definitions of accessibility indicators);
- identify and investigate ICT and ITS solutions to influence mobility patterns for long-distance, rural and urban travel towards increased co-modality;
- develop business models that enable and promote these solutions in practice;
- assess the potential impact of the solutions identified both on local and on European level, in particular with regard to carbon emissions;
- develop general conclusions and provide recommendations for national and EU transport policy and actions.

Project Consortium

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