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The autumn of the Bicycle Master Plan: after the plans, the products

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1. Introduction

In its efforts to secure a "sustainable society", in 1990 the Dutch government expressed clear views on the environmental policy, the land use and city planning policy and the transport policy. The policy on bicycles can play an important role in the transport policy, it is strongly influenced by the land use and city planning policy and can support the environmental policy. A project group was therefore established at the Ministry of Transport in order to further detail the bicycle policy in a Bicycle Master Plan policy paper. The project group has also been responsible for the pretty plans being put into action.

During Velo-City conferences in Milan, Mont-real and Nottingham, reports were given on the Bicycle Master Plan, the objectives, the means and the working methods. As the activities of the project group are scheduled to fold up at the end of 1996, Velo-City Basel provides the ideal opportunity to take stock of the provisional results.

Dutch presentations during Velo-City conferences initially emphasised intentions and considerations. Luckily, more and more reports have become available on results and experiences. This contribution is even more strongly concentrated on what has been achieved and the knowledge gained, as the safe use of bicycles is not promoted by mere announcement of the actions which should take place and the benefits of cycling for mankind, the environment and society as a whole. Much more important is the exchange of useful information and sharing of experience gained by effective policies, measures and activities.

The principal part of this contribution concerns the five spearheads of the Bicycle Master Plan. Each spearhead is placed in a broader context and is the subject of qualitative discussion. A general view of the effectiveness of the bicycle transport policy and a look towards the future conclude this contribution.

2. Spearheads of the bicycle transport policy: background and developments

The Bicycle Master Plan project group regards the bicycle transport policy as an inextricable part of, at least, the total transport policy. Increasing the attractiveness of cycling is an essential yet inadequate precondition in stimulating the use of the bicycle and the safety of cyclists. Even in the Netherlands, structural changes will be required throughout the transport and traffic system in order to achieve such objectives, demanding not only insight and political courage but also considerable time. In the cities and beyond, such a drastic change will be preceded by choices with regard to the required functions of the public spaces. The next step will be to determine the conditions under which the various means of transport will make use of these spaces, depending on the time and the place.

With this in mind, but also with the realisation that priorities must be established, the project

group has divided its activities over the following five spearheads.

2.1 Mobility: the switch from the car to the bicycle

In the Netherlands, the bicycle transport policy is of importance to the many people who cycle frequently, regularly or occasionally. In the 1980-1994 period, they represented 27-29% of all traffic movements in the Netherlands, running up to 50% in some cities. Imagine the effect if half of those cyclists were to switch to other means of transport. The Netherlands experienced a similar decrease in cycle use in the 1963-1973 period. Repetition of this would result in the use of public transport increasing tenfold or in 50% more car journeys in the cities. One of these options is extremely expensive and the other most undesirable. Keeping the cyclists on their bikes is therefore essential.

The Dutch bicycle transport policy is however primarily based on "the bicycle as an alternative for car transport". The point is to attract new cyclists, to convince car drivers to cycle more often. Such a priority would seem unjust for those people already using the bicycle as a means of transport, but it is not. After all, they profit from such a policy, which can only be successful if cycling becomes a qualitatively attractive alternative for car drivers.

There are plenty of people using their car for short distances: of all car journeys, 20% is shorter than 2.5 km and 54% shorter than 7.5 km. In the towns and cities, movements exceeding 7.5 km are rare. This indicates enormous potential in short distance movements, a large proportion of which could be made by bicycle in the Netherlands, and particularly in the cities and towns. Opportunities galore therefore for a bicycle transport policy!

Unfortunately, the other side of the coin is that city cycling is not always particularly attractive, precisely because of the large numbers of short distance movements undertaken by car.

Although these constitute a mere 23% of all movements shorter than 2.5 km and 38% of all movements up to 7.5 km, these are the most threatening and hazardous movements for the cyclists. And whether mobile or stationary, cars always take up the most public space.

Cycling can only be made more attractive by means of an active policy to provide better facilities and less obstacles to cyclists. With the high frequency of bicycle use in the Netherlands, such "pull" measures have as yet proven inadequate in attracting significant numbers of car drivers to switch to a bicycle. There are two illustrations of this:

* In 1994, a long term evaluation was made of the cycling route network established in Delft in the 1982-1987 period. Bicycle use increased somewhat in the beginning, on establishment of the infrastructure facilities, but the effect was identified as being one-off in the longer term. Road safety did indeed improve both in the short and the long term, generally speaking and also specifically for cyclists. However, the same can be said of other cities.

* Since 1990, the total length of cycle paths has increased to almost 19,000 km, generally speaking double the length in 1980. (The Netherlands has around 108,000 km paved and asphalted roads, including 2200 km of expressways). Besides cycle paths, there were also investments in roundabouts, reconstructions of junctions and pedestrian/cyclist crossings, cycle tunnels and bridges and parking facilities for cyclists; totalling an estimated 1.5 billion guilders. The costs were split up into approximately fifty percent for the municipalities, 15% for the provinces and the remainder for the national government.

Results: In 1994, the total distance cycled was 12.9 billion km, compared with 12.8 billion in 1990. (The number of km travel-led by car was 125 billion in 1990 and 129 billion in 1994). Consequently: Expansion and improvement of the infrastructure does not necessarily increase the use of bicycles.

These illustrations of the limited effectiveness of the bicycle transport policy in a restricted sense need not necessarily lead to pessimism, though certainly to the conviction that the bicycle transport policy in the Netherlands is indeed best effective as part of a wider transport policy. Paid parking, which is a very effective form of municipal pricing policy, has become

increasingly common since 1990, also outside of the town and city centres and the rates have been raised considerably. Transport management is gaining popularity among companies, car pooling and car sharing are making headway, the demand for reduced car access to inner cities is ever more predominant, the first car-free neighbourhoods are in the making and enormous investments are being made in public transport.

After five years of this new policy, the results are as yet insufficiently visible. Of course we would all prefer the changes in thought patterns to be automatically and rapidly followed by changes in everyday reality. Unfortunately, that reality is stubborn and changes take time.

A good example is the city of Groningen where a political U turn was made in the transport policy in the 1970s. Gearing of the policy to land use and city planning and to the economic policy has by now booked results: the inner city is now almost entirely a restricted area for cars, two-thirds of all resident transport is no further than 5 km and 76% of this is carried out on foot or by bicycle.

Organisations which protect the interests of cyclists can influence long-term developments such as those in Groningen by making themselves continually heard. Their volume is a factor of course, though more important is the quality of their actions and their harmony with other members of the choir. The same applies to a project group working on bicycle transport in a Ministry of transport. Their own little policy territory is important but plenty of attention is required for participation in the discussion on the total policy. The effects of such participation are barely measurable but are expected to greatly exceed the group's own efforts in the long run. Involvement in such discussions was the main activity within the Mobility spearhead for the Bicycle Master Plan project group over the past five years. An example:

More and more companies and institutions are establishing transport plans, particularly to limit the use of cars in commuter traffic. Of all commuter movements up to 7.5 km in the 1986-1990 period, 42% was made by bicycle, 42% by car, 10% on foot, 2% by scooter and 2% on the bus, tram or underground. Estimated is that the number of movements undertaken by bicycle can further increase by 50%. The bicycle is therefore paid great attention in the transport plans, also because the savings for the company in terms of travelling expenses per car compare very favourably with the costs of erecting bicycle sheds, changing rooms, showers, etc. Moreover, less car parking spaces are required, often an expensive item, the "green image" of the company is improved and the employees become fitter and less prone to absenteeism.

The role played by the project group in this was limited to the collection and distribution of arguments, the provision of information and the support of a number of experiments.

2.2 Transport chain: the switch from the car to a combination of public transport and a bicycle

The transport chain concept will gain in the amount of attention received from the world of traffic and public transport in the coming years. In the strive for more effective and efficient transport of people, it is inevitable that more systematic attention be paid to the quest for an optimal combination of means of transport. Taking into account the strengths and weaknesses of each of the means of transport, many combinations are imaginable. The final choice depends on the movement which must be undertaken. How great is the distance to be covered, is the person in question travelling alone or in a group, must luggage be transported, what is the reason for the journey, what are the weather conditions?

Transport chains are not new, we are simply not used to them having a name. When a man walks to the garage, drives his car to a car park and then wanders into the shopping centre, he will tell his wife in the evening how he has "Been out shopping in the car today". The man on the street will not speak of the walking-driving-walking transport chain.

The chain of public transport and bicycle combines the advantages of public transport - routed transport of large groups of people in a short period of time - with those of the bicycle in the pre

and post transport: quick over short distances, from door to door and a limited amount of space taken up.

In the Netherlands, train and bicycle are a very common combination. In 1991, 44% of the travellers went to the local train station by bicycle and in the place of arrival 14% used a bicycle to reach the target address. Particularly the share in post train transport can be step-ped up, notably in commuter traffic. (Companies can facilitate this for their employees, for instance by making company or lease bicycles available and by paying for guarded storage near the station.) Storage facilities are available at each station. Sometimes this involves a few cycle lockers and a number of roofed bicycle racks, but larger stations can often accommodate thousands of bicycles, whether or not guarded.

Dutch Rail (NS) have an obvious interest in the bicycle in terms of pre and post train transport: the desirable high concentration of activities at train stations renders the room at these stations very scarce. Consequently, parking cars is only possible at very high parking rates. Consecutive public transport is not always available on a frequent basis, while train passengers generally walk hardly more than 10 minutes to their destination. (At present, approximately half of the people getting off the train walk to their target address.) The bicycle is the solution here: always available, little room required, accurate prediction of the time of arrival and, consequently, hardly any delay. Moreover: when compared with a 10-minutes' walk, a 10-minutes' cycle trip increases the target area surrounding the station with a factor 10. This makes the bicycle an interesting option on the destination side of the train journey, because it may increase the use of trains and reduce the use of cars.

Dutch Rail are in the middle of a privatisation process, which separates the government-financed infrastructure from the more commercial operation of the trains and stations. In the beginning of this process, the attention for pre and post train transport by bicycle threatened to be neglected: bicycle storage facilities, for instance, were destined to be judged by their commercial value, which of course is not very great. This threat can probably be averted, partly thanks to the constant attention demanded at NS and the Ministry for the interests of the cycling customer. The attention has been fuelled by the Bicycle Master Plan project group through the initialisation of innovative activities to reinforce the bicycle/train combination. Particularly extension and modernisation of the bicycle storage facilities at stations will require prolonged attention.

Transport companies organising interlocal bus transport have recently realised that the bicycle may improve their competitive position towards the car. This awareness has been on the increase ever since a process has started in the Netherlands to enhance the effectiveness and efficiency of public transport: less government subsidies, yet better services by customer-oriented public transport and consequently a greater necessity to set priorities.

Transport companies are beginning to pay greater attention to the total passenger journey between origin and destination and not only in terms of stops and stations. Particularly pre and post transport and the waiting times at bus stops render the competition with car transport difficult for public transport. The transport companies aim at higher travelling speeds, which requires linear routing and a limited number of stops. This increases the average distance to stops, rendering the use of a bicycle more attractive and raising the demand for bicycle storage facilities at stops. Fortunately, more and more transport companies and road managers are prepared to make such facilities available.

The Bicycle Master Plan project group stimulates this development through the initialisation and financial support of pilot projects. Preliminary results indicate that proper bicycle storage facilities at bus stops may lead to an increase in the share of bicycles in the pre-interlocal bus transport. (This share averages 14% at present, running up to 40% on certain bus lines and even 70 to 80% at some bus stops). More importantly, however, such facilities enhance the general quality of the bus stops, which results in more bus passengers.

Local transport (bus, tram and underground) and bicycle may also complement one another. In

larger cities, in particular, the bicycle may serve as an excellent feeder of local public transport from the suburbs to the crowded city centres. The Netherlands has hardly any real large cities. When compared with many cities in other countries, Amsterdam (720,000 inhabitants on 160 km²), Rotterdam (600,000 inhabitants, 200 km²) and the Hague (450,000 inhabitants, 65 km²) are even relatively small.

The limited size of the Dutch cities implies, however, that movements are short-distanced, which makes the bicycle a serious competitor for local public transport in particular. Regarding distances up to 5 km in Amsterdam, each trip by public transport is opposed by four trips by bicycle. For Groningen this ratio is 1:18, for Delft 1:30 and for the Netherlands as a whole 1:25. On the other hand, public transport may also be a formidable competitor for the bicycle, which was made abundantly evident when an annual season ticket for all public transport was made mandatory to students on 1 January 1991. As from that date, students have made massive use of public transport. This would seem a nice result, but there are also disadvantages because almost 80% of the new movements by public transport used to be made by bike. This reduction in the use of the bicycle by a group of the population who traditionally frequently use the bicycle could not be prevented by the Bicycle Master Plan project group.

2.3 Cyclist safety

The train of thought with regard to traffic and traffic safety in the Netherlands is heading in an interesting direction: that of a sustainable and inherently safe transport system. Until now, the emphasis was on accidents as an undesirable by-product of the system when it comes to danger on the roads. Such accidents were analysed and studies carried out to determine how they may be avoided and how the severity of their consequences may be reduced. A couple of years ago, the first voices could be heard calling for the emphasis to be shifted to the system itself rather than its undesirable by-product. The system would need to be gradually modified and managed in such a way that the risk of errors is minimal and, in the unlikely event of such an error occurring, the consequences limited where possible.

Should the error concern an accident, the important thing is to condition the accident process in such a manner that death and permanent or serious injury is almost out of the question. The switch is from a curative approach to a preventative one.

An inherently safe transport system is aimed at mutual gearing of the function and the design of the infrastructure (including legislation and regulations), of the nature of the vehicles and the capabilities and limitations of the user, the man in the street, vulnerable and by no means infallible.

Effective functioning of the system is influenced by very many individual actors, the road users, and a number of collective actors: political bodies, the corporate sector, industry, interest groups and road management authorities. Within this train of thought, traffic accidents are not the result of errors made by individuals but rather the consequence of inadequate functioning of the system as a whole.

System management must be aimed at all elements of the system: people, vehicles and infrastructure.

* The most difficult factor is in exercising direct influence on the behaviour of road users: nowadays, people are not generally interested in too many rules and regulations. They wish to make their own decisions on how to behave, also in traffic.

* Theoretically speaking, setting standards for vehicles is simple enough, but in practice this is a long and rocky road. The most important standards require international gearing, which is generally preceded by lengthy discussions and more often than not results in vague compromises.

* At the local, regional and national levels, changes to the infrastructure offer the most concrete opportunities for influencing the functioning of the system. The desired end result, a drastic

reconstruction of the road network, can be achieved through a gradual process of downgrading a large number of roads and upgrading of others.

A sustainably safe transport system offers favourable perspectives for bicycle transport in terms of safety and will also improve the "competitive" position as against car traffic. The Bicycle Master Plan project group therefore anticipated this new train of thought right from the very beginning. In concrete terms, this means that the priority in terms of safety is to reduce the number of confrontations between cyclists and fast moving vehicles. This requires separation of means of transport in terms of time or place, both on road sections and at junctions, and in cases where separation is either unfeasible or undesirable, the speed of the motorised traffic will have to be drastically reduced. Simplification of many traffic situations is also required.

Consistent application of these principles will benefit not only traffic safety but also the effective flow of bicycle traffic and car traffic, and in time benefits will even be seen in the quality of the urban social climate and the environment. Such principles have played an important role in the design manual for a cycle-friendly infrastructure, already available in English, "Sign up for the bike" and a German version, "Radverkehrplanung von A bis Z".

A sustainably safe transport system is equally attractive from a financial point of view, though the separation of fast moving traffic and pedestrians and cyclists on a limited number of main roads will require relatively expensive alterations. On the other hand, on most of the road network the speed limit for car traffic is drastically reduced to 30 or at most 40 kph. This saves not only great space but also costs incurred in road maintenance, simpler provisions and less accidents, environmental damage, nuisance and annoyance.

As the car gradually became affordable for people in the Netherlands following the Second World War, the number of road casualties increased strongly. In 1950, the total number of people killed in traffic was 1021 and the registered injuries 19,500 (percentage of cyclists was 32.5% and 41.8%, respectively). These figures reached a peak in 1972: 3264 deaths in traffic and 70,000 injured (percentage of cyclists 17.1% and 12.7%, respectively). Road safety has improved greatly since then: a total number of 1298 deaths and 49,000 injuries were registered in the Netherlands in 1994.

Bicycle use was at an all time low in 1972 after having being roughly halved in the preceding ten year period. This was to come to an end following the oil crises of 1973 when many Dutch rediscovered their bicycles during the car-free Sundays. It was not until the 1980s that bicycle use increased structurally, partly due to increasing awareness of the environmental issue and added attention for the importance of healthy exercise. Since then, the increase in use of the bicycle has gone hand in hand with a reduced number of casualties. The number of deaths among cyclists was 426 in 1980 and only 269 in 1994. In 1980, 4200 injured cyclists were admitted to hospital, by 1994 this figure was 2700. The annual average of registrations of otherwise injured cyclists remained more or less steady and fluctuated between 8500 and 9500. The percentage of cyclists in the total number of road casualties has remained relatively constant throughout the years. The death toll among cyclists on the road has fluctuated around 20 to 22%, hospital admissions for injuries between 22 and 24% and otherwise registered injuries around 23 to 25%. The number of movements by bicycle has also showed little variation since 1980: 27 to 29% of all movements in the Netherlands.

The favourable development in road safety is not due to the activities of the Bicycle Master Plan but is rather the consequence of a broad and varied package of measures, of a long-term, collective learning process which is not limited to the Netherlands alone. As individuals, people have proven very capable of adjusting to changing conditions. Dutch cyclists have learned, for example, to cope with the increase in cars from 139,000 in 1950 to 5.88 million in 1994. Due to this enormous increase in car use, the use of bicycles in the Netherlands has not at all been marginalised as in other countries.

Over the past years, the Bicycle Master Plan project group has concentrated its Safety spearhead attention on the increase of knowledge and the support of activities of third parties. Besides

cyclists, attention was also paid to other users of cycle paths such as moped and light scooter riders.

The project group is continually faced with the persistent misconception that increased bicycle use is accompanied by more traffic casualties. This misconception has led to the desirability of stimulation of bicycle use being a debatable point time and again. The argument offered is that, per kilometre travelled, cyclists run three to five times as much risk as car passengers of being killed or injured in a road accident.

This may be true on average, but averages once again give a contorted comparison in this case. The risk for 18-20 year old car drivers is higher than that for cyclists of the same age for example. Furthermore, only short trips made by cyclists and car drivers must be mutually compared, as only these figures are relevant for comparison. One also has to attribute all casualties involved in accidents with cars to the number of car kilometres, rather than merely the casualties among the car drivers (not one car driver has been killed by a cyclist in the Netherlands!) When such a mathematical comparison is applied, the 18-40 year old car drivers can easily leave the car at home for their short trips and switch to their bicycles without this leading to an increase in road casualties. A decrease is in fact much more likely if we consider that all cyclists would then encounter much fewer cars.

The fact that "more frequent and safer" bicycle use can combine excellently is apparent from the development in bicycle transport and the number of cyclist casualties between 1980 and 1990. The number of cycle kilometres increased by 30% in that period, car kilometres by 25%. At the same time, the annual death toll among cyclists decreased by 30% and the number of seriously injured among cyclists by 25%. This relationship is not purely a Dutch phenomenon, as is apparent from the development of safety among cyclists in Beijing. During the 1980-1993 period, car ownership was multiplied by five, while bicycle ownership more than doubled. At the same time, the annual deaths among cyclists decreased by 40% and the number of registered injuries by 80%.

2.4 Parking of bicycles and the battle against bicycle theft

To cyclists not only personal safety is important, but also bicycle security. At present, approximately 12,000 deceased and injured cyclists are registered in the Netherlands on an annual basis, while according to very rough estimates the number of non-registered, usually less seriously injured cyclists amounts to ten times this number. Still, the chances of a bicycle being stolen are far greater: around 6% for the whole of the Netherlands on average (annually almost 1 million of bicycles are stolen from an estimated total fleet of 15 million bicycles). In the larger cities the chances of a bicycle being stolen are greatest, mainly in the cities with large numbers of students. Amsterdam beats all the other cities with a percentage of 24%, even rising to 40% in the inner city. Therefore, it will not come as a surprise that consequently 23% of the inhabitants (aged 12 and over) of the Amsterdam conglomerate does not own a bicycle, while 33% of those who do, hardly ever uses it.

Bicycle theft also has a negative influence on bicycle maintenance. Moreover, it renders investment in a proper and therefore more expensive bicycle for daily use hardly attractive, particularly in the larger cities. The resulting old, cheap and poorly maintained bicycles are often parked in a disorderly and chaotic manner, which in turn has an adverse effect on the image of the bicycle, not only in as far as cyclists themselves and potential cyclists are concerned, but also in the eyes of bodies which are responsible for the design of public areas and crowd pulling locations. The poor image of the bicycle reduces their willingness to invest in proper storage facilities. This generates a self-reinforcing effect.

Logically, bicycle theft is a substantial impediment to bicycle use and the corresponding policy of stimulation. For this reason, the Ministry of Transport has adopted the battle against bicycle theft as part of its policy in 1990, in consultation with the Ministry of Justice. The efforts are

mainly aimed at prevention, implying better storage facilities and locks, amongst other things. The greater part of the attention of the Bicycle Master Plan project group is focused on storage facilities and bicycle parking in general. Bicycle theft prevention is one argument in favour, but the fight against vandalism and the orderly organisation of public areas are important factors as well. The orderly parking of cars has been generally accepted for many years now, yet in many places cyclists still have to search for a proper place to park their bicycle. It can hardly be blamed on the cyclists that shopping areas, station squares and some residential areas leave such a disorderly impression behind.

Until recently, many municipalities, public transport companies, enterprises in general and housing associations simply forgot that bicycle storage and parking facilities are just as important to cyclists as car parking facilities are to motorists. However, there is a change for the better. Research and pilot projects add to the awareness of all those involved that in many places more bicycle parking facilities are an absolute necessity and that such facilities must be better than they are at present. The results of a recent examination of the quality of cycle racks were such that a number of manufacturers are now discussing the improvement and standardisation thereof, and that the production of some types of racks has been discontinued. On the other hand, the current attention for bicycle traffic has resulted in many new products in this sector. Various security systems are being developed, often with financial support from the Ministry, with a view to realise a guarding system for bicycle storage as effective as possible. As long as this involves a small number of bicycles in one location, racks or lockers will offer the proper solution. It has become apparent however, that in the residential areas in old city neighbourhoods or in the inner city, where most bicycles are stolen because of a lack of covered storage in or near the house, there is a great need for the rehabilitation of the former neighbourhood bicycle storage facilities which have been closed one by one in the course of the years. The major problem of such relatively small-scale storage is not the engineering aspect, but the space required and their effective operation in particular. However, there are also locations, such as railway stations, where thousands of bicycles must be accommodated. The expertise about the storage of such massive numbers of bicycles on a small area is still in its infancy in the Netherlands.

Cyclists, too, can assist in the prevention of bicycle theft. The optimum solution is a guarded or built-in storage, but this requires facilities. Second best is the use of proper bicycle locks. In addition to the ring lock, which is supplied practically as standard in the Netherlands, it is recommendable to use a padlock or chain-lock of proper quality, for example to chain the bicycle to a tree, fence, lamppost or bicycle rack. Unfortunately, they are no guarantee that the bicycle will not be stolen, because virtually any lock can be picked within a couple of seconds by any seasoned bicycle thief, as was proved by recent investigation. Social control by passers-by has little effect here.

The fight against offences such as bicycle theft is the responsibility of police and justice, but generally speaking, they only attach low priority to this issue. It is true, in numerical terms bicycle theft scores relatively high when compared with other categories of offences, but the damage per case suffered by the victim is relatively small. Besides, there is still no effective identification and registration system for bicycles, despite a few attempts in this direction. Consequently, the police task is rendered very labour-intensive.

The tracking and retrieving of stolen bicycles is another problem that has not yet been solved. On a national basis, only 5 or 6% of the stolen bicycles is returned to their respective owners. As a result, the willingness to report a missing bicycle is very low and this in turn does not give the identification and registration systems for (stolen) bicycles much of a chance.

In theory, many splendid systems are conceivable, but it is no use putting them into operation when there is no control and supervision. At present, possibilities for proper identification are being investigated together with Dutch bicycle manufacturers and traders. The latter two parties have become motivated following research which demonstrated that they are put at a serious

disadvantage as a result of bicycle theft. Were they previously of the opinion that each stolen bicycle was replaced by a newly bought bicycle at an authorised bicycle dealer, they have now become convinced that people whose bicycle is stolen rather tend to buy a second-hand or much cheaper bicycle. Moreover, they often buy these bicycles from sources other than the authorised dealer, for instance from a receiver of stolen bicycles.

In fact, this is an excellent example of how research may result in activating a party concerned. Activation is an important tool for the Bicycle Master Plan project group in making the use of the bicycle in the Netherlands more attractive and safe.

2.5 Communication

The cycling policy: an inextricable part of the total transport policy. The cycling policy: related to land use, city planning and the environmental policy. The cycling policy: maximum effect to be gained in a structural change to the entire transport system. The cycling policy: in which a number of spearheads can be distinguished. The cycling policy: a relatively random and small sub-collection of activities intended to influence a complex system which consists of a large number of elements with even more mutual relationships.

These relationships are often more important than the elements themselves. Mutual gearing of the elements and of the actors which influence them is therefore crucial to the process of system management. The willingness of actors to carry out the required action is increased when they are familiar with the correct arguments and available instruments. The Bicycle Master Plan target group regards the provision of such relevant know-how and information as an important objective of its communication efforts.

For more than five years, the project group has paid great attention to the Communication spearhead, attempting to put the following basic principles into practice:

- * Understand your message before transmitting it. Required: expertise, interest.
- * Speak the other person's language. Required: Empathy, openness.
- * Keep it simple. Required: clear presentation of intentions.

Communication often amounts to negotiation: it concerns not only the demand but also what you have to supply. Negotiation requires bartering, and respect for the views and interests of the negotiating partners increases the chances of success for all parties. Experience has shown that openness of emotions may prove functional and certainly if you are here-by willing to display your own vulnerability.

The ultimate objective of the spearhead is to influence individuals in their choice of means of transport: we want people to take to their bicycles more often. They are more likely to be willing to do so when the conditions become more attractive. Individual citizens can have no real effect on such conditions and the project group is therefore of the opinion that the general public should only be approached when the provisions, facilities and conditions have actually been improved. The motto here is: "The Dutch are aware of the advantages and disadvantages of cycling; if they fail to choose the bicycle then they apparently view its advantages as being less convincing than the advantages of the other means of transport."

With this standpoint in mind, communication activities are mainly aimed at all manner of intermediary groups. These are groups which can influence the realisation of an attractive cycling climate: politicians and administrators, interest groups, the corporate sector, other ministries, municipalities, provinces, educational and research institutes, advisory agencies, the media, etc. In the contact with these target groups, the efforts are certainly not limited to the short term, but particularly at embedment of the policy in many different areas. It is important that other parties are both willing and able to assume most of the responsibility for the cycling policy in the end.

Willingness depends on having the right arguments, and instruments affect the ability. The necessary know-how becomes available from research but also from the many experiments and

model projects which have been undertaken and supported. The information thus gained is distributed via brochures, guidebooks, video films, the group bulletin which is published quarterly, articles in the professional press, etc.

However good the written information may be, personal contact is still often the most effective: endless discussions, selective attendance of meetings, the organisation of small-scale theme gatherings, participation in vocational education, taking part in symposiums and conferences at home and abroad. Communication via the newspapers, radio and television is always difficult to plan, but remains important. Even a poor newspaper article on a project with mediocre result can have more effect on some target groups than a carefully prepared mailshot on a very successful project.

The project group distinguishes between a large number of target groups and makes every attempt to communicate with each of them in their own terms. This concerns not only the exchange of knowledge, information and experience but also the evolvment of co-operation, not only with target groups but also within those target groups in particular. The promotion of co-operation and the forging of alliances, that is the name of the game, also in the cycling policy. We may speak of progress, and sometimes even of success when the parties involved show willingness to accept joint responsibility.

It is as yet impossible to assess to what extent success has been booked. The project group was successful in reinstating the bicycle on the agenda. The objectives of the Bicycle Master Plan have been adopted in all kinds of local and regional plans and only time will tell to what extent these objectives will be realised. A fact is that much new information on bicycle transport and on provisions made for cyclists has become available since 1990. Such information is already being applied but will also prove very useful in the longer term.

One of the recent products within the scope of the Bicycle Master Plan is a brochure giving examples of cities in the Netherlands, Denmark, Germany and Switzerland which have chosen to allocate the bicycle a clearly defined role in their urban movements. An English version of the brochure will be available at Velo-City Basel. Another product is a 15 minute long video film on the three well known Dutch cycling cities: Groningen, Houten and Delft. The premiere of the German and English versions of the film will be shown in Basel.

3. General observations

It all began in 1990 and will end at the close of 1996; we can rightly speak of the autumn of the Bicycle Master Plan. Although fifteen months of hard work still lie ahead, this is the right moment to reflect a little on the past. What have we achieved? What can we learn from five years of active cycling policy from the national government? On discussing the spearheads of the Bicycle Master Plan in chapter 2, it becomes apparent that we have indeed achieved something, though the results are by no means spectacular. It is a fact that a lot has been learnt, but will we retain this important knowledge and will we continue to put it to good use?

It is not the Bicycle Master Plan project group's task to make an interim evaluation. In discussing the spearheads in Chapter 2, efforts have been made to consider the group's own activities from a distance where possible, though the assessment is probably not objective. The project group is preparing both a summary of all activities carried out within the scope of the Bicycle Master Plan, plus an extensive evaluation which will be completed by the end of 1996. This evaluation will be based, where possible, on hard facts, statistics on (development of) the use of the bicycle, independently or in combination with public transport, information on the infrastructure (including parking spaces and storage facilities for bicycles), data on road accidents, casualties and bicycle theft, etc.

This is all useful information but it only gives a partial picture of the results of six to seven years' cycling policy. Moreover, these "measurable" results may not even be attributed to the cycling policy alone. The fact that bicycle use in 1994 was the same as in 1990 and that the

number of deceased and seriously injured cyclists decreased by 11% and 18%, respectively, in that period is the consequence of a number of processes inextricably woven up with each other. One may, at most, derive that the cycling policy influenced a number of such processes, though the scope and the causes of such influence are almost indeterminable. Independent observers could possibly draw useful conclusions about the situation if they were first informed by parties with whom the project group has co-operated and by target groups of the cycling policy.

Should the project group tentatively take stock of the situation, then the first impression is that the quantified objectives for the year 2010 in particular have had effect. They have been adopted in many local and regional plans, and regardless of whether or not they have been fully realised, the mere fact that efforts are being undertaken is favourable to bicycle traffic. Another impression is that the train of

thought with regard to cycle traffic has "matu-red": it is no longer limited to the construction of cycle paths and one-track attention for the safety of cyclists. The arguments for and against the use of bicycles are also better underpinned than was previously the case and there are more effective instruments for those parties wishing to promote the use of the bicycle.

Maybe the most important result is that cycling has been slightly upgraded as a means of transport by the professional world and among many target groups of the cycling policy.

Attention for the car and public transport still dominates but there is ever growing awareness that the bicycle is a common and very efficient means of transport and very cheap for its user and society in general.

The question of whether the national government has been successful with the Bicycle Master Plan and with temporary financial stimuli for the construction and reconstruction of infrastructure for cycling traffic must yet be answered. It is doubtful whether that will be possible even in a number of years' time, because the national government's role with regard to financing of local and regional transport policies is presently undergoing considerable change in the Netherlands. This is occurring within the framework of widespread decentralisation of tasks to the regional and local authorities. A consequence is that, when making choices with regard to the allocation of available means, the provincial and municipal authorities have to weigh up their own priorities on transport and other policy fields.

The regulation introduced by the national government in 1990 for the subsidy of infrastructure for cycle traffic will also become obsolete at the end of 1995. However, the necessity for provincial and municipal authorities to spend their own transport policy budget very cautiously could prove favourable to cycling traffic. Research has shown that, in the long term, the return on investment in the cycling policy is profitable. When the right people become aware of this, the future may not be as bleak after all for cycling traffic in Dutch urban and rural communities.

4. The future

In making weather forecasts, looking more than five days ahead is pointless. Likewise, there is no point in looking far and extensively into the future when it comes to our national cycling policy. Based on the experience gained so far, a few indications can be given of what is required to keep the autumn of the Bicycle Master Plan from developing into a cold winter.

To begin with, we can note that the cycling policy of the central government will continue to play an obvious role, even when important tasks have been decentralised. It has become apparent that central co-ordination is effective in the increase of knowledge, monitoring and support of model projects and experiments. Furthermore, the national government is of course the body involved when it comes to legislation and regulations. Finally, it seems that attention paid by the national government serves to legitimise attention for cycling traffic by the provincial and municipal authorities, among companies and interest groups, etc.

Whether bicycles are seen as an independent means of transport or in combination with public

transport or as an alternative for the car, it is increasingly desirable to consider all the motives for travelling by bicycle. Between 1978 and 1992, utilitarian use of the bicycle (to go to work, on business, to school, to the shops) fluctuated at around 60% of all move-ments by bicycle in the Netherlands. Social and recreational bicycle use (visiting, sport, relaxa-tion, touring and other) therefore accounts for the remaining 40%, though this percentage seems to be gradually increasing and also generally concerns a slightly longer average distance. A natural relationship would seem to be that of an alliance between those bodies who mainly wish to stimulate utilitarian use of the bicycle with the recreational sector and the tourist industry, now that the latter are disco-vering the bicycle as an environment friendly means of transport for a general public whose leisure hours are on the increase and who wish to keep active in order to stay fit and healthy.

There will continue to be important tasks for cyclist organisations in the future. It is impor-tant that they lobby at both the national and international levels and that they partici-pate in all forms of discussion. Their mere participa-tion means that their interests are taken into account. More concrete results can be booked at the local level, where the facilities will have to be realised in the end.

The future will not be an easy one for the cyclist organisations, as car traffic almost go-vern our culture and professional bodies pro-tect the interests of public transport. Cycling is an individual means of transport and the pro-tection of cyclists' interests is and will remain difficult and laborious. In the search for part-ners, the cycle trade and the tourist industry would seem to be the strong candidates with large-scale interests. The government, whether international, national, regional or local, must also continue to implement an active policy for stimulation of bicycle traffic in the future, that is a fact which will be obvious by now.

A final comment concerns the future of the Bicycle Master Plan. It will be discontinued at the end of 1996 and that is good. The Master Plan is a project and every project has a beginning and an end. Many people have worked and co-operated with each other enthu-siastically but the time would now seem ripe for a new formula. After all: variety is the spice of life. Most of the tasks of the project group, in fact all the spearheads with the exception of Communication, can be taken over by existing departments at the Ministry or by co-operating interest groups. Promotion of co-operation and the forging of alliances require co-ordination, as does the acquisition and distribution of knowledge and experience.

Nationally speaking, such a co-ordination task would be best organised by an expertise and information centre (what's in a name?) with a wider working field. After all, cycling is not the objective in itself but rather the process of influencing the choice of means of transport. Such a "Local and Regional Transport" centre could function as a guide for municipal and provincial authorities, but also for private organisations.

There has been great international interest in the Dutch cycling policy for many years now, and since 1990, the Bicycle Master Plan project group has reacted actively to such interest on behalf of the Ministry of Transport. Such great interest is but one of the signals that, internationally speaking, there is a need for a "Bicycle Transport" information centre. Such a centre could begin on a European scale but should soon broaden its working base. Let us not forget that of the estimated 850 million bicycles in the world in 1994, only 15% is used in Europe. In China alone, there are 2 to 3 times as many cyclists. When considering the Chinese potential to increase the present number of cars in the world (1994: 470 million) to exceed the present number of bicycles, one can recognise the importance of bundling of knowledge on bicycle transport.

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