

CITY ACCESS RESTRICTIONS AND THE IMPLICATIONS FOR GOODS DELIVERIES

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Outline

- Background
- Variety of aims and objectives
- Impose and enforce access and loading regulations
- Access and loading restrictions
- Problems caused by access and loading restrictions
- Conclusions

Terminology

- Time restrictions / Time delivery windows
- Weight restrictions
- Restrictions for vehicles that do not meet specified environmental standards

The type of restriction is strongly related to specific issues: e.g. environmental problems, historic city centres or congestion

Concept of space management

- The concept of space management for urban delivery addresses the following aspects:
 - Provide dedicated road space for loading and unloading processes
 - Provide value added services on the delivery processes
 - Assign the same space to other user groups over the day (to be used by residents for parking, clear way or dedicated to loading and unloading)
 - Support a correct usage, e.g. by the installation of fixed signs or variable message signs (VMS)

Variety of aims and objectives

- Restrictions for vehicles that do not meet specified standards
- Vehicle-limiting measures (e.g. only vehicles not exceeding length/width/height) or weight regulations (axle-weight, total train weight).
- Loading capacity restrictions
- Establishing special protected loading zones in areas where there is considerable delivery traffic, parking places.
- Fee for parking or the use of special delivery window (city-centre licence).
- (Pedestrian) zones in which deliveries can only be carried out at certain times of day or night or certain events.
- Allowance or obligation of night deliveries
- Limitation of the loading/unloading time at the point of delivery
- Protected zones that have to be kept completely or partly free of trucks.
- Access slots
- Access regulations depending on (only at certain points) existing regulations within the urban infrastructure (e.g. narrow bridge).
- Access charge based on specific times or environment standards or applicable for all vehicles

Impose and enforce access and loading regulations

- Traffic signs - inform drivers of the restriction
- Plus - CCTV enforcement
- Retractable bollards
- Width regulations

- Enforcement of parking and loading regulations is important
 - special staff - parking attendants (expensive)

- Feasibility work when planning the restrictions
 - do the advantages outweigh the disadvantages? (taking into account the economy, society, and the environment)

Issues to consider in the implementation of a scheme

- Use of organisational and operational enforcement measures for above mentioned schemes (signalisation, guidance, parking regulations)
- Use of physical restriction measures such as gates and bollards
- Control and monitoring with ITS, video, number plate recognition or other innovative systems
- Standardisation/harmonization of restrictions
- Licensing.

Access and loading restrictions

- Vehicle weight and size regulations
- Time regulations
 - access time regulations
 - loading time regulations
- Environmental zones
- Night deliveries
- Lorry lanes
- Licensing

Vehicle weight and size regulations

- Unsuitable road or to improve amenity for others: historic cities or areas with heavy congestion
- Usually applied to vehicles driving through the area
- Restrictions based on surface area/dimensions primarily related to physical hindrance to traffic flow
- Restrictions based on axle weight and/or vehicle weight meant to limit physical damage to infrastructure (under or beside road)
- Examples: narrow road, weak bridge, sharp bends, overhanging buildings, low bridge

Time regulations

- Vehicle access
- Loading and unloading

Access time restrictions

- Examples include:
 - Pedestrianised shopping areas – often all vehicles are banned during the main shopping hours
 - Residential streets – goods vehicles above a certain weight or size are sometimes banned from a road or urban area at night to prevent disturbance, or during the day near to a school to prevent accidents
 - Entire urban areas – weekend bans are imposed on goods vehicles in some European towns and cities

Loading time restrictions

- Applied to kerbside locations used for delivering or collecting goods - drivers are usually informed by using traffic signs that state times and days when restriction is in force
- Busy retailing or commercial area - much competition for the kerb space between goods vehicles and other vehicles - need for balance
- Good kerbside management can help to make better use of the limited kerbside
- Dedicated space for loading and unloading either at all times or at certain times/days can be implemented if necessary
- Periodic reviews are essential to ensure consistency and meeting changing needs

Environmental zones

- “Low Emission Zone” (LEZ): an area that can only be entered by vehicles meeting certain emissions criteria sometimes called an “Environmental Zone”
- LEZ schemes can take many forms based on:
 - geographical area, the times in force, vehicle emissions standards, types of vehicles that need to comply, implementation and enforcement approaches used
- LEZs already successfully implemented and run in several Swedish cities
- LEZs planned in Copenhagen and London, and the Ministry of Transport in Norway has established an LEZ working group
- Environmental Zones and LEZ in Europe are usually based on the Euro 2 or 3 standards and in most cases from 2010 the standard applied will be Euro 4.

Night deliveries

- Impact of restrictions include:
 - More vehicles required in the fleet to make deliveries because deliveries have to be concentrated within a smaller time window
 - Less productive output from vehicle drivers because they are forced to deliver during times when traffic is congested
 - More fuel consumption as deliveries take place in busy areas at more congested times of day
- Allowing delivery at night leads to faster and more reliable journeys
- But, may be adverse impacts on residents living near the delivery point and on access routes
- Trials and initiatives: Piek (NI), Barcelona, UK (night time delivery guidance)

Lorry lanes

- Following main options exist:
 - Dedicated lorry lane - lane only for goods vehicles
 - Bus and lorry lane (also called “no-car lane) - lane that all essential vehicles can use (but cars are not allowed to use)
 - High occupancy vehicle lane – lane for buses, goods vehicles and cars with a specified number of occupants

Problems caused by access and loading restrictions

- Additional costs for transport operators
- Restrictions are not coherent and 'joined-up'
- Roles of national and local governments
- Restrictions may be framed in the wrong way.
- Commercial attractiveness of city centres

Conclusions

- A fundamental question – relates to time and space allocation
- Freight transport treatment is often less than optimal
- Need for review and more innovation
- Agreement among the stakeholders is difficult
- Private sector role should not be ignored
- Policy measures can enhance opportunities for better solutions