

MOBILIS Bulletin

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Parking Management and innovative Inner-city

In this Bulletin:

- Parking management in MOBILIS cities
- Lessons learned & shared
- From parking restriction to parking management
- Toulouse and Venice



Parking Management in CIVITAS MOBILIS cities

Inner city parking has rapidly increased within the last decades and causes various problems. Cars used by commuters and visitors are blocking parking space required by residents, and also cause congestion and pollution in residential areas. Soft modes as cycling and walking are often discouraged by cars parked on footpaths and cycling lanes, not to forget the negative impacts on urban space in sensible areas. Commuters and car users aren't satisfied either, as they have to make some efforts to find a place for their car. Another issue are larger events or shopping days: When many people are travelling to the same destination at the same time, capacity problems and congestion by people looking for a parking space are likely.

European cities have been working on this issue during the last two decades using different approaches. It turned out that simple parking restrictions often don't match the goal as they just shift the problem to the next street and don't differentiate sufficiently between visitors and residents. In order to solve this, bold concepts are necessary: Existing parking space needs to be managed more effectively; also concepts for major events or demand peak periods need to be elaborated in some areas. Integrated approaches,

considering rather zones than particular hotspots and taking into account the needs of local stakeholders – both residents and shopkeepers / business people - need to be developed. These concepts also should offer attractive alternatives for those people that are expected to leave their cars outside the city centre, such as park & ride and high quality public transport. Furthermore, alternatives like carsharing and public bicycles can play an important role in inner city areas, where parking space is scarce but public transport is not available or suitable for any reason.

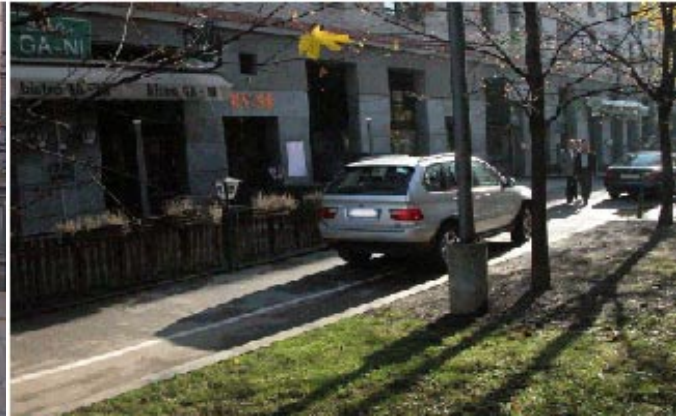
The CIVITAS MOBILIS cities are following different approaches of parking management: While some cities (mainly the smaller ones, such as Odense, Ljubljana and Debrecen) limit their policies to some streets in the actual city centre, Venice and Toulouse have developed integrated concepts, including also access management in the case of Venice. The MOBILIS cities have shared their experiences in a workshop held in Cologne (Germany) in 2006.

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CiViTAS
Cleaner and better transport in cities





Lessons learned & shared

Parking management is considered as a form access restriction by some stakeholders, particularly business people tend to be reluctant. However, apart from the question of sustainability, many inner city areas offer only a limited number of parking spaces. Usually, this leads to undesirable effects such as parking on pavements or lanes, subsequently causing congestion and impeding other road users. In this light, parking management is a tool to maintain accessibility to inner city areas. It helps to balance supply and demand and to encourage intelligent alternatives, such as carsharing and public bicycles.

From parking regulation to parking management

Parking management is much more than distributing cars effectively on the available parking space. It is an effective tool for demand management: by regulating supply of available parking space, use of the private car can be discouraged while alternative modes can be strengthened. In concrete terms, such schemes can release inner city residential areas from external traffic: Knowing that parking is not available at destination, people will chose alternative modes to reach them. Non-motorised modes often are hampered by cars parking on cycling paths and pavements. More efficient enforcement in resident parking areas thus contributes to improved conditions for cyclists and pedestrians. Furthermore, parking management can reduce the need for parking spaces and open the floor for consequent reallocation of urban space, however this is practiced only in a few cities yet.

While parking management is often linked to residential areas exclusively, the impacts of major events and other particular peaks in parking demand should not be neglected. For example, Cologne sees congestion on many Saturday mornings when shoppers from the agglomeration are looking entering the city. While roads could cope with the amount with cars, the multi-storage parking lots do not – leading to congestion of waiting cars on the roads. Also major events such as the Football World Championship in 2006 are challenges in terms of parking. It is important not only to distribute these streams to capacious roads and parking lots, but also redirect them to park & ride facilities or to public transport for the whole trip.

Large scale private parking (e.g. garages of large office buildings) counteracts parking management policies as they are providing large amount of parking which cannot be regulated. Often there is a gap between the objectives of building design specifications and sustainable mobility policies.

A broader discussion on parking management related topics such as reallocation of urban space, building design specifications and alternative modes needs to be stimulated in CIVITAS. Furthermore, parking management should also include topics such as parking space for bicycles and freight delivery.

In summary, the CIVITAS-MOBILIS cities appreciate parking management as an effective and less cost intensive instrument to steer transport in urban areas. The positive impacts are particularly high in densely built inner city residential zones, often accessed by visitors and commuters to store their cars there. While the implementation costs are rather low on the equipment level, sufficient resources should be dedicated to stakeholder involvement and communication, including detailed assessment of user needs. Acceptance by local residents (and business people) is crucial for a smooth implementation process. Parking management is an essential part of integrated urban transport strategies, also able to enforce the impacts of other measures to reduce inner city car traffic and to encourage sustainable mobility.

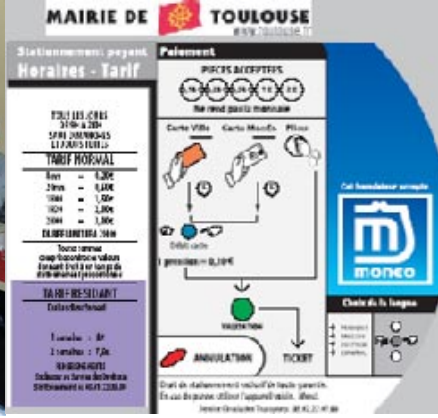
Scientific Introduction to Parking Management

Parking is the way we use the private car the most time: In Germany, an average car is only used one hour/day while it is parked the remaining 23 hours!

The term 'parking' covers each stop of the vehicle which is not caused by the traffic, such as stops to enter or leave a car, load/unload goods, at home, at work, to go shopping and also to leave the car at the airport for a longer trip. Even each trip asks for at least two parking stalls – at begin and end of the trip, we use to plan only for the parking needs at the end of the trip. Complex trip chains are of course an exception which has to be considered separately.

Different trip purposes have an influence on the parking behaviour: They affect time and duration of the park-





ing process as well as the willingness to pay or to walk distances from the parking stall to the final destination. Finally, this can also have an effect on the modal choice: If parking fares, distance to walk to the final destination etc. are too high, a more suitable mean of transport will probably be chosen.

If we are looking to a specific area of a city, also different types of parkers can be identified, such as residents, people working/shopping in the area or deliveries. Following these framework conditions, the following patterns can be identified:

	Residents	Workers	People in Education	Shoppers, other purposes	Visitors	Delivery and local business
Duration of Parking	long	long	long	short	long/short	short
Willingness to pay	no	no/yes	no/yes	yes	yes	no/yes

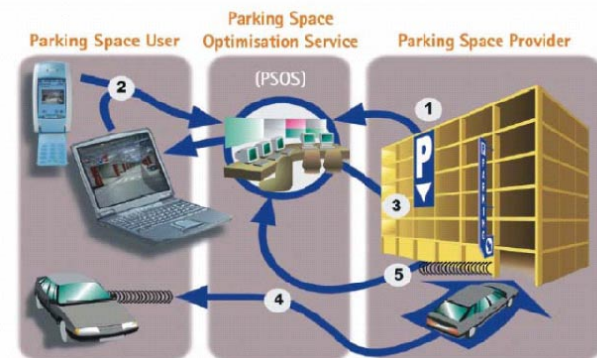
Depending much on the type of area (Historic City Centre, Business District, Residential Area, etc.) different needs for intervention can be identified.

Parking behaviour can be influenced by different measures (pricing, time restrictions, user group restrictions/promotions, etc.). Parking management can also support shifts towards more suitable modes of transport and enable reallocation of urban space for more efficient uses than parking. However, the characteristics of the area and user groups all over the whole daytime have to be considered. Stakeholders need to be involved from the very start.

Optipark - Innovative Parking solutions for European Cities

The parking reservation tool Quickpark is developed within the European Commission co-funded Optipark project. This scheme will be trialled in Amsterdam from July 2006 on and offers a combined reservation & payment system for parking. It can be understood as a parking brokerage service: Different providers (private & public parking garages; but also parking space which is usually not open to the public such as public authorities, residential area car parks) offer their free capacity to a pool. Registered users can request a parking place in a certain area, make a reservation and also pay via this internet portal. There are

of course some prerequisites to fulfil: The parking site must be enabled to provide real-time occupancy data and the operator must be willingly to cooperate. This can become an issue when trying to integrate also non-public parking (e.g. free capacities company, residential or authority parking garages) or on-street parking, where occupancy is not counted. Also for many P&R sites, no real time occupancy data is available. It is also difficult to assess if willingly to join (and to pay for) the reservation scheme, regarding the overcapacity of many parking garages and the clear preference for on-street parking from the user side. The advantages must be seen in the integration of various parking space providers, the (possible) access to non-public parking space and in the integrated information, reservation and payment system which eases the use. It is also possible to influence demand by offering different tariffs depending on time and location.



The Amsterdam Pilot starts with three car parks, but the platform includes the possibility to extend it to more operators in the future. The pilot will start July 2006 and validation (evaluation) results will be prepared in April 2007. The Optipark project will also be demonstrated in Baden-Baden (Germany), Bologna (Italy), Bruges (Belgium) and Madrid (Spain)

Toulouse

Toulouse is a growing agglomeration with 13.000 additional residents each year, 1.200 additional cars each month come on the streets of the agglomeration and 400.00 trips by private car are made daily in the city centre of Toulouse. It is a vital interest of the city council to maintain quality of life for its inhabitants and visitors



and commercial possibilities for their shops. This calls for action in three fields:

- Encourage the use of Public Transport
- Encourage Walking and Cycling
- Introduce a new Parking Policy in the city centre

The new parking policy has been introduced in October 2005, addressing different types of users i.e. residents, commuters and visitors.

The policy follows the target to ban commuters' cars from the city centre and shorten the occupancy time of visitors. For this sake, no long stay tariffs are offered. At the same time, the scheme aims at improving the situation for residents and shopkeepers. Residents can subscribe for a low amount (15€/month), while shops will benefit from the improved rotation thanks to the limitation of 2 hours (non-residents).

Different models have been introduced, depending on the character of the individual streets. This means for example, that residents will also have to pay the normal fee in streets with high commercial activities, at least during daytime. The measure is accompanied by enforced controls.

Parking management has been introduced in four city centre neighbourhoods, 300 car owners have successfully applied for the 'resident status'. The holder is allowed also to park in the directly neighbouring areas, if he does not find a parking space in his own neighbourhood.

The impacts are very encouraging, with almost 80% of the applicants being satisfied. The time to find a free parking place (as a resident) has been reduced by 60%. This first evaluation also allowed the have a feedback on technical issues and allowed some smaller improvements.

Venice

The City of Venice is particularly addressing the traffic coming from outside with its access and parking management strategy. Almost 200.000 cars per day are entering

Mestre (Venice mainland), leading to congestion, pollution and shortage of urban space. In order to reduce these negative effects on the Mestre city centre, a P&R scheme has been inaugurated, absorbing the traffic at the highway exits and main arterial roads.

The P&R system in Mestre has been opened in the year of 2002 (1st stage) and will be extended by some 2.200 car places at 6 sites within the CIVITAS-MOBILIS timeframe. At the moment, frequently operating minibuses ensure the accessibility of the Mestre city centre. Real time information panels inform on the capacity of P&R sites (at major roads) and on the departure time of the buses. Beyond this, the P&R sites provide public bicycles and car sharing as alternatives to get around.

To ensure effectiveness, the P&R scheme is embedded in a bundle of measures: Fees for on-street parking in the central area has been introduced and a complex electronic access control system will regulate the access of private cars and tourist coaches, including road pricing. With the construction of the tram and light railway system (operational from 2008 on), access by public transport will be improved much, constituting a strong 'pull-factor' to abandon private car for trips to the Mestre city centre.

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CIVITAS MOBILIS cities and partners

In 2004 the cities of Toulouse (France), Debrecen (Hungary), Ljubljana (Slovenia), Odense (Denmark), and Venice (Italy), and their main local mobility stakeholders established a European partnership for "Implementing Mobility Initiatives for Local Sustainability" – of which the CIVITAS MOBILIS project is the physical result. CIVITAS MOBILIS aims to implement radical strategies for clean urban transport in all five cities and to create a new culture for clean urban mobility in the wider framework of sustainable development. The project will enable the involvement of all relevant stakeholders and the transfer of good practices to other urban communities across Europe. Altogether 30 partners work on a range of mobility improvements scattered within eight technical and five policy themes during the four years lifetime of the project. The CIVITAS MOBILIS Bulletin is produced by the MOBILIS project partners, co-funded by European Commission through CIVITAS INITIATIVE <http://www.civitas-initiative.org/>. The CIVITAS MOBILIS Bulletin is published quarterly (during the project time span). If you want to register for a free subscription, please send an e-mail to milena.marega@guest.arnes.si. The CIVITAS MOBILIS E-Newsletter is available at <http://www.civitas-mobilis.org/>.

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