

Smart Pedestrian Net

Smart cities are walkable: SPN - a model to plan a pedestrian network and a pedestrian navigation system

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Projektbeschreibung

Walkability is the key to an urban area's efficient transportation within liveable cities. Walkable areas bring various health, economic and environmental benefits to cities and their inhabitants. The aim of the project is to develop and apply a Smart Pedestrian Network (SPN) to assess and improve walkability in cities. The SPN is based on four main innovative components: (i) using a spatial-based multi-criteria analysis performed through a geographic information system and a consideration of the wide range of urban criteria; (ii) integrating people's needs and preferences in a pedestrian navigation system, an innovative technological application, to help pedestrians find suitable footpaths according to specific criteria and preferences. The model will be implemented in the cities of Porto and Bologna. The SPN will demonstrate the level of walkability, the configuration and connectivity of the pedestrian streets, the measures to promote walkability, the challenges facing its implementation and the main key issues concerning the technological application. The overall goal is to provide a model to help European cities to be people-oriented by improving walkability as one of the important dimensions of smart sustainable and inclusive cities.

Abstract

Walkability is the key to an urban area's efficient transportation within liveable cities. Walkable areas bring various health, economic and environmental benefits to cities and their inhabitants. The aim of the project is to develop and apply a Smart Pedestrian Network (SPN) to assess and improve walkability in cities. The SPN is based on four main innovative components: (i) using a spatial-based multi-criteria analysis performed through a geographic information system and a consideration of the wide range of urban criteria; (ii) integrating people's needs and preferences in a pedestrian navigation system; (iii) evaluating and ranking the streets/areas according to their walkability; (iv) supporting a pedestrian navigation system, an innovative technological application, to help pedestrians find suitable footpaths according to specific criteria and preferences. The model will be implemented in the cities of Porto and Bologna. The SPN will demonstrate the level of walkability, the configuration and connectivity of the pedestrian streets, the measures to promote walkability, the challenges facing its implementation and the main key issues concerning the technological application. The overall goal is to provide a model to help European cities to be people-oriented by improving walkability as one of the important dimensions of smart

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Projektpartner

 Association for sustainable innovative developments in economoics, environment and society (kurz "AIDEES")/ Verein zur Erhaltung und Unterstützung der innovativen Entwicklung im Bereich der Wirtschaft, der Umwelt und der Gesellschaft