Viewpoint

City logistics in Spain: Why it might never work

Jesús Muñuzuri *, Pablo Cortés, José Guadix, Luis Onieva

School of Engineering, University of Seville, Seville 41092, Spain

Abstract

Urban freight deliveries depend strongly on local regulations and policies to guarantee a tidy and efficient flow of goods towards commercial premises. However, the urban freight delivery system in Spain, which is even more complicated due to the urban morphology and driving behavior, also suffers from a combination of negative factors, including uneven regulations, lack of enforcement and obsolete policies. We present the picture of the current scenario and the typical regulation schemes, analyzing the reasons for failure of the system and the possible efforts, relatively cheap and easy to implement, that could be undertaken towards improvement.

Introduction

European cities present a series of common characteristics that influence their mobility and commercial activities and impose a series of restrictions in the associated flow of freight deliveries. First, most of these cities have a radial structure, with a very high concentration of shopping areas, restaurants and other social attraction poles in the city center. This generates asymmetric flows of people going to work, shop, eat or visit tourist attractions, with similar flows of associated goods. However, the morphology of these city centers, inherited from the Middle Ages and, thus, containing narrow streets with no parking lots or back alleys, was not designed for these types of land uses, a situation that further increases the downtown parking problems found in virtually every urban center (Ligocki & Zonn, 1984). In addition, infrastructure investments in these cities over the last three or four decades have often been implemented with a general idea of sustainability in mind (Topp & Pharoah, 1994), including bike lanes, underground and tram systems, more efficient bus systems (Daganzo, 2010) and the enlargement of pedestrian areas, which has generally led to larger and stricter restrictions regarding freight deliveries. As a matter of fact, freight deliveries are normally perceived as a nuisance, to which city governments react with ignorance (Zunder & Ibáñez, 2004). The common stereotype is that of large, slow and polluting vehicles contributing significantly to already high congestion levels because they are forced to stop in dense city center areas to make deliveries, which often requires double parking or the use of sidewalks due to the lack of space devoted to logistic activities (Dablanc, 2007).

Nonetheless, these goods need to be delivered. Therefore, along with their general mobility policies geared towards sustainability, many European cities have tested or implemented city logistics measures (Russo & Comi, 2004). In the case of Spain, however, with the partial exception of Barcelona, while public and private passenger transport in Spanish cities continue to benefit from improvements in infrastructure and/or technology (e.g., traffic simulators, traffic counts, and real-time information), urban freight distribution continues to be hamstrung by procedures and regulations introduced half a century ago. We describe here the specific characteristics of the current urban freight scenario in Spain, from the perspectives of all the involved stakeholders. We focus particularly on the role played by the local authorities that are responsible for managing the system and establishing regulations and policies. We present the typical regulatory framework for Spanish cities as well as the mild attempts to introduce city logistics concepts, suggesting some action lines that might help to improve the situation.

Nevertheless, there may be no hope for the future of city logistics in Spain. Plans, initiatives and regulations will never work unless they are consistently respected and enforced, and the Spanish cultural environment, together with the local authorities’ lack of initiative and willingness to truly face the problem head-on, often results in their ineffectiveness. In conclusion, we summarize the main characteristics of this enforcement issue, which may be decelerating or even paralyzing the development of city logistics in Spain.

The current scenario

A number of indicators can be used to create a general picture of urban deliveries in Spain. Typical figures show that there is one commercial establishment for every 50 inhabitants in Spanish cities, including shops, bars, cafes and restaurants. The locations of
commercial premises are roughly distributed as follows: 40% in large municipalities, 40% in metropolitan areas, and 20% in small towns and rural zones (Ministry of Commerce and Tourism, 1999). Supported by regulations, small urban retail shops have managed to resist the introduction of shopping malls on their periphery, and the daily movement of all types of freight into the inner parts of the city remains necessary.

However, when it comes to in-depth analysis and regulation of delivery vehicles’ flows and practices in Spanish cities, local authorities often tend to rely on intuition or, at most, on low-detail information. Not many attempts have been made to better rationalize or adapt city logistics policies to the real daily scenarios (Dablan, 2008), possibly due to a lack of data in this regard. Very few studies have surveyed real-life activity to obtain relevant data for urban freight analysis (Allen & Browne, 2008), and only some Spanish cities have begun to see the need for such work. Furthermore, as a result of industrial secrecy and the strong competition in the sector, there is rarely any impetus on the side of transport companies to provide accurate information of this sort to public authorities.

The current tendency all over Spain is to increase the priority of public passenger transport as well as restrictions on passenger cars, while freight transport holds a somewhat intermediate position. The main stakeholder groups in urban freight distribution and urban mobility (e.g., carriers, receivers, residents, workers, and shoppers) have different interests with respect to the freight issue, and different political powers. Lacking the appropriate data and decision support systems and feeling the pressure to redesign mobility flows in cities to deal with growing populations and congestion, local authorities in Spain have to decide what direction to take with respect to the improvement of urban freight distribution. Unfortunately, the result is often inaction.

**Carriers**

While freight carriers operating in Spanish urban areas do plan their distribution operations, they often do so without introducing city logistics concepts. The road transport sector in Spain does not consider urban freight distribution specifically as a subsector of its industry, and there are no companies specializing in urban freight deliveries. Even though the Spanish logistics association has issued a set of recommendations for companies delivering in cities (AE-COC, 2002), no recent distribution innovations have been induced by a market pull. Policy issues on the supply side are, for the most part, handled by each company independently. There are national associations (CETM, Fenadismer) with regional delegations as well as regional (e.g., Asemtraex in Extremadura, Fegatramer in Galicia, Anet in Navarra, and Asatrans in Andalusia) and local (e.g., Froet in Murcia, Transcalit in Barcelona, and Asetraval in Valencia) associations that lobby for their common interests, but these associations have not put much effort into urban freight issues. For instance, there is no interest whatsoever in the introduction of co-operation schemes (Thoma, 1995), and we do not know of any privately initiated investment in shared resources introduced by independent transport firms to implement any nation-wide coordinated action for urban freight distribution. It seems that strategic advantages related to the direct relationships between the firms and their respective clients outweigh any possible advantages of increasing the load rate of pick up/delivery trips or reducing the number of required vehicles through cooperation, as stated in a personal interview by the President of the Asatrans association.

Very few of these transport operators’ associations include urban freight distribution as one of their main objectives, and those that do act mostly at the local level, interacting directly with the corresponding local authorities, with little coordination between them. The few large companies in business throughout Spain (e.g., SEUR, Ochoa, and Guipuzcoana) are most interested in the formulation of urban freight issues at the national level (Cobas, 2002). The rest of the companies are rather small, usually operating in only one or a few urban areas, and thus they concentrate on very specific issues related to loading/unloading in specific streets of specific cities. Several forums have been launched in the past in different Spanish cities with the participation of all the relevant stakeholders in urban mobility, sometimes including urban carriers, but with scarce practical results. There is usually a good relationship between the freight carriers’ associations and the local authorities responsible for traffic and transport, who acknowledge that these associations represent the interest of the sector, but they do not give much consideration to their stated wishes. In addition, the interests of full-truckload and less-than-truckload carriers are usually different when addressing local administrations (Andersen, 2002).

Furthermore, logistic companies plan their investments and their operations according to business perspectives, which usually require decisions to be made very rapidly. However, any strategic move in the urban logistic environment requires the approval of the local authorities, which follow a very different rhythm. Spanish companies typically find that bureaucracy and political changes are heavy burdens on the shoulders of urban freight distribution. Processing construction work licenses (e.g., for expansion of premises), regulation modifications or just addressing simple mobility issues can take months or even years.

**Residents, workers and shoppers**

People spending their leisure time in city centers (e.g., living, working, and shopping) represent the largest stakeholder group, and they are presented here as a single group due to their similar interests, mainly related to accessibility. They oppose access restrictions and pricing policies (Schlag & Schade, 2000), and lobby for the reduction of congestion, the availability of parking spaces and the introduction of fast, comfortable and reliable public transport systems (particularly underground systems). From the residents’ perspective, these issues affect the livability of the area and the value of the land (Diaz, 1997). While they appreciate commercial activity, they contradictorily regard freight transport as a nuisance that increases congestion and pollution and reduces traffic fluency and the number of on-street parking spaces. Their opinions are important given that they are the largest group in terms of voting power, which is often the deciding factor against the introduction of city logistics policies at the expense of passenger transport.

**Receivers**

Freight receivers, namely retail shop owners, represent the link between urban freight carriers and residents, workers or shoppers. Their activities rely upon the supply of goods, but their priorities regarding mobility focus on three main areas:

- Achievement of full accessibility for the general public, who constitute potential customers, and promoting priority for private vehicles in the use of space in the city center
- Construction of new public parking lots, located as deep inside the center as allowed by the authorities.
- Enhancement of commercial areas in the city center, with deep controversy around whether the expansion of pedestrian areas is positive or negative for this commercial activity.

In general, the receivers are satisfied with the current urban freight situation, and the modern stock management policies (i.e., no stock and just-in-time frequent deliveries) can be implemented...
دریافت فوری متن کامل مقاله

امکان دانلود نسخه تمام متن مقالات انگلیسی
امکان دانلود نسخه ترجمه شده مقالات
پذیرش سفارش ترجمه تخصصی
امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
امکان دانلود رایگان ۲ صفحه اول هر مقاله
امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
دانلود فوری مقاله پس از پرداخت آنلاین
پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات