



EUROPEAN CITIES AND REGIONS NETWORKING  
FOR INNOVATIVE TRANSPORT SOLUTIONS



# Flow? Destination! Polis-EPA Parking Report Towards a new deal for urban parking



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## Introduction

Parking is important for the redefinition of the role of cities, between the “motorway” culture and re-urbanisation. Centralised parking in cities has been proven to decrease the dependency on car trips and improve the public domain. However, implementing integrated parking strategies is a challenging task, for both local authorities and parking operators.

To create a better understanding between the different actors in parking activities, the European Parking Association (EPA) and Polis have established a partnership to discuss the interaction of urban transport and parking activities. Both organisations regularly exchange information and expertise about making parking in cities better. As part of their creating an interchange of ideas, Polis and EPA organised a successful seminar in Stuttgart, on the 16<sup>th</sup> May 2011.

This document identifies the main challenges that were identified during the last two years of joint Polis and EPA activities. Parking is a concrete problem, with concrete solutions. That is why concrete cases and practical issues have been included.

## Challenge 1: Integrating parking policies and cities Sustainable Urban Mobility Plans (SUMP)

***“Urban parking structures and policies are an essential part of these plans (SUMP), as they contribute to the integration of land use and urban planning with traffic and transport planning at an early stage.”***

*Siim Kallas, Vice-President of the European Commission, addressing the European Parking Association’s Congress in Torino, 14 September 2011*

### **SUMPs gain importance in EU policy**

Sustainable Urban Mobility Plans define a set of interrelated measures designed to satisfy the mobility needs of people and businesses, today and tomorrow. They involve an integrated planning approach and address all modes of transport in cities and their surrounding areas. SUMPs are generally recognised as a central element of transport planning in cities.

At a European level, Sumps are receiving increased recognition and importance. The 2011 Transport White Paper states that the EU will venture into *“examining the possibility of a mandatory approach for cities of certain size, according to national standards based on EU guidelines and link regional development and cohesion funds to cities and regions that have submitted a current, independently validated Urban Mobility Performance and Sustainability Audit certificate.”*

#### **The following elements can be included in an SUMP:**

##### **Accessibility:**

- Where can vehicles go in the city, where do they park?
- Traffic volume for people and goods

##### **Environment:**

- Where can vehicles go in the city?
- Promotion of clean vehicles through tariffs
- Enabling electric vehicles charging

##### **Liveability:**

- Residential parking schemes
- Reduction of search time and search traffic

##### **Enabling economic development:**

- Accessibility planning of new developments, including a rational number of parking lots
- Accessibility of shopping, touristic destinations (coaches)
- Management of parking for specific large events

#### **Life on the streets: search traffic**

Only a few cities have quantified the problem. Research methodologies about “cruising”, when vehicles circulate around urban streets seeking a vacant parking space, also differ.

Research of the BSM – Barcelona shows a very interesting correlation between parking offer deficit and cruising, per block. The figures about cruising are disparate, although D. Shoup developed an overview of figures collected the last century in various cities around the world. Search traffic has a specific road safety impact.

There is no direct correlation between the provision of residential parking and parking at destinations in multi-functional cities. Hybrid solutions should be developed (e.g. mixed use of off-street parking facilities).

## SUMP as the framework for better parking policies

The SUMP will set the objectives that can be achieved by different measures, including parking management. Basically, the SUMP will clarify three important issues related to parking:

1. Traffic Volume; its nature and distribution over the urban road network
2. Future funding need
3. Balance of attraction and traffic generation across the urban territory, defining the central urban morphology

The SUMP will define concrete parking measures such as park and ride, the relation between off-street and on-street parking provision, parking guidance, the structure of tariffs, permits and fines, etc.

### City of Ghent (Belgium)

The mobility plan provided a combination of improved public transport, pedestrianisation of the city centre and parking management:

Parking guidance information is provided at the periphery of Ghent's pedestrian area, covering the different parking facilities available in the city.

Accessibility to the city is managed using five parking zones. These zones are linked by a parking route.

City parking company and mobility department have recently merged to become the city mobility company, to enable joint projects and common financing.



## Challenge 2: Defining the business models of smart parking strategies in cooperation with different stakeholders in urban life and urban accessibility.

### The need for innovative business models

The majority of benefits of effective parking policies concern accessibility of cultural and commercial functions in the central urban area, public space for sensitive users (pedestrians and cyclists), easier traffic flows and fewer emissions in central urban areas. The parking industry itself doesn't benefit directly: parking policies do not create additional customers for the parking industry and existing customers are pushed to use more remote (and usually cheaper) parking facilities. The challenge is to create business cases that go beyond just the parking sector, recognising the effect of parking policies by urban and mobility developers.

*“Technology is not the issue.”*

*Start and ending point of many discussions about technology*

In many cases merchants recognise the importance of providing access and parking at reasonable price close to their business for their customers. Parking operators and merchants (i.e. retail, cinema) cooperate in loyalty schemes to discount one or two hours parking upon spending EUR 25 or EUR 40 or to provide a voucher for two hours free parking at the next visit. Those schemes require creativity of the participants and need support by technology.

### The role of technology

Technology has developed to a point where it is no longer a barrier for implementing smart parking strategies. Larger challenges lie in defining business models and the added value arising from the take up of further technological solutions. The parking sector is felt to be a leader in the uptake of state of the art technology.

### Cashless operations: person or vehicle based?

An important issue is that of payments. The parking sector has to adhere to national legislation, which in some cases pre-defines or excludes payment options available to parking operators. The parking sector, like other commercial sectors, is moving towards cashless operations. Forerunners in this regard are the cities of Antwerp and Amsterdam. The sector is mainly focussing on bankcard solutions, despite the increased introduction of systems such as Radio Frequency Identification, vehicle licence plate recognition and in-car vehicle identification.

### In-car information

In – car technology can also be the carrier of real-time parking information. Cities should be involved in this process, as this form of exchange of information is an essential component of the relationship between car park operators and municipalities.

### Life in the server park: parking data warehousing

The Dutch parking data warehouse project (a form of national parking register) builds on the concept of the city as a 'department store of parking spaces' and uses warehouse management strategies to address availability and access rights. The project is currently deployed in Enschede and Amersfoort. Amsterdam is also joining the project.

Recently, the United Kingdom (UK) government has made a commitment to publish the data held on the Department for Transport's (DfT) National Car Park Database. The data is available for re-use by information providers and apps developers. The database holds details of the location and number of spaces at around 23.000 car parks in the United Kingdom. It includes information from the private sector parking operators, rail companies and National Parks.

## Challenge 3: Acceptability of parking policies

***“Parking should go to the “deserver”, not to the lucky. Parking policy is not about prohibition.”***

*Donald Shoup, UCLA, advocate for objective pricing strategies for parking.*

### Sound knowledge base

The aim of parking policies should be accepted by car drivers, residents, retailers etc. It can be difficult for local politicians and decision makers to decide about parking policies, as they have to deal with a wide range of differing opinions on the subject. The parking sector itself finds it difficult to agree on a coherent message on parking policy.. This issue was examined by Giuliano Mingardo, Erasmus University. His research studied the ‘power of consensus’ amongst parking professionals and found that, for very central questions in parking policy, the parking sector does not have an agreed approach (e.g. can parking revenue go to the central city budget?).

In general, one could say that sector lacks studies with authority that are accepted by everyone. It is worth mentioning that parking policies are included in the deployment of the ‘smart cities’ approach. New interesting concepts to look at the economics and management of parking are finding ground.

### Life on the streets: San Francisco

San Francisco has introduced a dynamic price strategy per block, based on monitoring of available price offer. Prices can also increase drastically for specific events. The price can be changed remotely. (Prices are not changed dynamically in real time, but after a monitoring and evaluation period of different months.)

***“Of course people think they are cash cows, when the parking industry promotes itself with pictures of paying customers instead of showing why people are parking”***

*Giuliano Mingardo, Erasmus University*

### Improving the sector’s image

Central to the acceptability of restrictive measures, such as paid or regulated parking, is an understanding of the objectives of such a policy by those it may affect. This is not always clear from the marketing approaches used in the sector. Parking operators and parking policy makers market their approaches with displays of technology, heavy engineering and visually intrusive buildings. The sector should show better what its impact is in cities (liveability, better use of public transport through park etc.).

### Life on the streets: know your target group!

The Fédération Internationale de L’Automobile (FIA) has set up user surveys across countries, including self-assessment tools for parking operators (cfr. ESPA). A study by the ACI, an Italian member of FIA, showed that the majority of new public transport customers are male. This means that members of the next target group of parking services costumers are more likely to be female.

***'Promoting sensible parking'***

*Dublin's catchphrase to rebrand its parking enforcement programme*

### **Credible enforcement strategies**

Several European Union countries have set, at the national level, parking fines that are so low they are not effective in enforcing parking policies. A sound business model requires measures such as effective pricing, enforcement and fines. Fair and reasonable enforcement is crucial to enhance acceptability of parking policies.

Cities can tackle this challenge by presenting the benefits available to customers from a package of parking services and not only focussing on the parking penalties. In this regard, Dublin has rephrased its fines collection to "promoting sensible parking". Penalty procedures have to be transparent, yet manageable. The UK is on its way of setting up an independent appeals service for parking fines. Could this be an idea for larger European cities as well?

***"The money missing in the city budgets is in the streets."***

*Professor Hermann Knoflacher, TU Vienna*

### **Transparent revenue use**



As described above, there is no agreement on the best use of parking revenue. Should it contribute to the general budget of the city, or should this be earmarked for investments in parking or other mobility measures? Investments could even be made locally, 'on the kerb', e.g. free WiFi, based on surplus capacity in the system installed to manage the parking installations.

### **Nottingham city council**

The UK's first workplace parking levy comes into force in Nottingham in April 2012. Prior to the start of the scheme, businesses in the city will be required to register all their workplace parking spaces. Around 500 employers (those with more than 10 parking spaces) will have to pay the levy. This represents about 15% of all companies in Nottingham. Firms will have to pay about GBP300 per year for each parking space.

The cost will rise over the next years in line with inflation. The levy will contribute funding to the extension of Nottingham's existing tram system, as well the redevelopment of Nottingham Railway station and financial support the city's Link bus network.

## Challenge 4: finding a balance between the public and private parking sector

### Defining the perfect model for public and private interaction

The perfect model for public and private interaction creates an integrated, transparent and seamless system that satisfies the needs of an urban area's residents and visitors.

Cities' models for public and private interaction will develop in accord with national legislation, apply available good practice and be efficient in terms of policy outcomes and revenue.

It is advisable that cities should:

- Decide on parking policies where specific tasks are operated by private parties.
- Cooperate with the private sector, mainly through service contracts and operation licenses.
- Continue to monitor private initiatives.
- Seek cooperation in areas such as parking guidance, data-sharing etc.

### EU perspective

Currently, there is no European level concern about parking issues. This suggests that current practices are within the boundaries of EU constitution and derived legislation in terms of state aid, public procurement practices and anti-trust legislation.

Comparing with existing transport operations legislation, such as the railway package and regulation on Public Transport as a service of general interest, we can learn the following:

- Transparency about the relation between the private and the public sector is needed.
- A clear division between the organizing authority (these who set the rules, starting from city policy objectives) and the operator (these who do the practical handling of parking management), is also required.

Parking policies tend to have a local application, related to the specific urban situation. However, there are some issues with impact beyond local reach. Most of them are legislative issues:

- Transparent regulations and sanctioning at a national level.
- European quality and governance guidelines

### Private sector as implementer of strategic vision and policies, outlined by public authorities

The private parking sector is aware of the challenges and opportunities that the current changing paradigm in urban transport brings. These changes are situated on different levels:

- Planning (with SUMP)
- Financing (with a public sector under financial pressure that has become more increasingly knowledgeable about searching for self-financing and alternative revenue streams)
- Technology (cooperative systems, mobile traveller information systems, Electric Vehicles).





The private parking sector has the potential to address all these issues. The question is, at which level and at which stage they will enter local transport decision making in this regard? As with other policy implementation processes, public authorities should have a central role in the decision making process about strategic vision building and objectives. The private sector can be involved in the detailed planning phase (“Régie”) and operations.

Integration models could be derived from the situation in local public transport and some toll roads. For example, in France, concessions for investment and operation of parking are already widespread.. There are examples of rail connected public transport infrastructure, which is owned by the public sector, but operated by the private sector within the framework of lease contracts.

If there is a continued shift towards citywide parking planning and operations, cities face the challenge of maintaining open market conditions and avoiding monopolies. It is possible that the parallel mechanisms that have been developed for public transport operations (the European Union regulation on public transport as a service of public interest) could be applied to parking management. This might be needed in the near future.

## Challenge 5: increasing the quality and the seamlessness of the parking services offered for people and goods carriers

### Further diversification and integration of the parking offer

The quality and seamlessness of operations can be increased through a further diversification of parking services. Increased diversification of parking services provided could also improve the perception of the parking sector. Many transport service providers want to develop themselves into mobility service providers (e.g. public transport companies, car lease companies etc.). The diversification within the private parking sector is mainly parking related (e.g. electric vehicle charging), where municipal mobility companies run public transport and manage parking at the same time (e.g. Italian examples such as GTT - Torino and Polis member BresciaMobilita).

Diversification of services should primarily be aimed at offering the urban visitor alternatives to reach the destination of their choice. Choice of the alternatives should be supported by pricing policies, taking into account the consumer's sensitivity to price in the mobility sector. Interesting diversification and integration activity is already taking place with integrated fare charges etc. and it is anticipated that the sector will develop further integration. The parking sector is closely associated with real estate development. As well as integration in the supply of mobility, it is likely that there will be integration with the real estate and finance sector's activities.

### Parking and urban good logistics

It is felt that there is a large potential market for urban logistics schemes likely to become available for parking service providers. However, the number of successful schemes currently in operation is limited e.g. Barcelona's Area Verda. Local authorities can create conditions for private interest in urban goods logistics, by setting a stringent regulatory framework controlling the time and place that the delivery of goods is permitted.

#### Life on the streets: kerbspace wars

In many major cities, drivers of delivery vehicles struggle to find kerb space to unload legally. This often results in penalty charge notices, which cost companies' time and money to resolve.

Freight companies are often the main collectors of parking fines in cities. Additional space for soft modes and PT makes the problem even more stringent. Electric vehicles demand for locations to charge their batteries put even more pressure on available kerbspace.

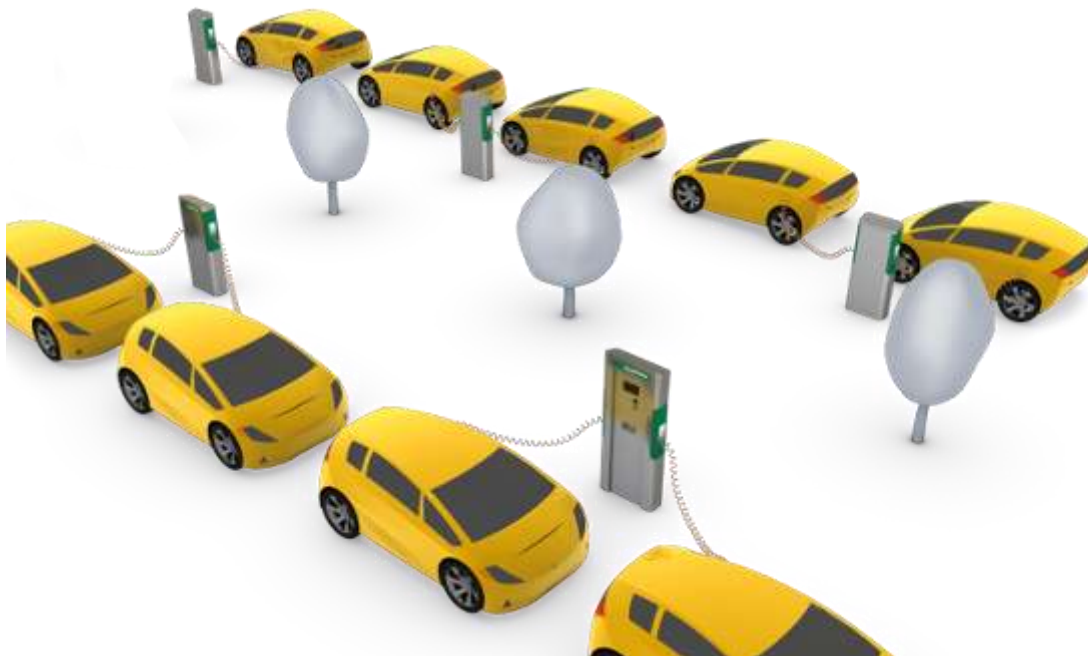


## Challenge 6: Using off-street parking facilities to advance the deployment of electro mobility

Parking management is an important enabler in the deployment of electromobility. The sector should push for further innovations in this regard. Current approaches are looking at combining existing technologies or enhancing existing systems, such as motor pre-heating facilities in Nordic countries.

There is a fundamental problem with widely deployed kerbside EV charging. The on – street charging points currently available can be visually intrusive. In an era where a lot of cities are banning parking meters and are moving to discrete and non-material solutions like sms payment, the 1.5-metre high poles can look out of place. More discrete solutions are available, being integrated into the pavement, but face problems with water infiltration or damage when vehicles are driven over them.

The UK DfT, for instance, has published a central government plug – in vehicle infrastructure strategy document, entitled “*Making the Connection*”, during June 2011. It anticipates that most electric vehicle owners will recharge their cars at home or at their workplace. It feels that an extensive public on-street recharging infrastructure would be under-utilised and uneconomic. Instead, charging points should be targeted at key destinations, where consumers need it, such as supermarkets, retail centres and car parks, together with a focused amount of on-street infrastructure, particularly for residents without off-street parking.





## Conclusions

- State of the art parking management is essential for a sustainable urban mobility system.
- Pricing of parking should be flexible to achieve a sustainable mobility and contribute to liveable and dynamic city centres throughout Europe.
- Traffic “cruising” in search of parking spaces is counter-productive for business in the city centre; it also creates congestion, pollution and road safety problems.
- New initiatives, new technology and new thinking should be introduced to achieve the goal of “parking: the new deal”.

**Polis and EPA will continue their cooperation in 2012. A workshop focusing on the challenge of enforcement is scheduled to take place spring 2012. For more information, contact [icre@polisnetwork.eu](mailto:icre@polisnetwork.eu).**

For more information about Sustainable Urban Mobility Plans, visit [www.mobilityplans.eu](http://www.mobilityplans.eu)

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Pictures:

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