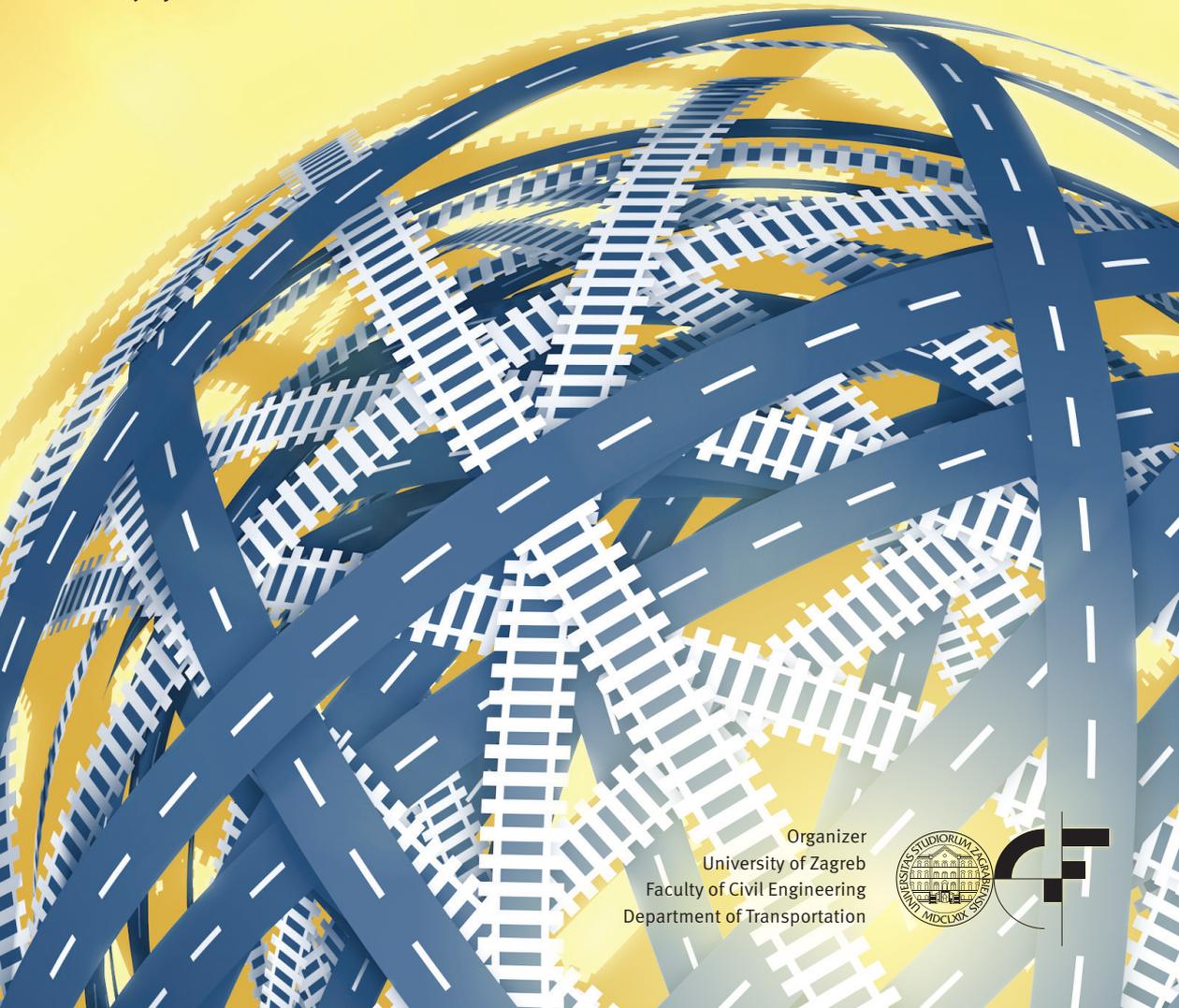


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4th International Conference on Road and Rail Infrastructure
23-25 May 2016, Šibenik, Croatia

Road and Rail Infrastructure IV

Stjepan Lakušić – EDITOR



Organizer
University of Zagreb
Faculty of Civil Engineering
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Faculty of Civil Engineering
University of Zagreb
Zagreb, Croatia

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HOW TO EFFECTIVELY IMPLEMENT MOBILITY MANAGEMENT FOR COMPANIES – EXPERIENCES AND EXAMPLES FROM 5 YEARS OF “SÜDHESSEN EFFIZIENT MOBIL”

André Bruns

Hochschule RheinMain University of Applied Sciences Wiesbaden Rüsselsheim, Germany

Abstract

Mobility Management (MM) in general but especially MM for companies or generally employers both private and public (MMfE) has been successfully established as a means of influencing travel demand towards more sustainability throughout Europe during the past 10 years. It has proven its effectiveness in a variety of forms and contexts from large scale implementations in the course of large infrastructure projects to small scale measures for single employers. Technically MM for companies is a complementary tool for traffic planning adding a demand oriented element to strategies which usually focus on organizing transportation systems. Thus MM for companies “strengthens the lever” of the public hand and adds significantly to the success of traffic planning by making employers strong partners of transport planning helping to meet the goals of planning schemes (e.g. accessibility, reducing nuisances of motorized traffic). It does so by making use of existing organisational structures in companies to implement integrated mobility concepts (e.g. comprising of special public transport fares (job-ticket), promotion of walking and cycling, parking management).

Starting point of the paper is the question of how the potential of MM for companies may be realized in a long term perspective and when no legal obligation for employers exists to start MM activities. The paper presents critical success factors, drawing on 5 years of experience with the “südhessen effizient mobil” program in the Frankfurt region and other activities throughout Germany. It will be shown that besides guidelines, consulting and (little) funding money it is crucial to embed private MM activities of employers into a public framework consisting of stakeholder networks, standards and quality control. This is done by presenting examples of MM activities of employers in the Frankfurt region.

Keywords: Mobility Management, Sustainable Transport, Traffic Planning

1 Background of Mobility Management for enterprises / employers – a brief outline

1.1 Mobility Management – What is it all about?

The concept of Mobility Management (MM) which is known nowadays as a means of influencing travel demand towards more sustainability has seen a long development since the early beginnings. It was in the Netherlands where in the mid 80ies of the last century the American concept of Transport Demand Management was transferred to Europe [1]. From 1990 on Mobility Management started spreading across central Europe, a “common concept of mobility management” being developed [2]. At the same time the European Platform on Mobility Management (EPOMM) was founded providing an institutional framework for the further development of MM and, equally important, a widely accepted definition of MM:

“Mobility management is a concept for promoting sustainable transport and dealing with the question of car use by modifying the habits and behaviour of travellers. The core of this mobility management is formed by “soft” policy measures such as information and communication, organisation of services and the coordination of activities of the various partners”. [1]

It has to be stated though that the definition of MM is differing throughout Europe as each country has introduced MM with different focal points leading to the emphasis of different aspects of MM [1]. Therefore it appears necessary to describe some key constitutional aspects forming MM:

- Focus of MM is on travel demand resp. mobility needs of individuals or target groups.
- MM-concepts are characterized by comprehensive sets of measures addressing all means of transportation and their combinations.
- The focus is on soft policy measures as stated in the definition above but the transition to ordinary travel supply measures is smooth and thus MM-concepts very often also comprise hard measures from the classic traffic planning and engineering world such as building bicycle paths, the enhancement of public transport supply or parking management policies.
- MM is based on both vertical and horizontal policy integration as well as the cooperation of numerous public and private stakeholders.
- MM is, even more than planning, a continuous (management) process in which especially evaluation is essential.

Today MM in Europa has reached a certain degree of maturity: MM is inherent part of EU policies [3] and subsequent EU-funding schemes. Almost every European country is member of the ECOMM [1], has in turn established its own national structures and implemented MM as an own policy area either within traffic planning and engineering or in the context of climate protection activities. It was also in the latter context where MM recently has gained even broad international attention when having been identified as the tool at hand to cope with the problems of climate change mitigation within the traffic sector [4].

However, most important is the fact, that MM has proven its effectiveness throughout numerous carefully evaluated projects in various different contexts and at different scales. The range of MM successful applications starts with rather small and local projects, e.g. for a single employer or the implementation of MM in the form of mobility information for new citizens, e.g. in Munich [5]. And it ends on the large scale as a tool which effectively helps to cope with capacity restraints during major infrastructure projects, e.g. the A9 project in the Netherlands [6].

1.2 Mobility Management for enterprises / employers (MMfE)

As described before an important characteristic of MM is that it focusses on the mobility needs of different target groups like children, students, employees, new citizens, tourists, senior citizens etc., thus different areas of MM activity have been established. One of the most prominent and well developed branches of MM is MM for enterprises or employers in general (MMfE). Lacking a common definition MMfE may be described as “a continuous management process in which an enterprise/employer systematically analyses all kinds of corporate mobility or travel demand, sets specific goals towards enhancing the efficiency of the corporate mobility production, defines and implements a set of corresponding measures and evaluates their effects”.

MMfE usually focusses on the following parts of corporate mobility: 1. Home-to-work-trips by employees (work travel). 2. Trips of employees in the course of their work (business travel) which includes the topic of corporate vehicle fleets. 3. Trips of customers or guests (customer travel). In contrast goods traffic and especially logistics are usually not seen as parts of MMfE when they are also part of the core business model of an employer and therefore subject to

own management processes. However, certain aspects of goods travel and logistics may be incorporated in MMfE plans when these processes generate a significant amount of traffic at a certain location. As stated before, the overall, so to speak generic objective of MMfE is to increase the efficiency of corporate mobility. Looking on it from different perspectives several more specific aims of MMfE can be identified:

- From an employer’s perspective MMfE may aim at: a) efficiently allocating financial resources, e.g. by reducing costs of vehicle fleets or business trips; b) enhancing site accessibility and reducing traffic congestion, e.g. by reducing the share of motorized individual traffic; c) support recruiting of qualified labour by fostering a positive image as an employer, e.g. by introducing job tickets for public transport; d) reducing mobility induced CO2 emissions as part of corporate sustainability strategies.
- From the perspective of the public hand MMfE aims at: a) promoting sustainable transport and thus contributing e.g. to climate protection strategies; b) enhancing accessibility and traffic flow; c) mitigating traffic related problems e.g. traffic congestion, emission of pollutants and noise.

The latter benefits for the general public are the main reason why MMfE has become a major focus of public MM policies during the last years. A comprehensive study for the Frankfurt RheinMain region shows potential benefits of a systematic implementation of MMfE. The study was based on regional wide data on existing employers and available evaluation data of MMfE projects as well as on accessibility modelling by means of the regional traffic model. The study showed that when implementing MMfE regional wide one of five work travel related car trips may be shifted to other transport modes and vehicle kilometres may be reduced substantially by 25% [7]. Considering the effects on both CO2 emissions (reduction of about 150.000 tons per year [7]) as well as traffic flow in the major road network resulting from that, the importance of MMfE as a means of transport and climate protection policy is obvious.

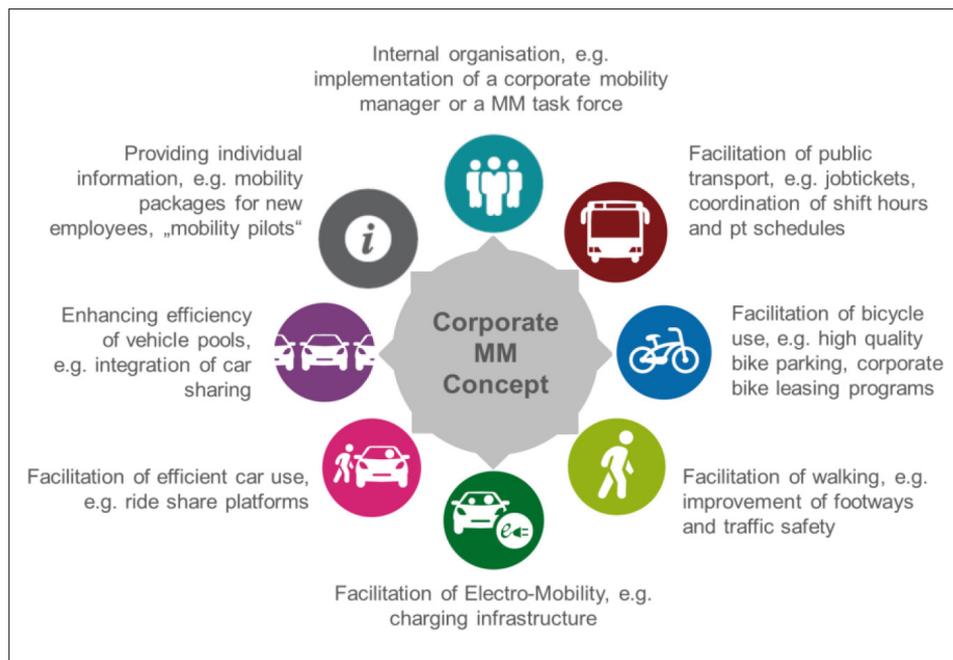


Figure 1 Measures of MMfE [9] (translated by the author)

MMfE comprises a broad spectrum of measures; Fig. 1 depicts the major fields of action and examples of measures. According to the description of MM above, corporate MM concepts are both integrated and comprehensive action plans which means that they contain bundles of measures aiming at all transport modes. Since MMfE and generally MM aims at changing travel behaviour and especially routines concerning modal choice, special emphasis lies on measures in the fields of communication and organisation.

2 Effectively implementing MM for enterprises / employers

Having its substantial potential benefits in mind, the logical implication seems to be that MMfE is a natural part of up to date transportation policy as it obviously ideally complements the classic supply oriented policy approaches. It so to speak strengthens the lever of transportation policy as it makes use of existing organisational structures within enterprises to influence travel demand by actively stimulating behavioural changes rather than waiting for people using the existing traffic systems in a way traffic engineers want them to. However, although MMfE may incorporate benefits worthwhile even out of an employer's perspective this has not led to an automatic breakthrough of MMfE in practice; obviously some external stimulation is needed to boost the concept. Thus the major question for transport policy makers as well as planners and engineers is what it needs to put this potential into effect? This question will be addressed by in the following chapter by elaborating on the five years of experience from the German "südhessen effizient mobil" program geared to facilitate MMfE.

2.1 Essential challenges (from a German perspective)

The first major challenge on the way to an MMfE breakthrough seems to be the motivation of employers to start corresponding management processes. From numerous contacts to enterprises in the Frankfurt RhineMain region the author draws the following conclusions concerning the major underlying reasons:

- The issue of priorities ("nice to have" or "must have"): Corporate mobility is surely regarded as an important issue as it facilitates business processes, but nevertheless it is a servicing function and thus not top focus of decision makers.
- The issue of value for money: Connected to the first question most managers first call for concrete numbers on benefits. Due to lacking evaluation data this question is in most cases hard to answer in a convincing way.
- The issue of how to and know how: Successful MMfE requires coordinated activities of different parts of a business starting with human resources and ending at fleet and real estate management. Quite often not knowing where to start prevents employers from implementing MMfE.
- The issue of limited spheres of influence: Other than in the field of energy efficiency, the success of MMfE does not solely lay in the hands of enterprises. The public hand has to be involved when it comes to measures concerning transport supply and cooperation in this field between administrations and enterprises is in this case not widely established.

But, secondly, hindrances are also existent on the side of the public hand in Germany as no legal obligation exists to conduct MMfE or MM activities in general. Thus the majority of municipalities lack strategic processes aiming at systematically implementing MM which could be an anchor and/or catalyser for private MMfE activities. Connected to the missing obligation is the problem of missing funds as the flexibility of municipal budgets concerning voluntary activities has been substantially reduced due to the German "debt brake" policy.

2.2 The approach of südhessen effizient mobil

To overcome these challenges, different funding projects have been implemented in Germany: The first generation of projects concentrated on fostering MMfE by 1st developing methods and tools, 2nd fund actual MMfE processes, 3rd building regional and local networks of stakeholders and 4th conducting extensive public relation activities. The most prominent project in this generation was the “effizient mobil” program [10] which funded MMfE processes in 100 enterprises all over Germany. However, despite the initial success of “effizient mobil” it soon became clear that the MMfE processes started to a great extent were not enduring after the funding ended. Process evaluation showed several crucial shortcomings: 1. 100% funding of external consultants did not result in enduring internal processes, 2. the funding period was too short to establish regional and local stakeholder networks to embed the activities of the enterprises, 3. this correlated with a lack of acceptance of MM among municipal politicians. After that first attempt, a second generation of funding schemes have been established explicitly building up on those lessons learned: 1. the “MobilProFit” program explicitly aims at establishing 12 regional focal points where both MMfE processes as well as stakeholder networks are funded [11]. 2. the “südhessen effizient mobil” program is a follow up process of the initial “effizient mobil” and was established 5 years ago in the Frankfurt RhineMain region [9] by regional and local institutions within the public sector (ivm – integrated traffic and mobility management Frankfurt RhineMain region, cities, districts, public transport (PT) authorities as well as the chambers of commerce). In the following the strategic approach as well as the key success factors from “südhessen effizient mobil” (SEM) are presented.

While the operative goal of SEM is quite simple, to foster MMfE processes at as many employers as possible, the strategic goals are more divers and directly connected to the major challenges described above [12]:

- 1) using MMfE as a breakthrough topic for establishing MM in general as a field of action in municipalities, permanently anchoring MM on the local level
- 2) creating and ensure standards concerning the quality of MMfE processes, including precise guidelines and qualification profiles
- 3) fostering the market for MM consultancy
- 4) evaluate and quantify the effects of MMfE
- 5) support the strategic communication between municipalities and enterprises

Above that a main attempt was to create a funding scheme which solely relies on regional (public) budgets in order to be able to offer a long lasting independent support. According to that the program was based on two pillars:

- a) The actual funding scheme, which offers a free of charge 1st level consultancy to employers to the point of a corporate MM concept utilising standardised tools (status quo analysis, impact assessment, evaluation etc.) and consultancy from quality controlled experts. Above that the support for the employers was organised in form of a workshop program which stimulates the enduring exchange between participants.
- b) One regional and several local stakeholder networks comprising of municipal administrations, public transport authorities as well as the local chambers of commerce as a leading partner.

The program is moreover flanked by a 2 level audit scheme assessing the quality of the planning process (1st level, certificate valid for 3 years) and subsequently the implementation of measures as well as impacts (2nd level after 3 years). The SEM program is currently in its 6th year of operation and is about to become a permanent institution in the Frankfurt RhineMain region. Up to now over 60 MMfE processes were supported. Currently the emphasis, besides further growth, is on properly evaluating effects and improving model based impact forecasting.

The main strategic approach of the program 1st is to get employers started with MMfE by means of (little) external funding effort and expertise for the first phase of the MMfE process and that the internal process afterwards is sustained by internal resources, with only marginal further support by the SEM program. 2nd the program especially attempts to interconnect public and private players to realise potential effects within the field of work travel, usually being a limited influence sphere for employers. Many good practice examples have proved this approach to be a key success factor for promoting MMfE:

- The data from the standardised mobility survey can directly be used as a basis for a “Job Ticket” contract with the regional PT authority (RMV), enabling employers to offer an inexpensive access to PT for their workforce on work trips. The chamber of commerce in Darmstadt e.g. combined the Job Ticket with a parking allowance to a so called mobility card (employees pay once for access to PT and parking space which was free of charge before), this led to a drop of the share of daily car drivers within work travel from above 70% to below 40%. [9]
- Close cooperation within the SEM program between a deep-frozen-food producer (Erlebnacher Backwaren) which was not accessible by PT and the local PT authority led to a cooperative solution where the employer restructured his complex shift model to make it fit to the PT authorities needs concerning efficient production of PT supply. [9]
- In an extensive MMfE process by the Technical University of Darmstadt TUD) which implemented a comprehensive MMfE scheme including the issuing of a mobility card similar to the one of the chamber of commerce, a permanent high level coordination process between the TUD and the city of Darmstadt was installed. This allowed for coordinated planning of PT as well as parking management to cope with the massive rise of PT use by almost 50% and a decline of car trips by 35%). [13]

3 Conclusions

As shown MM in general has the potential to add substantial effect to traditional mobility and traffic planning by directly addressing travel demand. This especially applies to MMfE as it makes use of existing organisational structures in companies to implement integrated mobility concepts. However the experiences up to now show that MMfE is not a self-runner but needs to be supported. Evaluations of past funding schemes in Germany revealed though that funding money may not be the decisive part in a long lasting strategy to support MMfE. In fact the experiences from the Frankfurt RhineMain region lead to the conclusion that besides guidelines, consulting and (little) funding money it is crucial to embed private MM activities of employers into a public framework consisting of stakeholder networks, standards and quality control. Besides that financial resilience (not relying on temporary external funding) as well as intensive and long lasting efforts to convince employers as well as local politicians by means of carefully evaluated good practices are key success factors.

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