How to enhance walking and cycling instead of short car trips

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This paper is based on papers written by Ralf Risser and Karin Ausserer, FACTUM, and on the Final Report made by the WALCYNG Coordinator Christer Hydén. The Final Report is in turn based on the Work Package reports written by the WALCYNG Consortium.[2]

Background

Car traffic has the potential to become a problem for the quality of life in urban areas. Accordingly, it is agreed upon that the increase of car traffic has to be restricted in urban areas. As a large proportion of car trips are very short, WALCYNG[3], a research project within the EU Fourth Framework Programme (DGVII Transport RTD Programme, Urban Sector), concentrated on the development of strategies to substitute short distance car trips by walking and cycling.

The central idea: Marketing

Enhancing walking and cycling instead of short car trips means to convince and/or to motivate car drivers to change their behaviour and walk and cycle instead of using the car on certain trips. There are several ways to achieve this. One model that is quite complete in this respect is the marketing model, a communication model that says: If you want people to change their behaviour, then:

Information policy: One has to collect information about potential and practising customers, carry out analysis of the market situation: what are the target groups, what kinds of products are on the market, what are the needs and interests of different groups of people, etc..

Product and distribution policy: Based on the results of information policy, adequate an attractive technical solutions are worked out. Styling and layout aspects have to be considered thoroughly in order to meet customers´ and potential customers´ needs.

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3 WALCYNG = WALking and CYkliNG instead of short car trips

Communication policy: Users and potential users have to be informed that their needs and interests are taken into consideration, as well on the product and distribution side, as on the incentive side. The product has to be displayed and has to be given an image.

Incentive and pricing policy: Based on the results of information policy one has to provide incentives given by the society, institutions, companies, etc., on all levels.

In commercial marketing the wished-for behaviour is mostly that the addressed people should buy a thing. In social, or non-profit marketing, the wished-for behaviour is most often some change in habits, or routines, or attitudes.

The Work Programme

WALCYNG was divided into 12 different work packages (WP). The first seven work packages covered the information and product policy part. The last work packages dealt with communication and incentive policy.

In the first four work packages, all available information about the target groups, and of the preconditions for walking and cycling was collected (WP 1 to 4). This was analysed on basis of existing literature, expert interviews etc.. In work package 5, results of these work packages were summarised and synthesised. The results of WP 5 were based both on the previous reports and on a three-day consortium workshop.

In order to obtain information on pedestrians´ and cyclists´ attitudes towards their present situation, towards the strongest practical attractors for walking and cycling and the most severe barriers, semi-standardised attitude surveys with strong qualitative elements were carried out in four European countries (Italy, Spain, Finland, Austria). Part of the interviewees in the attitude surveys were practising pedestrians and cyclists and the other part were car drivers. In addition a stated preference study was carried out in Norway (WP 6).

On a consortium workshop, the criteria that should be respected when planning infrastructure for walking and cycling considering the target groups´ needs were discussed (WP 7). The results formed the basis for the Walcyng Quality Scheme, the WQS. This is the Product and distribution policy part of the marketing model.

What incentives should and could be provided for car drivers in order to make them walk and cycle instead of using the car for short distances (WP 8)? This question was dealt with the help of literature studies, round table discussions with experts, and expert interviews. WP 8 deals with the Incentives/Pricing part of the marketing model.

All persons and institutions that want to enhance walking and cycling are of course interested in means to improve communication with their target groups. Methods to deal with this topic were literature studies, expert interviews and case studies (WP 9).

How should researchers and practitioners prepare themselves for the structural difficulties they will meet with a topic that so far is considered of inferior importance? The concept of inoculation (WP 10) reflects the idea that mentally dealing with the expected problems helps one to react more coolly and objectively when they arise, to be prepared and to resist. Some guidelines with respect to this inoculation concept were developed with help of literature studies, round table discussions with experts, case studies, and expert interviews.

If the importance of walking and cycling as transport modes should be raised and sustained, then some structural support and promotion of the walking and cycling issues has to be provided. This type of support is more or less covered by the concept of lobbying. WP 11 deals with the question of what efficient lobbying in the area dealt with should look like.

WP 9 to 11 deal with the Communication policy part of the marketing model.

Results

Portions of short car trips and trips by walking and cycling (WP1)

People in different countries in Europe make about 3 trips per day, but the amount varies somewhat from country to country. A little less than half of the trips are car-trips as driver. The number of trips on foot lies between 10 and 35 per cent of all trips per day. In most countries the number of bicycle trips is about the same as that for public transport (about 5-10 per cent of all trips). Two countries point themselves out: The Netherlands and Denmark. In The Netherlands more than 1 in 4 trips are made by bike.

There is a distinct limit to how far people are willing to walk, when walking is seen as transport (1-2 km). The willingness to cycle over longer distances differs between countries. However, in general we should not expect people to use a bike for transport for distances longer than 3-5 km. But as many as 17-18 per cent of the bicycle trips in The Netherlands and Denmark are longer than 5 km.

The portion of car use for shorter distances is amazing. If we consider walking as an alternative, a change from car to walking for trips shorter than 1 km would reduce car driving by 15 per cent in most countries. And with a limit of 2 km the reduction would be close to 30 per cent. Including cycling and taking into consideration 3-5 km we could get rid of half of all car trips.

Walking is a way of travelling used mainly for two purposes; short trips to shops with probably not too much to carry, and leisure trips where the walking in itself is one main purpose. Cycling is a way of travelling very much the same as walking. We use the bike on short trips to shops and for leisure purposes. Driving a car for shorter distances has one main purpose, shopping. In addition, some short car trips are to work and for transporting others, like children to school, kindergarten, etc..

Various target groups show different travel behaviour. Young people cycle more than older people. People working part-time make most trips per day. The larger the city, the more people walk or cycle, and the less frequently they use a car.

General problems of pedestrians and cyclists (WP3)

The problems of cyclists can be conceptionalised as deficiencies or weaknesses of the facilities for cycling. The problems can be analysed along a number of dimensions: social climate, health, comfort, safety, mobility, aesthetics and financial advantages.

Social Climate: One problem, consciously or unconsciously experienced by walcers[4], is the low status of those traffic modes, especially compared with driving a car. In contrast, the car symbolises such concepts as power, prestige, independence, freedom and status.

Health: Cycling is good for health but cannot be done without a baseline health condition. Calculations made by the Finnish Ministry of Transport and Communications demonstrate that if the amount of cycling in Finland would double, the savings in health costs and road upkeep would outweigh the costs resulting from the increase of cyclists´ injuries.

Comfort: Since walking is not only a means of transport, but also a way of socialising, spending time and relaxing, special facilities are seen as important for the comfort of pedestrians: Lack of benches, waste-baskets, finger-posts, shelters and public toilets can affect the willingness to spend time walking.

The motor activity of walking sense in a stricter sense is greatly affected by pavement conditions. Negative experiences are mostly caused by dirt or obstacles on the pavements. Weather conditions affect the comfort of walcers.

Security: Experienced safety does not always correlate with objective safety. To increase the experienced safety of cyclists, they should be separated from cars. The experience of safety of the pedestrians is threatened by both cars and by cyclists, especially that of the elderly pedestrians. Feelings of insecurity are related to bad surface conditions (holes, broken surfaces, litter and glass) and very narrow pavements. Personal security can be threatened if walcers are too much isolated from car traffic, especially if the illumination is not sufficient.

Mobility: The main mobility problem of cyclists is the lack of a continuous and good quality bicycle road network. In addition, smoothness of the road surface and better markings are desired. Stopping at traffic lights is experienced as a significant problem for smooth mobility, and traffic lights equipped with detectors are considered a great improvement.

[4] In this project we will introduce some definitions:”walcyng” stands for walking and cycling, whereas ”WALCYNG” stands for the project, ”walcers” stands for people who walk and/or cycle, ”walce” stands for walk and/or cycle

Aesthetics: Car drivers and passengers keep there eyes mainly on the road. They tend to notice movements in terms of other traffic, people and animals. When they look beyond the road they focus on bigger landmarks such as buildings. Pedestrians and cyclists, because of the slower pace, have time to look around and really get to know the environment. Especially a green environment is valued. Noise of surrounding traffic and pollution are experienced as aesthetical problems as well as health problems.

Financial Advantage: Unlike car drivers cyclists are not systematically offered any financial support (e.g., tax reduction). Moreover, the relative inexpensiveness of cycling is threatened by bicycle theft.

Safety problems of pedestrians and cyclists (WP 4)

Walking and cycling are more dangerous modes than travelling by car in most European cities. An increased use of walking and cycling would today result in a considerable increase in accidents. It is of utmost importance that efforts to enhance walking and cycling are supported by efforts to improve the safety situation for these types of road-users.

WALCYNG highlights three basic safety themes:

It must be accepted that pedestrians do make mistakes: Everybody does, even car drivers, cyclists and other road-users. Due to the difficulties in changing this behaviour, the traffic system has to be more tolerant for these unexpected pedestrian actions.

Pedestrian safety depends to an alarming degree on the driving speed of the so called free vehicles (vehicles not in a queue). A free car with a 50 km/h speed causes a risk of death almost eight times higher when compared with a speed of 30 km/h.

Car drivers are not afraid of cyclists: Nobody wants to hit a pedestrian or a cyclist. However, pedestrians and cyclists do not threat the life of the people inside cars. Thus, car drivers are not really afraid of cyclists or pedestrians. The protective behavioural patterns of car drivers do therefore not take enough account for unexpected and sudden movements of weaker (vulnerable) road users. This concerns especially cyclists who often appear at conflicting situations with a rather high speed.

Therefore, car drivers should be able to notice cyclists without any specific and demanding efforts. Two-way cycle paths should not be used without specific facilities at crossings. Vegetation, car parking and other sight obstacles near to cycle path crossings must be removed.

Rare events are dangerous: There is a lot of evidence that conflicting events in traffic are the more dangerous the rarer they are. For example, the number of killed cyclists per bicycle mileage is in Italy (not many cyclists) radically higher than in the Netherlands.

Speed reduction is the most efficient measure to reduce the number of severe accidents. Humps, small round-abouts, automatic camera speed control, 30km/h zones, etc. are efficient

measures to reduce speeds. In general a stricter law enforcement for car drivers could be one way to improve cyclists´ safety.

Interviews, attitude analyses, stated preferences (WP6)

The majority of respondents in Finland, Austria, Italy and Spain, drivers as well as walcers, like walking and cycling. Especially walking seems to be a popular activity, while cycling is almost, but not quite as popular.

There are a lot of benefits associated with walking and cycling: Health aspects are important benefits of walking as well as of cycling. For walking environmental aspects and getting fresh air are additional important benefits. Surprisingly, environmental aspects are not mentioned as positive aspects of cycling very often. Cycling is fun, gives you good exercise and is very convenient.

Even though there are many benefits involved in walking and cycling, walcers meet a lot of barriers or obstacles. Walking and cycling conditions are not satisfactory and many trips are not suitable for walking and cycling.

Walking and cycling takes too much time and are not useful for longer travels. Lack of ability to transport heavy things are among other important barriers of walking. Environmental and geographical barriers, like the town is hilly, the weather is bad, the air is polluted etc. are important negative aspects of cycling.

Also infrastructural barriers such as insufficient road cycle network, unsafe crossings, parked cars on the pavements and high curb stones are important negative aspects of cycling. Drivers mention infrastructural barriers for cycling more often than walcers. One of the most important reasons for commuters to drive their car to work is reducing travel time.

Walcers as well as drivers find infrastructural and political measures, i.e., laws, prices, regulations, control, etc. as the most important to improve walking and cycling conditions. Walcers are more than drivers interested in giving advantages to people walking and cycling.

The most important infrastructural measures are more footpaths and cycling lanes, wider pavements, improved pedestrian subways and crossings and smoother road surface. The most important political measures are prohibit cycling on pavements, city centres free of cars, priority for walcers at crossing, different measures to reduce car traffic, like increased gasoline prices, fees for parking spaces and restrictions on car driving etc. Other measures wanted to improve the conditions for walcers are facilities for showering at work and burglary-proof bicycle sheds.

The Norwegian/SP-study indicates that the trips to work and to sports and exercise are easiest replaceable by bicycle. Grocery shopping trips could easiest be replaced by walking. Short trips by car where you deliver or fetch someone, like children to kindergarten, are very difficult to replace by walking or cycling.

Incentive Strategies (WP 8)

An incentive in the marketing sense can be defined as an extrinsic motivation to behave in a special way, provided by persons or institutions who are interested in addressed people to behave in a special way. The central function of incentives is that they should make people try a certain product (in our case walking and cycling). A reinforcement connected to such a trial should be defined explicitly.

There are mainly three types of incentives that can be given in the area of walcyng:

- incentives from public institutions to companies (e.g. tax reductions, cycling certificates) for a walcyng friendly policy concerning trips to work
- incentives from public institutions to the citizens (e.g. choosing the pedestrian/cyclists of the month, tax refunds, etc.)
- incentives from public and private institutions to their employees (e.g. lotteries, free service, extra days off, because walcers are healthier, etc.)

The number of possibilities to give incentives to citizens in general and especially to commuters is high. There exist various marketable suggestions, which are already in use, but not implemented in a wide range. In Austria a few enterprises have already tried to influence the mode choice of their employees by different kinds of measures. The feedback is positive in all cases. One example is known where the share of cyclists increased by 26 % within six years from 15 % to 41%.

It is, however, very important not only to offer incentives to citizens, but to improve the preconditions for walking and cycling and to take into account communication measures.

Communication (WP 9)

Communication is seen as a form of relationship between parties, in order to exchange thoughts, experiences and knowledge. Within a marketing concept for walcyng, communication can be used as a means to promote the quality of walcyng facilities, so that demand for walcyng will increase.

Four stages of a communication strategy can be distinguished:

- stage of arousal, during which people may be stimulated and be informed, which requires a clear, general acceptable message, and the use of various media and actions.
- stage of commitment, which requires segmentation and adaptation to group characteristics. The message may now be different for various groups, and media and communication channels must be adapted to the group´s needs and prerequisites.
- stage of behaviour change, during which the new behaviour is tried out. A more personal approach can be fruitful in this stage, and groups of interested people may exchange experiences. This stage requires ample time, to get used to the new behaviour in different circumstances.
- stage of evaluation and consolidation. The experiences with the new behaviour are used to make a decision for continuation. Fair comparison of the new and old behaviour are

needed. People should also be rewarded for maintaining the required behaviour, and they may be aware of the fact that they also can get others going.

Changing behaviour is a long lasting and complex process, which requires much planning and investment. Adaptations may be necessary during that process, and therefore flexibility of proceeding with frequent feedback is needed. The design of a simple, short term communication process, will not yield many results in this field.

Inoculation (WP 10)

Experts, who work or want to work in the area of promoting walcyng meet many problems connected to self-esteem, image, identification and that causes frustration. The aim of Inoculation is to give those experts who work in this field support according to the ”incolation concept”. Being forewarned of barriers, structural and interpersonal problems, difficult working situations, etc. would make (self-)motivation for the mentioned target groups easier.

The forewarning in the frame of WALCYNG consists of a systematisation of the situations and counter arguments one meets, either from governmental institutions, private institutions, or certain individuals working in such institutions.

The types of arguments can be subdivided into three types: arguments of general character against walcyng, economical/political arguments, and ”democratic and communicational” arguments. Also, one has to fight not only with arguments against these modes, but must to cope with a working situation connected to a ”car orientated” system. One meets mainly two types of problems: difficult situations which relate to structural problems and difficult situations which have something do to with the image of walcyng.

Arguments of general character are usually prejudices. These are primarily based on lack of experience and on ignorance. People often judge walcyng from the car driver´s view, without having experience, at least with cycling, themselves. These arguments are not only brought forward by individuals. Governmental and private institutions sometimes argue in the same way.

Economical and political arguments are often related to the powerful car industry and their influence in all fields of our society. Politicians are afraid of restricting car traffic. They do not want to have car drivers against them as it is a big potential voting group. Democratical and communicational arguments are connected to statements concerning equity and the protection of majority rights. Communicational arguments refer to social climate and to conflicts between different road users.

Structural problems: A main problem in this field is the competence confusion. There is not only one person that is responsible for walcyng matters, but often competence is split up between many different departments. In this way responsibility is often delegated. For the users, and also for experts working in the field, it would be of great comfort to have one responsible person with competence - or his/her office - to address.

Another aspect which was mentioned referred to people working in and responsible for road traffic: In many cases traffic planners, traffic officials, and politicians are car users themselves. They often do not have enough expert knowledge with respect to cycling. Bad solutions need not result from nonchalance.

The promoters of walcyng are not organised in the way car drivers are. The number of members of the walcyng organisations is relatively small. Thus the representatives of walcers are in many cases not members of the different committees that are handling practical traffic planning and organisation issues.

Image problems of walcyng are reflected by moderate or little interest in these issues, which causes a number of difficult and awkward situations for the expert working in the walcyng area. Media report about walcyng only from time to time about walcyng problems or about news in this field, whereas the car plays an eminent role in the media. Due to the low importance attributed to walcyng matters, little money is put in walcyng infrastructure and in walcyng research.

Lobbying (WP 11)

If the importance of walking and cycling as transport modes should be raised and sustained then some structural support and promotion of cycling issues have to be provided. This type of support is more or less covered by the concept of lobbying. WALCYNG dealt with the question how efficient lobbying for cycling should look like.

Lobbying for cycling means, that cyclists´ interests are taken into consideration more systematically and that such considerations shall become routines. Structural improvements (pressure groups, public departments that are responsible for pedestrians and cyclists, industry sections, etc.) will be needed. It will be necessary to motivate representative of legislation, of jurisdiction and law enforcement and of administration to enhance cycling by treating it fair in comparison to driving motor vehicles.

In general there are three main points which should be considered when setting up a lobby for walcyng.

European perspective: If one decides to set up a lobby for walcyng one has to keep in mind, that any activity will be more successful, if it is not concentrated on a local problem, but tries to see the whole target in a broader - if possible in a European - perspective. In this case it is more likely that one finds partners also from industry or other important branches.

a well organised information policy: Correct and reliable information is the key to later success. In the frame of the information policy all different kind of information has to be collected in order to be able to define your targets precisely, to know, which person (opponents and partners) will be involved and to be prepared for resistance and barriers, you will meet during your activity, etc.

and a well considered communication policy:
The A and O of the whole lobbying process is a network with co-operative partners. For that reason it is very important to know, how one communicates with whom, what language he/she has to use for which special partner. In this connection it is very important to transmit messages in the right way by sticking to certain rules:

- information has to be correct
- information has to be given on time
- information has to be easily understandable
- information should not be inconsistent
- information shall contain instructions for the person one is talking to
- information shall be redundant but not boring

Setting up a strong lobby for walcyng is a rather long-term process. One has to fight with many problems, resistances and barriers. By collecting information about preconditions for setting up a walcyng lobby respectively for organising lobbying activities the first step is done to motivate more walcyng oriented people to stand up for their rights in an more organised way.

The WALCYNG QUALITY SCHEME (WQS)

The final result of WALCYNG is an evaluation scheme (WQS), that should allow an assessment of different policy activities in the area. This means that some criteria were developed that set the scene for a good marketing policy in connection with walking and cycling. It is addressed to municipalities or even to providers. I.e. to institutions and/or to companies, that can do (produce or influence) something for walcers. But it also can be used by everyone, who wants to evaluate official institutions´ or providers´ efforts.

The WQS is a good basis to make municipalities, companies, etc. think over the situation for cyclists in their city or company. At the same time it is an instrument for people, who want to improve the situation for cyclists, but do not know where to start.