

Discussion paper for the 2nd BESTUFS workshop,
27th of September 2000, Round-Point Schuman 6, Brussels

Thematic focus:

'City access, parking regulations and access, access time restrictions and enforcement support'

Introduction

City access restrictions

'City access restrictions' in this paper are restrictions for all types of goods vehicles in the access to the inner cities. Freight transport in this respect concerns both pick up and delivery activities in retailing, parcel and courier services, waste transport, transport of equipment for the construction industry and a broad range of other types of transport. The purpose of these restrictions is to reduce the negative effects in the city area caused by the interaction of goods vehicles with other users of the city and the infrastructure. For example, goods vehicles can cause problems in the city on aspects like:

- Traffic: low speed and blocked roads resulting in traffic jams
- Danger to other users of the infrastructure (cyclists and pedestrians)
- Hindrance to inhabitants people by noise, vibrations, stanch and a bad air quality
- Physical damage to buildings and road.

The most well-known restrictions are time and weight restrictions (e.g. vehicles heavier than 3.5 tons only access to the inner city from 6 till 11 hrs in the morning). However restrictions on the dimension of the vehicle (length, wideness, height) and restrictions on levels of emissions also occur (e.g. only EURO-2 trucks are permitted to enter the city). In general the strength of the measures depends on the weight and size of the vehicles (the bigger, the more prohibitive they are).

Loading and unloading policy

Causes for problems regarding loading and unloading in city areas can be:

- Cars and other objects blocking loading and unloading areas
- Too few loading and unloading areas
- Large distances between loading/unloading space and the final destination of the cargo

- Too little time for loading/ unloading

These problems may result in time-losses in vehicle operations, more costly, difficult and critical transport operation and more negative external effects.

Enforcement

A critical factor in the success of the policy on parking/loading/unloading and, city access in general, is the enforcement of rules and regulations. Enforcement is traditionally a labour intensive task and is therefore costly. However new applications of information and communication technology (ICT) may improve the 'enforcement efficiency' and enlarge the scope of enforcement.

Conflicting interests in urban goods transport

The interests of various actors have to be considered in order to guarantee sustainable solutions. Finding the right balance between these interests is a key objective of policymakers.

Description of actors and interests

Several actors are directly or indirectly involved at urban goods transport. All actors have their own specific interests. The following table presents these actors and their main interests:

Actor	Main interest with regard to urban goods transport
Shipper	Delivery and pick-up of goods at the lowest cost while meeting the needs of its customers
Transport-company	Low cost but a high quality transport operation, satisfaction of the interests of the shipper and receiver (shop)
Receiver / shop owner	Products on time delivered at a short lead-time
Inhabitant	Minimum hindrance caused by goods transport
Visitor / shopping public	Minimum hindrance caused by goods transport and a high variety of the latest products in the shops
Local government	Attractive city for inhabitants and visitors: minimum hindrance but having an effective and efficient transport operation
National government	Minimum external effects by transport, maximum overall economic situation

Conflicting interests

Of course a clear conflict exists between the economic industrial objectives of transport companies and consignees on the one hand and city authorities on the other hand. As a matter of fact the 'access restrictions' can be considered as the outcome of this conflict.

Another potential conflict exists between the inhabitants on the one hand and the interests of the industry and the policymakers on the other hand in the case of night-deliveries. While night-deliveries may be interesting from the economic viewpoint and also lead to reduced emission levels, the city inhabitants are often less pleased with night deliveries. Especially there are concerns about noise-levels.

Also conflicts can exist between the interests of local and national or European governments. Local policy has a limited scope and often policies are not harmonised across cities let alone across EU member states. Situations may even occur that local governments are improving the situation in the city centre, but by doing this cause new problems in the city outskirts or perhaps also in nearby cities. The total negative effects of the whole transport chain may then show an increase instead of a decrease.

Some issues for 2nd BESTUFS Workshop

The use of small goods vehicles compared use of heavy goods vehicles

The perception of the general public is that big and heavy trucks cause more traffic jams, more danger, more noise and more air pollution compared to smaller goods vehicles at the same amount of goods delivered. However, if the whole supply chain is analysed (from shipper to the final customer) this perception is often incorrect. The total negative effect of using vans is in many cases not lower but higher since the use of big trucks may save trips. However one should realise that the use of smaller vehicles in many instances is unavoidable because the market requires them. Many shops in the city demand high frequencies of just-in-time deliveries with short lead-times. This demand is also the result of using small storage spaces at shops and having a broad product variety. This is the result of increased needs of the shopping public. The shops need to have a maximum amount of space for the presentation of latest products in order to satisfy the needs of the shopping public. It is expected that a further increase in the use of vans will be the consequence of the expected growth in home deliveries caused by teleshopping.

Flexible access restrictions

If a city is easily accessible and heavy goods vehicles operate effectively with high load factors there are strong arguments against the use of 'rigid time-windows and weight restrictions'. Effective policy requires in this case flexible, 'tailor-made' restrictions that better take into account the situation of transport operators and their customers. E.g. exemptions of access regulations (time windows, vehicle size) should be possible when vehicles are fully loaded. Also, as another example, one may think about allowing exemptions when transport operators voluntarily provide route-information to the enforcement authorities (e.g. large vehicles may enter city centres provided the routes can be checked on-line by the police e.g. by using mobile communication and GPS).

Harmonisation of access restrictions across cities

Many shippers and transport companies that access city centres operate not only on a local level, but are active in a much bigger geographical area. From their point of view (a higher scale level) there could exist severe conflicting regulations between cities. These problems arise e.g. when in a roundtrip either the same or completely different time-windows are faced. Then there is either little room for delays or else forced waiting during the trip. Also weight restrictions may be substantially at odds between cities within a region. These differences are not only bad for operator productivity but are also bad for the environment (at least if one views this also from a regional/ not purely local perspective). Combining this issue with the previous issue of 'flexible access restrictions' one may plead for 'flexibility in access restrictions across cities in a region'. By this we mean that if operators can prove that they have a very high level of vehicle utilisation in regional or national transport their operation should not be obstructed by purely local access restrictions.

Wider harmonisation issues with respect to city access

As has been remarked in the previous subject on 'harmonisation of access restrictions across cities' some local policies may be at odds with the objectives of regional, national or even EU-policies. There are other examples where conflicts may arise. E.g. if in international transport one needs in the near future for each city different system components (e.g. smart cards, on-board systems) for road pricing, parking and city access there is little doubt that this also completely at odds with the idea of the freely accessible EU internal market. So also with respect to these new technologies (or the 'new economy') harmonisation issues arise that have to be addressed at the level of the transport market; that is the EU level.

Loading and unloading policy

The city authorities want to reduce the visiting time of goods vehicles as much as possible in order to improve the city image and to minimise annoyance of inhabitants and city visitors. Basically transport companies also want as quickly as possible to leave city centre areas in order to minimise the risk of delays. So a partial win-win situation exists at this point.

However these interests must be balanced against the interests of inhabitants and visitors of the city so that loading/unloading facilities will be limited. The shopping public and inhabitants also want pedestrian and green areas and space to park their cars. This is a dilemma for city governments because space is limited and expensive. This resulted in creative solutions like initiatives in Barcelona to 'open' bus lanes for goods vehicles and design and implement loading zones that use small space (see figure).



Enforcement support

With innovative ICT-applications the scale of enforcement (on city access and parking / loading and unloading) can be enlarged while maintaining or even reducing the number of employees. Technically it is possible to monitor all users of the infrastructure. All offences of access and parking restrictions can e.g. be registered in real-time. The owner of a vehicle can be identified automatically and a warning or ticket can automatically be sent to him directly in the vehicle (if the right on-board equipment is present) or otherwise by post. Evidence of offences can be stored automatically. An enhanced enforcement system using ICT is already operational in Barcelona. Creating support for such a system and the acceptance by the user can however be possible bottlenecks. Next to the costs for the general public also privacy aspects should be taken into account. Furthermore one should be aware that a new field of harmonisation issues arises when these applications are being introduced (see also previously discussed points).