User centered design
The PEACOX system design will focus on the user and his needs. The aim is to enable users to make all necessary decisions without any prior knowledge or experience. This will be reflected in the research of user requirements, the creation of personas, use cases, scenarios and usability tests.

Expected results
• Integrated system that supports end-users in engaging in sustainable travel behaviour. The system provides all information needed to achieve eco-friendly behaviour and attitude change.
• An automated model for analysing and predicting movement patterns, transportation means and trip purposes by use of available location and spatial (e.g. GPS) data.
• An advanced model for the prediction of carbon emission and exposure levels and exposures of routes, also taking into account dynamic data like traffic situation, weather, etc.
• Innovative persuasive strategies and interfaces targeted to the needs of ecological trip planning and selection.
• Guidelines for the implementation of persuasive strategies targeting behaviour change and sustainable travelling.

Project Partner
• CURE - Center for Usability Research and Engineering (A)
• FLUIDTIME Data Services GmbH (A)
• TMX - Telematix Software a.s. (CZ)
• ETHZ – Swiss Federal Institute of Technology Zurich (CH)
• TCD – Trinity College Dublin (IRL)
• ICCS – National Technical University of Athens (G)
• ITS- ITS Vienna Region (A)
• TOMTOM INTERNATIONAL BV (NL)

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What is Project PEACOX?

PEACOX - Persuasive Advisor for CO2-reducing cross-model trip planning - is an international collaboration between eight organizations from six different countries aiming to provide travellers with personalised multi-modal navigation tools that allow, help and persuade them to travel and drive ecological friendlier. PEACOX enriches navigation systems with innovative approaches and features. PEACOX develops an environmentally-friendly smart phone application that focuses on minimizing energy consumption and pollutant emissions. The project is supported by the EU under Framework Programme 7.

Why is it important to promote eco-friendly travel behaviour?

In our highly globalised world work and leisure life are often geographically widely distributed. Increasing mobility and traffic results in a strong environmental impact, in particular in urban areas. Personal transportation is one of the greatest contributors of CO2 emissions. More people are becoming increasingly concerned with rising fuel costs and pollutant emissions. Strategies are urgently needed to promote environmentally friendly transport behaviour.

PEACOX offers

- Mobile smart phone application
- Eco-friendly route planning and navigation
- Eco-friendly travel suggestions with comfort
- CO2 feedback for selected routes and means
- Detection of individual travel patterns
- Personalised and green travel suggestions
- Real time traffic information service (e.g. weather, traffic situation)

User Stories

Emily: “With PEACOX I can rediscover the city by bike.”

“It was a sunny day and I was riding my bike to University. After the lecture I decided to visit a friend, who recently moved to a new flat. Although I know the city well, I don’t always know the best or most comfortable route for bicycles, especially if it’s a place I haven’t been to before. Recently I downloaded the PEACOX app onto my smartphone, because it nicely integrates trip planning for bikes and public transport. I tried PEACOX to see if there was an alternative route to my friend. PEACOX suggested a very nice route I have never taken before!”

Michael: “I use P+R in combination with PEACOX more frequently!”

- “I was on the way to work, when I was stuck again in heavy traffic. I started the PEACOX app which offers turn-by-turn navigation and live traffic data. I was thinking it would guide me around the traffic jams but suddenly it pointed out a P+R facility a few blocks down the road. PEACOX estimated that switching to subway there would save me at least 15 minutes. I never tried P+R before, but was intrigued to do so, considering the time savings. Once at the P+R PEACOX told me which train to take to my company’s headquarter. At the end of the day, I took the same connection back to the P+R and from there drove my car home, avoiding 5 o’clock rush hour. Now I use P+R in combination with PEACOX more frequently!”