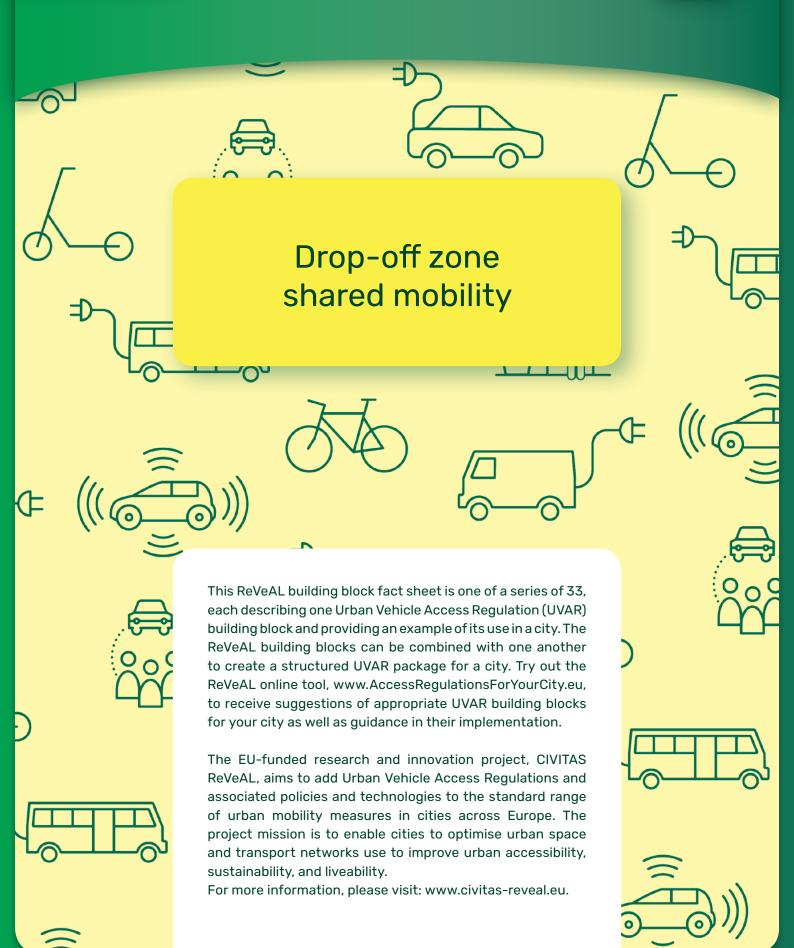


UVAR building blocks **Spatial Interventions**







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:

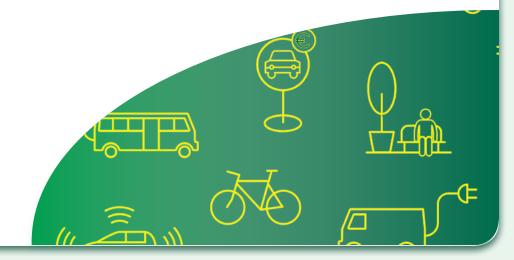
- · Vehicle type
- Dimensions

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

Parking space is converted to a space for dropping off vehicles of shared mobility systems (e.g., micro mobility, car sharing, etc.).

Timing, phasing, scaling and replication

This building block has no-timing related issues requiring specific attention.

Time windows

Time differentiated access is generally not used.

Enforcement options

- Manual enforcement through visual inspection
- · Road sign

Gender and equity

Be aware of the needs of people with disabilities. Individual special arrangements may be needed.

Future considerations

No specific effects are foreseen for this building block from future technologies.

Further guidance

- · Communicating the aim of the scheme
- · How to communicate the scheme
- · Fairness and equity

Complementary measures

Organisational support

A city can support which shared mobility systems are implemented (and in which way; uniformity, infrastructure, ...) and they can support the dialogue between stakeholders (e.g., citizens, companies, providers, etc.).



Consider combining with:

Spatial Interventions

Reallocating road space for pedestrians:

- Widen pavement
- · Pedestrian priority street or zone

Pricing Aspects

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

Parking charges:

- Workplace levy
- · From on-street to off-street parking

Regulatory Measures

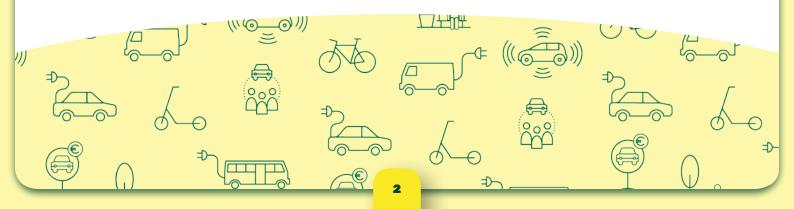
Regulation by permit: Permit to travel



A mobility point in Bremen connected to public transport (Karbaumer, 2018)



One small mobility point in a residential area (Karbaumer, 2018)





Example: Mobil.Punkt, Bremen, Germany

Description

The city of Bremen was one of the first European cities to set up a car sharing scheme. Some existing on-street parking spaces in the city have been converted into mobility points. They differ in size, being bigger in the city centre (mobil.punkte) and smaller in the residential areas (mobil. pünktchen).

Mobility points are indicated by a signpost, are equipped with bike racks and are defined by an extended kerb to prevent illegal parking and to ease emergency vehicle access. There are currently 130 car sharing stations across the entire urban area of Bremen, of which 45 are on-street mobil. punkt stations.

The goal of the city is to deeply embed car sharing in the overall mobility and spatial planning strategy so that there are stations every 300 metres, for example by integrating it in new area developments.

Enforcement methods

No information available

Time windows

No time differentiation for access

Phasing and upscaling

- 1990. First car sharing initiative, 3 cars and 28 users
- 2003. Implementation of the first two mobil.punkte on public space
- 2009. Car sharing action plan sets the target of 20K car sharing users by 2020
- · 2013. Addition of first small mobility points (mobil.pünktchen) in residential areas
- 2022. There are currently 45 mobil.punkte and mobil.pünktchen part of the entire car-sharing offer, which consists of 130 stations from different operators.



A mobil.punkt with Park and Bike (Karbaumer, 2018)



















Mobil.Punkt, Bremen, Germany

Other building blocks put in place

Spatial Interventions

Reallocating road space for pedestrians:

- Widen pavement
- Pedestrian priority street or zone

Reallocating road space for cyclists:

- Cycle lane
- Cycling street

Pricing Aspects

Parking charge: Fixed price

Regulatory Measures

Regulation by emissions: EURO standard

Complementary measures

Increased mobility options

Connection of mobil.punkt with public transport

Introduction of Park and Bike

Additional information

The city is oriented to establish quality standards/certification for car sharing operators wishing to receive support from the local authority. A federal car sharing act (CsgG) came into force in Germany on 1 September 2017. that allows car sharing cars to be parked on public space

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