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Goods transport in large European cities: Difficult to organize, difficult to modernize

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Abstract

In this article, I wish to present three characteristics of urban goods movements in major European cities: (1) Goods movements are largely indifferent to the internal structure of cities. (2) Urban policies targeted on freight mobility appear to be quite inefficient. (3) The provision of appropriate urban logistic services is slow in emerging despite growing needs. These features have been observed over the last five or six years through working with large metropolitan transport authorities, as well as with the French national research program on "Goods in Cities" and the "Best Urban Freight Solutions" European network. These observations draw a picture of the urban freight industry, which can appear quite critical. Indeed, many initiatives have emerged to make this industry less routine and more efficient, especially regarding its environmental impacts as well as its level of quality of service. However, changes are slow, and on the whole, it appears as though none of the stakeholders are willing to make fast progress: on the one side, city governments expect business to set up new logistic services fit to the emerging needs of the customers and retailers as well as beneficial to the environment; on the other side, logisticians are waiting for municipalities to initiate (and subsidize) new services before starting businesses which could prove poorly profitable and highly risky. Despite this tendency for status quo in the urban freight industry, some solutions can be identified, which I present in the concluding chapter of this paper.

Keywords: Urban freight; Policies and planning; City logistics; Regulations; Trucks; Deliveries

0. Introduction

A large number of different types of freight flows constantly cross an urban environment, including consumer goods, building materials, waste products, postal mail and others. These flows occupy about one fourth

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of the street traffic of a typical city.[1] Further, freight materials require loading/unloading, storage, conditioning and packaging, which demand even greater use of urban space.

All these urban goods movements are the result of logistic decisions, i.e., of the processes required to organize the movement of goods in an efficient manner within the goods production system. These logistic decisions are based on the demands of the production and distribution sectors, themselves dependent on the behaviours of economic agents such as households and firms. These interactions give complex characteristics to the urban mobility of goods. In this paper, I wish to present three of these characteristics. First, goods movements are largely indifferent to the internal structure of cities. Second, urban policies regarding freight mobility are inefficient. And third, the provision of appropriate logistic services is slow in emerging despite growing needs in urban areas.

This paper is both a synthesis of field work completed over the past six years and a personal analysis hopefully contributing to providing useful solutions to city practitioners. I have been working with large metropolitan transport authorities since 1999. As a result, I have been able to compare my informal research with those of my colleagues from the French national research program on ''Goods in Cities'' initiated by the ministry of transport and the agency for the environment (ADEME), as well as from the BESTUFS (best urban freight solutions) European network.

1. Urban goods movements are independent of local urban characteristics

A simple ratio can help explain the nature of urban freight movements in a large French metropolitan area, on average, every job generates one delivery (or pick up) per week. It is not so much the number in itself, which is important rather than its very existence (only a few years ago, these statistics did not even exist), and its relative invariance. More precisely, each activity (commercial, service, industrial, administrative, etc.) taking place in an urban environment can be associated to a specific profile of freight generation, which is constant from one city to another. From a logistic point of view, a drugstore (or a bakery, a bank, a warehouse, etc.) operates in the same way whether located in the centre of a very large metropolis or at the outskirts of a medium size city.

Goods movement, which represent between 20% and 30% of vehicle kilometer and between 16% and 50% (depending on the pollutant considered) of the emission of air pollutants by transport activities in a city (LET – Aria Technologies, 2006), is determined by a large set of strategic decisions taken within each economic sector at a regional, national or supra national level. For medium and small cities, the driving forces behind goods movement are even more disconnected. In these cities, carriers (especially parcel transport) do not even use a terminal in the vicinity. Delivery rounds are organized from terminals which are often located at more than 50 or 100 miles from the city centre.

Therefore, what is taking place is a sort of ''neutralisation'' of the urban territory. By this, I mean that whatever the city (its geography, its regulations, etc.), deliveries will be made in a more or less similar way and no specific logistic will be designed for a specific city. Generally speaking, logistic decisions are closely related to land issues, when a logistic developer is willing to locate a terminal or warehouse, they have to take into account the accessibility of the area (by road, rail, canal, etc.), its distance to large economic centres, as well as the availability of adequate land. However, within cities, the land is not an issue anymore. Urban land simply does not exist anymore for logistic activities. Because a city is a complex, costly and constrained space, in most cases it is only a space of circulation and unloading and loading. Very few permanent logistic installations are located in an urban territory, and freight operators penetrating in a city centre do so only for the time needed to accomplish their delivery. They do not act and feel as if they belonged to the urban environment they work in.

[1] Unless otherwise specified, these data and all the following quantitative information given in this paper come from surveys made by the Laboratoire d'Economie des Transports (Lyon, France) with the support of the French national research program on *Goods in Cities*. This program was launched in 1993 in France, opening the way to the realisation of studies, data collection and modelling activities. The web site www.mv.transports.equipement.gouv.fr presents the main results of these studies. Several publications in English are also available on www.docapolis.com.