

# Paths to pleasant parking

Following six successful pilots, OPTIPARK is now seeking industry involvement to develop a commercial service.

Europe's OPTIPARK intelligent parking management initiative is seeking active industry involvement in developing a new crossborder commercial parking service using innovative parking solutions that have recently proved themselves in six European cities – Amsterdam (Netherlands), Baden (Switzerland), Bologna (Italy), Bruges (Belgium), Madrid (Spain) and Vilnius (Lithuania).

Says coordinator Alfredo Fernández of Spanish company SICE, which also masterminded the project in Madrid: 'We have developed OPTIPARK to provide a parking location and reservation service that can work in any location in Europe. It would enable the more efficient use of resources that are currently idle or rarely used for the benefit of all concerned.'

OPTIPARK research has found a number of major actors – car park owners and operators, equipment suppliers, automotive manufacturers and telecoms providers – showing interest in its achievements. Although they are not necessarily prepared to take these further solely on their own account, they could be ready to work with a specially-created independent entity that could offer a service for them to use. This would have the potential to become a global-scale parking information, optimisation, reservation and payment platform, integrating existing telematics-based parking solutions and encouraging new ones.

Its role would be to gather and host data for driver guidance and dynamic parking information that would be accessible to motorists in thousands of European towns and cities and at other key sites eg airports. They would use the information to secure a guaranteed parking space whenever and wherever they wanted it, and for as long as they intended to use it. Fernández compares the potential with what the AMADEUS on-line booking system has done for the air travel industry. 'We will provide urban mobility demand and parking management services of a kind that do not yet exist anywhere.'

The core of the concept is the development and validation of a flexible ICT-based parking reservation and information tool designed to be usable by any parking operator. Potential applications include, in addition to improved and more widely available driver information, a reservation system that can handle privately-run facilities or park-and-rides as well as public authority-owned on-street spaces; provision for drivers with special needs; and acting as a brokerage service to match demand for space with existing resources. A major driver behind OPTIPARK is the fact it



The Tilto car park in Vilnius

was proving difficult to transfer the results of the preceding e-PARKING project (see box) into commercial reality. One major barrier, which emerged in extensive discussions with the parking, automotive and telecoms industries, was the lack of any market pilots to test specific parking sector segments from social and economic as well as technical perspectives. Hence the six city pilot sites.

## Amsterdam

The pilot aimed to enable drivers, initially subscribers to the Park-Line service, with reservations with Parkeergebouwen Amsterdam (PGA) – an agency of the city council – to be automatically identified on arrival and departure, and receive a monthly invoice. PGA owns and/or manages some 80 public car parks including four park-and-rides, with 1200 spaces, near the A10 ring way; four city-centre facilities, with over 2000 spaces, and 8500 spaces in sites around the periphery. This last category consists largely of the 7500 spaces at the Amsterdam Arena stadium. During slack times, PGA acts as a broker and makes these available for events at the RAI Exhibition and Congress Centre.

Park-Line is a service provider for RFID-based mobile parking solutions, with 60,000 subscribers in 14 cities in the Netherlands, and an expansion programme covering Belgium, Italy and the UK. Parking activation and deactivation and cashless payment are by GSM and, on registering, subscribers receive a credit card-sized transponder fit to fit inside the windshield which serves as a digital parking ticket.

The pilot covered three car parks:

- Muziektheater/Stadhuis, located underneath the Amsterdam City Hall and Opera House, on the edge on the historic city centre with consistently high occupancy;
- The city-centre Kolk, again with consistently high occupancy; and
- Markenhoven, on the edge of the city centre with separate sections for the general public (medium occupancy) and private residents.

The trial saw most operational issues successfully dealt with – apart from ticket validation. PGA has expressed interest in expanding the service to other car parks in Amsterdam, while Park-Line is offering the service in other car parks in the Netherlands.

[www.park-line.nl](http://www.park-line.nl)

## OPTIPARK and e-PARKING

A EU co-funded initiative (under the eTEN Programme), OPTIPARK started in October 2005 and involved eight project partners (see panel) and six participating cities in six European countries. It followed on from the ?3 million, two-year e-PARKING project, which started in 2001 within the EU's Fifth Framework ICT programme.

e-PARKING had, at its core, the concept of an integrated parking space optimisation service (PSOS), with parking management and secure e-payment capabilities. It involved many of the same partners as OPTIPARK, and set out to develop legal and business frameworks as well as technical solutions; OPTIPARK set out to meet the commercial need for on-street evidence of feasibility.

Aside from the EU, OPTIPARK was supported by the European Parking Association (EPA) and the Brussels Programme Centre of the International Road Federation (IRF).

[www.erf.be/section/ep/eparking](http://www.erf.be/section/ep/eparking)

[www.optipark.eu](http://www.optipark.eu)

[www.smarter-parking.eu](http://www.smarter-parking.eu)

establish the viability, for a small community, of a type of system normally affordable only by large cities. [www.allmobile.com](http://www.allmobile.com)

### Bologna

Bologna has suffered for years from growing vehicular traffic overwhelming the urban road network and generating unsatisfactory levels of pollution. The city's pilot forms an integral part of its urban traffic plan, introduced to address the problem by improving traffic flows, rationalising the use of public space, and increasing people's awareness of its value.

The pilot centred on two car parks owned by city public transport provider ATC, where it ran well according to the Bologna Municipality. Experience highlighted the need for greater in time bookings and extensions, and the Municipality is looking at expanding the system, eg in combination with automatic numberplate recognition (ANPR) technology.

[www.comune.bologna.it](http://www.comune.bologna.it)

[www.atc.bo.it](http://www.atc.bo.it)

### Bruges

The pilot offered reservations in the 1400-space Parking Zand, below the city's Concertgebouw (Concert Hall), for people making advance bookings for shows using a credit card which the system recognised on arrival and charged on departure. Zand is one of more than 60 Belgian car parks operated by Interparking.

The pilot took place in the context of an initiative designed to improve the quality of the city centre, with non-residential traffic being discouraged and parking enforcement strictly implemented. Knowing that a parking space was reserved made it more attractive to visit the city centre.

The online link between the two systems removed the need for quota management, with reserved spaces automatically removed from those publicly available and being freed only after cancellation or expiration of the reservation.

The centrally-located Parking Zand also offers a convenient starting point for day-time visits to Bruges. Potential expansions of the system include web-based links with hotel reservations

and bookings for other cultural events and tourist activities. [www.interparking.com](http://www.interparking.com)

### Madrid

The Madrid pilot enabled owners of apartments to loan their car spaces temporarily to visitors needing to park by way of a controlled reservation system based on the principle of demand and offer. Charges and availability are subject to negotiation between the individual parties.

Nearly 100 owners have joined the scheme, because of the prospect of additional revenues, although there have naturally been reservations at the prospect of strangers gaining access to their privately-owned space. Some 70% of parkers have voted it attractive and are willing to pay a fee to ensure a space. The scheme runs until end-2007, in expectations of finding commercial support. [www.sice.com](http://www.sice.com)

### Vilnius

With rapid motorisation, the Lithuanian capital is experiencing heavy peak-hour congestion, which frequently breaks legal environmental requirements. One of the main objectives of the Vilnius Strategic plan is to decrease transport flows in the central area, and follow up with strategically-located urban development designed to limit the overall demand for private transport.

The city, which had not originally planned to take part in OPTIPARK, joined while it was in progress to draw on other partners' experience in assessing, managing and planning its parking resources as part of a plan to take early action before congestion worsened. Previously, while real time information services gave details of free spaces, there was no method of booking any of them.

Through OPTIPARK, however, drivers could register to make web bookings of spaces in the Tiltu multi storey car park in the city centre, owned by the Vilnius Municipality and managed by local public transport authority MESP. The city is now considering combining the system with existing payment schemes.

[www.vilnius.lt](http://www.vilnius.lt)



photo credit: Stadt Baden Entwicklungsplan

### Queuing for parking in Baden

#### Baden (Switzerland)

Baden, 20km from Zurich, is a small city of some 17,000 inhabitants, but the focal point for a wider population of around 150,000. The inner area has a large and attractive zone where parking is often scarce, especially towards evening and on Saturdays.

The trial involved setting up a virtual parking guidance system, with three public carparks – Schmiede (270 spaces), Theaterplatz (240 spaces) and Tunnelgarage (148 spaces) – connected to the OPTIPARK platform. This worked well, with fresh availability data being delivered to the OPTIPARK database and forwarded to [www.smarter-parking.eu](http://www.smarter-parking.eu) every three minutes. The basic service made possible enhancements including the:

- Tying in of additional car parks;
- Addition of further output media, eg an SMS service; and
- Distribution of data to other portals eg [www.badenmobil.ch](http://www.badenmobil.ch).

Over three years, the municipality expects the system to enhance Baden's shopping and tourist experience, and reduce traffic pressure on residential areas. The trial has also aimed to