

**TRANSPORT DEMAND MANAGEMENT NEW STYLE**  
**- from transport demand management to location accessibility -**  
**(workshop: Quality partnerships to generate demand for alternative transport)**

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**1. INTRODUCTION**

Transport demand management<sup>1</sup> policy has a history of more than 10 years in the Netherlands. Central government has used transport demand management since 1990 to tackle a major element in the problem of accessibility, i.e. commuter traffic. There have been various shifts in emphasis over that ten year period, from a largely centrally managed approach to a more decentralised one and from an approach directly aimed at employers to one aimed more at adjacent areas of policy.

All in all, the results have been disappointing in terms of reaching targets. In 1999 about 6% of the target group (companies<sup>2</sup> with more than 50 employees) were actively using transport demand management in the Netherlands (AVV, 2000). Apart from a few good initiatives, the need for transport demand management is clearly not widely recognized by companies. This therefore begs the question: to what extent has the policy been effective over this ten-plus year period and what does that mean for new policy? The policy needs reviewing, not just in the light of this ten years of experience, but also because there is a clear shift in present-day perceptions of public and private initiative. Public authority management does not always appear to be effective and is generally very much supply-oriented. By contrast, private initiatives are more demand-driven and can make use of the expertise available within the private parties to bring about process and technology innovations. Government support is sometimes necessary for this, and this is where the added value of a Public-Private Partnership (PPP) comes in. Experience with PPP structures has already been built up in major projects, particularly in infrastructure and property development, but this has hardly been the case, if at all, in transport demand management.

This paper will take a closer look at the developments outlined above and examine the consequences for transport demand management and transport demand management policy. In section 2 we will look back over transport demand management policy in the Netherlands since 1990 to the present. In section 3 we will look at how the private sector partners view the concept; what is the value of mobility and the accessibility of their location in terms of their own interests? It will be argued that companies are not so much interested in transport demand management as in working conditions, cost reduction and customer service, etc. Section 4 will consider the issues of what role policy can still play in transport demand management and how this affects the public and private parties. This will result in a vision, in which transport demand management will be presented as an integral part of much wider issues. Examples will be used to illustrate this vision. Finally, in section 5 we will draw some conclusions.

**2. TRANSPORT DEMAND MANAGEMENT POLICY IN THE NETHERLANDS: 1990-2002**

When we look at the period 1990-2002, transport demand management policy in the Netherlands can be described on the basis of a number of observations, i.e.:

- from central steering to decentralised activities;
- voluntary but ambitious policy goals;
- integrated transport demand management;
- providing a certain level of facilities.

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<sup>1</sup> Transport demand management is an instrument which companies (i.e. employers) can use to improve their own accessibility and to promote selective care use.

<sup>2</sup> Whenever the word 'companies' is used in this paper, this refers to companies, institutions or any other organisations which function as an employer. Companies which supply products and services will be referred to in this paper as 'industry'.

### **From central steering to decentralised activities**

Since the mid-1990s the relationship between the various tiers of government has drastically changed in the Netherlands, not least in the area of traffic and transport policy. While at the start of the 1990s central government still had an important steering and decision-making function, with the move towards decentralisation of financial resources, the provincial and municipal authorities have gained greater powers since 1 January 2000. This decentralisation has allowed the provincial and municipal authorities to bring policy more into line with regional needs and interests. This is shown by the wide variety of regional traffic and transport policies.

This development has clearly had repercussions on transport demand management. The regional differences are considerable. First of all, there are differences in setting priorities. Not every region attaches the same importance to transport demand management. In those places where the problems are most acute we find the most opportunities for transport demand management and more emphasis is accordingly placed on the subject in policy. There are also clear regional differences with regard to the content of the transport demand management policy itself. These differences can be seen in the relationship with other policy areas, as well as the methods and contacts with companies.

### **Voluntary but ambitious policy goals**

In the Netherlands transport demand management is not directly associated with legislation. It was deliberately decided to do it this way, both because of the limitations of rules and regulations and because of what a voluntary approach was expected to achieve. It was believed that the accessibility problems were such that companies would recognize the urgent need for transport demand management. To underline this, ambitious policy goals were also formulated in the first half of the 1990s. It has already become clear that these expectations were rather over optimistic: the number of active companies has remained below or even well below the targets set in policy.

The municipalities still have ways of demanding transport demand management from companies through flanking policy. However, they make little use of this avenue, possibly because of the potential impact on their competitive position relative to other municipalities.

### **Integrated transport demand management**

Although transport demand management was primarily seen as an instrument for improving accessibility, it was not long before links were made with other areas of policy than just traffic and transport. Policy on spatial planning, the environment, the economy and employment, as well as parking also offered useful leverage for transport demand management. This combination has, to some extent, led to a development in which transport demand management can potentially be used as a negotiating tool between the authorities and companies e.g. transport demand management in exchange for an environmental permit. This potential is already being exploited in some places through covenants, although in practice such processes are often long and drawn out. This is partly because companies do not always see the necessity for such agreements and it also partly depends on the implementation and degree to which they can be enforced.

### **Providing a certain level of facilities**

Transport demand management in the Netherlands has mainly consisted of steering supply, both before and after the decentralisation of tasks. For example, a national network of regional implementing bodies (VCCs) has been created. These bodies operate as intermediaries between government, industry and employers. Their function is mainly to oversee the implementation of effective transport plans within companies, if necessary supported by government and industry. After the decentralisation, these VCC bodies were steered and funded by the regional authorities. This resulted not only in different working methods between the VCCs in each region, but also created uncertainty with regard to future funding.

Besides setting up the network of VCCs, technical innovation was encouraged through a subsidy scheme. The scheme was mainly intended to encourage the development of products and services to benefit public transport and other alternatives to car mobility. A number of subsidised projects has actually resulted in innovation; the true market value of these products will be demonstrated in the coming period.

### **Conclusions after more than 10 years of transport demand management policy**

What has all this led to? The assumption was that by offering a certain level of facilities transport demand management would be embraced by employers. The policy has certainly borne fruit in terms

of the level of facilities. A network of implementing bodies (VCCs) has been created, innovation is encouraged and the subject has certainly been put on the traffic and transport policy agenda. A great deal of knowledge and experience has also been garnered through research and from pilot projects.

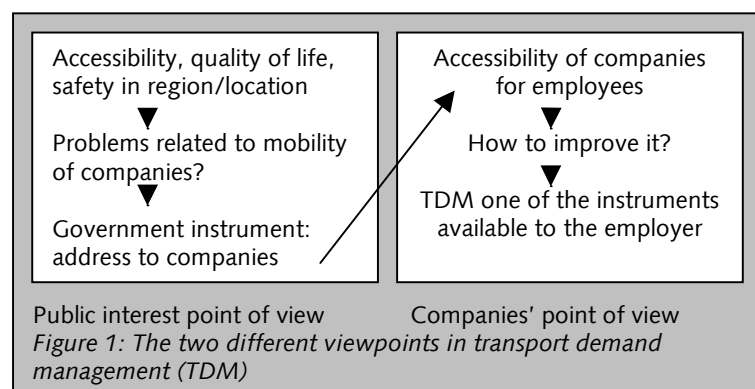
With regard to the number of active companies however, it has to be said that this has remained very small and that the envisaged policy effect on car use has not been achieved. It may justly be concluded therefore, that transport demand management has not been effective.

What conclusions can we draw from this? That transport demand management is ineffective? That would probably be going too far. Research has in fact shown that a number of transport demand management measures<sup>3</sup> which are relatively easy to introduce could already result in an average reduction in car use of 7% (Novem, 2002). What we do see, however, is that despite supply management by the authorities, it is difficult to get companies to take the step to implement transport demand management. Clearly there is still not a sufficient sense of urgency among companies to take this step.

By extension, it is clear that transport demand management can be seen from two different points of view, i.e. from the companies' viewpoint and from the public interest viewpoint. Transport demand management is primarily about balancing the accessibility and other interests of employers and employees at a commercial level, or the companies' viewpoint.

Considered from the public interest point of view however, it is sometimes desirable to make transport demand management a policy topic. Congestion, parking

problems and environmental nuisance may be the triggers which lead to this. Transport demand management then becomes an instrument which the various tiers of government can use to make agreements with companies about mobility. In this case the degree of monitoring and enforcement will determine to what extent companies actually feel the need to tackle transport demand management.



Transport demand management in the Netherlands has so far been closely connected with policy-related and supply management approaches. Although something has been achieved at this level, the essential step required for transport demand management has never really been taken, i.e. the step towards the companies. Achieving a certain mass (or a particular share of active companies) has not happened. Clearly companies do not (yet) feel a sufficient sense of urgency to tackle transport demand management. The question in this context is when will companies actually feel sufficient urgency to want to invest in transport demand management? Section 3 will consider companies' attitudes toward accessibility and will look at the question of when companies will be willing to invest in transport demand management.

### 3. TRANSPORT DEMAND MANAGEMENT: A MATTER OF PRIVATE INITIATIVE

The results with transport demand management (expressed as the number of active companies) so far

A recent survey of 954 companies in industry and B-to-B services conducted by the employers' association in the Netherlands (VNO-NCW), showed that more than a third of the companies felt that the accessibility of their company was a problem (or a major problem). More than three quarters of these companies indicated that the operating results were to some extent adversely affected by these accessibility problems.

(Source: VNO-NCW West, RAI, ANWB, 2002)

suggest that companies do not have an interest in accessibility. Various surveys and research have shown, however, that this is not the true picture. In some companies accessibility is actually a highly topical issue. The difference is that this interest is not always the same in nature and scale as the

<sup>3</sup> These are measures which encourage car pooling, cycling and the use of public transport.

authorities' interest in transport demand management and companies are therefore not always willing to invest in transport demand management. For a public authority accessibility is mainly related to car use and its effects and therefore a goal in itself. A company is primarily concerned with making profit and therefore accessibility will be a means of creating or securing that profit.

### **The three dimensions of accessibility for companies**

Companies have to be accessible, otherwise it would be impossible to operate the business or make a profit of any sort. This accessibility has certain clearly differing dimensions, each with its own set of requirements.

1. *Accessibility through the front door.* Customers and visitors to a company enter a company through the front door. This could be to sell products or services, or to make business agreements. This is the first impression that a visitor or customer gets of a company. If entering by the front door already creates a problem (because there are not enough parking places or the distance from the station on foot is too far, or because there is too much traffic and too little greenery) this can have an effect on his or her attitude inside. In this respect, in the eyes of the customer or visitor, accessibility via the front door is an added value to a product or service. The front door is thus an important competitive factor in the **customer market** and partly determines the turnover which companies can generate at the location concerned.
2. *Accessibility through the side door.* The side door is intended for the company's employees. It is important to employers that employees can reach the side door on time, but the commuter traffic generated by its employees may be a reason to reduce the congestion caused by parking in the area (in favour of customers and visitors). Employees are pleased if they can reach this side door quickly and easily. Accessibility can therefore be a factor in negotiations about terms of employment between employers and employees. Thus, the side door is a competitive factor on the **labour market**. Particularly in times of labour shortages, this can determine whether or not an employer is attractive to an employee.
3. *Accessibility through the back door.* The supply and dispatch of goods takes place through the back door. In fact, there is just one guiding principle at work here: it must be as efficient as possible. The accessibility of the back door is important to both the company and the supplier.

### **Accessibility: the need**

The urgent need for companies to invest in accessibility (and thus transport demand management) is closely related to the financial return companies actually get from these investments. In view of the fact that the accessibility of the front, side and back doors has a direct impact on the running and therefore the operating results, companies are often willing to invest in this where there are problems. Such investments are then made not to reduce car use or increase bicycle use, but as a service to the customer/visitor, to lower costs and to be able to offer good and sound secondary employment conditions.

The need for companies to invest in accessibility may also arise out of external factors. A company benefits from the spatial and economic infrastructure in which it is situated. The level of facilities, the presence of roads and rail links, neighbouring functions, the local labour market and the *cachet* of the location all contribute to a positive commercial performance. This is offset by the cost of using of this spatial and economic infrastructure (or elements of it) or other obligations which this brings; particularly when there are problems with accessibility, the quality of life and safety and a company has a part in this. In the construction, management and maintenance of a location such aspects are reflected in the regime in force in that location. This could consist of a set of permits (e.g. environmental or building permits), but could also take the form of pricing policy (e.g. paid parking).

If the benefits of the spatial and economic infrastructure outweigh the regime in an area, a company will be more prepared to invest in accessibility than when it gets less return on its own investments. This can still make a difference in whether a company really sees that there is an urgent need to invest in accessibility, because otherwise no permit will be granted and it will be impossible to conduct the business. Or a company can decide for itself whether it wishes to invest in accessibility or not, but it will see the effects of this decision (on society) reflected in the operating costs.

Finally, it is also the case that financial incentives can make companies more willing to invest in accessibility. Fiscal measures and subsidies will not increase the sense of urgency as such, but may well encourage initiatives.

### From transport demand management to location accessibility

If we take the above a step further, we see that companies have an inherent interest in accessibility. It has three dimensions. Commuter traffic (and transport demand management) is just one element of it, aimed mainly at the accessibility of the side door (and only indirectly the front and back doors) and at agreements between employers and employees about mobility.

#### Investing in good accessibility through the side door: FLEXIBLE MOBILITY BUDGETS

In 1998 the ICT company Origin introduced a flexible package of employment terms. Among the main reasons for this were to increase the loyalty of the existing workforce in a tight labour market and to be able to offer an interesting package to potential employees. The poor accessibility of the office by car was increasingly seen as a reason for employees to switch to another employer or not to opt for Origin.

One element in the package is a mobility budget. The employee can use this mobility budget either for a leased car or for alternative transport arrangements. Since the introduction of this measure, 23% of new and existing employees (those whose lease contract had expired) have opted for the alternative transport arrangements. Most employees opted either for a lump sum payment of the mobility budget or, alternatively, for the use of a public transport annual season ticket. The main obstacle turned out to be the increased administrative burden that was created. The initiative has since been adopted by other companies.

But accessibility also affects other operational aspects than just the relationship between employer and employee. It appears that accessibility is equally important in relation to the customer, for example, although in a different way than in transport demand management. It is a matter of providing the customer with both motivation and satisfaction at the same time.

#### Investing in good accessibility through the front door: The EFTELING theme park

The Efteling is the Netherlands' largest theme park and attracts around 3 million visitors over a period of 7 months a year. An abiding consideration for such a theme park is to make sure that it continues to be attractive to customers. Good accessibility is just one aspect of this. Most visits (80%) are made by car (although with an average of 3.9 passengers per car). The remaining 20% come by public transport, coach or touring car and bicycle. To improve accessibility the Efteling has itself invested in access roads, parking facilities, sound barriers and a bus station. To encourage the use of public transport a shuttle bus service was introduced between the mainline stations in the area and the Efteling; known as the Fairytale shuttle (Sprookjespendel). Besides providing passenger transport this shuttle was also used for promotion purposes. The project has since been stopped because it was too costly. The Efteling is now working on the creation of a car-free bus lane to bring visitors who come by train quickly to the park.

The Efteling provides a good example of a private initiative. What this experience shows is that government support (in whatever form) is a critical success factor.

It would therefore be preferable in policy too, to speak of location accessibility rather than just transport demand management. Location accessibility can be defined as "the inherent interest which a company has in the accessibility of its front, side and back doors". The basic principle is that companies make up the balance for themselves about how the accessibility of their location can be improved. They are in the best position to decide what is likely to work and what not, based on their own expertise and interests.

Two concepts which are related to location accessibility are the area-based approach and park management. The area-based approach makes use of the added benefit to be gained from working with other stakeholders (often the public authorities and companies) to set up joint projects at local or regional level. Park management is an example of an area-based approach targeted mainly at new trading and industrial estates or business parks in which a private service provider manages and maintains the site on behalf of an association of the companies. These services could include waste disposal, security, signposting and accessibility. Park management is clearly on the increase in the Netherlands.

### **New mobility products and services**

A key condition for companies to undertake private initiatives is the market supply of mobility products and services. Such initiatives will be almost impossible without an adequate market supply to improve location accessibility. Over the last ten years a major effort has been made in the context of transport demand management to provide advice and incentives to companies (through the VCCs) and to develop products and services for the commuter. Although expertise has been developed and innovation fostered, it appears that the market value of these products and services has never been very great because there has been no increase in the demand for them. The challenge is to encourage the industry to develop mobility products and services which have a market value, without creating an oversupply. This supply could be aimed at public transport, seamless mobility (trip chains) and cycling, as well as car use.

#### Investing in new mobility products and services: MOBILITY MIXX

In October 2001 the public transport provider Connexxion (bus company) started a service called Mobility Mixx for commercial users. This service is intended to allow trips for business purposes to be organized and coordinated more efficiently based on their own particular requirements. Mobility Mixx also allows employers to respond more flexibly to the actual situation. This service is a combination of more and more up-to-date travel information, pool cars, integrated payment and the facilities of a service centre.

The experiment has been successfully implemented by the municipality of Alkmaar and the Nuon power company. The results show not only an increase in the distance covered by public transport (in km) but also a reduction in costs for the companies.

For further information see: [www.mobilitymixx.nl](http://www.mobilitymixx.nl)

## **4. TRANSPORT DEMAND MANAGEMENT: A NEW ROLE FOR POLICY?**

In the foregoing we have seen that the effect of transport demand management is based not so much on the instrument itself as on how urgent transport demand management is perceived to be by companies (acceptance of policy and measures). It is clear that transport demand management is basically a matter for employers and employees and private initiatives from the market. That is not to say that there is no further role for the public authorities with regard to transport demand management. This role is essentially two-fold, i.e.:

- facilitating and supporting private initiatives,
- safeguarding accessibility, quality of life and safety in the region.

This requires not only a different approach but also a shift in thinking about transport demand management in companies. Just as transport demand management for companies is just one aspect of accessibility, so the authorities need to consider transport demand management as just one element in an integrated policy on traffic and transport, spatial planning and economic affairs.

### **Facilitating and supporting private initiatives**

Private initiatives cannot always go it alone. Government support in the form of funding, legislation or coordination, for example, may be necessary to help get private initiatives underway. Some examples:

- A company wishes to set up a shuttle service to bring its employees to the workplace. In view of the congestion on the roads, if this service is to be a success it is important that a real time-saving can be achieved compared with the car, for example. A government authority could ensure this success by allowing this shuttle service to use the restricted bus lane.
- A supplier wishes to launch an innovative product on the market, the market value of which has already been demonstrated. However, a considerable start-up capital is required to ensure the success of the product. A government grant could help to bridge the gap between the major start-up investment costs and the often modest initial returns.

### **The public interest: accessibility, quality of life and safety in the region**

The government is there to ensure accessibility, quality of life and safety in the region. When one of these goals is threatened (and scarcity is created), it is one of the responsibilities of the authorities to deal with this scarcity, not least by addressing the party causing the threat. The question is, how to do this effectively? In section 2 we saw that supply steering often by-passed the policy goals. In section 3 we saw that companies can often come up with good and effective solutions themselves provided that

the need for such investments has been recognized. Based on these two conclusions it is recommended that private initiative should provide the basis for transport demand management but under the conditions laid down by government. This could be through pricing policy or legislation.

### **Integrated policy on location accessibility**

Companies consider accessibility (and therefore transport demand management) as an integral part of the operations. Besides having to select mode of transport, route and time, it is also something which affects the personnel, the product or service, marketing, etc. Essentially, the same applies to the government. Transport demand management is an integral part of several different policy portfolios, not just traffic and transport but spatial planning, the economy, the environment, the labour market and finance too. Transport demand management has therefore been too narrowly defined given the reality in the industrial estates and business parks. The term 'accessibility policy' would be more appropriate.

This requires a sea change in government circles. It means that cooperation with other policy fora and between the various tiers of government must be sought to create a coherent policy.

### **Mobility agreements: the link between public and private interests**

Private initiatives should therefore provide the basis for transport demand management and to improve the accessibility of locations. The authorities still have a role in this, although a different one than they had in the transport demand management policies of the past ten years. Moving away from steering and promoting, the role of the authorities now will mainly lie in creating the right conditions and supporting private initiatives. An interesting development in recent years has been the industrial covenants that have been entered into between the public and private sector. A good example is the approach taken in the Amsterdam port area (Amsterdam-Westpoort).

#### Investing in regional cooperation: AMSTERDAM-WESTPOORT

Companies in the Amsterdam-Westpoort port area are faced with major accessibility problems. There is too much congestion and very little public transport (particularly outside peak hours). In 2002 a project was started the aim of which was to make Westpoort as a whole and the individual companies in particular, more accessible for both suppliers and visitors. Five major companies are currently working to re-organize and streamline their commercial transport operations by joining forces to combine purchasing and transport services. An external 'accessibility broker' will eventually be responsible for the private transport company and will act as a coordination point. This will provide the companies with various benefits: financial (greater efficiency), contracting out of commercial transport (less organisation), better public transport (making the companies more attractive as employers) and an environmental permit (which includes a section on mobility).

An organisation was set up for this purpose (Stichting Bereikbaarheid Westpoort – the Westpoort Accessibility Association) and to manage the combined annual budget of the participating companies. The launch of the new collective transport system is planned in May 2003 as a Public-Private Partnership (PPP). (Source: Raad voor Verkeer en Waterstaat, 2003)

## **5. CONCLUSIONS**

Transport demand management is, in the first instance, a matter of choice by companies; they are in the best position to calculate the potential of the instrument based on their expertise and in relation to other aspects of their operations. This decision-making process can be influenced through policy. Not by steering supply. Experience has shown that the use of measures is determined first and foremost by how necessary the companies consider it to be to invest in transport demand management, and as long as there is no sense of urgency, supply steering will have little effect!

The degree of urgency which companies attach to investing in mobility and accessibility will be mainly determined by what return they get from these investments. This could be directly expressed on the shop floor, e.g. as good customer service (and therefore a higher turnover), good secondary employment conditions (and therefore a better position on the labour market) and more efficient operations (logistics and commercial transport). But this return could also be expressed indirectly as key conditions which are essential to the performance. An example of this in the Netherlands is the environmental permit, which could also include a section on transport demand management. Another consideration is that companies could and would be willing to invest in more than just transport

demand management. Improvement in mobility and accessibility can also be achieved by opting for a different location or by making a conscious decision to invest in accessibility by car or other means. Provided that the interests of the public are taken into account in these decisions, there is unlikely to be any problem.

In any event, the conclusion is that companies must ultimately decide whether they want transport demand management or not. This is the only way that companies will accept transport demand management and they will be willing to put more effort into it than in a transport plan on the side.

The role of policy is two-fold. Firstly, to support companies in their efforts to improve accessibility. Sometimes the public sector has the necessary instruments to enable or support private initiatives. A good example of this in the Netherlands is the provision of restricted lanes for company transport or van pools for certain target groups. It is therefore important that the authorities keep their eyes and ears open to make sure that such promising private initiatives get the support they need.

Secondly, policy should serve the interests of the general public and these go much further than the interests of companies. Here a balance has to be struck between opposing positions. One possible result of this might be that a public authority would ask a company to invest in the accessibility, quality of life or safety of a region to bring about a particular improvement. It is up to the company, however, to decide what would be the best way to do this. The company would be in the best position to see whether transport demand management would fit into this or not.

Taken as a whole, mobility agreements between the public and private sectors can be seen as a promising instrument in taking a concerted approach to the problem of accessibility. Based on a mutual sense of urgency (for the public authorities: accessibility, quality of life and safety; for the private sector: efficient operations, satisfied customers, employees, visitors and suppliers; for private suppliers: profit), goals can be jointly formulated and steering can take place on the basis of allocated roles based on what which each party is best at. In short: a businesslike approach.

At local and regional levels this businesslike approach will mainly be reflected in agreements made between the provincial and municipal authorities and employers on specific projects. At national level there will be more administrative agreements and commitments between central government and the umbrella organisations of the regional authorities and private sector parties.

## Literature

AVV (1998) *Status Kansrijk*.

AVV (2000) *Monitor vervoermanagement*.

AVV (2000) *Vervoermanagement: een kwestie van draagvlak en maatwerk*.

AVV (2001) *Gebiedsgerichte aanpak van vervoermanagement*.

AVV (2003) *Strategiebepaling Beleidsdossier Vervoermanagement*.

Novem (2002) *Basispakket vervoermanagement*.

Raad voor Verkeer en Waterstaat (2003) *Bewust mobiel, beter bereikbaar! – Perspectief op bereikbare mobiliteit in het personenvervoer*.