



Successful Travel Awareness Campaigns
& Mobility Management Strategies



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Definition of Mobility Management and Categorisation of Mobility Management Measures

Annex E to the Comprehensive Research Plan

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MAX - Introduction

MAX is the EU's latest framework research project on Mobility Management (MM) and Travel Awareness (TA) in transport. Four thematic Work Packages (WP) will link these topics to develop products of use to MM and TA practitioners:

- WP A New approaches and innovative campaigns in MM
- WP B Development of a new behaviour change model and a prospective assessment tool
- WP C Linking MM to Quality management - leading to MM certification
- WP D Integrating planning and MM

Accompanying Work Packages 1-5 will integrate the research efforts. MAX started in October 2006, the State of the Art analysis will be finished in April 2007 and the main research will be carried out over the following 18 months.

Previous EU research on MM has in the main studied MM and TA separately, but MAX aims to link them to demonstrate the synergies between them and, importantly, to develop products that will be of wider applicability and usefulness than the pilot demonstrations that tended to predominate in earlier projects.

A special focus is on new Member States, as reflected in the partners from 16 EU countries, 4 of them new Member States. The consortium will provide excellence, know-how and experience from various disciplines, including marketing, psychology and social science. The main results will be translated into the most important languages of these countries, while the final conference will be in the largest new EU Member State, Poland, in the city of Cracow, in September 2009.

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1 Introduction

This document contains a Definition and Categorisation of Mobility Management, as basis for the research tasks of the Work Packages A-D of the project:

MAX - Successful Travel Awareness Campaigns and Mobility Management Strategies

This definition was necessary to have a working basis for all WPs, as the existing definitions available were not suitable to work with. The definition was developed by the core team consisting of Stefanie Baasch, Elke Bossaert, Christer Ljungberg, Stratos Papadimitriou, Panos Papaioannou, Karl-Heinz Posch, Tom Rye and Janina Welsch, as well as contributions from the whole MAX team.

The work was part of work packages 2, B, C and D of MAX.

1.1 List of abbreviations

EPOMM	European Platform on Mobility Management
MM	Mobility Management
PTA	Personalised Travel Assistance
TA	Travel Awareness
TDM	Travel Demand Management
WP	Work Package

2 The Definition of Mobility Management

The definition of Mobility Management (MM) currently agreed in MAX is as follows.

Mobility Management (MM) is a concept to promote sustainable transport and manage the demand for car use by changing travellers' attitudes and behaviour. At the core of Mobility Management are "soft" measures like information and communication, organising services and coordinating activities of different partners. "Soft" measures most often enhance the effectiveness of "hard" measures within urban transport (e.g., new tram lines, new roads and new bike lanes). Mobility Management measures (in comparison to "hard" measures) do not necessarily require large financial investments and may have a high benefit-cost ratio.

To give an impression what this means in practice: in a city where MM is implemented:

- you would notice campaigns and promotions for walking, cycling and public transport;
- you could be offered personalised travel assistance to help you see where and how you might be able to reduce your car use;
- your employer might pay your public transport tickets to encourage you not to drive to work;
- at home, you might have a carsharing service available on the street outside your house,
- at your children's school, there could be a mobility plan organising safe walking for the children's trip to school,
- for leisure trips by public transport you would have the option of using the consulting services of the local mobility centre;
- building permits might be connected to certain requirements to minimise the mobility impact of the new development, for example the development of a mobility plan for employees, visitors, and goods transport around the building site or limiting the number of parking spaces provided.

Typically, MM measures are rarely isolated, instead they often come as a bundle of measures, i.e. information campaigns combined with infrastructure, pricing policy or regulations.

2.1 Demarcation – the boundaries of MM

Whilst the above is sufficient as definition, working more in depth with MM can pose some questions. Therefore MAX provides some guidance on where the boundary of MM lies.

- **MM is demand oriented – instead of supply-oriented.** This means that building new tram lines, new bicycle paths, new roads etc. are not considered to be MM, as these are all supply-side measures. This is reflected, for example, in the policies of the Netherlands and Sweden, where it is in many cases obligatory to first look at the potential of MM before permission for supply-side measures like road building is given. It is also reflected in the fact that in the USA and some other countries MM is called Travel Demand Management (TDM).
- **Infrastructure measures can be supportive measures for MM.** In many countries, MM is seen most often as a site-based activity – connected to a traffic generating site such as a company, a school, or a tourist attraction. On sites, such as hospitals or business parks, a negotiated MM measure package might include infrastructure (bicycle parking, tram stops, car parking, a bus shuttle service – typical supply measures). They are considered as supportive measures (but not as MM).
- **MM does not necessarily have to be limited to a site.** City-wide, regional or even national appliances like carsharing, car pooling, mobility centres, new resident information packages, campaigns, integration of several services into one fare system are regarded as MM.
- **Sustainable urban transport plans are not MM, but they should contain MM.** MM does not include the whole spectrum of traffic and transport planning. Transport plans are part of MM when they

are site based, such as workplace travel plans or schooltravel plans. The official term coined for this by Momentum is the **mobility plan**. HOV-lanes, congestion charging, parking management and road tolling, whilst being typical demand oriented measures, are not MM, but can be supportive measures for MM. As parking management is often central to site based MM, parking management as part of a MM bundle of measures is considered to be an integral part of MM.

- **Traffic system management is not considered part of Mobility Management.** However, components of traffic management that aim to influence demand and change attitudes and especially if they make the use of alternatives to the car more attractive, be it by delivering real departure time of trains on mobile phone or internet or variable message signs or via navigation systems are considered as MM.
- **Travel awareness, mobility education, marketing of sustainable modes is regarded as part of MM.** Some MM theoreticians regard these as being quite distinct. In practise, it is almost impossible to draw any boundaries.
- **MM is considered to encompass goods transport,** as long as it is site based and the measures concerning goods are part of a mobility plan that also include passengers. In any case it includes the transport of passenger luggage. But if these conditions do not apply, organising goods transport is considered as logistics for which there already exists a highly specialised industry.
- **Various legislation, pricing incentives and disincentives are part of MM,** if they support concrete MM measures that fall within the demarcation as described above.

2.2 Open character of definition

This definition is a working paper, to be discussed and endorsed by the EPOMM-Board. As MM is a concept that is adaptive and developing, this definition does not claim to be all-inclusive and is open for change.

However, the MAX consortium recommends the usage of this definition when working with MM.

3 Definition of MM Measures

MM consists of a range of measures, as shown by the previous section. Here an attempt is made to comprehensively list and categorise these measures. First MM measures are listed in brief. They are then defined in more detail if necessary. This list has been derived with reference to earlier EU studies of Mobility Management, and then cross-referenced with a study from the USA (Meyer, 1999), the Toolbox for Mobility Management Measures in Companies (www.mobilitymanagement.be), and the Victoria Transport Policy Institute's TDM Encyclopaedia (www.vtpi.org).

This list is a working paper, to be discussed and endorsed by the EPOMM-Board. As MM is a concept that is adaptive and developing, this definition does not claim to be all-inclusive and is open for change.

Information measures

These measures are essentially driven by demand from the traveller and they provide the (potential) traveller with information and advice through many possible media. Examples include:

- The information and trip advice services of the local Mobility Centre.
- Travel information, delivered via a range of technologies, pre- and during the trip.
- Marketing of sustainable modes through advertising and the use of other marketing techniques, such as door to door leafleting.

Promotional measures

This category of measures has at its core the idea of encouraging voluntary behaviour change through awareness raising, promotion of alternatives to the car, and information provision. This means that this group of measures does not actually provide any additional alternatives to the private car, but rather tries, actively, to raise awareness and encourage the use of the alternatives that are already in place. The measures include:

- Personalised Travel Assistance (PTA) to help travellers to see, in relation to their own personal travel patterns, how they might be able to reduce their car use.
- Advertising campaigns and other types of promotions (e.g. "European Car Free Day") to encourage people to try walking, cycling and/or public transport (sometimes linked to health promotion).
- Targeted promotion of alternative modes and trip reduction/chaining. This might include projects where public transport agencies run projects with schoolchildren, or approaching all households in a given area and offering them a variety of "resources" (e.g. local travel guides, local shopping guides), to help them think about ways to change their travel behaviour.

Real-life examples would include such things as the "bike to work" campaign as implemented on a large scale in Denmark, Germany (Cycling to work campaign: www.eltis.org) and Austria, or also the Travel Awareness and behaviour change programme for new residents as implemented in Munich.

Organisation and coordination measures

As its name suggests, this category offers, organises and coordinates various types of Mobility Management service across an area to provide an alternative to driving ones' car alone.

- Region- or area-wide Car Pool matching services bring together those who are making a trip by car with others who want to make the same trip and are willing to share a car to do so.
- Area-wide carharing (and flexible cycle hire) services. These provide an alternative to individual car (or bike) ownership by offering the hire of cars or vehicles at convenient locations within an area. By requiring pre-registration and often membership of some kind of club, these sharing arrangements then make the actual booking and hire process a very speedy one that is normally done by internet, and the car accessed by means of remote communications.
- On demand public transport services, sometimes also called paratransit, e.g. in Germany/Austria/Switzerland the Anrufsammeltaxi, in Holland the Treintaxi (railway-taxi).

Education and training measures

This category of measures refers to the integration of MM into education, and the training of staff in MM issues. Examples include:

- The training of, for example, hotel or shopping centre personnel to provide mobility information to customers.
- MM courses for target groups such as Mobility Centre staff, or mobility coordinators.
- Mobility education, where mobility, and how to manage it to reduce car use, becomes a part of the educational curriculum in schools and elsewhere.

Site-based measures

In many countries, MM is predominantly a site-based activity connected to a traffic generating site such as a company, a school, concerts, sports matches, fairs, hospitals, entire administrations based in a number of locations, recreational sites etc. In these cases MM seeks to manage the way in which people travel to the site in question. A large number of measures fall into this category.

- A school mobility plan is similar to other site-based MM activities, except that it typically includes a greater level of involvement of children and parents/employer and employees in both planning and implementation.
- Site-based services and infrastructure – chosen to suit the nature of the site and the people who travel there – such as bicycle parking, on-site pedestrian facilities, tram stops, car parking, a bus shuttle service, works buses, strengthened service buses, park and ride, and/or Van Pools. A more exhaustive list of measures is offered in the next section.

Telecommunications and flexible time organisation

Certain measures can be taken by organisations and others to reduce the need to travel by substituting telecommunications for travel, or reorganising working practices, or both. Examples include:

- Changing the number of times that patients have to come to hospital for a given procedure. This has been trialled at Gelre Hospitals in the Netherlands, for example.
- Changing the number of times that people must go to a government building in order to carry out a certain administrative procedure e.g. registering a birth, obtaining title deeds to a new house.
- Shopping, working, socialising, and carrying out other services by telephone or on the internet from home, instead of travelling somewhere else to do them. In Greece, for example, birth certificates can now be obtained by post after a phone call, whereas a decade ago up to three trips to a central office in Athens were needed for the same thing.
- Changing the opening hours of certain organisations to reduce impacts on peak travel, introducing flexible working hours or compressed working weeks. In the latter case, employees work longer hours but on a shorter number of days per week or month, thus reducing overall travel.

Supportive/integrating actions

These measures may not be implemented directly to manage mobility, but they can have significant impacts on the effectiveness of MM. They can affect the cost of travel by car or other modes, or make the environment more conducive to the introduction of MM measures. These actions may not be seen directly by the end user but they will nonetheless have an impact on their travel behaviour. For these reasons they are referred to here as supportive/integrating actions.

- Parking management (pricing, rationing, limiting, cash-out) in order to reduce parking supply and/or manage reduced supply, to influence the number of people choosing to travel to a site by car.
- In most countries, new development requires some form of permission from the public sector before it can go ahead. In some countries, this permission-giving process provides a leverage point at which time the public sector is able to require/encourage the developer of the site to implement MM measures. In other words, planning permission can sometimes (depending on member state planning law and practice) be connected to certain requirements on the developer, owner and/or occupier to minimise the mobility impact of the new development, by implementing one or more of the measures listed in the category “site-based MM measures”, for that development.
- Tax changes to make employer provided travel benefits more or less attractive. For example, making a company-provided parking space liable for income tax as a benefit in kind would reduce its attractiveness to the employee and may act as a disincentive to drive to work. Taxing reimbursement for commuting by train more highly than the equivalent by car makes the train more attractive.
- In some countries there is a tradition of being able to write off commuting costs against tax, to allow commuting costs by sustainable modes to be written off to a greater extent than those for non-sustainable commuting modes, or to change distance limits above/below which costs can be written off, or similar.
- Location efficient mortgages, where interest rates are lower where the house-buyer chooses a location that reduces their dependence on car travel.

- Congestion charging (of roads that were previously free at the point of use).
- Offering integrated fares – some examples include:
 - Integrated fares for different public transport modes across a region, buses, trams, metro etc. all with one ticket (normal in many parts of the EU, but still uncommon in other places).
 - The entrance ticket for a concert, sports match, fair etc. is also valid as a public transport ticket (through a negotiated deal between municipality, local PT operator and event organiser).
- Multimodal card/fare: carsharing membership provides a discount on public transport and vice versa – similar applications for paratransit and bicycle rental services (e.g. the public transport bicycle (OV-Fiets) in the Netherlands).

4 Further definition of individual measures

The previous section provided a categorisation of MM measures. Where necessary, this section expands on the earlier brief definition.

Information measures

A **Mobility Centre** provides information and services on mobility, such as ticket sales, usually for several public transport modes (bus, metro, tram, rail) as well as for other modes (car parking, carsharing, car pooling). Sometimes a Mobility Centre also prepares mobility plans for traffic generating sites like schools, companies etc. When a Mobility Centre is located in a large company, it is sometimes called a **mobility office**.

A **Mobility Consultant** is a person providing either personalised travel information (and is then often working for a Mobility Centre) or is a person developing mobility plans. In this role, they are also sometimes called mobility manager or travel/mobility coordinator – especially when they work for a specific site.

Promotional measures

Personalised Travel Assistance (PTA) involves recruiting people who are interested in considering how they might change their travel behaviour. They may be recruited from workplaces, although most often this technique has been used in area-wide approaches to households (particularly in Australia, under the banner of TravelSmart). A letter about the Travel Awareness campaign is sent to all households in an area; this is then followed up with a phone call. Those households who express an interest are offered a range of resources, of which one may be Personalised Travel Assistance. In PTA experiments, the interested household will normally complete a diary of their travel over one week. They then discuss this with a travel advisor to find ways in which they may be able to change their travel patterns by more Car-Pooling, use of cycling, walking and public transport, trip chaining or use of information technology.

Organisation and coordination measures

Car Pooling is where two or more people share the same journey, using one of the participants' own private cars (in the UK this is called Carsharing).

Carsharing is when people pay to use a car by the hour / day etc, and the car is owned by an individual company that runs the scheme on a commercial basis, and when the cars are not located in one central depot, but spread around the city or even several cities. Carsharing can also be organised within an organisation by a formal booking system (in the UK the former is called Car Clubs, the latter Car Pooling). Carsharing is distinguished from Car Rental in that using the car is possible for a very short time, that no personnel are needed to provide the car and that cars are available in many locations.

Van Pooling is where a group of employees in a group run a minibus to and from work, sharing the cost of the vehicle and its operations. Sometimes this arrangement is subsidised by the employer; it may also be organised by a third party rather than by the employees.

Site-based measures

A **Mobility Plan** is a site based plan that aims to manage and, often, to change the travel patterns of the persons travelling to and from this site (for example employees of a company, customers at a shop, or pupils and teachers at a school). In many countries, this is called a **travel plan** or **trip reduction plan**. The mobility plan most often consists of a whole package of measures, especially when the site is very large. The mobility plan must be tailored to the needs of the particular site, so will include a range of measures selected from the following (which itself is not a completely exhaustive list):

- Promotion of different ways to get to the site so that people are aware of the alternatives that are available.
- Multi-modal information about how to reach the site (internet-information, signs for pedestrian routes, etc.).
- A Car Pooling Scheme to match regular travellers so that they can travel to the site together.
- Carsharing Scheme for a company (e.g. the company offers shared company cars for business use and sometimes for private use after work).
- Guaranteed ride home service so that people who Car Pool can get home if something unplanned occurs e.g. their children suddenly being taken ill.
- Compressed work weeks (working 9 days in 10, but for longer hours), or changing working or appointment hours to avoid congested periods and/or coordinate with public transport times.
- Allowing and helping staff to work from home some of the time, or facilitating home shopping – so the trip to the site does not have to be made.
- Re-organising and rationalising business trips and/or substituting telecommunications for some business trips to reduce travel on works business.
- Re-organising and rationalising deliveries by a company and/or by suppliers to reduce freight trips to and from the site.
- Changing allowances paid to staff for using their own vehicle on works' business to favour more environmentally-friendly vehicles and modes (e.g. for longer distance trips paying only the equivalent rail fare regardless of the mode used, not a per km rate for car use; higher reimbursement per km for cycle use than car use). This aims to change the mode used for business trips as well as reducing the incentive to bring a car to work in order to have the opportunity to “earn” business trip allowances.
- Showers, changing rooms, lockers, irons, curling tongs and hairdryers for people who choose to walk, run, skateboard, skate or cycle to work.
- Secure cycle parking.
- Assisted/tax-efficient purchase of bikes and other equipment for slow modes of transport.
- Provision of company cycles.
- On-site free bicycle repair service at the start of the bike season.
- Safe and direct cycle and walking routes on the site linking buildings with all site entrances.

- Paying or negotiating with public transport operators to:
 - Run shuttle services between the site and nearby transport interchanges or park and ride sites (these may be public park and ride sites run by the municipality, or open only to users of the organisation to which they are linked).
 - Run existing services more frequently.
 - Run completely new services to link the site directly with areas where a lot of site users live.
 - Offer a ticket discount to site users.
 - Provide job-tickets, which are offered to commuters and reduce the price for regular public transport travel tickets.
 - Offer trial tickets so that people who do not normally use public transport can try it out for a week or a month at low or no cost.
- Selling public transport tickets on-site.
- Van Pooling, where employees group together to run a minibus to and from the site, sometimes with a subsidy from the organisation.
- Paying employees an incentive (on a daily basis) to use alternative modes to get to the workplace (this is usually only practicable with worksites).
- Employing a mobility consultant and running a mobility office on site.
- Providing facilities on-site to reduce the need to travel off-site at break times.
- Managing car parking on site (and sometimes, in conjunction with the local authority, off-site as well). Further details are provided below.

Car parking management is a powerful mechanism to influence how people travel to a site. In a situation where parking supply is less than demand, parking on-site can be managed as follows:

- All or certain users can be charged to use it, by the day, week, month or year, with a flat charge or charges varying according to criteria (e.g. employees' income), or to the quality and location of the parking space.
- It can be rationed e.g. employees might be allowed to park four days in every five.
- The best spaces can be reserved for Car Poolers, for example, to give them an incentive to share their car to work.
- Spaces can be allocated according to certain criteria e.g. seniority, how long it takes someone to get to the site by car compared to public transport, caring responsibilities, and so on.
- Access can be time limited e.g. the car park in a shopping centre might not open until 10:00 to deter its use by commuters.
- Staff may be paid not to use their parking space (this is called parking cash-out).

In addition, a site with limited parking on-site and an excess of demand over supply may have to work with the local authority to manage parking on-street around the site to avoid “spill-over” effects.

In **school mobility plans**, parents may help in the implementation of measures by, for example, running “walking buses” where children walk together to school, escorted by a number of parents. In addition, the development, operation and monitoring of the plan will often be integrated into the curriculum. Hence pupils and parents will see measures to offer them alternative means of transport to school, plus education about mobility, plus awareness and promotional activities. This might include:

- Mobility games combined with mobility surveys and perhaps including some kind of competition between children or groups of children for the best survey.
- Involving children in identifying areas around the school where they feel threatened by traffic and then helping to design measures to reduce these problems.
- Educational units on mobility (including excursions).
- Cycle training.
- Dedicated stops for dropping children off at school when they are brought by car.
- Parking prohibition in front of school.
- Organising Car Pools or walking buses for bringing children to school.

5 References

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