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A balanced transport package for heavily-frequented venues

René Teeuwen, **Tom Rye** and **Marcus Enoch** explain how an approach to mobility management at heavily-frequented sites, intended to be applicable across North West Europe, is being developed by the trans-national OPTIMUM² project

MANY BUSINESS PREMISES and parks, hospitals and other heavily-frequented venues suffer from poor accessibility. The problems are all too familiar: daily recurring local congestion and parking overflow caused by huge numbers of staff and visitors. Mobility management – a demand-oriented approach seeking a balanced combination of alternative transport options – is a way to get things moving again. In many cases, the solution can be found in reducing solo car use, by encouraging greater use of public transport, as well as commuting by bicycle, moped or scooter. Mobility management's target groups are staff, customers and visitors who generate commuter, business and social/recreational traffic.

It will become increasingly important to employ mobility management techniques cope with the growing traffic load. Focusing especially on bottlenecks in urban areas, the OPTIMUM² project intends to provide impetus towards that end. OPTIMUM² (Optimal Planning Through Implementation of Mobility Management) is a European project involving eight partners from the UK and the Netherlands who are developing, through ten local projects, a common approach to solving the problems related to the accessibility of heavily-frequented venues. The project's objectives are outlined in the panel on the right.

This common approach begins by determining the starting point, using the answers to five basic questions:

- What are travellers' wishes and needs?
- Based on these wishes and needs, what relevant transport services are on offer, and how can we ensure that they are used to full capacity?

- Further information on the OPTIMUM² project is available from the project website at http://www.optimum2.org
- How do we inform travellers about the services on offer and the best way to use them?
- How can we act to contain the use of cars at the initial stage of land use and development planning?
- If necessary, how can authorities force businesses to systematically contain the use of cars?

There are many types of heavily-frequented venues. The characteristics of these venues differ widely, and consequently so too do the ways of improving accessibility. Traffic build-up near an amusement park, for example, calls for a different set of measures from those required by traffic issues arising in a business area, where most of the staff work regular hours.

The project tests the OPTIMUM² approach in two types of locations:

- business areas, where staff mostly travel by car during rush hour; and
- hospitals, frequented by many incidental visitors at various hours of the

Using the answers to the questions above, the following five 'pillars' support the approach:

- putting the traveller at centre stage;
- developing marketing activities;
- communication and integrated travel information:
- mobility management as a fundamental factor in plan-making; and
- the enforcement of mobility management measures as an option.

Details of the measures being taken under each of these headings are illustrated here through examples drawn from the ten local projects. These projects are currently in full swing, with users and stakeholders

OPTIMUM² objectives

The aim of OPTIMUM² is to use mobility management to offer a successful and innovative approach to problems related to the accessibility of heavily-frequented venues in urban areas. This is to be achieved by meeting the following objectives:

- testing the user-oriented OPTIMUM² approach;
- achieving major improvements in mobility management in Europe;
- working out the practical details of ten mutually co-ordinated local projects;
- developing means and methods that can also be used in other regions;
- monitoring and assessing the results;
- drawing up a 'cookbook' giving guidelines for the practical application of the user-oriented approach;
- building an extensive European network of partners who will apply the OPTIMUM² approach; and
- determining where else, beyond the UK and the Netherlands, the OPTIMUM² approach can be tested possibly also at other types of venue, such as amusement parks, (sports) events and museums.

putting the approach into practice, and plans being devised and measures prepared and implemented. The selected examples presented give an impression of the approach being taken – other measures or developments may prove to be even more effective at a later stage of the project.

Putting the traveller at centre stage

Various means are being used to determine what the travellers and companies involved in the local projects want. In the business areas of Amsterdam-Zuidoost, thousands of staff completed and returned a survey, distributed by post and e-mail. A survey was also conducted among staff at the Goudse Poort business area, where a user panel was also established to search for ways to improve the area's accessibility. At Gelre Hospitals (located at three sites) an extensive study was conducted among patients, visitors and suppliers, with measures subsequently being developed and implemented through user groups.

In the Southwark main business area local user groups have been instigated – for business representatives, for example – and are consulted by the local authority when development or investment plans are being formulated.

Developing marketing activities

Actively influencing transport supply and demand increases the success of mobility management. Marketing plays a crucial role in this process. Although marketing is often equated with communication, it is actually a much broader activity, and covers areas such as customer service and the price and quality of the transport on offer. Within the ten local projects, the number of marketing activities is remarkable, as is their range.

Royal Devon and Exeter Hospital, for instance, has its own park and ride area, with shuttle-buses for staff, patients and

visitors. Staff who do not have an annual season ticket for public transport receive a 33 per cent discount on a public transport ticket upon showing their staff pass.

In the Amsterdam-Zuidoost business areas, the use of car-pool vans has been made more attractive by granting them the right to use the emergency lane and the bus lane, along with public transport buses.

Gelre Hospitals has a shuttle service that connects the three hospital locations 13 times a day, and it runs a marketing campaign to increase the number of passengers even further. There is also a bicycle scheme, called *Trappers* (pedals), which awards staff bonus points each time they come to work by bicycle, which can be used to 'purchase' all sorts of products and services (as in a customer reward programme).

In the Ede business area a private transport system has been set up, using mini-buses driven by a staff member of one of the participating companies. The driver picks up colleagues at their home and brings them back at the end of the day. Fares are charged at the same rate as public transport.

At the Goudse Poort business park the area itself is marketed, yielding transport benefits. For example, each staff member can obtain a free mobility card which gives access to various modes of transport (bus, parking space, loan bicycle). The cards are also available to visitors. The revenue from adverts printed on the cards makes it possible to supply them free of charge.

Communication and integrated travel information

The ready availability of accurate, reliable and relevant information is an absolute condition for anyone making the switch-over from car use to another means of transport, and the OPTIMUM² project is developing various digital

information systems that will supply motorists and other travellers with 'live' travel information, plans and alternatives.

Colchester General Hospital has opted for an integrated travel information system for patients, staff and visitors, which enables them to access information on the hospital's website using their mobile phones or via kiosks at railway stations and bus stops, in libraries or in the hospital's entrance hall. A special feature is that GPs can arrange their patients' transport themselves, or can provide detailed travel information when making an appointment for treatment in a hospital clinic. The hospital also keeps an up-to-the-minute record of the number of available parking spaces.

Staff working at the Amsterdam-Zuidoost business areas receive tailor-made travel advice. A travel information system is also being developed especially for new staff and staff who are moving house.

Lancashire Teaching Hospitals (comprising Chorley and South Ribble Hospital and Royal Preston Hospital) operates a real-time travel information system, supplying travel information (such as the schedule of the next buses) at bus stops and on a digital screen above the hospital's central reception desk. The system can also be accessed through the internet. Posters displayed in the hospital grounds show where the bus stops are located, allowing patients to see how to get to them while still inside the hospital. Text messages provide travellers with live travel information at bus stops that are not yet equipped with real-time travel information.

Royal Devon and Exeter Hospital has its own agency that provides travel information, either directly or by telephone or through the internet. A patient making a hospital appointment automatically receives travel information. In addition, the hospital provides live travel information in the entrance hall.

At the Ede business area, a mobility facility point is being set up to help companies tackle their mobility issues, along with an interactive system (including a website) which will supply staff and clients with travel, route and traffic information. The facility point also draws up travel plans for new businesses.

Mobility management as a fundamental factor in plan-making

The objective here is to integrate mobility management as a fundamental element of spatial development plans, building plans and transport solutions right from the start, thus increasing the chances of success. For example, the planning for construction activity at the Zuidas business area in Amsterdam is linked to the city's traffic model, to allow

Partners and local projects working within the framework of OPTIMUM²

Partner

Province of Noord-Holland (NL) (lead partner)

Essex County Council (UK)
Lancashire County Council (UK)
London Borough of Southwark (UK)

City of Edinburgh Council (UK) Royal Devon and Exeter Hospital (UK)

Province of Gelderland (NL)

Province of Zuid-Holland (NL)

Project

Amsterdam: Southern business areas
(Amsterdam-Zuidoost and Zuidas)
Hilversum: Mediapark business park
Colchester: Colchester General Hospital
Lancashire: Lancashire Teaching Hospitals
Southwark: Better Bankside Business
Improvement District

Edinburgh: Business areas and hospitals Exeter: Royal Devon and Exeter Hospital

Apeldoorn: Gelre Hospitals _Ede: Business area

Gouda: Goudse Poort business park

SenterNovem (NL) (the Netherlands Agency for Energy and the Environment) assists the partners in monitoring and assessing the local projects

consequent effects to be anticipated. It also allows the effects of, for example, the increasing use of public transport, bicycles and car-pooling on the accessibility of the business area to be modelled.

At the Royal Devon and Exeter Hospital, mobility is expressly taken into account in planning its extension, for example by integrating the construction of bus stops for the park and ride service into building plans, and by distributing information packages to new staff.

Gelre Hospitals' building plans turned out to require an adaptation of the local zoning plan, which allowed the Province of Gelderland to draw extra attention to accessibility and parking. Gelre Hospitals has subsequently made mobility management a fundamental factor in the planning and implementation of its reorganisation process.

For the yet-to-be-developed business areas in Ede, 'local traffic performance' has been used – a comparatively new instrument bringing supply and demand measurements together at an early stage of plan development, thus allowing realistic transport alternatives to cars to be investigated.

Mobility management was integrated into planning from the start of the restructuring process at the Goudse Poort business area. Whereas the zoning plan is usually drawn up first, Gouda's city council began with a document setting out the preferred direction for the area's development. Investors and project developers are then expressly involved with the making of plans for Goudse Poort - including accessibility plans. Investor involvement is constructive, as investors are well aware of the importance of accessibility in keeping the business area attractive in the long run. This is a novel approach in the Netherlands.

Enforcement as an option

So far, neither the British nor the Dutch authorities have forced any business or organisation to utilise mobility management. However, it is possible that in future the accessibility of heavily-frequented venues will require extra measures. OPTIMUM² is therefore aiming to put to the test incentive and enforcement measures that authorities may take to encourage the practical application of mobility management.

For example, in the Amsterdam-Zuidoost business areas a temporary fiscal arrangement was made with the tax department, whereby companies were permitted to give their staff a 'Zuidoost pass' for public transport tax-free while a nearby motorway was undergoing large-scale reconstruction. (The work has since been completed and holders of the Zuidoost pass have been made a follow-

up offer.) This should serve as a precedent for other projects in the Netherlands.

The city council has granted the business areas in the south rim of Amsterdam the status of a so-called 'Alocation' – for locations that can be easily reached by public transport. At such venues the standard parking allocation for the area is one parking space per ten staff members. Under the Environment Management Act the city council can force companies to map their traffic and transport use and can then decide to make additional demands to reduce the number of cars. The council cannot, however, (as yet) enforce the taking of concrete measures.

In the UK, Royal Devon and Exeter Hospital is obliged by the local authority to produce a transport plan to reduce transport use. The hospital is aiming to develop a plan through 'carrot' measures, such as bus travel subsidised by the hospital and a park and ride shuttle-bus service to the hospital, rather than 'stick' measures, such as making staff pay for parking permits.

Gelre Hospitals intends to reduce the use of car trips to the extent that only 70 per cent of the permissible number of parking spaces is needed. Consequently, in 2004 regulated parking was introduced for staff, visitors and patients, as was paid parking for visitors and patients. Together with the local government, the hospital is looking for a suitable location for a park and ride area.

The town council of Ede is searching for collective parking solutions at the new Ede business area, so that space can be used more efficiently, and companies are encouraged to increase their awareness of their car-use habits. Standard parking densities and spatial preconditions for allocating development land can serve as leads. A proposal has been made to root mobility considerations in the business park management at the earliest stage in the development process, and the council is considering, among other things, obliging companies to draw up a transport plan when they purchase land.

In the new zoning plan for the Goudse Poort business area, fewer parking spaces near company premises are allowed than was formerly the case, resulting in more room for office buildings. The town council is opting for a high-quality environment with no parking in the street, but with parking at communal parking areas. Indoor parking is another option, but comes at high cost. Companies are prepared to manage their use of cars, but only if they benefit from proper facilities. In combination with a centrally-located car park and additional mobility services, the area's accessibility is set to improve.

A European network

OPTIMUM² is the follow-up to an earlier project, OPTIMUM-1. The latter's focus was to investigate the potential for including mobility management in the various spatial planning processes at the earliest possible stage – it did not lead to concrete results or projects. OPTIMUM² is focused, instead, on testing the approach in the field, through local projects in the UK and the Netherlands (as well as widely disseminating the results).

As the approach is intended to applicable in all of North West Europe, it is of great importance to know whether (parts of) the approach and the measures work in other countries as well. There are, after all, differences in culture and attitude, and also in legislation, transport systems and planning instruments. It is all too possible for a measure to be successful in one country and yet fail in another. Consequently an 'OPTIMUM2 network' was established to allow knowledge and experience gained to be exchanged, and so help to develop a transnational approach. Knowledge from outside the project will be introduced and tested in the OPTIMUM2 approach, while (parts of) the OPTIMUM2 approach will be put to the test elsewhere in North West Europe. The OPTIMUM² network is made up of mobility management experts from all eight North West European countries: Belgium, France, Germany, Ireland, Luxembourg, the Netherlands, Switzerland and the UK.

Implementation

The OPTIMUM² project started in 2004 and will run until mid-2008. Many measures are already being implemented in the ten local projects. In the end, it is the results from the projects that will count. A team has put together consisting of delegates from SenterNovem (the Netherlands Agency for Energy and the Environment) and Loughborough University, Napier University, Edinburgh and the University of Westminster - to monitor and evaluate the results and promote co-operation and the exchange of knowledge between the local projects. Towards the end of the project a 'cookbook' of good practice will be made available on the internet, listing the methods and measures used and results from OPTIMUM2 on various transport issues.

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