

# Smart Pedestrian Net

Cities are facing growing mobility challenges due to the strong dependence on cars. Motorised traffic is recognisably a major source of air and noise pollution in cities. In EU, urban mobility accounts for 40% of CO2 emissions and up to 70% of other pollutants. The sustainable mobility concept is focused in shifting this pattern towards non-motorised or more sustainable forms of mobility.

Walking is a soft and active mode strictly related with sustainable mobility as it reduces traffic congestion and pollution and has positive impacts on health. SPN is a project focused on improving walkability in cities. SPN intends to provide a model to help European cities to improve walkability as one of the important dimensions of smart, sustainable and inclusive development.



## Aim/objective

- Assess the urban conditions provided to pedestrians considering a wide range of criteria
- Define planning policies to improve walkability and street connectivity by involving stakeholders
- Develop a pedestrian navigation system for defining routes

## Approaches/methods

- A GIS multi-criteria and space syntax analysis to assess the urban conditions and street connectivity
- Multi-actor participatory approach with stakeholders, surveys and workshops
- Real time data in the navigation system and website to publish findings

## Expected results and impacts

- Increased understanding of the walkability
- Providing planning policies and management tools to help decision makers in improving walkability
- Developing a mobile navigation system to help pedestrian in selecting routes according with their preferences

### Smart Pedestrian Net – Smart cities are walkable: SPN – a model to plan a pedestrian network and a pedestrian navigation system

**Duration:** 2017–2020

**Internet:** <http://ctac.uminho.pt/spn>

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**Partners:** University of Minho, Portugal, University of Bologna, EUC – SYSTEMA Research Centre, European University Cyprus, ASIDEES, Porto Municipality, Bologna Municipality

## Involved cities

- Porto
- Bologna

## About JPI Urban Europe

JPI Urban Europe is a transnational research and innovation programme on urban transition. With the ambition to develop and validate new solutions for sustainable and liveable cities, a cooperation platform and programme is provided to connect urban stakeholders, researchers, cities, business and society

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