

FUT Symposium 2012-10-01

Urban Freight for Livable Cities:

-How to deal with collaboration and trade-offs.

A. Sharing the Urban Space

A supply chain management perspective on sustainable urban transport - the role urban characteristics and the goods receiver

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Numerous urban freight transport solutions have been introduced in order to improve transport performance while at the same time reduce the negative environmental impacts. The results, however, seem to have been disappointing and most pilot projects have not survived without subsidies. This is probably due to the fact that the solutions have been designed and evaluated without taking into account special characteristics of the different city areas as well as not including the interests of all urban stakeholders.

The context could be described in terms of urban structures and different types of build environment as well as characteristics of the companies. The available space for transport and other business activities in cities is limited and in city centres the cost of land and building space is very high. This has contributed to the fact that shops have limited warehouse space as well as limited or no goods receiving areas, which creates special requirements on the transport system. Material supply systems with similar characteristics can be found in other contexts, such as for instance the automotive industry. By studying in-plant logistics solutions it is possible to learn what the effect is of an increased focus on the receiver of the goods in combination with an increased emphasis on the flow of goods. However, a prerequisite to avoid the implementation of solutions that are unsuitable to the local context is a systematic assessment and evaluation of the characteristics of the city environment and its stakeholders, not the least the receivers of the goods, which could be a consumer.

There are potential to enhance efficiency and effectiveness of the urban transport system by taking into account how best utilise the space, new technologies and the collaboration between stakeholders. Different measures available need to be matched with the characteristics and requirements of different urban areas. An urban logistics and distribution model has been developed in a Gothenburg project (Sustainable Urban Transport, SUT). The purpose of it is to provide a range of possible solutions suited to the specific area and the different stakeholders' expectations. The model is mainly based on two parts: urban area characteristics and stakeholder requirements. The characteristics include aspect such as urban infrastructure, logistics infrastructure but also available vehicle technology. The stakeholders' requirements are grouped into different common topics i.e. accessibility, environment, cost, life quality and delivery characteristic.

Another model being developed in Gothenburg is the CUTS model for the analysis of total urban transport flows. This assessment and evaluation framework aims to improve the effectiveness of urban logistics initiatives. This is achieved by defining an evaluation framework that links logistics goals with freight transport efficiency and urban characteristics from the point of view of the different stakeholders. In this way, the framework can facilitate cooperation and communication between the urban actors, which is key in any urban logistics initiative.