Far from the Capitals : what are the relevant city logistics public policies ?

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Abstract

During almost 20 years, in France, city logistics has been the unshared concern of researchers from the National Programme on Urban Goods. They brought a strong and useful methodological and theoretical base, particularly useful for the ongoing practices and implementations that followed.

Several years later, in the 2000's, studies, experiments and projects have been conducted mainly in Paris. The city of Paris implemented a public-private consultation forum, and opened public biddings for the management of several logistic terminals, located in public car parks. In the land use documents, the city took into account the freight issue. Since 2012, Paris is the stage of an emerging project of a new multimodal platform. City's active communication on the urban freight issue turned the French urban logistics into a very Parisian issue.

However, during the last ten years, other French cities have studied, experimented and implemented various solutions in matter of city logistics. This article aims at bringing to light some non-Parisian significant progress and at analyzing similarities and differences from the case of Paris. The purpose is to explore the different territorial scales and their adequacy with city logistics solutions (projects of terminals fostered by public authorities, regulations, consultations, traffic management, street infrastructure projects…).

The article will contribute to extend and deepen the understanding of the most relevant administrative and territorial scales for an urban freight public policy : region, "department", jointly-run structures of inter municipalities, municipality ? Another main point will be to understand if political and planning concerns are similar or different in Paris and in other big and medium-sized cities. The article will deal with city logistics policies from a technical perspective (nature of urban freight services provided, public governance or private initiative), from a legal and administrative perspective (which competences should be gathered for each type of public actions?) and from an urban planning perspective (how can city logistic projects be included in an overall planning framework ?).

Based on examples of city logistics projects in particular in France, a proper legal analysis will be developed regarding the competences of each administrative and territorial layer in the fields concerned by city logistics: transport, planning and economic competitiveness. The

article will focus on demonstrating that one of the most relevant levels for developing a city logistics public policy is the metropolitan area. In France this level is reflected, from an administrative standpoint, by the level of the inter-municipalities. The authors will highlight and detail the appropriate public policy at this specific level, irrespective of the size of the city, in comparison to the other territorial and administrative scales (region, district, municipality….)

Introduction

The goods flows in urban area implies several categories of stakeholders :

- The inhabitants are at the same time local residents, road network users, transport consumers (deliveries at home) and carriers (purchasing trips). They are affected by the nuisances of goods vehicles without perceiving their use, as they rarely feel concerned by the supplying of urban activities.
- The economic stakeholders act and decide according to commercial logics which usually go beyond the geographical framework of a simple city, conurbation or region.
- The institutional stakeholders organize and regulate the goods transport with a preoccupation both for the quality of life of the citizens, and for economic development of the city. The municipalities manage the traffic and parking regulations, the inter-municipal structures monitor the road network (when the local land use plan allows it) as well as the territorial and economic development.

The urban space becomes a place that crystallizes the tensions between actors that have different, however not necessarily conflicting, viewpoints. In this context, European and French local authorities implemented public policies to intervene in the field of urban goods movements.

Capital cities like Paris or London have, since many years, carried out public policies for of urban freight. Their experiences have been widely studied (Ripert 2008). However, aside from capital cities, local authorities of various sizes have engaged procedures through the last years concerning parking regulations, urban layout, land use, and consultations with private stakeholders.

The question of the relevant scale for an urban freight policy is regularly asked by elected representatives. According to the existing national regulation, the urban freight competence is not clearly conferred to any administrative layer. However, in France the public authorities can carry out public policies in the frame of the “general competence clause”, which means taking a responsibility of a field for which it has no mandatory competence.

In France the administrative system is multi-layered and consists in an overlapping of spatial scales. France (66 million inhabitants) is composed of 22 regions, 96 “departments”, 2585 intermunicipal structures and 36 569 municipalities, while Germany (81,5 million inhabitants) has 12 196 municipalities and Italy (61 million inhabitants) has 8 101 municipalities. The following examples show how the role of regulator in the matters of urban freight has been taken in particular by intermunicipal structures.

I. The urban freight public policies carried out by local authorities

There are different types of public actions. The first part of this article describes and analyses them :

- The creation of public consultations between the public and private spheres.
- The use of urban planning tools such as the Land Use Masterplans (“Plans Locaux d’Urbanisme” in French), and Transport Masterplans (“Plans de Déplacements Urbain” in French).

- The local parking and traffic regulations
- The planning of urban developments.

Nevertheless, many means of action are not used at their maximum potential today. Taking into account the needs of freight activity in the urban developments, for public space project as well as for real estate operations, is critical. The integration of these needs has to be enhanced. The constraints weighing on the construction of real estate tools for the urban logistics, as well as on the prices, have to be reduced. Finally, modelling tools, which can bring precise data at the starting point of reflections on urban freight, are insufficiently implemented. Describing these actions will be the object of the second part of this article.

a. Public-private consultations

In view of the different viewpoints of the involved stakeholders, a shared management of the urban freight issue is clearly required. A public-private consultation is a good means of providing to this need. Any public positive action in the field of goods' transportation needs the support of the private practitioners (Dablanc Diziain Levifve 2011).

Several intermunicipal structures such as Lyon, Saint-Etienne, Strasbourg, Toulouse, Grenoble, set up public consultations including public stakeholders (State, Region, intermunicipal structures, municipalities), private practitioners (shippers, carriers, retailers, distributors, professional transport organizations) and sometimes even representatives of local residents. These consultations, temporary or permanent, allow for example to tackle issues related to regulations, to understand the points of view of private operators on the number and locations of the areas of deliveries, to discuss the relevant routes for heavy lorries and the possibilities of bringing back the logistic terminals inside the cities. Without this being an obligation, these consultations can also allow the signature of local agreements on best practice, in Toulouse for example. Finally, the definition and the sharing of a regulatory framework granting competitive advantages to the "best-in-class" operators, can contribute to decreasing investments risks in new vehicles.

If the consultation of the carriers is intuitive, the consultation of shopkeepers and retailers should not be neglected, as the consignee usually defines the schedules of deliveries.

As an example, Lyon, the second French metropolis (1,54 million inhabitants in 2010) set up a long-lasting dialogue structure between public and private spheres which exists since 2004. It gathers twice a year a plenary group. Workshops are also organized frequently (around 6 to 8 every year) with the initiative of the Greater Lyon authority. Three workshops have been created on three issues: "improvement of the conditions of delivery", "car park spaces for heavy lorries" and "location and development of logistics platforms".

From this consultation has emerged in 2007 a new regulation for delivery bays in the historical center of Lyon (Peninsula area, 2nd district of Lyon city). This regulation has been extended in January 2013 in all Lyon and in the center of Villeurbanne, which represent the perimeter of the most urban dense zone of the metropolis. A program of redevelopment of delivery bays has also been decided by public and private parties together, granted with a budget since October 2012. This regulation is based on:

- A maximum surface of 29 m ² for delivery vehicles

- A control by delivery disk of the duration of occupation of the delivery bay
- A disk distributed only to the professionals (transport operators and transport for own account).
- An access limitation for the most polluting vehicles according to a scheduled implementation; In 2013, the limit has been set at EURO 3.

Over the first years, this new regulation allowed a decrease of 20 % of double-line delivery and an increase of 30 % of the use of the delivery bays.

In Grenoble (a metropolis of 495 000 inhabitants), the consultation has been taking shape beyond the administrative limits of the intermunicipal authority. Specific seminaries gathering elected representatives and professionals have been set up and workshops have been organized with retailers associations. Besides informing the various stakeholders, the aims of these workshops and seminaries were to produce a "white paper" shared by all the stakeholders as well as to take measures to be registered in transport masterplan.

In Toulouse (a metropolis of 872 000 inhabitants in 2010), a partnership on deliveries has been signed between the City of Toulouse, the chamber of commerce and industry of Toulouse, the Chamber of crafts and small businesses of the Haute-Garonne, the national Federation of the road hauliers, the French logistic and transport association and the general group of public carriers of the Haute-Garonne *département*. It came into effect on November 1st 2012, and it is based on the use of a 20 minutes delivery disk and on the accreditation of transport operators. The time slots authorized without accreditation are: from 0am to 6 am, from 9:30 am to 11:30 am and from 8 pm to 12 pm.

As a supplement to authorized time slots to all the professionals, some of them have been authorized for specific categories of deliveries considered as indispensable to the normal functioning of activities (such as food transport) and also to electric vehicles.

The authorized transport operators are:

- Transport professionals using an electric vehicle from 3 to 20 m3. This authorization allows the deliveries from 0 am till 12 pm, except on symbolic streets with specific delivery regulations.
- Professionals performing specific deliveries using conventional vehicles, shorter than 9 meters and delivery activities related to food.

This accreditation authorizes the deliveries from 0 am till 11:30 am and from 8 pm to 0 am. This initiative benefited from a porterage supported by local elected representatives. Carriers made a commitment to respect these new regulations, to improve the organization of the delivery rounds by pooling and consolidation and to develop the use of clean vehicles. Finally, storekeepers made a commitment to promote the agreement, to synchronize the opening hours of stores with those of the deliveries, and to develop the consolidation of the receptions by implementing relay-stores or relay points.

b. The use of planning tools

Two regulatory planning tools involving freight can be used in France: the land use masterplan, which can be defined at a municipal level or at an intermunicipal level, and the transport masterplan for all the urban areas of more than 100 000 inhabitants.

Land use masterplans offer two kind of tools :

- The article 12 focus on the park spaces standards and can include the obligation to create deliveries bays inside private properties.
- The zoning (graphic document) and the redaction of zone regulations (descriptive document of the activities admitted in a zoning and of the related spatial rules) can allow the preservation of logistic sites.

The lever of the article 12 of the land use masterplan allows to impose deliveries on private infrastructure. Delivery bays on the public space is adapted neither to all types of businesses nor to the most cumbersome vehicles. Local authorities can oblige stores and shops that have important sales surfaces to integrate the deliveries on their own infrastructure. The land use plan can thus define, in its article 12, a "logistics ratio" to integrate the creation of private means to welcome delivery vehicles.

This is also the choice made by other European cities such as Barcelona where delivery bays of at least 25 m² have to be built for all the industrial and commercial establishments of more than 500 m ² of floor space. It is also the case in France, in Nice (metropolis of 941 500 inhabitants) where the land use masterplan regulates spaces dedicated to logistics for shops, crafts, industry, offices, warehouses and hotels, …

The French surveys on urban goods movements have shown that goods movements were directly correlated to the number of full-time jobs. It is thus possible to determine these « logistics ratios » either on basis of the sales area of the store, or on the number of jobs of businesses.
In Nice for example, the land use masterplan approved in 2010 imposes the following measures for new projects of buildings between 300m ² and 1000m², which are located at more than 200m of the tramway or more than less 300m from the railway stations :

➔ A delivery bay of at least 10 meters long every 300m ² of floor space

For the real estate projects of businesses of which the floor space is superior to 1000m ² :

➔ A delivery bay of at least 10 meters long every 300m ² of floor space and an area for heavy lorries (16,50 m x 3,50 m European standards) every 1200m ² of floor space.

For the real estate projects of buildings for craft activities, industrial activities or warehouses :

➔ A delivery bay of at least 10 meters long every 300m ² of floor space.

The second tool (zoning and zone regulation) has not been used in France by any other city except Paris.

Transport masterplans can also be used in order to manage urban freight. Nevertheless they are still underused, and have often been defined as a list of actions and declarations of intentions (Dablanc L, Thevenon J. 2001).

The law on national transport (*loi d'orientation sur les transports intérieurs*) have created the transport masteplans, in order that local authorities integrate their traffic policy into an overall policy for transport and mobility. But the issue urban goods movements hs ben integrated into the transport masterplans only in 1996, after the adopton of the law on the air and rational use of the energy (*loi sur l'air et l'utilisation rationnelle de l'énergie*). In 2000 the law on solidarity and urban renewal (*loi solidarité et renouvellement urbain*) specifies the

means of this integration and extends it to other documents of planning such as the territorial coherence plan (*schéma de cohérence territoriale*) which has a larger geographical perimeter. The urban freight becomes more and more an issue to be taken into account.

The article L1214-2 of the French Code of transport defines the objectives of the Transport Masterplan. It aims at ensuring a sustainable balance between needs in terms of mobility and accessibility and the protection of environment. It also organizes the conditions of supplying the urban area, necessary for the commercial and crafts activities, by requiring coherence between schedules of delivery in an intermunicipal perimeter, and also regarding the weights and dimensions of the delivery vehicles.

However, the transport authorities in charge of piloting of the elaboration of the Transport Masterplan have some difficulties in dealing with urban logistics. As opposed to the regulatory frame in other countries such as Great Britain, they do not have clear legal attributions to regulate goods distribution in cities. A survey realized in 2012 by the group of authorities responsible for transport (*Groupement des Autorités Reponsables des Tranports*) indicated that 48 % of the transport authorities thought to be lacking skills to be effective in this domain and that 47 % of them declared to have met the difficulties during the elaboration of the Transport Masterplan to handle these issues. This survey had also allowed to notice that very few planned actions have been carried out.

It is nevertheless through implementing Transport Masterplans that interesting actions emerged, as in Bordeaux, where an urban logistics space has been implemented according to the recommendations of the Laboratory of Transport Economics (Lyon, France) to manage the deliveries during the construction of the tramway lines in 2004-2005. The work on the coherence of the local traffic and parking regulations is also an action of the Transport Masterplan.

Furthermore, through the elaboration of the Transport Masterplan, public-private consultations can be established and perpetuated. The consultation in Lyon has been initiated thanks to a workshop organized for the elaboration of the Transport Masterplan in 2003.

c. The local parking and traffic regulations

In France the mayor of a municipality has in charge the management of traffic and parking regulations. Thus, the mayor can regulate the access to the urban area and, for example, he can reserve it to a specific type of users or vehicles. In this way, he can regulate the delivery stops and the vehicles parking and also decide of locations for loading or unloading of goods.

The article L1214-6 of the french code of transport plans that the decisions taken by the authorities in charge of the public road network and the police have to be compatible with the Transport Masterplan.

The municipalities of all sizes in France have widely used this power, in order to manage the circulation of goods in town. Nevertheless, this competence has mainly been used according to defensive strategies that limit the presence of heavy vehicles in urban zones, though regulations based on weight criteria.

But these regulations may have counterproductive effects: a 19 tons lorry can be replaced by (in average) 7 light commercial vehicles, which would have stronger impact in terms of congestion, of occupation of the public road network and of pollutant and noise emissions. If

these regulations aim to ensuring a better share of the public road network and to reducing congestion, it can be preferable to use the floor surface of the vehicle as the main regulatory parameter. Indeed, from an urban point of view, the surface is more relevant than the payload capacity. Furthermore, for an equivalent payload, there are various surfaces of vehicles. The surface parameter also has the advantage to simplify the control because the dimensions appear on the tare weight plate of the vehicle.

As an example, Lyon and the nearby municipality Villeurbanne implented a limitation of 29m ^{2} which corresponds to thresholds surface of the fire brigades vehicles.

We also often notice an accumulation of regulations corresponding to the requirements of the local residents. These regulations are generally coherent at the scale of a street, of a district, or even o a municipality. There are rarely understandable at an intermunicipal level. A metropolis can thus have tens of regulatory standards on the payload or dimensions of lorries, as well as on the time slots of the delivery spaces. As an example, the municipality of Bordeaux has presently 23 different time slots for its delivery bays.

The transport operators face ill-assorted and hardly readable regulations, which are sometimes difficult to respect. To put an end to this situation, the Urban District of Bordeaux carried out a project of coherence between local regulations in its 27 municipalities, in order to define an efficient time slot for delivery bays and to define routes for lorries

The coherence of local regulations, within the urban areas or with the bordering municipalities, leads to make the day-to-day work of the delivery operators an policemen easier. However mayors remain legitimate in the use of their power of regulation. The Greater Lyon authority edited in 2006 a guide to help the mayors in writing their municipal regulations.

Finally, the contributions of the transportation of goods in CO2 emissions, NOx and particles widen the competences of local authorities. The French code of environment reminds, in its article L.220, the right for each citizen to breathe a sane air. Hence, regulations cannot only be motivated by the necessities of traffic monitoring, but also by the concerns of environmental protection. The French highway code also specifies in its article L.318 that the least polluting vehicles can benefit of favored conditions of traffic and parking. It is already the case in cities such as Langres and Montpellier which authorize the deliveries in the pedestrian city center only in the morning with the exception of electric vehicles which can deliver during the whole day. Or Paris which authorizes the access only to clean vehicles between 5 pm and 10 pm. Lyon and Villeurbanne set up the first low emission zone in France by forbidding the access to the most polluting vehicles even if, in the facts, the control of these vehicles raises some problems. The schedule of implementation is progressive, starting with the EURO 0 standard in 2007, the threshold being today EURO 3.

If the regulations are important, their control is also important. Barcelona chose to set up a brigade of specialized agents of control trained on the regulations and their applications. Communities such as the Greater Lyon authority or Toulouse Métropole set up trainings on the control of delivery spaces destined to the agents of control of the road network and to the municipal policemen.

It is important to note that the environmental regulations cannot be controlled in France, because of the absence of the identification of the breaches in the national regulations.

d. Road network planning and layout

Local authorities have in theory the means to act on the arrangements of the public road network, through the direct competence the public road network administrators but also as urban planners; on private infrastructures, through the tools of operational urban planning such as the Joint Development Zone" *(zone d'aménagement concerté*). However urban goods movements are today taken into account exclusively on the public road network.

The term of urban logistics terminals recovers a wide range of applications and scales, since the space needed to operate these equipment starts from a few tens of m² up to urban distribution platforms of 3 000 m ² and even large warehouses of 10 000 m ².

However, when it comes to the dense urban cores, delivery bays can be considered as real urban logistics spaces and as essential tools for road network planning, allowing to meet the requirements of delivery drivers. However, these locations are often used by passenger cars and by vehicles of the shopkeepers.

Reserving delivery bays is possible since the adoption of the law *Solidarité et Renouvellement Urbain* which modified the article L2213-3 of the general code of regions with a measure of autonomy formally authorizing the definition of spaces reserved to " vehicles stopping for loading or unloading goods ", these spaces can also be used by private individuals for short stops, but not for parking. Nevertheless the delivery space reservation faces constraints, and the experiments carried out on this issue (such as Freilot project in Lyon) have not been successful. The high costs of this type of system, in investment and in maintenance, remain prohibitive. Smaller cities such as Langres (10 000 inhabitants) have implemented such a reservation system (CERTU 2007). The city of Langres set up in June 2003 a regulation reserving the access to the city center for electric or natural gas lorries from 9 am till 10 pm. In the case where companies could not take adapted measures, a mutualized platform managed by the carrier Lesserteur was organized on the nearby municipality of Saint-Geosmes, a neighboring municipality.

The Greater Toulouse authority chose a controlled logistic bays on in its historical city center : a portion of the public road network is dedicated to the deliveries with a control by retractable bollards. These barriers are lowered in the morning from 5 am till 11:30 am to allow the deliveries, the rest of the time the space is returned to the pedestrians. The local police guarantees a smooth functioning of this system.

Another solution is defining rules of use for delivery bays by a control disk. This solution allows a limitation of the delivery stop time of the vehicles thus increasing the turnover rates in the delivery spaces and also make the police control easier. This disk can be given to transport and logistics professionals by carriers or shopkeepers associations or public authorities. These disks have also to be delivered to professionals of other fields of activity as long as they operate any kind of transport activity for their own account (which represents 35% of the urban goods movements according by the French surveys on urban goods movements carried out by the Laboratory of Transport Economics). Lyon, Toulouse and Nantes have already implemented it. Lyon only distributes it to professionals; Nantes asks to indicate the number plate on the disk; In Toulouse the accepted delivery time is 20 minutes, whereas 30 minutes is the time defined in other French cities.

Beyond regulations, the sizes, locations and planning of delivery bays are essential. The Greater Lyon published a guide for delivery space planning dedicated to the various head offices and municipalities of the authority. This guide explains key principles such as: the area of attraction of 50 meters of a delivery space, the optimal dimensions (15 meters, with a minimum of 12 meters), the importance of the lowering of sidewalks in order to ease the maneuvers of delivery drivers with their handling tools.

It appears that inter-municipalities have implemented a set of measures. But a difficulty however remains: the pertinence perimeter for logistics in a conglomeration does not usually correspond to the administrative perimeter.

II. Tools scarcely implemented by local authorities

a. Resistance to the "logistics sprawl"

Urban logistics undergoes severe land pressure, which pushes it further and further away from the heart of the Ile-de-France metropolitan area. Often a nuisance due to trucks and small van traffic, with air pollution, greenhouse gas emissions, noise and unsightly buildings, logistics has less and less of a place in the heart of cities and tends to go further away in exurban locations. This move is called "logistics sprawl" (Dablanc and Rakotonarivo, 2011). It means a spatial deconcentration of logistics activities in large metropolitan areas. (Dablanc 2011). It is a worldwide phenomenon (Cidell, 2010, Woudsma et al., 2007, O'Connor, 2010).

Logistics sprawl has serious environmental consequences. Increased distances travelled by road means increased mileage and additional emissions, as well as growing road congestion, thus inducing a heavy cost for the community. Recent research on logistics sprawl and its carbon footprint in Paris (Dablanc and Rakotonarivo, 2011) has contributed to raising awareness of these environmental challenges on the part of the local authorities in the Paris region.

Slowing down logistics sprawl may not be sufficient. In fact it may have to be reversed (Diziain, Dablanc, Ripert 2011) The logistics sprawl is just an example of a larger trend of sprawl concerning many activities of urban goods distribution such as wholesales establishments and supermarkets (Gonzales-Feliu et al 2010), and also industrial activities.

Examples of implementation of regulatory documents and urban planning documents to preserve logistics spaces remain exceptional. The recent deliberation voted in february 2013 by the Greater Lyon on urban logistics displays a will to preserve sites for logistics. Besides logistics, the will is to preserve sites for other activities that a city needs close to its core (light industrial or services) and which are usually highly generative in terms of urban goods movements (transport for own account). This preservation can be carried out by the Land Use Masterplan, or by financial incentives or setups allowing logistics activity to settle in cities for low prices.

Beyond this principle, real actions are rare. Paris has welcome five urban logistic spaces in its car parks. The urban logistic space of "les Cordeliers" in Lyon is one of the rare non Parisian examples. Operating 314 m² since march 2012, the carrier Deret distributes by electric vehicles 1500 parcels and 500 palets a month for about thirty clients. The upstream supplying is done at night between 1am and 3am, thanks to one conventional heavy lorry. The project could be implemented thanks to low locative prices (around 20 euros/m²/year) permitted by

the landlord “Lyon Parc Auto”, a public-private structure where the Greater Lyon Authority is the main shareholder. A second project of the same type is being studied in the sector of the “Part-Dieu”, a large and dense developing business district in Lyon.

The preservation of these sites is to be carried at every scale of the urban framework, concerning both small sites like urban logistic spaces, and larger sites dedicated to classical terminals for parcels.

The role of local authorities in the implementation of urban logistics space of all sizes is a relevant issue for every local authority wishing to start policies in favor of urban logistics. Numerous intermunicipal structures in France (Bordeaux, Grenoble, Saint-Etienne,…) have recently started to show interest for this issue through studies on urban distribution centers, which appears to them as a solution to every delivery problem in city centers.

It actually may seem relevant to initiate urban distribution center projects aiming at a consolidation of goods movements. Studies and assessments have shown important environmental gains, with a reduction by 30% to 50% of pollutant emissions and public space consumption. (ADEME 2004). However the financial model needs, in the majority of cases and at least during the intial period, public grants or incentives : the cost of the transshipment is not compensated by the financial gains of the consolidation. Moreover, this type of organization is equivalent to the creation of a monopoly in the organization of the last kilometer, which seems contradictory with the principle of trade and industry and free competition in a highly competitive market with low profit. However the decision of the State Council of Italy in favor of the city of Vicenza (Ville, J Gonzalez-Feliu L. Dablanc 2010) shows that the environmental protection motive can justify the implantation of an urban distribution center. The impact on the final cost for consumers and on the small transport companies that can also be a serious brake on futher implementation.

Albeit more modestly, local authorities can promote urban logistics spaces by preserving zones, by identifying real-estate opportunities and insuring a link between the landlords and operators. Moreover we can notice that private stakeholders have recently entered this new market by proposing new solutions. Indeed, the demand of users is ever more important. Congestion pushes some transport operators to search for more urban locations to avoid congestion, even with higher costs than in peripheral zones. These costs must however remain compatible with the logistics activity and its acceptable rent.

Furthermore, most valued activities are often preferred to logistics and productive activities. A logistics or light industrial building usually sends back a negative image and thus arouses fears of the local residents (noise, pollution). The role of the local authorities thus consists in reserving spaces for this indispensable logistics functions in urban zones while making sure that buildings and operators of transport solutions are compatible with the environmental and social requirements of the urban environment.
Solutions exist in particular for real estate dedicated solutions, containing an esthetic facade and a technical facade, such as the programs recently developed by Alsei, Sirius or Spirit in Parisian suburb. The mixing of activities with the measured dose of tertiary floorspace allowing an adjustment is also a solution. The examples, such as the program Alsei in the Nord East suburb of Paris, remain nevertheless rare.

The financial intervention of local authorities can solve a part of the equation. It can be expressed through financial supports to make compatible the costs of rent with the logistics

activities (example of Chronopost Concorde in Paris) or through participations to initial urban infrastructures development (example of the arrangement of the railway hall Gabriel Lamé to allow the use of the rail to supply Parisian stores of large retailers).

b. Low emission zones

Low emission zones have little success in France for two main reasons:

- An absence of regulatory framework which sanctions offences for such regulations
- A political difficulty to exclude very small firms, which have no financial capacity to develop and renew their fleet of vehicles.

This regulatory tool could offer a competitive advantage to the the "best-in-class" professionals and thus impulse the evolution of practices. Despite the difficulty of control, Lyon limited since 2007, in its historical center, the access to the vehicles of EURO 3 standards and more.

c. Using more modeling tools characterizing the urban flows of goods on a territory

The examples quoted in the previous part concern only a small number of cities in France (twenty urban areas at the most). Most wish to approach the particular subject of urban goods movements, unconscious of the specificities of this field. However, there is today no methodology for local authorities that wish to start a reflection on urban goods movements.
Every territory is specific and requires an approach in which would be taken into account the characteristics of the flows, the infrastructures, but also the specificity of the place: the collaborative habits between the actors, the history of the evolution of the urban environment.
In an initial approach, the knowledge of flows generated by the activities, present and programmed, is the most obvious, the most common starting point, but also the most ignored. Nevertheless, there are today in France robust modeling tools to produce this knowledge. The FRETURB model (Routhier & Toilier, 2007, Bonnafous et al., 2013) calibrated through heavy surveys on urban goods movements, carried out on three French urban areas between 1994 and 1997 (Patier & Routhier, 2008, Ambrosini & al., 2010), allows in particular to realize an initial knowledge of the urban goods flows at several scales of a city or urban area.

In the simple reading of a register of establishments listed in France produced by the INSEE (national institute for statistics and economic studies) and on a localization of these establishments in a relevant zoning, the FRETURB® software allows to calculate the following elements of diagnosis:

- Number of deliveries and pick-ups per week in every zone of the urban area
- Kilometers traveled in the urban area,
- number of parking hours on public road network,
- Origin - destination of the routes for each zone,

These four main indicators are known according to diverse parameters:

- The category of activity,
- The vehicle type (< 3,5T, truck carrier, articulated vehicles),
- The mode of management (own account – consignor or consignee and third party),
- The mode of organization (express, regular messaging, direct tracks).

On the basis of these results it is possible to perform an environmental assessment of the urban goods movements on an urban area (Segalou and al., on 2006).

A tool of this type does not require heavy and expensive local surveys, because it has been calibrated on data collected on a significant number of establishments and operators of transport, in order to reproduce the specificities of urban goods movements to the totality of French cities, even European. This tool has been applied in most of large French cities (about forty cities) and two cities in Switzerland. A new wave of surveys is in progress, and will allow to update the data of calibration of the model and to give it a predictive reach.
An approach of simulation is under development (Gonzales and al. 2010, Henriot and Routhier, 2010). Three main types of actions are envisaged:

- In the short term, scenarios of regulations of the public road network and land use,
- In the medium term, the scenarios of logistics organization (consolidation solutions for storage for example),
- In the longer term, the scenarios of location of the places of transshipment (urban logistic spaces)
- And finally the projection of the evolutions of the localizations of the activities (Gardrat and al, 2013).

Prospective works are presently carried out on the most constrained areas of the Greater Lyon authorities. These studies underline an increase of the number of movements due to the densification of the urban environment. The example of the Confluence area shows an increase between 15 and 25% of the number of goods movements (Gardrat and al, 2013(2)).

Other tools like evaluation methods (ex-ante/ex-post) of policies and envisaged innovations are gradually implemented (Patier and Browne, 2011). They would deserve to be applied in a systematic way, as the environmental studies of the operations of urban planning.
If we can consider that the integration of the goods in the public policies has in France a slight delay compared to the stakes (Patier, 2010), we have to admit that the difficulty is partially methodological.

Conclusion

The means of action to influence the organization of the transportation of goods in cities are numerous. Nevertheless, all of them are not used, and local authorities do not implement the simplest solutions, which, for moderate costs, would bring major improvements: good calibration and good location of delivery spaces, coherence of the schedules of delivery and size of vehicles, integration of delivery spaces in the large real estate projects.

Beginning with a good initial state of urban goods movements and allocating the right place for logistics in the urban core of the cities are two main recommended approaches for policy makers and administrations. The implementation of a permanent observatory on the transport of goods, crossing data from the fields of economy, transport and urban planning would bring to local authorities a precious tool, for adapting in a reactive way its measures to the evolutions of needs and organizations of the urban freight.

Generally speaking, a paradigm shift has to be operated: rather than thinking the urban logistics in terms of supply (of transport, services, real-estate, taxes, and logistics equipment), it would be advisable to think of it as a demand of the consumers. As a support function support of the city, the urban logistics is at the service of the populations and economic agents.

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