

UVAR building blocks Regulatory Measures



Delivery and logistics



This ReVeAL building block fact sheet is one of a series of 33, each describing one Urban Vehicle Access Regulation (UVAR) building block and providing an example of its use in a city. The ReVeAL building blocks can be combined with one another to create a structured UVAR package for a city. Try out the ReVeAL online tool, www.AccessRegulationsForYourCity.eu, to receive suggestions of appropriate UVAR building blocks for your city as well as guidance in their implementation.



The EU-funded research and innovation project, CIVITAS ReVeAL, aims to add Urban Vehicle Access Regulations and associated policies and technologies to the standard range of urban mobility measures in cities across Europe. The project mission is to enable cities to optimise urban space and transport networks use to improve urban accessibility, sustainability, and liveability.

For more information, please visit: www.civitas-reveal.eu.





ReVeAL

Spatial Interventions

Spatial interventions are where the road layout has been altered to favor more sustainable mobility and prevent vehicles entering. Examples of these are removing road and parking space taken for vehicles and using the space for sustainable mobility or amenities (bus lanes, logistics hubs, parklets, restaurants and more)

Speed reduction

Traffic filter:

- Recirculation of traffic
- Road block
- Capacity restraint

Reallocating parking space:

- Parklet
- Drop-off zone shared mobility
- Logistics bay (mini-hub)
- Kiss & Ride (K&R)

Reallocating road space for pedestrians:

- Widen pavement
- Pedestrian priority street or zone

Reallocating road space for cycling:

- Cycle lane
- Cycling street

Reallocating road space for public transport:

Bus or tram priority lane

Pricing Aspects

Pricing aspects are when the entry to an area or to the entirety of the city is given a price tag to encourage more sustainable transport. Pricing aspects also include the (differential) levels of penalty fees to encourage (and enforce) compliance.

Road charges / tolls:

- Charge applied to a perimeter or an area (congestion charge)
- Charge applied to specific points
- Distance-based charge
- Time-based charge
- Permit charge
- Charge based on emission standards (pollution charge)

Parking charge:

- Dynamic price (real time)
- Fixed price
- Charge based on emission standards (pollution charge)
- Workplace levy
- From on-street to off-street parking

Regulatory Measures

Regulatory measures are those where there is a legal instrument that states who can and cannot enter an area. They could often also be called "bans" and include Zero Emission Zones, Low Emission Zones, and Limited Traffic Zones.

Regulation by emissions:

- Euro standard
- Zero-emission vehicles

Regulation by vehicle type and dimensions:

- Vehicle type
- Dimensions

Regulation by trip

purpose:

- Delivery and logistics
- Through traffic ban

Regulation by permit:

- Permit to travel
- Parking permit
- Planning permit conditions





Definition of the building block

Access for delivery and logistics vehicles is regulated; this can be within a pedestrian area or a limited traffic zone focused on delivery or logistics. The rules or permits given can be by time window or be valid 24/7, and they can be with or without permits. They can provide more (or less) freedom for those with 'desirable behaviour' (e.g., low emissions). The regulations generally focus on the need to access (e.g., perishable goods or servicing the catering trade), on vehicle size/type, on emissions or on other requirements. The rules can be phased in by increasing the restricted times or tightening the requirements (e.g., emissions, vehicles affected).

Timing, phasing, scaling and replication

Ensure that complementary measures for sustainable logistics are in place from the beginning. This measure can be phased in by progressively tightening either time restrictions or permit requirements.

Time windows

- Allowing vehicle access at particular times of day
- Allowing vehicle access on given days of the week (e.g., weekends)
- Having no time differentiated vehicle
 access

Enforcement options

- Cameras with automated number plate recognition (ANPR)
- Manual enforcement through visual inspection
- Physical barriers
- Radio frequency identification (RFID)
- Road sign

Gender and equity

Smaller businesses may find it difficult to comply, so sustainable logistics alternatives such as cycle logistics or consolidation centres need to be available (e.g., to avoid the need for a new vehicle purchase).



Electric vehicle and cargo bikes operated by DB Schenker (Bloglobal, 2021)

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Complementary measures

Exemptions

The types of exemptions will be different depending on the scheme type, but some examples are:

- Key exemptions for police, fire department, waste collection, etc.
- User needs exemptions, e.g. for people with disabilities with forced car dependency, taxis, classic car owners, residents, deliveries
- Exemptions for adapted vehicles (e.g., retrofitted or converted electric or hybrid vehicles)
- Limited numbers of purchased exemptions for entry (e.g., per day/ month/year) to a specific zone
- Specified maximum amount of kilometre "credits" allocated to individuals or businesses

Increased mobility options

The types of increased mobility options will be different depending on the scheme type, but some examples are:

- Creation of mobility hubs
- Increasing/improving walking or cycling facilities
- Increasing/improving public transport
- Facilitating vehicle hire and/or car sharing
- Providing parking spaces in alternative locations (e.g., Park & Ride)

Financial incentives

These will differ depending on the planned UVAR measures, but some options include:

- Financial incentives for fleet renewal, e.g., for the purchase, renting or leasing of greener vehicles (including tax exemption)
- Membership or vouchers for sustainable mobility options (e.g., public transport and shared mobility services) such as discount cards, free rides or annual passes for public transport or consolidation centres
- Monetary incentives for cycling trips (e.g., for bike-to-work) or for (e-)cycle or (e)-cargobike purchases
- Grants towards retrofits (e.g., diesel particulate filters, new engine or fuel conversion)
- Compensation for scrapping an old vehicle (either financial or through a voucher), often differentiated by emission standards, vehicle type or owner income.

Organisational support

This can include logistical, administrative, promotional or other support provided by the city. This might include supporting alternative business models (e.g., for car parks that have no/ fewer customers), facilitating changes and working on individual solutions to resolve issues.



Consider combining with:

Spatial Interventions

Traffic filter: Road block

Reallocating parking space: Logistics bay (mini-hub)

Pricing Aspects

Road charges/tolls: Charge applied to a perimeter or an area (congestion charge)

Future considerations

The increasing availability of zeroemission heavier delivery vehicles will make these vehicles easier to include in access regulation measures.

Further guidance

- Signage to communicate UVARs
- Exemptions
- Exemptions and permits in limited traffic zones
- Managing permits (and exemptions)
- Enforcement options

Regulatory Measures

Regulation by emission:

- EURO standard
- Zero-emission vehicles

Regulation by vehicle type and dimensions: Vehicle type

Road charges/tolls can be an alternative method of implementing regulation by trip purpose; instead of regulating (banning) 'undesirable' vehicles, these vehicles are charged a fee at the level of a fine, and 'compliant' vehicles are charged no fee. A logistics bay/mini-hub can be a useful combination, and other spatial interventions leading to increased pedestrianisation can be applied as logistics congestion is removed.

the orange boundary marks the extent of the regulated area, in purple, the pedestrian area



Map of the regulated area in La Rochelle (Communauté d'Agglomeration La Rochelle, 2019)

Example: La Rochelle, France

Description

La Rochelle has a low-emission zone for delivery vehicles active in the boundary of the inner city. Access is regulated by time window and emission level. Delivery vehicles that are 100% electric or hydrogen, gas, hybrids, or Euro 6 are granted a longer delivery time window in the pedestrian area. In the city centre there is dedicated parking for delivery operations, that become accessible to other vehicles from 11.00 to 6.00.

Enforcement methods

Law enforcement officers

Time windows

Dedicated delivery spaces: exclusively reserved for delivery operations in the city centre on Mondays to Saturday from 6.00 to 11.00 (at other times, other vehicles may use these spaces).

City centre

- Delivery vehicles heavier than 3.5 tonnes only have access from 6.00 to 11.00.
- Delivery vehicles lighter than 3.5 tonnes and low-emission vehicles have unlimited access.

Pedestrian area

- Delivery vehicles heavier than 7.5 tonnes have no access.
- Delivery vehicles lighter than 7.5 tonnes only have access from 6.00 to 11.00.
- Low-emission delivery vehicles have access from 6.00 to 11.00 and from 19.00 to 21.30.

Phasing and upscaling

- 2002. Start of trial with electric last mile deliveries, inside the framework of Elcidis (ELectric Clty DIstribution System 1998-2002)
- 2015. Decision to restrict access to only electric vehicles for deliveries
- September 2019. Introduction of the delivery regulation: to give carriers time to renew their fleet, the time window for delivery vehicles heavier than 3.5 tonnes gets extended (6.00 to 11.00 in place of from 6.00 to 07.30)
- Introduction of the new time window for low-emission vehicles from 19.00 to 21.30



La Rochelle, France

Other building blocks put in place

Regulatory Measures

Regulation by emission: EURO standard

Regulation by vehicle type and dimensions:

- Vehicle type
- Dimensions

Regulation by permit: Permit to travel

Complementary measures

Exemptions

- Vehicles with a parking card for people with restricted mobility
- Health care and emergency services
- Armed forces and civil security
- Driving schools
- Removal companies
- Authorised market suppliers or those transporting frozen goods
- Fuelling vehicles
- Special vehicles
- Classic cars
- Vehicles older than 1990, used as part of a commercial activity for tourism

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