CERIS : Civil Engineering Research and Innovation for Sustainability

SmartHubs

Summary

Worldwide the pressure on urban areas and climate is increasing. Cities need to implement new and effective mobility solutions, such as shared mobility, to deal with this pressure. The adoption rate of shared mobility is already rising, however not yet at a rate that is actually changing the way people move around in the city. This means that the reduction of pressure on transport networks and public space is still limited. Previous research shows the potential of shared mobility, but there is a need for actual planning or piloting tools. Smarthubs will bridge this gap by testing, developing and validating hub concepts and by developing a decision-support planning tool to enhance the implementation of Smarthubs.

To realise these outputs a diverse consortium of cities, companies and universities who are all working on shared mobility to increase sustainable transport, have joined hands. As part of the project pilots will be run at diverse mobility hubs in six cities. These pilots will provide information about the hubs' needs, location, context, users, etc. The partners will translate this information into a decision-support planning tool for cities to help them decide on the type, location, and offered mobility services of the smart mobility hubs at the street, district and city levels. The project will also deliver a validated list of criteria and a process for the public procurement of smart mobility hubs in public spaces. With the creation of these tools, Smarthubs aims to accelerate the successful implementation of the hubs, maximizing citizens' accessibility and inclusion, as well as reducing emissions.

Challenge: In a world with increasing pressure on urban space and climate, there is a clear need for new and effective mobility solutions, such as shared mobility.

Main Objective: The main objective is to develop and validate effective and economically viable mobility hub solutions.

Output: A planning and analysis toolkit for cities to help them decide on the type, location, and offered mobility services of the smart mobility hubs at the street, district and city levels.

Figure 1. Conceptual representation of the Portuguese sites.

Figure 2. Setúbal multimodal interface.

Project Reference

-

Leading Institution

AMS – Stichting Amsterdam Institute for Advanced Metropolitan Solutions (Netherlands)

Partners

Ajuntament de Sant Cugat (Spain), AMB – Barcelona Metropolitan Area (Spain), Brainport Smart District (Netherlands), Capgemini Engineering (Portugal), CARNET – Future Mobility Research Hub (Spain), City of Amsterdam (Netherlands), Municipality of Eindhoven (Netherlands), EMEL (Portugal), FGC – Ferrocarrils de la Generalitat de Catalunya (Spain), Municipality of Helmond (Netherlands), Hely (Netherlands), Mobilne Miasto (Poland), ZTM (Poland), ŠKODA AUTO (Czechia), IST – Instituto Superior Técnico (Portugal), TML – Transportes Metropolitanos de Lisboa (Portugal), TU Delft (Netherlands), UPC – Universitat Politècnica de Catalunya (Spain)

CERIS Principal Investigator

Rosário Macário (rosariomacario@tecnico.ulisboa.pt)

CERIS Research Team

Vasco Reis

Period

2021

Total

1 550 555.00€

CERIS

51 504.00€

Project Website

smarthubs.eu