



A modelling system to link end-consumers and distribution logistics

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Abstract

In the last years the interest in urban freight mobility has increased. However, the management and control of urban freight transport requires models which simulate the transport system. In literature some models have been analysed and implemented with tools which allow the verification of the measures adopted in several cities around the world.

In paper a review of measures implemented in some cities to reduce the negative effects of urban freight transport, an updated review of models developed to analyse urban freight mobility and the tools used to verify and check the proposed measures are presented. Finally the modelling system to link end-consumer and distribution logistics is described.

Keywords: Freight; Models; Urban goods movements; Best practices.

Introduction

Freight transport has a major role to play in the transport system, and in the economics system in general, being a key element in the process of economic development.

In Europe, it has emerged from various surveys that the main components of freight urban transport are represented by distribution and purchases, amounting to about 81% of total trips, while construction and building-related trips are about 5% (COST 321). If purchase mobility is not considered in the set, distribution accounts for 68%, while other significant components are construction and building-related trips (8%) and removals (8%).

In recent years, in the industrialized countries, studies of urban freight movements have increased since freight transport is a major source of traffic congestion and nuisance, including air and noise pollution.

The swift increase of freight vehicles in urban and metropolitan areas contributes to congestion, air pollution, noise, and to increases in logistic costs and hence, the price of

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