FREIGHT TRANSPORT REGULATION AND THE NEW FRENCH URBAN MOBILITY MASTER PLANS

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Abstract

Freight operators, activities and vehicles that take place in urban areas escape from many of the social, technical and economic regulations that constitute Transport Law. This is reinforced by, or results in, inefficient local planning policies which disregard the main environmental and economic issues at stake and prevent the professionalization of freight urban activities. However, a 1996 reform in urban and regional transport planning has changed the framework of freight management in French large metropolitan areas. This paper describes the evolution of national and local policies that apply to urban freight transport, before reporting on the implementation of the new urban mobility master plans throughout France.

Introduction

Despite the many problems that freight activities encounter in, or cause to, the urban environment, the city is the "black box" of French freight transport regulation. Freight operators, activities, companies and vehicles that take place in urban areas escape from many of the social, technical, economic and professional rules and regulations that constitute Transport Law. It can be argued legitimately that this is the reason why freight transport in recent years has shown remarkable flexibility to supply city centers despite increasing congestion and sharper demands of carriers' commercial counterparts, shippers and receivers, together with providing many jobs for city dwellers. However, freight activities in cities also appear today as economically inefficient, very costly and environmentally unfriendly (CERTU/ADEME, 1998). This is reinforced by, or results in, inefficient local freight planning policies, which disregard the main environmental and economic issues at stake and prevent the consolidation of freight urban traffic and the professionnalization of freight activities in cities. A 1996 Clean Air Act has changed the framework of transport planning and management in French large urban areas. In particular, freight is to be a specific target of metropolitan planning policies.

This paper intends to report on the on-going implementation of these new regulations in French major cities. It will describe national and local regulations that apply (or do not apply) to freight, before analyzing the new urban mobility masters' plans and their current enforcement throughout France.

THE LEGAL INVISIBILITY OF URBAN FREIGHT

The urban movement of goods remains largely ignored by the institutional and legal framework. Whether at the national or at the local level, no legislation or case law has so far proposed a clear distinction and organization of freight urban activities.

At the national level

Take the basic characteristics of urban freight in France :
- urban freight is predominantly done by means of *small commercial vehicles* (60 % of freight pick up and deliveries in an urban area such as Bordeaux[1] for example) ;
- only one third of deliveries come from professional carriers, the rest being done with firms' *own account private fleet* ;
- carriers operating in cities are generally *very small firms* (many being one person firm only), which are often sub-contractors of large transport operators and freight forwarders ;
- freight transport in urban areas results mostly from *local* supply and demand, and *small distance transport* prevails (one third of deliveries in Bordeaux have both their origin and destination in the metropolitan area of Bordeaux itself) ;
- and about 40 % of the total time constituting an urban freight operation results from *static activities*, such as waiting in lines for access to the delivery areas, loading and unloading goods, handling goods within receivers' warehouses and shops (BERNADET, 1997). Static operations have been estimated to up to 50 % of the total cost of urban freight operations.

Many of these characteristics of urban freight have been exempted from the increasing number of legal obligations that the long haul carriage industry has to comply with. This results in making the urban freight market an easy one to enter, and the urban freight distribution an easy profession to access.

Easy access to the market

Direct market regulation (price fixing or quotas for example) has disappeared nearly entirely from the French legal system, after the movement of road transport deregulation began in the mid-1980s[2]. Since July 1998, the European transport market has been entirely deregulated with complete freedom given to cabotage (any European Union based transport company is free to operate in any European Union country for any type of transport activity). The French "transport authorizations", which in 1986 replaced a 50 year old system of transport licenses that severely restricted long distance truck transport, have been abandoned in February 1998[3].
However, it should be noted that up until now, market regulation such as licenses or authorizations, which provided quantitative as well as qualitative restrictions[4] as to who could enter the transport market, had never targeted urban freight activities :
- own account transport was exempted ;
- short distance transport was exempted ;
- companies using small commercial vehicles (up to 3.5 tons of maximum authorized weight) were exempted.

Therefore, for a long time, while controlling strictly long distance carriage and heavy vehicle use, the public administration had avoided dealing with the specifically urban types of freight transport markets.

Easy access to the profession

French companies have to register to the Transport Register before entering the transport business. To do so, they have to abide by three prescriptions (whose general terms have been fixed by European regulations[5]) :
- "*honorability*" : all directors and top management[6] must be clean of any lawbreaking with respect to truck security or transport social laws ;
- *financial conditions* : to start up a transport company, a minimum capital of 100 000 FF (15 244 Euros) for the first truck, 50 000 FF (7 622 Euros) for the second and 21 000 FF (3 201 Euros) for the following ones is required[7] ;
- and *professional capacity* : specific degrees are required in order to create a transport company.

The regulation of the transport profession represents now one of the most efficient ways left to public administrations to control road transport activities. However :
- the regulation of transport professions does not apply (by definition) to own account transport activities ;
- up to now, companies using small trucks have been exempted from the need to register to the Transport Register. This last principle results from the European legislation, which has always specifically exempted companies using light trucks of any professional restriction[8], member-states being given the possibility to take a harder line. In France, the Transport Law of February 6, 1998 has created a specific Transport Register for all companies using small trucks.

Easy access to driving

As regards trucks, drivers operating in cities come under very few driving regulations apart from that of any private car driver. When using vehicles under 3.5 tons of authorized weight, only a private automobile license is required. Training regulations have been reinforced by a 1995 Collective Agreement on truck driving training and a Decree of May 31, 1997. However, these regulations do not apply to :
- truck drivers from non transport companies ;
- truck drivers operating with small commercial vehicles.

Therefore, many urban truck drivers have been, until now, excluded from specific training, despite the difficulties of their job. Truck drivers who are not salaried workers (such as heads of small companies) were also exempted from specific training requirements. The Transport Act of February 6, 1998 has imposed the principle of a specific training to own account transport and non salaried drivers[9]. However, the text remains silent about specifically urban driving conditions as well as the use of small commercial vehicles.

At the local level

Local governments' response to freight in urban areas follows what has been said about the national regulation of urban freight : few cities have developed an explicit, coherent and global policy with regards to freight. Two opposite types of policy will be presented here : the traditional use of local traffic ordinances (the « police side ») ; and the new experiments of Urban Distribution Centers (the « service side »).

The "police side" : the use of restrictive local traffic ordinances to regulate freight

Local public response to urban freight difficulties and impacts has been quite conservative, especially in France where traditional "police powers" (the regulatory powers in charge of maintaining public order, under which come traffic and parking regulations) have been attributed to the smallest level of institutional jurisdictions, the local municipality. There are more than 36 000 municipalities in France : as a result, the impact of local ordinances on urban freight activities is quite important (SAVY *et al.* 1995). A survey done within the 124 municipal governments composing the urban core of the Paris region (DABLANC 1995) showed a very fragmented regulatory picture in terms of traffic and delivery ordinances. Even the definition of a *truck* differed greatly from one municipality to another. The result is that local carriers have to cope with heterogeneous routes or delivery hours that prevent them from consolidating their delivery operations. An update of this survey was made in 1997 (IAURIF 1997) together with an additional survey on the rest of the Paris region. It shows that little progress has been made. Even the four "new towns" that have been developed around Paris, which represent coherent urban spaces, show very incoherent commercial traffic ordinances.

The "service side" : experiments in Urban Distribution Centers

While most local policies remain focused on police regulations, a few, mostly north European cities are designing innovative ways of managing urban freight activities, by means of "Urban Distribution Centers" (UDC). In these UDCs, all freight intended for a city center is consolidated before final delivery, hence decreasing the number of trucks and truck trips necessary for supplying retailers.

By doing so, city governments are inventing the provision of a *freight transport urban service.* Whereas police is the set of regulatory powers prohibiting or imposing the patterns of private activities, the provision of service is the means by which governments organize - directly or through a private sub-contractor, an urban service. Freight in these cities is thus evolving from the police section to the service section of government activities (DABLANC 1998). More specifically, of the 20 European UDCs which have been studied (DABLANC *et al.* 1996 + 1998 updating), three "models" can be defined :

- The *"Monaco model"*. In Monaco, the UDC is owned and operated by the government. In 1989, the government contracted out the operation of freight distribution to a single carrier (a regional transport company). This sub-contractor was given a monopoly over the municipal depot. Added to this was a partial monopoly on the delivery of goods. All trucks over a maximum authorized weight of 8 tons (this limit should be lowered to 3.5 soon) are banned from the city of Monte Carlo. If they are to deliver goods to clients in the city center, they have first to go to the local freight platform and unload. The municipal service then takes the final distribution in charge, with specific vehicles. The costs of the service are shared between the municipality, which gives financial aid and free warehouse space to the carrier ; the carrier who provides driving and handling staff as well as the vehicles ; and finally the retailers who supposedly pay for the amount of goods they receive from the UDC service[10].

- *The "Dutch model"*. Following a national program of reduction in energy consumption in urban areas (DUTCH MINISTRY OF TRANSPORT, 1993), many Dutch cities have set up systems of urban freight distribution licenses. Strict operating regulations are imposed on the licensees in exchange for an extended usage of street space and longer delivery hours. For example in Leiden, a license system has been functioning since March 1997. Applicant carriers must respect a list of criteria such as a good level of truck loading, a bottom number of shipments and the use of electric vehicles. This kind of municipal organization can lead to a quasi monopoly of distribution where a very limited number of registered carriers dominate the market of urban distribution, as it was the case in Utrecht[11].

- The *"German model"*. In that case, at carriers' own initiative, a private service of goods distribution is set up with the help of the city. Different carriers join together to consolidate freight and distribute it cooperatively. These experiences have been developed in some German cities such as Fryburg or Nuremberg. In Nuremberg for example, electric vehicles are used for the city delivery service. The system provides for other kinds of services, such as home deliveries, collect and recycling services, or short time storage. Government support can take the form of the distribution of an official « City Logistik » label on trucks and warehouses. Governments can also participate in the financing of the system. In Nuremberg, the experimental phase for the city consolidated delivery service was paid in half by the Land administration.

It should be noted that many of these UDC experiments have failed to attract a significant share of the total urban freight traffic, many have even been closed down and most have cost a lot to their initiators, whether private or public. They however demonstrate a growing interest in many European cities for a new way of considering, planning and managing freight transport.

French cities so far have shown little interest in these experiments, with some notable exceptions such as Aix en Provence which tried to implement a city distribution center in the early 1990s. This leads us to a more general observation : whereas in France the provision of urban services, such as public transport, has always shown a great adaptability, with a large number of legal structures for outcontracting and private management of public services in sophisticated public/private

partnerships (what has been called the "mixed economy") and where a strong expertise on urban services has developed within large private corporations (LORRAIN *et al.* 1995), the management of freight has always come under the police power jurisdiction, based on the protection of public order. Whereas Dutch, Swiss, German cities have been trying to design new ways of organizing freight transport urban activities, in France so far no experiment has been made and French cities have not put to the service of freight the long experience they have of public/private partnerships in public transport or water utilities.

However, this now is changing rapidly and innovative experiments begin to catch the interest of public managers : in Lille and Arras, in Nice or Besançon, La Rochelle and other cities, UDCs are currently being discussed. This interest comes in part from the new context created by the preparation of the *plans de déplacements urbains*, or urban mobility master plans.

THE NEW URBAN MOBILITY MASTER PLANS

The new *plans de déplacements urbains (PDU)*

The *plans de déplacements urbains* (PDU), or urban transport and mobility master plans, have been proposed to French local governments since the 1982 Transport Act called the "LOTI"[12]. Though they were to become a key element in the local and regional transport planning process, PDUs never actually reached that status. Some cities designed effective and powerful PDUs, but most of them established documents that were of little direct use, consisting mostly of broad statements of general policy with no effective legal or financial means to apply them.

The 1996 French Clean Air Act[13] included an article reforming PDUs. In particular, PDUs are now made compulsory for metropolitan areas over 100 000 inhabitants. Some 60 French urban areas are affected by the measure. Cities have until the end of 1999 to establish a PDU. Other reforms will make a PDU more effective in terms of rational metropolitan planning process. The territory of a PDU cannot be inferior to the "Urban Transport Perimeter", which is the metropolitan transport agency's jurisdiction covered by public transport services. Also, a PDU has to include tangible planning and operational measures to guarantee its enforceability, and it has to be reviewed every five years. Perhaps the most significant reform introduced by the Clean Air Act comes from a provision making it compulsory for local police regulations « to be compatible or made compatible » with the orientations of the PDU. For the first time, a legal limit is put on local municipal ordinances with regards to metropolitan transport management.

What is of interest for the issue discussed here is that the Clean Air Act recognizes freight as one of the major issues at stake in a PDU process. "The *plan de déplacements urbains* defines the principles of passenger and freight transport, of traffic and parking regulations in the urban transport perimeter". Only implicit in the former statute, freight is now explicitly part of the wording of the national regulation on PDUs.

Five major orientations for PDUs are specified by the Clean Air Act : reduction in automobile traffic and the development of clean transport modes ; global parking policy ; use-sharing of streetspace ; development of employees' collective transport within large firms ; and policies for freight. As regards freight, a PDU has to establish orientations for "the transport and distribution of goods so that their environmental impact be reduced as much as possible".

In that wording, we can note that the restrictive vision of freight still prevails in the new legislation. Freight is not meant to be positively managed as an urban service, but is to be controlled and regulated so that its visible presence in the street be minimized. However, freight may benefit from the reform of the PDU planning process :
- a PDU's territory is now metropolitan, and this will help look at the "bigger picture" of freight regulation and spatial coordination ;
- a PDU process invites local governments to public/private partnerships and actual dialogue with all private actors involved in the transport system ;
- and finally, making local ordinances « necessarily compatible » with a PDU orientations could result in more coordinated truck weight and size regulations or delivery hour provisions within a metropolitan area.

The current implementation of the PDU reform in France regarding freight transport

Apart from Lyon which has published its PDU in November 1997[14], and Bordeaux which has opened a public inquiry on its PDU proposal in December 1998, French large cities have delayed starting the planning and coordinating process of their PDU and are largely behind schedule. Most metropolitan areas though have by now set up working groups dedicated to the preparation of the PDU, and many have hired private consultants to assist them. But according to the minister of Transport, in December 1998 only one fourth of French urban areas seemed to be able to respect the 1999 deadline. As regards freight, the situation is somewhat heterogeneous. A study has been conducted recently on the way large cities integrate freight in their PDU process (PREDIT *et al.*, 1998). These cities share the following characteristics :
- a general interest for the issue of urban freight ; this was not true only a few years ago, and it can be attributed directly to the new PDU planning process ;
- a lack of data regarding urban goods and commercial vehicles' movement and the absence of specific modeling systems ; this confirms what other surveys had shown before ;
- a dysfunctionning of the local regulation process ; this confirms studies made on the Paris region ;
- very few innovative experiments (such as Urban Distribution Centers) but a growing interest for them.

Some cities demonstrate a specific interest for freight. The study lists a few cases, among which are the following ones :
- In Arras, a market study has shown that an Urban Distribution Center was feasible. The concept, supported by the local Chamber of Commerce and the municipality, includes such services as home deliveries and short-term storage.
- In Lille, the same concept may also be tested after the City of Lille and the Lille metropolitan authority (Communauté urbaine de Lille) solve their differences of opinion regarding the implementation of the distribution service.
- Besançon has shown a great interest for the issue of freight planning for the past three years. Several studies have been made on delivery data, electric delivery vehicles, the creation of an Urban Distribution Center in the river port facility, etc. Although no project has materialized yet, the city is planning to experiment further.
- In Montpellier, planners are looking at the opportunity given by the land formally owned by the national railway company (SNCF). Adequately located in the urban core, it represents a potential site for an Urban Distribution Center.
- In Nice, pedestrian highways will be a specific target for future freight planning and policy.

- La Rochelle (which is well known in France for its environmentally friendly mobility management experiments), plans to set up an ambitious municipal Urban Distribution Center, using electric vehicles. A pilot study should be set up soon.
- Rouen is involved in the SURFF European Program. The objective of this program is to optimize urban goods movement. Real size testing operations should take place, in collaboration with some parcel delivery industry operators.
- The cities of Dijon, Toulouse and Strasbourg are also interested in designing innovative freight management schemes.

What this study shows is a growing interest for freight. It is not clear whether this interest will materialize within the PDUs' final documents themselves, nor if it will have any concrete policy implication. However, the next generation of PDUs should be more considerate of freight than they are now.

In the meanwhile, considering the significant lack of expertise that French cities have demonstrated so far towards freight, the Ministry of Transport has published some "Freight Guidelines for the PDU Process" (CERTU/ADEME 1998). This document looks at the various issues at stake in urban freight planning, and draws recommendations and methods for freight data collection or the design of local ordinances and zoning plans (so that the granting of building permits for medium or large-sized industrial or business constructions include prescriptions for sufficient space for off-street loading and unloading for example). Furthermore, the government is providing financial support for innovative experiments in urban goods movement through the « PREDIT »[15], a five year plan for the promotion of public/private partnerships in surface transport research.

Conclusion

The experiments in Urban Distribution Centers in Europe have so far been disappointing. They represent costly sophisticated processes with little gains in the market share of the city's goods distribution or in the diminution of truck traffic in the city center. However, they demonstrate that cities today are ready to experiment new ways of planning the urban movements of goods. French cities today should reflect on these experiments, their outcomes as well as their drawbacks. The current preparation and implementation of the *plans de déplacements urbains*, or urban mobility master plans, in the major metropolitan areas represent an excellent opportunity to reconsider the way freight is organized in cities, and to design innovative - yet realistic - solutions. It is crucial that French cities begin to introduce some global thinking in order to reform, on a metropolitan wide basis, the framework in which freight transport operates. Truck routes, weight and size restrictions and delivery hours' regulations as well as many other *police* regulations are still necessary in cities. But there is also the need for some *service* regulation, based on innovation, coordination and partnerships. It is now time for freight transport and distribution to be regarded as an urban service to the community.

ENDNOTES

[1] All figures related to Bordeaux in this paper come from a survey made in 1994 by the Laboratoire d'Economie des Transports of Lyon, within the large metropolitan area of Bordeaux. For main results, see (CERTU/ADEME 1998).
[2] Decree of March 14, 1986.
[3] Transport Act of February 6, 1998.

[4] The authorities at the regional level in charge of delivering authorizations could deny them on grounds of a wide variety of criteria : if applicants did not respect traffic laws, or did not prove sufficient financial profitability, or else if "regional transport needs proved to be sufficient" (article 16 of the Decree of March 14, 1986). Actually, by the mid-1980s, very few of these criteria were strictly applied and few authorizations denied.

[5] Directive 98/76/EC of October 1, 1998 amending Directive 96/26/EC, « on admission to the occupation of road haulage operator and road passenger transport operator and mutual recognition of diplomas, certificates and other evidence of formal qualifications intended to facilitate for these operators the right to freedom of establishment in national and international transport operations ». Official Journal of October 14, 1998.

[6] Before the Decree of November 6, 1997, only the owner of the company had to abide by the rule of honorability.

[7] These amounts result from the Decree of November 6, 1997, which substantially increased them compared to previous regulations.

[8] The new European regulation (Directive of October 1st, 1998) makes professional regulations applicable to companies using trucks over 3.5 tons of authorized weight, instead of 6 tons as in previous regulations. An earlier version of this Directive had proposed to apply professional regulations to all transport companies, with no mention of the type of trucks used. However, the text which has eventually been voted has retained a limit, even though stricter than before.

[9] The Decree of November 18, 1998 has extended training requirements to non salaried workers.

[10] The initial fee was 10 FF (about 1.5 Euros) for each 100 kg received, but retailers actually never paid.

[11] However, the Utrecht UDC was abandoned in 1997 because of the city's failure to impose delivery hours for unlicensed operators.

[12] *Loi d'orientation des transports intérieurs* (Domestic Transport Orientation Act).

[13] Namely the *Loi sur l'air et l'utilisation rationnelle de l'énergie* of December 30, 1996.

[14] although specific studies have been conducted, the final document of the Lyon's PDU does not specify thoroughly on freight targeted objectives and measures. However, a specific freight management committee should be constituted.

[15] PREDIT : « programme quinquennal de recherche et de développement pour l'innovation et la technologie dans les transports terrestres » (5 year program for research and development for innovation and technology in surface transports).

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