

Assessment of Urban Goods Distribution Initiatives Towards Mobility and Sustainability

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Goods transport and distribution within urban and metropolitan areas, especially in the core areas of cities with old and established centers, impacts the local community in what concerns to the economic development, quality of life, accessibility and attractiveness of cities.

To minimize these impacts, an increasing seek for alternative solutions to supply cities has been carried out.

Following that tendency, authors define and evaluate urban goods distribution initiatives under the umbrella of sustainability and mobility. The objective of the paper is to identify better initiatives and policies under the criterions of (operational) mobility and sustainability, considering both public and private interests.

The evaluation of initiatives and policies was carried out with microscopic traffic simulation, using data collection on specific problematic areas in Porto (Portugal) and a set of indicators previously defined, based on compilation of good practices and on scientific literature review. The effects of seven initiatives, which had already proven to be good practices in specific contexts, implemented individually or in an integrated policy were estimated.

Results of the analysis revealed that each problem requires a specific solution adapted to the intrinsic characteristics of the area, as well as to the respective technical and political context. Authors identify common guidelines, highlighting the different stakeholders' perspectives and quantifying the respective impacts in terms of mobility and sustainability.

Keywords: Mobility, sustainability, city logistics