# EUROPEAN CONFERENCE OF MINISTERS OF TRANSPORT



IMPLEMENTING SUSTAINABLE URBAN TRAVEL POLICIES: MOVING AHEAD

National Policies to Promote Cycling



#### FOREWORD

Cycling is increasingly recognised as a clean, sustainable mode of transport and an essential part of an inter-modal plan for sustainable urban travel.

While regional and local authorities bear the primary responsibility for detailed planning and implementation of cycling policies, national-level commitment is important in setting the right legal, regulatory and financial framework so that successful implementation of cycling initiatives can take place.

The study provides an overview of policies at the national level for promoting cycling. The report is based on information obtained from 21 ECMT Member and Associate Member countries in 2002 and 2003.

The report was presented to ECMT Ministers at their Ljubljana Council in 2004. It was the first time that ECMT Ministers were asked to consider a specific role for the national level in promoting cycling in urban areas.

At the Council, Ministers agreed a Declaration on National Cycling Policies (included in this report) that recognises the importance of cycling policy as an integral part of a national policy framework for sustainable travel in cities.

This report is part of the follow-up to ECMT's work on Implementing Sustainable Urban Travel Policies -- conducted from 1998 to 2001 -- the findings of which are summarized in the document *Key Messages to Governments on Implementing Sustainable Urban Travel Policies*, approved by Ministers at ECMT's Lisbon Council in 2001.

#### ACKNOWLEDGEMENTS

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#### **EXECUTIVE SUMMARY**

#### Introduction

The objective of this report is to provide an overview of policies at the national level for promoting cycling, which is increasingly recognised as a clean, sustainable mode of transport in urban areas. The report is based on information obtained from 21 ECMT Member and Associate Member countries in 2002 and 2003.

While the growing trend in car use continues, the level of bicycle use seems generally stable with only minor fluctuations. The modal share of cycling trips, though varying from country to country, is roughly 5 to 10% of all trips in Western Europe and approximately 1 to 5% in Central and Eastern European countries. Two countries stand out with much higher modal shares for cycling: the Netherlands (27%) and Denmark (18%). Japan's cycling modal share is also noteworthy at 14%. Cycling's share in North American cities, although growing in importance, remains fairly low.

Cycling can have many advantages as a short-distance means of travel in urban areas: it is environmentally friendly – without emissions and noise nuisance; provides cost-effective mobility, and offers an opportunity for health and physical fitness by regular exercise.

On the other hand, there are both real and perceived barriers to bicycle use that – with the exception of a few countries – keep cycling somewhat in the margins of urban travel. These barriers include vulnerability in accidents with motorised traffic, bicycle theft, increasing travel distances due to urban sprawl, perceived low social status, weather and topology.

#### The policy and institutional framework

Cycling policies and measures alone cannot bring about sustainable travel in cities. They are, however, an important element of a comprehensive package of policy tools designed to improve the sustainability of the whole transport network. Integration and coherence between cycling policies and other policies addressing land use, environment, physical health and finance are essential. This requires co-ordination among various levels of government and sectors, with input from cycling stakeholders – including national, regional and local governmental bodies, non-governmental organisations, cycling associations and the bicycle manufacturing industry.

While regional and local authorities bear the primary responsibility for detailed planning and implementation of cycling policies, national-level commitment is important in setting the right legal, regulatory and financial framework so that successful implementation of cycling initiatives can take place.

#### National cycling policies and plans

An increasing number of countries are developing national cycling plans, strategies and policies. The approach to cycling on a national level varies from country to country: some countries have a separate, specific plan for cycling promotion at a national level, while others include cycling policies in national transport, environment or health plans. In many countries, cycling remains the exclusive responsibility of regional and local authorities with limited commitment at a national level.

Cycling policy objectives draw from various sectors including transport, land-use, safety, environment, and health. The cycling policy and planning process therefore involves input from the wide range of cycling stakeholders mentioned above -- governmental bodies at all levels, non-governmental organisations, cycling associations and the bicycle manufacturing industry. In a number of countries the Ministry of Transport has a leading role in co-operation and co-ordination with relevant bodies in the policy planning process.

## Challenges to effective policy-making at a national level

Although a number of countries are making progress in promoting cycling travel, difficulties persist in the process of planning and implementing cycling promotion policies.

First, cycling remains somewhat marginal in transport policy discussions in many countries, and national budgetary allocation reflects this status. Second, as cycling policies draw from a wide range of objectives and involve many actors, lack of co-ordination, both horizontally and vertically, may cause biased policy planning and roadblocks to implementation. Third, safety fears arise from cyclists' vulnerability to motorised traffic. Fourth, technical understanding is not always adequate and, consequently, the design of transport infrastructure - - even cycling-specific infrastructure -- is often flawed or of poor quality. Fifth, scarcity of road space makes it difficult to provide adequate bicycle infrastructure. Finally, cycling often carries with it a somewhat skewed image – often perceived only as a sport, leisure, or children's activity rather than a mode of transport.

Many countries are working to better understand these barriers. The national governments in a number of countries have been instrumental in overcoming these difficulties through the development of national policies and plans for the promotion of cycling, through financial support to local and regional authorities, and via national public awareness and communications initiatives, among others.

#### How can national level commitment be helpful?

In the Netherlands and Denmark, the bicycle is one of the principal means of travel in cities, thanks at least in part to their national governments' strong, long-term, support for cycling.

Inquiries to local authorities carried out in the context of the ECMT study revealed that national government can help implementation of cycling policies in local areas in a number of ways, including by establishing a national policy framework or strategy that sets out the necessary legal and regulatory instruments for safe and efficient bicycle use; and by providing adequate financial support – especially for cycling infrastructure development and facilities. It should be noted that investments for cycling infrastructure and facilities can be considerably less costly than those for other types of transport infrastructure (e.g. for motorised transport, public transport).

#### Conclusions

A national cycling policy approach – be it a separate document or elements of a more general transport policy plan – can be a powerful tool for national governments to encourage cycling in urban areas. Tailored to a country's specific circumstances, a national policy framework can provide a common, integrated basis for the long-term development and implementation of cycling policies among various sectors and levels of government.

A national cycling policy framework can:

• articulate common objectives, goals, and a set of specific, integrated, co-ordinated actions among the different national Ministries and

agencies (horizontally), as well as among national, regional and local authorities (vertically), and in partnership with industry, cycling associations and other stakeholders;

- demonstrate political will and commitment at the national level, thereby pushing cycling policies higher up on the policy agenda;
- raise awareness and "de-marginalise" cycling as a sustainable mode of transport;
- provide a basis for the monitoring and evaluation of cycling policy implementation by national, regional and local authorities.

# MINISTERIAL DECLARATION ON NATIONAL CYCLING POLICIES FOR SUSTAINABLE URBAN TRAVEL

The Ministers of ECMT Member and Associate Member Countries:

- Note the findings of this report;
- Recall the *Key Messages to Governments on Implementing Sustainable Urban Travel Policies*, approved by Ministers at their Lisbon Council in 2001, in particular, the recommendation that national governments establish a supportive national policy framework for sustainable urban travel;
- Agree that policies and measures to promote cycling are *an integral part* of urban transport policy alongside those designed to promote public transport, manage car use and integrate land use and transport planning;
- Recognise that the following national policy actions can promote cycling and facilitate implementation of cycling measures in urban areas:
  - establishing an integrated national cycling policy framework with clear goals, actions, and targets in co-ordination with other national level administrations and agencies, regional and local authorities, cycling associations and bicycle manufacturers;
  - proposing legislation, regulations, and guidelines for the development and implementation of cycling policies at regional and local levels;
  - using financial and other instruments to encourage and facilitate cycling initiatives by regional/local authorities;
  - improving safety for cyclists by encouraging the reduction of speed and volume of motorised traffic where necessary;

- conducting research on cycling policies and measures and making knowledge available to local authorities and other relevant stakeholders;
- improving data collection on cycling travel and cyclists behaviour, so that there is better understanding of the status, trends and potential of cycling;
- monitoring progress towards goals and quantitative targets and evaluate progress in implementing cycling policies;
- Ask Deputies to review progress and exchange experience on implementing these ideas for cycling policies in countries and report back to Ministers in due time.

#### Chapter 1

#### **1. INTRODUCTION**

#### 1.1. Context

From 1998 to 2001, the ECMT conducted a project on Implementing Sustainable Urban Travel Policies jointly with the OECD. The results of the work, which was structured around a series of thematic workshops, a survey of cities and a series of national policy reviews on urban travel, were presented to Ministers of Transport at their Council in Lisbon in May 2001. The findings of the work, detailed in *Implementing Sustainable Urban Travel Policies Final Report* and *Key Messages for Governments*, were approved by the Ministers.

Promotion of cycling as a means of travel is one of a number of policy tools that can contribute to bringing about sustainable urban travel, defined in ECMT's *Final Report* as follows:

"Although definitions of and criteria for sustainability differ among countries and cities, most have common objectives for quality of life in urban areas that include, clean air, quiet neighbourhoods, and economic prosperity without detrimental health and environmental impacts and depletion of finite natural resources."

Cycling is increasingly recognised as a clean, sustainable mode of transport that has potential as an alternative to the car for short-distance travel in urban areas. The recommendations of the above-cited *Final Report* of the project urge governments to "Establish a supportive national policy framework." Such a national framework for urban transport policy should consider cycling in an integrated context with other urban travel and land-use policies. The recommendations state that governments should "Ensure that measures to promote walking and cycling in urban areas … are supported in the legal and regulatory framework."

With this mandate ECMT conducted a review of national cycling policies and plans in ECMT Member and Associate Member countries (hereinafter referred to as "Member countries"). The objective of this report is to provide an overview of policies for promoting cycling at the national level, focusing on initiatives taken by Transport Ministries.

The report is based on responses received to a questionnaire (in Annex to this report) sent to 48 ECMT Member and Associate Member countries in the fall of 2002. Replies to the inquiry were received by 20 countries: Belarus, Czech Republic, Finland, France, Germany, Hungary, Ireland, Japan, Latvia, Malta, the Netherlands, Norway, Poland, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, the United Kingdom, and the United States.

This report is not intended to evaluate one kind of national policy approach against another: Member countries differ in social, economic, institutional and climatic contexts, and so there is no one "right" approach to cycling policy at the national level. Instead, the report aims to describe the current situation of national cycling policy planning; identify key cycling policy issues for national governments – including barriers to effective implementation of cycling policies - and point out ways Transport Ministries can contribute to more effective cycling policy-making and implementation.

This report is organised as follows: Chapter 1 sets the context for cycling policies in urban sustainable transport and gives an overview of the current status and trends in cycling travel. Chapter 2 identifies key policy areas, describes the overall institutional framework and what measures are actually taken in Member countries. Chapter 3 describes the status of development of national plans in Member countries, provides examples of good practice at national level and considers the efficacy of a national plan. Chapter 4 identifies a number of challenges and barriers to developing and implementing cycling policies. Chapter 5 explores why national-level commitment is important. Chapter 6 then concludes the report with recommendations as to how Ministries of Transport can help to improve policy-making and implementation in cycling.

#### 1.2. Status and trends in cycling

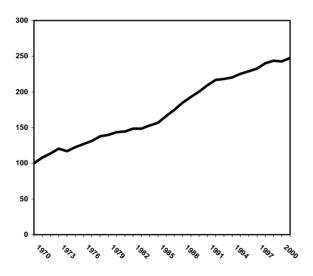
It is widely accepted that the increase of car use in urban areas poses serious environmental and health problems. While the generally increasing trend in car use has continued, the level of bicycle use has remained generally stable in the recent past with only minor fluctuations. (Table 1.1, Figure 1.1 and Figure 1.2).

Average mobility in cities	Year in 1990s	Most recent year	
Individual car			
+ motorised 2-wheel vehicle	1.41	1.57	
Public transport	0.88	0.82	
Cycling	0.43	0.43	
Walking	0.82	0.77	
All modes	3.54	3.59	

# Table 1.1. Average mobility(Number of trips per person per day by mode)

*Note*: Averages of 168 cities in 32 countries in Europe, North America and Asia. *Source*: ECMT, Survey of Cities, (1999-2000).

#### Figure 1.1. Private passenger car transport trend (passenger-kilometres) Western Europe 1970=100



15 countries: BEL, CHE, DEU, DNK, ESP, FIN, FRA, GBR, GRC, ISL, ITA, NLD, NOR, PRT, SWE.

Source: Trends in the Transport Sector 1970-2002, ECMT, 2002.

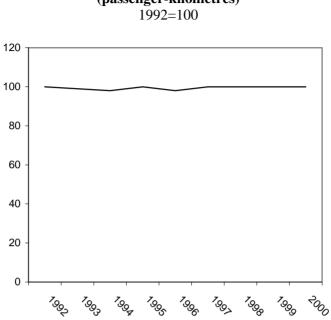


Figure 1.2. Cycling transport trend in 15 EU countries (passenger-kilometres) 1992=100

Source: European Union Energy & Transport in Figures 2002, EC, DG TREN.

Bicycle use varies from city to city. While more than 50% of all trips are made by bicycle in some cities, cycling as a means of travel is almost non-existent in others. Behind these variations lie different factors relating to the economy, culture, climate, topology, and policies of different countries. Recent statistics show that the modal share of cycling trips, though varying from country to country, is generally around 5-10% of all trips in Western Europe and approximately 1% to 5% in Central and Eastern European countries. Two countries are stand out with much higher modal share of trips by bicycle, the Netherlands (27%) and Denmark (18%). Cycling kilometrage varies between 0.1 km/person/day and 2.6 km/person/day. Japan's cycling modal share is also noteworthy at 14%. Cycling's share in North American cities, although growing in importance, remains fairly low (Table 1.2)<sup>1</sup>.

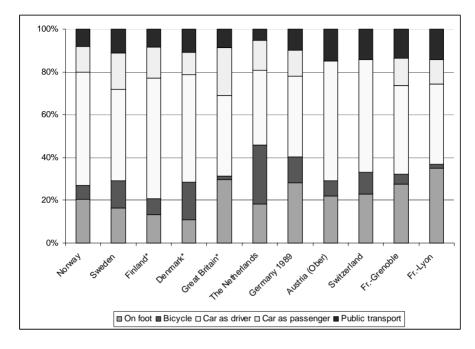


Figure 1.3. Modal split in 10 European countries (Number of trips)

\* Trips longer than 200-500 m.

Source: WALCYNG (1999).

## 1.3. Benefits of cycling: How cycling contributes to sustainable travel goals

Cycling has attracted increasing international attention as an environmentally friendly mode of transport, since the bicycle does not pollute or create noise. More cycling in urban areas in place of car use could contribute to less energy consumption from travel activity and reduced congestion. Increasing cycling could be a promising way to contribute to the reduction of greenhouse and other emissions, a major concern raised in the 1995 ECMT-OECD sustainable urban travel strategy<sup>2</sup>.

Further, many ECMT Member countries have taken steps to improve the efficiency of transport charges and taxes, differentiating charges in relation to emissions of air pollutants,  $CO_2$ , and congestion. While such demand management measures try to reduce car use by increasing charges to internalise the external cost of transport, cycling can provide an alternative form of

mobility. In this way, the shift from car use to bicycle use – particularly for short distances – could reduce the amount of such external costs of transport without necessarily reducing mobility.

Country	Cycling per person and day in kilometres (2000)	Modal share as a % of number of trips	
Netherlands	2.3	27	
Denmark	2.6	18	
Sweden	0.7	12.6	
Germany	0.8	10	
Belgium	0.9	10	
Finland	0.7	7.4	
Ireland	0.5	5-6	
Austria	0.4	5	
Italy	0.4	4	
France	0.2	3	
UK	0.2	2	
Luxembourg	0.1	1.5	
Greece	0.2	1	
Portugal	0.1	1	
Spain	0.1	0.7	
Norway		6	
Switzerland		9	
USA		0.7	
Japan		14	

Table 1.2. Cycling per person and per day (kilometres)
and modal share (number of trips)

*Source:* EU Energy and Transport in Figures Statistical pocketbook, 2002. EU Transport in Figures Statistical Pocketbook 2000.

Cycling also provides an opportunity for regular exercise, with potentially significant health benefits if people use bicycles as a daily means of transport. The health benefits of cycling concern not only gains for an individual's health; but also can contribute to reduce the costs of health care in society as a whole.

Many studies advocate the various advantages of increasing cycling travel. For example, the U.S. Department of Transportation has concluded that increased levels of bicycling and walking would result in significant benefits in terms of health and physical fitness, the environment, and transportation-related effects<sup>3</sup>.

# Box 1. The health effects of physical activities

Lack of physical activity is one of the major risk factors for coronary heart disease, which is the leading cause of mortality in Europe. Walking and cycling on a daily basis can promote health by providing physical activity, decreasing noise and air pollution.

The health benefits of regular physical activity can be summarized as:

- 50% reduction in the risk of developing coronary heart diseases (i.e. a similar effect to not smoking);
- 50% reduction in the risk of developing adult diabetes;
- 50% reduction in the risk of becoming obese;
- 30% reduction in the risk of developing hypertension;
- 10/8 mm Hg decline in blood pressure in hypertensive subjects (i.e. a similar effect to that obtained from antihypertensive drugs).

Other effects include reduced osteoporosis, relief of symptoms of depression and anxiety, and the prevention of falls in the elderly.

A total of 30 minutes' brisk walking or cycling on most days of the week, even if carried out in 10–15 minute episodes, is effective in providing these health benefits.

The average trip by walking in Europe is about 1.5 km and the average cycling trip is about 3.5 km, each taking about 15 minutes to make: two such trips each day would be enough to provide the recommended "daily dose" of physical activity.

(Annex 1 of WHO Charter on Transport, Environment and Health, 1999).

The WHO Charter on Transport, Environment and Health (London, June 1999) and more recently the Joint WHO-UNECE Transport, Health and Environment Pan-European Programme (THE PEP)<sup>4</sup> (Geneva, July 2002) promotes modes of transport which lead to health and environment benefits, aiming at a shift to modes of transport with lower specific emissions and accident risks, in particular, cycling and walking. The Charter suggests that half

an hour's daily exercise significantly reduces the risk of heart disease, diabetes, obesity, and high blood pressure (Box 1).

In summary, the benefits of cycling compared with private car use include (but are not limited to) the following:

- Environmentally friendly: Cycling is free of emissions and noise.
- **Cost effective**: The bicycle can be purchased and maintained for a modest price and is also energy efficient. As the bicycle has low space requirements, cycling paths and parking facilities can be developed at lower costs than what is usually invested for cars. When replacing car use, cycling can contribute to reducing external costs.
- Quick: It is often one of the quickest modes of transport in urban areas.
- **Healthy**: Regular exercise can improve overall physical condition and reduce the costs of health care.

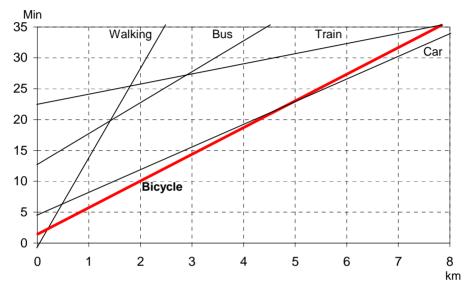
	Car	Car plus catalytic converter	Bus	Bicycle	Air	Train
Space consumption	100	100	10	8	1	6
Primary energy consumption	100	100	30	0	405	34
$CO_2$	100	100	29	0	420	30
Nitrogen oxides	100	15	9	0	290	4
Hydrocarbons	100	15	8	0	140	2
CO	100	15	2	0	93	1
Total atmospheric pollution	100	15	9	0	250	3
Risk of accidents	100	100	9	2	12	3

# Table 1.3. Comparison of environmental impact of transport modesBase=100 (private car)

*Note*: Comparison with a private car based on identical journey with the same number of people/km.

Source: UPI Report, Heidelberg, 1989, quoted by the German Ministry of Transport.

For short-distance travel, bicycles are often faster than other modes such as cars or trains as shown in Figure 1.4. Cycling is often the quickest mode of transportation for travel within urban areas, particularly travel less than 5 km.



# Figure 1.4. Comparative table of journey speeds in the urban environment

*Source:* Cycling: the way ahead for towns and cities, 2000, EC, Directorate-General for the Environment.

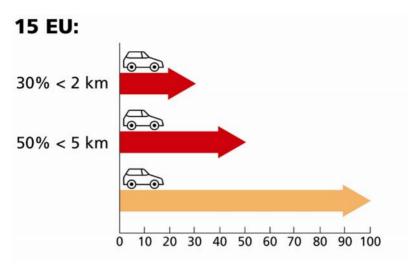
On the other hand, the frequency of car use for short distances is significant. 30% of motorised trips are shorter than 2 km, and 50% of motorised trips are shorter than 5 km in EU 15 countries (Figure 1.5). There seems to be ample room to replace these shorter car trips with cycling travel.

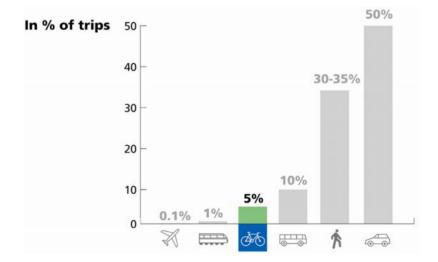
#### 1.4 Barriers to increased cycling activity: Real and perceived

In spite of these benefits, cycling has not seen significant increases in recent years and remains a marginal transport mode in many countries.

Barriers to cycling – both real and perceived – are not always the same. A study shows the differences between barriers to cycling and attractors to bicycle use raised by car drivers who do not have much experience in cycling and cyclists who practice cycling regularly (Table 1.4).







*Source:* European Transport in Figures, European Commission, DG TREN, Fact sheets, passenger transport, November 1998, quoted by ECF.

Road users	Barriers for cycling	Attractors for cycling		
Car drivers	<ul> <li>you cannot transport heavy things</li> <li>you depend on the weather</li> <li>cycling is dangerous</li> <li>the cycle network is incomplete</li> <li>badly signed cycle routes</li> </ul>	<ul> <li>cycling is fun</li> <li>cycling is healthy</li> <li>cycling is environment-friendly</li> <li>you make exercise</li> </ul>		
Cyclists	<ul> <li>high speed of car drivers</li> <li>the cycle network is incomplete</li> <li>lack of secure parking</li> <li>car noise and fumes</li> </ul>	<ul> <li>cycling is healthy</li> <li>you feel flexible and independent</li> <li>you are fast</li> <li>cycling is environment-friendly</li> </ul>		
Source:	EU research project WALCYNG, Proceedings Velo-city '97 Barcelona 15-19 Sept. 1997.			

# Table 1.4. Barriers and Attractors for cycling separated in cyclistsand car drivers

The following factors present both real and perceived barriers to bicycle use:

- **Safety**: Cyclists are vulnerable to motor vehicle traffic. Cyclists may perceive a greater risk under poor cycling conditions due to insufficient cycle path infrastructure and high motor vehicle speeds.
- **Security**: Fear of theft or damage when bicycle parking facilities are inadequate. Fear of travelling at night.
- **Distance**: Spatial distribution of city functions can affect travel distances. Urban sprawl tends to increase distances. For example, in the Netherlands, the increase in average trip lengths resulted in a shift from bicycle to car use, and offset the positive effects of policies to promote cycling<sup>5</sup>.
- Health: Cyclists may inhale vehicle exhaust emissions.

- **Social Status**: Cycling may be perceived as an activity for children, or as socially inappropriate for those who can afford a car.
- Weather: Unfavourable weather conditions such as particularly high or low temperatures and frequent rainfall can be perceived as a deterrent to cycle use. Finland points out, however, that rather harsh and severe winter conditions are not a barrier for promoting cycling in Finland. For example, in Oulu, a city of about 120 000 inhabitants situated close to the Arctic Circle, cycling still has about 25 % of the modal share for daily trips.
- **Topology**: Hilly terrain can discourage cyclists.

# NOTES

- 1. Careful interpretation of modal share is needed in terms of its measurement in either kilometres or number of trips. Since the distance covered by bicycle is short compared to motorised transport, the modal share in terms of number of trips may be more relevant rather than that of passenger-kilometres.
- 2. For example, "Part 1, Chapter 3, section 4 on Air pollution", pp. 60-63.
- 3. Chapter Two, Final Report, The National Bicycling and Walking Study Transportation Choices for a Changing America (1994).
- 4. THE PEP www.unece.org/the-pep/ or www.the-pep.org
- 5. P 19, PROMISING Workpackage 2 (2001).

#### Chapter 2

#### THE POLICY AND INSTITUTIONAL FRAMEWORK

This chapter examines the key policy and institutional approaches being taken by governments to encourage cycling. Transport Ministries in many countries play an important role in promoting cycling and this, irrespective of the existence of a national cycling plan.

#### 2.1 Key Policy Areas to Promote Cycling

#### Image of cycling

The European Commissioner for the Environment has said that the worst enemies of the bicycle in urban areas are not cars, but long-held prejudices<sup>1</sup>. A number of bicycle user organisations indicate that cycling is often, though not always, regarded as a leisure/sport activity or a travel mode for those of modest means or children – not as a "normal" mode of travel.

According to the Dutch Ministry of Transport, Public Works and Water Management, in cities with a high bicycle share (above 30 percent) such as Enchede, Amsterdam, Eindhoven and Copenhagen, the acceptance in the 1950s and 60s of the cyclist as a "normal" traffic participant, having equal rights on the roadway with cars was a crucial factor in attaining their high modal share for cycling. From the 1970s onwards, a new "image of the bicycle" emerged along with concern about energy consumption, the environment, health and quality of life in cities.

On the other hand, a low bicycle share (around 10 percent or less) in Antwerp and Manchester could be partially due to a negative collective image of the bicycle as a means of travel<sup>2</sup>.

The UK National Cycling Strategy explicitly refers to "Culture shift changing attitudes". Aiming to raise the status and awareness of cycling amongst transport providers, service providers and employers as well as potential cyclists and other road users, the plan sets out a communication programme to spread the message that cycling is a practical, safe and enjoyable form of daily transport.

## Infrastructure

Dedicated infrastructure for cyclists requires space availability and investment. However, an integrated, seamless network of cycle routes can greatly improve the attractiveness and safety of cycling. Cycle route networks can connect origins and destinations quickly and provide more secure conditions by separating cyclists from motorised traffic. In most of the countries which replied to the questionnaire, the Transport Ministry is at least partially involved in development of bicycle routes, mainly in terms of planning and subsidising their development.

Some German cities such as Münster and Saarbrücken have a dense network of on- or off-street bicycle lanes on all main streets. In these cities, making one-way streets for cars accessible for cycling in both directions offers cyclists shorter journeys without detours. Since 1998, a modification in the German road traffic code officially permitted use of this measure.

In Finland, the Ministry of Transport and Communications has developed a Cycling Policy Programme which gives priority to the development of a cycling network, particularly in urban areas, and aims to promote cycling and increase its modal share. The Ministry allocates funds to the Road Administration and Road Enterprise for this purpose.

Policy in Norway focuses on constructing continuous cycling networks in cities. For the period 2002-2005 the plan is to build 230 km of cycle and foot lanes. Norway also plans to allow cyclists to ride both ways on one-way streets for a test period of one year in some cities. After the test period, the results will be evaluated to determine whether it should be made a permanent arrangement.

In 2003, Switzerland started work on producing guidelines for the design of good bicycle infrastructure. The cantons are responsible for implementation and construction of infrastructure.

Japan revised its Road Structural Code in 2001 to specify that trunk roads carrying heavy traffic must include adjacent bicycle roads when they undergo construction or renovation.

#### **Route Guidance and Information**

Development of a network of direct bicycle paths, which connect important starting places and destinations, can serve to improve bicycle use. Information on cycle routes, such as their number or colour and distances to destinations, can be indicated either on maps or on roadside traffic signs to ensure that the cycle routes are easy to find and can be followed by cyclists. These measures can attract more cyclists and contribute to enhancing their safety as seen in the next section.

Norway gives high priority to providing traffic and information signs for cyclists. The Ministry of Transport and Communications indicates that there should be more signs that tell cyclists where to go and the distance to the next city. However, it is not the responsibility of the Ministry but the Public Roads Administration to follow up this priority. The Police have the main responsibility for traffic signs in cities and urban areas.

The Swiss Federal Government is publishing guidelines for cycle routes, while the cantons are responsible for implementing this guidance.

Japan provides information about large-scale bicycle roads including maps and pictures on the web site of the Ministry of Land, Infrastructure and Transport.

#### Safety

Safety is another critical aspect for cyclists. It is not surprising that in countries such as Denmark, Finland and the Netherlands, where the bicycle is an important daily means of transport, the proportion of cyclist fatalities in all road accidents is quite large, respectively 13.2%, 16.8% and 20.%. In countries where the bicycle is used less widely, such as France and Greece, the proportion of cyclists represents respectively only 4.4 percent and 1.5 percent of all road fatalities. Obviously, in countries where the bicycle takes the highest share in travel, the proportion of the cyclist casualties in road accidents is the greatest. In addition, the number of bicycle accidents is in fact underestimated in many cases, in that a number of less serious cycling accidents are not reported.<sup>3</sup> ECMT Ministers meeting in Berlin in 1997 noted in their *Recommendation on Cyclists* that cyclists are far more at risk of injury in road accidents than other categories of road users, particularly owing to their vulnerability<sup>4</sup>.

The correlation between cycling accident statistics and risks is not always clear, however. An EU project WALCYNG (1998) carried out a comparison of the risks of fatal injury per cycling kilometre, which showed that the more

cyclists on the road, the better the safety record (Figure 2.1). This is probably due to road users who are more experienced with cycling traffic and higher standards for cycling facilities in the Netherlands and Denmark relative to other countries. Indeed, when road users are used to sharing the road space with cyclists, they can more easily perceive and anticipate cyclists' behaviour.<sup>5</sup>

Another study shows that cycling is no more dangerous than car use if the data is corrected for a number of factors. In Table 2.1, in order to compare the safety of car and bicycle traffic, figures showing car kilometres-travelled are corrected by taking out the kilometres travelled on motorways.

As shown in Figure 2.1, high bicycle use countries such as Denmark and the Netherlands have already reduced the number of cycling casualties. Malta points out that lack of standards for safe driving on the road, and the mixture of bicycles and other heavy traffic discourage cycling.

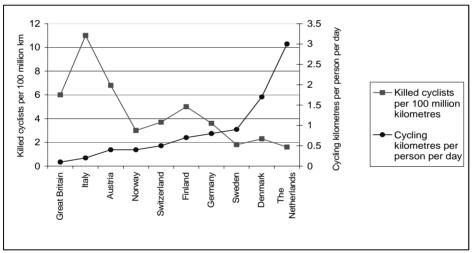


Figure 2.1. Inverse relationship between bicycle use and casualties

Relation between the number of cyclists and the number of casualties among cyclists involved in road accidents.

Source: C. Hydén, A. Nilsson & R. Risser (1998), quoted by ECF (1998).

Cyclists' safety can be enhanced in a number of ways, notably by reducing the speed of motorised traffic. Such a measure is good not only for cyclists, but also for road safety in general and the environment (noise and emissions). Cyclists' safety can also be improved by reducing encounters between cyclists and other faster traffic by separating them with cycle lanes. Other measures include better traffic signing on roads, better lighting on bicycles, and education of cyclists and car users as to their respective behaviour in traffic.

It should be noted also that the safety of pedestrians and other more vulnerable road users should be considered, especially when they share the pavement with cyclists. Separating cyclists and pedestrians is also desirable where possible.

Age group	Motorists (drivers)	Cyclists
12 - 14	_	16.8
15 – 17	_	18.2
18 - 24	33.5	7.7
25 - 29	17.0	8.2
30 - 39	9.7	7.0
40 - 49	9.7	9.2
50 - 59	5.9	17.2
60 - 64	10.4	32.1
> 64	39.9	79.1
Total	20.8	21.0

Table 2.1. Risk of accidents per million kilometres

*Source*: Cycling: The Way Ahead for Towns and Cities, European Commission, Directorate-General for the Environment (2000).

Norway states that safety carries first priority in cycling policy, particularly as concerns accidents involving cyclists and cars. Cycle paths are not a panacea and can be dangerous at intersections or when cyclists enter or leave cycle paths. Efforts are being made to minimise the problem by building road crossings with flyovers at intersections between roads and cycle paths. Information campaigns emphasising the importance of using helmets are also a part of initiatives to improve safety.

Japan notes that construction of bicycle paths has contributed to improved traffic safety, via the separation of bicycle traffic from cars and pedestrians. Japan also has been conducting studies on better use of existing road space. For instance, Saga city has developed a "time sharing" plan, which gives priority to bicycle use and restricts car use during commuting hours in the morning on 3- to 5-meter-wide local roads.

In Finland, the Ministry and the Central Organisation for Traffic Safety are responsible for traffic safety measures. An Act promoting the use of safety helmets for cyclists went into effect on 1 January 2003. Similarly in Sweden, the National Road Administration is preparing draft legislation to render mandatory the wearing of cycling helmets.

In this example drawn from Dutch statistics, the basic data have been corrected by two factors.

- Motorway km-driven are excluded (one-third of the distances driven in a car), as the risk is ten times less than on the rest of the road network and there is no comparable factor for cyclists.
- A factor showing the hazards which motorists represent for pedestrians and cyclists (the hazards which a cyclist represents for others is almost nil).

NB: The average total risk is biased against cyclists because two age groups (12-14, 15-17) which do not apply to motorists are taken into considerations.

#### Links with Public Transport

Improving connections between cycling and public transport is important in designing integrated transport networks using all modes of travel. Providing better links between these two modes has potential to attract more people to use bicycles and, as a result, to reduce reliance on private vehicle use.

Measures to improve the interface between cycling and public transport include development of parking facilities at railway stations and bus/tram stops; allowing public transport passengers to board public transport with their bicycles; and renting bicycles at public transport and railway stations. The potential effects of such measures on both cycling and public transport modal share look promising considering that in the Netherlands, for example, 35% of all train users come to the railway station by bicycle.

Many countries indicated that the importance of providing more bicycle parking is widely recognised at the national level; however, organisations other than Transport Ministries, especially the municipalities and transport companies, are in charge of organising bicycle parking, so co-ordination is necessary.

# Box 2. Bikerail – Winning with bikerail (United Kingdom)

# What is it?

Bikerail is a wonderfully simple, sustainable way of using the railway, combined with the flexibility of cycling, at either or both ends of the journey.

# Why Bikerail makes sense:

Research has shown that over 60% of people in the UK live within a 15 minute cycle ride of a station.

As people travel further to work, bikerail is a method that provides a door to door alternative to the car.

It suits everyone: those without a car, one-car families, shift workers, occasional commuters, and season ticket holders.

# Fostering bikerail through:

- Convenient, secure cycle parking at stations.
- Improved cycle carriage on trains.
- Better cycle routes and access.
- Good travel information.

## Brings real benefits by:

- Reducing traffic congestion.
- Improving air quality.
- Decreasing the need for car parking at stations.
- Boosting the rail catchment area by as much as 10 times.

## **Everyone's a winner:**

- Local Authorities find simple, low cost ways to increase the capacity and efficiency of local transport systems.
- Train operators discover a whole new passenger market.
- Local people get more reliable journeys and more quality time.

#### How to do it:

It is now recognised by the Strategic Rail Authority (SRA) that bikerail initiatives offer good value for money.

The simplified bidding process for the SRA's Rail Passenger Partnership (up to  $\pm 250\ 000$  per project) makes it much easier for train operators, and their partners, to bring provision for cycle parking at stations up to a decent standard.

The Rail Performance Fund will enable the internal design of rolling stock to be modified.

The Countryside Agency's 'Wider Welcome' initiative supports schemes that open the countryside up to city dwellers, without the need to go by car.

#### Why not try it now and reap the benefits?

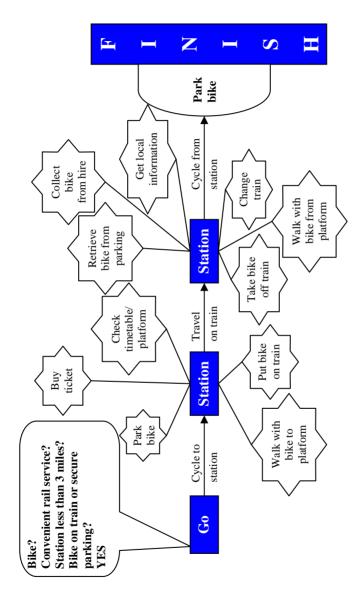
In the United Kingdom, *Bikerail*, a consultancy established in 1996 to promote bike and rail integration, works with central and local government, rail operators, the Countryside Agency, Strategic Rail Authority and NGOs to promote cycling as an inclusive part of a public transport journey. Priority has been given to providing more bicycle parking at stations and provision for carriage of bicycles on trains (Box 2).

The German National Cycling Plan 2002-2012 advocates linking up the various means of transport. In some German cities with a long tradition of bicycle use, bicycle "stations" aimed at facilitating the combined use of rail and cycling have been opened at central rail stations. The bicycle station at Münster central station has a parking garage with 3,000 supervised parking places, a bicycle maintenance service, a bicycle shop, a rent-a-bike service, lockers and a bicycle-wash. The bicycle station at Freiburg offers additional services such as travel information for the whole transport chain, ticket sales for rail and public transport, reservation of rental cars and accommodations.

In the Netherlands, cycling policy is part of the Mobility Management Plan, which provides an integrated management plan for all modes of transport. The Netherlands considers the improvement of bicycle parking facilities as a key factor in improving links with public transport and reducing bicycle theft. About Euros 200 million have been spent over a period of seven years to build and improve bicycle parking at railway stations. Development of a national formula for easy bicycle rental at railway stations is also underway.

The Japanese Ministry of Land, Infrastructure and Transport not only constructs bicycle parking facilities itself as a part of the traffic safety facilities and street improvement programme, it also offers property and business tax reductions to rail operators that provide bicycle parking near their stations. Moreover, in some Japanese cities, pilot tests are being conducted to improve connections between bicycles and public transport; these include a "Cycle & Ride" programme to reduce commuter car use and a "rent-a-cycle" plan at railway stations.

Figure 2.2. The Bikerail Chain



Source: bikerail, Winning with bikerail, UK National Cycling Strategy http://www.nationalcyclingstrategy.org.uk/bikerail.html

#### **Financial Arrangements**

Most of the countries that replied to the ECMT questionnaire have common characteristics in their financial arrangements to implement cycling policies.

• **Usage**: Most funds available for cycling policies are spent on investment in infrastructure development, particularly for construction of cycling routes as part of overall road development.

In some countries such as Finland, France, and the United States, funds are spent for educational and promotion programs. The UK Government allocates  $\pounds$ 1-2 million annually from the Cycling Projects Fund for small-scale initiatives by employers, schools and charities/voluntary groups. The projects include bicycle training schemes, secure bicycle parking, and facilities for cyclists (e.g. showers, changing rooms).

♦ Amount: The amount spent for cycling is very limited. It was not possible to obtain comparable data across countries as to how much money is actually allocated to cycling, because cycle path construction is often incorporated in road development projects.

In Sweden, SEK 100 million (about Euros 10.8 million) or 0.6 % of national transportation budget is currently allocated to cycling. In the United States, approximately 1 percent of Federal transportation funds are spent on bicycle and pedestrian improvements, which amounted to \$416 million in fiscal year 2002. In Norway's 2003 budget, NOK 360 million (about Euros 49.3 million) is allocated to cycling policies, or 2.14 % of the total road sector budget. Switzerland hopes to have an annual budget of Euros 70 million in the future for "human-powered" mobility including walking, while current allocation is marginal (Euros 1-2 million).

♦ Resources: The national budget provides funding to regional/local governments. In most cases, there is no specific budget at a national level earmarked for cycling, and implementation is up to regional/local authorities. More specifically, national funding is provided to regional/local authorities, who then decide how much of their available money will be spent on particular bicycle projects. National financial resources are provided not only by Transport Ministries but also by other governmental organisations in charge of health, education, and environment. In Norway, while the national budget is the main source of funding, some funding can also originate from road toll finance.

# Box 3. Financial Aspects in France

# 1. Circular on the implementation of urban transport plans and government grants for public transport services in the provinces

Since July 2001 the central government has provided subsidies (up to a maximum of 35%) for urban development projects designed to:

- Encourage better road sharing practices so that cars, public transport vehicles, cyclists and pedestrians can safely share the same carriageway.
- Improve travel by non-motorised modes within urban areas (creation of a cycle path network, charter for pedestrian access, etc.) and access to public transport by non-motorised modes (feeder cycle routes).
- Set out a coherent parking policy to encourage people to make greater use of less polluting modes and to facilitate transfers from one mode to another (transfer parking areas for cars and bicycles, secure bicycle parking areas).

#### Excerpt from the Circular

"II.4 Investment required for construction of a cycle path network

These actions are aimed at creating a cycle path network within an urban area, excluding local access at the district level. The award of a subsidy is therefore contingent on the existence of a master plan for cycle routes which divides the network into levels and which specifies the links required to ensure access to all communes within the urban area. The role of Owner in projects shall be assumed by the AOTU (Urban Transport Authority) or by the inter-communal body responsible for the area in which the PTU (Urban Transport Area) is located. Subsidies may be refused in cases where the application fails to take sufficient account of safety aspects. The basis of subsidy shall include construction of the cycle path infrastructure and installation of associated equipment (traffic lights, road signs). Cycle paths and facilities at the level of the commune shall not be eligible for subsidies except in the case of access routes to modal transfer areas (see chapter II-3). The maximum rate of subsidy shall be 35%."

State subsidies may be supplemented by financial assistance from the ADEME (Environmental and Energy Management Agency).

## 2. National cycle route network

At a meeting of the Inter-ministerial Committee on Territorial Development (CIADT) in December 1998, France adopted a scheme for the creation of a

network of national cycle routes extending over a total distance of around 9 000 km to be included in the European cycle routes and greenways plan "EuroVelo® plan". The creation of this network under planning contracts between the State and the Regions will qualify for subsidies from the government, the local authorities concerned (regions, départements and communes) and in some cases the European Union. These medium or long-distance cycle routes must provide links between regions and allow the safe passage of cyclists through built-up areas. Partially subsidised services such as accommodation, restaurant facilities, repairs, communications, rentals, luggage forwarding services, etc., are also provided so that users can travel in attractive and comfortable stages.

Source: Correspondence with CERTU (Centre d'Etudes sur les Réseaux, les Transports l'Urbanisme et les Constructions Publiques), November 2002.

## **Bicycle Theft**

Fear of bicycle theft can greatly discourage people from using their bicycle. Fear of theft is also a reason that many people choose to purchase a used bicycle in poor condition that is often unsafe. The responsibility to deal with bicycle theft often goes beyond the competence of the Ministry of Transport to other Ministries and government agencies.

The Dutch Ministry of Transport, Public Works and Water Management is implementing a national programme to prevent bicycle theft in co-operation with the Ministry of Internal Affairs and the Department of Justice. The annual number of bicycle thefts in Holland is estimated between 800,000 and 900,000. Important aspects of this programme are the electronic identification of bicycles and the realisation of a national police registration for stolen bicycles. The programme also gives much attention to prevention, easier ways to inform the police about the theft of a bicycle and returning stolen bicycles to the rightful owners.

#### 2.2. Roles of Different Levels of Government in Decision-making

As mentioned earlier, policies to promote cycling vary from country to country due to the wide variation of geographic, climatic, cultural, and economic contexts among countries. In the same way, the level of national involvement in cycling policy varies as well. As cycling is a means of local, short-distance transport, measures to promote bicycle use are most-efficiently designed, overseen and implemented by local authorities. However, the commitment of the national level can have a significant impact on implementation. If there is not a well-integrated policy framework at a national level, implementation at a local level is difficult.

Cycling policies also involve many actors and a variety of underlying objectives. Co-ordination among different Ministerial branches – transport, environment, land use, finance – is essential. Such inter-ministerial co-ordination on cycling policy is being carried out by task forces or working groups in some countries such as Finland and the United States.

The impact of national-level commitment and the role of the national government will be considered further in Chapter 5.

## 2.3. Integration of Cycling Policies

As the ECMT's 2001 *Final Report* suggests, integration and coherence among transport and other policies such as land use, environment, health, and finance are crucial factors in the success of cycling policy implementation. Measures to improve cycling can be linked with those designed to promote other modes, including rail, bus, and walking as part of an integrated, intermodal policy approach to urban travel.

As described above, a number of countries have taken firm initiatives to develop the interfaces of cycling with other modes. These include, improved bicycle parking facilities at rail and bus stations; carriage of bicycles on public transport and trains, and possibilities to rent bicycles at rail and bus stations in schemes similar to car-sharing. Such "pull" policies for promoting cycling can be combined with other "pull" policies for promoting public transport and walking as well as with "push" policies designed to restrict excessive car use.

In this regard, Finnish policy provides an excellent example. With aims to promote all sustainable modes of transport on an equal basis, Finland has developed programmes for cycling and walking, encompassed in the recent public transport strategy "Public Transport – An Attractive Alternative" (2001). In the context of these programmes, the country aims to decrease the dependence on private car use and integrate cycling and walking more closely with public transport. On the basis of these programmes, Finland has initiated so-called voluntary commitments between various partners involved (i.e. government, regional and local authorities, NGOs, enterprises and companies etc.) with the aim to increase the modal share of sustainable modes of transport. These commitments have led to the selection of pilot projects in three medium-

sized cities (Jyväskylä, Kerava, Lempäälä) where the various partners aim to promote cycling, walking and public transport. The project is named JALOIN, which firstly means "by foot" or "on your own energy" in Finnish, and secondly "the noblest", reference to the importance of the goal to promote sustainable modes of transport (Box 4).

The promotion of non-motorised transport is also one of the principal aims of Finland's Land Use and Housing Act (1999), which states that zoning plans at all levels should be designed to provide good accessibility and promote a well-functioning public and non-motorised transport system. According to the Act, when zoning new areas for housing, a plan must be submitted showing how public transport and non-motorised travel have been taken into consideration in the zoning plan. Zoning plans must also contain an evaluation of the distribution of trips among different modes of transport.

# Box 4. Jaloin - Promoting walking and biking for more sustainable transport in Finland

The goal of Finland's transport policy is defined as "intelligent, sustainable mobility". Consistent with this objective, The Ministry of Transport and Communication's (MTC's) project promoting pedestrian and bicycle traffic ("light traffic"), known as Jaloin, was started in 2001 and will continue through 2004. Initiated at the national level, the focus of the project is being shifted toward municipalities.

# **Objectives of Jaloin**

The main objective of the Jaloin project is to increase the combined share of "light traffic" (non-motorised means of travel) and public transport as well as reduce the dependency on passenger cars.

Guiding principles for the project include the systematic consideration of pedestrian and bicycle traffic in transport decision-making and the promotion of walking and cycling as key components of a healthy living environment and a functional transport system, which can prove to be competitive advantages for communities.

The project conducts and disseminates research on cycling policy and planning and provides authorities with technical assistance in examining transport problems and preparing transport plans based on the project's principles.

## Partners

Key partners in the project are the Finnish Road Administration, the Rail Administration, the Association of Finnish Local Authorities, the Road Safety Association and municipalities. Co-operative partners include the Meteorological Institute, the Finnish Institute of Occupational Health, fitness exercise organizations, and public health organisations.

# Promotion of good practice

The Jaloin project supports and uses examples of good practice as models for good cycling planning and practice. A study conducted in the Salo region examined how pedestrian and bicycle traffic is taken into consideration in transport system planning. A study in Imatra examined how a new residential area could be planned to encourage "light traffic". Commuter cycling is being promoted in the context of a Company Mobility Management plan. The winter operations plan for the pedestrian traffic works committee includes several projects that promote "light traffic" during winter months.

The Jaloin project also works to encourage state and municipal budget authorities to include targeted funding for promotion of "light traffic".

## Three pilot "Model municipalities with sustainable transport"

Three "model municipalities" -- Jyväskylä, Kerava and Lempäälä -- have been chosen to serve as pilot programmes under Jaloin for the development of sustainable transport plans using "light traffic" as one of the key components.

In the context of Jaloin, Finnish towns are also encouraged to participate in Finland's sustainable development partnership program and in the activity of the Finnish biking municipality network and the European intercity Cities for Cyclists organization.

Source: The Finnish Road Enterprise, www.tieliikelaitos.fi/jaloin/

## 2.4. Cycling Promotion and Awareness: the Role of NGOs and Industry

Non-governmental organisations have in many cases played a significant role in promoting the development of cycling policies. There are a number of bicycle user organisations at local and national levels that work with authorities to develop and design policies to promote cycling. Several international cycling groups such as the European Cyclists' Federation (ECF) and Velo Mondial have also been very instrumental in keeping cycling issues at the forefront of sustainable transport discussions and in bringing forward the needs and views of cyclists to administrations, politicians, industry and the media. Their activities include collecting information and expertise, disseminating good ideas and practices, and carrying out campaigns, tours and events to raise the status and awareness of cycling. Their input has shown to be valuable in a number of countries in the development of cycling policies and in the improvement of plans and legislation concerning cyclists' safety, infrastructure design among others.

The bicycle manufacturing industry has also proven to be an important player in promoting cycling as a more sustainable travel choice for short distances in urban areas and is working with authorities and NGOs to better meet cyclists' demands for better and safer bicycles. The bicycle industry has been continuously developing bicycle products with enhanced safety and comfort, including, for example, electric power assist systems, electronic devices for sensor lights, electronic gear changes with energy from hub rotation.

Moreover, the industry has been more actively involved in the political and planning process via consultation with urban mobility planners and provision of its expertise to stakeholders. For example, the industry is working towards better communication with city planners and other stakeholders by participating in the development of VeloInfo, a web-based database of expertise on bicycle planning policies and bicycle use in Europe, and of the European Council for Non-Motorised Mobility, scheduled for 2005.

#### NOTES

- 1. P 5, European Commission, Directorate-General for the Environment (2000).
- 2. P 103, the Dutch Ministry of Transport, Public Works and Water Management (1999).
- 3. 1995 ECMT statistics. P17, Table 1 and 2 in Annex, ECMT (2000).
- 4. P 75, ECMT (2000).
- 5. P 12, PROMISING Workpackage 2 (2001).

#### Chapter 3

### NATIONAL CYCLING POLICIES AND PLANS

Development of national cycling policies and plans varies significantly from country to country. This chapter aims to provide an overview as to which countries have developed or are preparing national policy plans for cycling, what the key objectives of the plans are, and how the plans were developed and co-ordinated among different levels of government and other relevant bodies.

#### 3.1. Status of Development of National Plans

Of the 20 countries that replied the ECMT survey, only five replied that they do not have any national policy or plan for cycling. Some countries have a separate, specific plan for cycling promotion at a national level, such as Finland, Germany, Latvia and the United Kingdom, while others have cycling policies as components of larger transport, environment or health plans, as seen in Norway and the Slovak Republic. Several countries, among them Poland and Spain, indicated particularly limited commitment to cycling at a national level, with cycling policy falling mostly to regional and local authorities (Table 3.1).

One of the clearest examples of a comprehensive national cycling plan is the UK's National Cycling Strategy (NCS) (1996). Developed through a partnership process involving public and private sector bodies and co-ordinated by the UK Department for Transport, the NCS (Box 5) identifies key objectives, targets, mechanisms, outputs, and responsible bodies for the promotion of cycling at a national level. It established a headline target of doubling bicycle use by the year 2002<sup>1</sup> (from a base of 1996 levels) and doubling it again by 2012. It calls on local authorities to establish their own local cycling plans and targets, consistent with the NCS.

# Box 5. National Cycling Strategy (1996) Department for Transport, UK

This National Cycling Strategy represents a major breakthrough in transport thinking in the UK. It will promote cycling priority on the highway in the centre of towns, at the workplace and in new developments. By so doing, the Strategy will generate a culture change for cycling.

More people want to cycle, especially for local trips. With safer conditions on the road a "critical mass" of cyclists will be encouraged. Then cycling will feed on its success and make our streets safer and cleaner for everyone. By 2002 the National Cycling Strategy aims to have tapped this potential and delivered a doubling of cycle use in the UK.

The Strategy will not stop there. A further target to double cycle use again by 2012 has been set. A National Cycling Forum\* will be established to guide the delivery of the strategic actions.

Cycling has a bright future, contributing significant benefits to the nation.

## Why cycling?

The Green Paper on Transport (*Transport: The Way Forward*) highlights the need to manage the existing road network more efficiently. Cycling has a clear role to play within this policy framework. Sustainable transport options are needed for both utility and leisure trips, offering practical alternatives to the private motor car. These will ensure long term economic vitality, improve environmental conditions, and safeguard public health. Cycling fits well into any plans for a future transport framework. It offers a widely accessible, convenient and environmentally-friendly means of making local journeys, especially in urban and suburban areas. And it is a healthy, enjoyable, economic and efficient means of travelling.

Much of the considerable potential for cycling is derived from the existing journey patterns of other modes. 72% of all trips are less than 5 miles in length. Half are less than 2 miles. Combined with public transport, cycling can offer a door to door alternative for longer trips.

## Why a National Cycling Strategy?

The National Cycling Strategy offers a new approach. It creates a focus for organisations and individuals who are in a position to influence a change in

physical conditions, the attitudes of individuals and the outlook of organisations. It sets out common objectives, identifies targets in relation to those objectives, and identifies a range of actions which can help to meet the targets.

## How can action be taken?

Many of the actions to provide for cycling will involve a more cycle-friendly application of existing resources. For instance, cyclists can be taken more fully into account and given priorities within traffic management schemes. This process may well involve the reallocation of road space to create convenient and safe access by cycle. Other actions will involve shifting resources to schemes which recognise the value of cycling. With planning and coordination, it is believed that the changes can be achieved within current overall resource constraints on the relevant bodies.

## A partnership

The National Cycling Strategy depends upon an increased level of co-operation between organisations in the public, commercial and voluntary sectors. Each can bring particular strengths to achieving the objectives, which contribute to the overall aim. As a consensus document, the detailed advice in the Strategy must be adapted to differing circumstances, whilst its main thrust will endure.

# The end result

The opportunity will be created for more people to choose to cycle. The focus for action is to restore cycling as a comfortable and convenient transport choice. The Steering Group is confident that the central target, to double bicycle use by 2002, can be met through the efforts of all those with an identified role to play. The longer term prize for our communities will be a further doubling of cycle use by the year 2012. (Please see endnote 1 on page 62).

\* The National Cycling Forum was replaced by the National Cycling Strategy Board and the Cycling Forum for England.

*Source*: Introduction by the Steering Group, National Cycling Strategy www.dft.gov.uk/stellent/groups/dft\_susttravel/documents/page/dft\_susttravel\_503877.h csp

Tal	Table 3.1.	Current Status of Nat	Current Status of National Cycling Plans in ECMT Member and Associate countries  Description  Ohiertives  Ohiertives  Ohiertives  Ohiertives  Ohiertives	aber and Associate countries Snecific Targets
Dolomo	U.S.	Trandition		
Delarus	ING			
Czech Republic	Planning	There is a draft of the National Cycling Strategy which was submitted for governmental approval	<ul> <li>Encourage every day use</li> <li>Encourage leisure use</li> <li>Increase safety of cyclists</li> <li>Reduce bicycle theft</li> <li>Improve facilities</li> <li>Meet the needs of different user groups</li> </ul>	
Finland	Yes	"Cycling and Walking Policy Programmes" in March 2001	<ul> <li>Reduction of car use and integration/promotion of all sustainable modes of transport (cycling, walking and public transport)</li> <li>Reduction of environmental and health problems caused by transport (greenhouse gases, air pollution, noise, promotion of physical health and safety etc.)</li> <li>Reduction of environmental and health problems caused by transport (greenhouse gases, air pollution, noise, promotion of physical health safety should improve in the lon accordance with general road sa</li> </ul>	Qualitative target: Improvements in the quality, attractiveness and safety of cycling, and increased weight on it in transport policy decisions. Cycling should be more competitive vis-à-vis the private car and should be combinable smoothly and safely with the use of public transport Quantitative target: The amount of cycling taking place should have doubled by the year 2020 relative to the 1998-99 level, and safety should improve in the long term in accordance with general road safety targets

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Countries	Plan*	Description	Objectives	Specific Targets
France	Partially	There is no cycling plan per se to date, however legal texts require the promotion of alternative modes to the car. The possibility of a national cycling plan is under consideration (2004)	There is no cycling planReduce the use of cars, congestionper se to date, howeverof city centreslegal texts require theImprove air qualitypromotion of alternativeImprove air qualitymodes to the car. Thepossibility of a nationalcycling plan is underconsideration (2004)	None
Germany	Yes	National Cycling Plan 2002 to 2012 Ride your bike! Measures to promote cycling in Germany	<ul> <li>To increase the share of cycling in the Germany until 2012</li> <li>To promote cycling as an element of approx. 25 % like in the Netherlands a sustainable, integrated transport policy</li> <li>To promote modern, socially and environmentally compatible local mobility based on the concept of the "City of short distances"</li> <li>To improve road safety</li> </ul>	To increase the share of cycling in the total traffic volume from currently about 12 % to approx. 25 % like in the Netherlands
Hungary	Yes	"Position of cycle traffic and main directions of its development in Hungary"	<ul> <li>"Position of cycle traffic • Improve traffic safety situation and main directions of</li> <li>• Rise of cycle traffic modal share</li> <li>• Rise of cycle traffic modal share</li> <li>• Development of national and international cycling tourism</li> <li>• Stimulate healthy lifestyle</li> </ul>	Until year 2000 the total length of bicycle routes and paths separated from the road traffic could be risen to 2 000 km

Countries	Plan*	Description	Objectives	Specific Targets
Ireland	Partially		The Agreed ProgrammeReduce car use, relieve congestion,for Governmentimprove air quality, improve mobility,between Fianna Fáilimprove health, heighten road safetybetween Fianna Fáilimprove health, heighten road safetyand the Progressivefor cyclists and other road usersDemocrats (May 2002)includes a provision onthe subject ofCycleways andFootpaths outlining acommitment to invest inexpanding the nationalnetwork of cycleways	<ul> <li>For Dublin,</li> <li>The completion of the strategic cycle network</li> <li>The provision of cycle links to transportation nodes, retail and employment centres</li> <li>An increase in cycle parking, the provision of tourist and leisure cycling and the promotion of cycling</li> <li>A 350km (two-way) network comprising strategic, local and recreational cycle facilities will be completed by 2006</li> <li>To increase the proportion of short trips (up to 6 km) made by bicycle to 30% by 2016</li> </ul>
Japan	No	Local authorities are responsible for basic planning		
Latvia	Yes	"Cycle Transport Development State Program for 1999- 2015"	<ul> <li>To ensure systematic cycle transport development</li> <li>Development and maintenance of cycle transport infrastructure</li> <li>Co-operation with neighbouring countries and alignment with the European Cycle Route network (EuroVelo)</li> </ul>	<ul> <li>To ensure systematic cycle transport development</li> <li>Development and maintenance of cycle transport infrastructure</li> <li>Co-operation with neighbouring countries and alignment with the European Cycle Route network</li> <li>EuroVelo)</li> </ul>

Countries	Plan*	Description	Objectives	Specific Targets
Malta	Yes	Incorporated in the Reduce car use, rel master plan for the improve air quality restructuring of the road promoting tourism network	lieve congestion, , for leisure, for	None
Netherlands	No	Cycling promotion measures on a national level are part of the Mobility Management plan. The Ministry of Transport has developed a national strategy for cycling, the Dutch Bicycle Master Plan (BMP) (1990-1997)	Reduce car-use on short trips in favour No official goals of walking and cycling, relieve of congestion, improvement of air quality, reduction of fatalities in traffic, reduction of CO <sub>2</sub> and even an improvement of general health	No official goals
Norway	Yes	Part of "National Transport Plan (NTP) 2002-2011" Now developing a strategy for cycling policy	<ul> <li>Strengthen the role of the bike as a mean of transportation, especially in lager urban areas</li> <li>Make it more safe and attractive to choose the bike as a mean of transport transport</li> </ul>	None
Poland	No	A group of local authoriti national cycling plan	A group of local authorities and NGOs are lobbying for a national cycling plan	
Slovak Republic	Yes	Partly included in the National Action Plan of Environment and Health of Slovak Republic Inhabitants, II	Partly included in theIncreasing of transport safety,National Action Plan ofreducing the transport negativeEnvironment and Healthinfluence on environment, improvingof Slovak Republicmobility, reduce car use, relieveInhabitants, IIcongestion, improve air quality	None

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Countries	Plan*	Description	Objectives	Specific Targets
Slovenia	Yes	National Cycling Network Development Strategy in the Republic of Slovenia (2000)	<ul> <li>National Cycling</li> <li>Influence the change of the modal</li> <li>Network Development</li> <li>Strategy in the Republic</li> <li>Ensure the connection of the state with cycling routes as well</li> <li>Ensure the appropriate safety of cyclists</li> <li>Decrease in the negative effect on the environment</li> <li>Improve urban and suburban cycling connections</li> <li>Ensure connection with the international cycling routes of the market oriented style – tourism</li> </ul>	<ul> <li>By encouraging the interest in cycling and appropriately ensuring safer conditions and a basic cycling after conditions and a basic cycling infrastructure Slovenia aims to double the number of cyclists by the year 2005</li> <li>Building of at least 25km of independent cycling routes per year which means opening of one or two smaller independent cycling routes every year 100km of public roads per year, outside inhabited areas, which are also appropriate for cyclists and are designed for long-distance cycling surfaces in Slovenia according to regulations on the traffic signalisation and road equipment Putting into practice the common principle for marking of cycling surfaces in Slovenia according to regulations on the traffic signalisation and road equipment Putting into practice the common principle for colouring cycling surfaces for lower and the colourer.</li> <li>Stimulating and educating cyclists who ride to school</li> <li>By the year 2010, in the period of the next national programme, another doubling of the use of bicycles</li> </ul>

Countries	Plan*	Description	Objectives	Specific Targets
				<ul> <li>Establishment or building of the complete cycling network of about 2000km in the next 25 years</li> <li>A decrease in the number of accidents involving cyclists</li> </ul>
Switzerland	Yes	"Mission statement for human powered mobility (hpm)" (draft) in Dec. 2002 not only for cycling, but also on pedestrian traffic, hiking and inline-skating	<ul> <li>Establishing hpm as the third equal player besides public transport and motorised transport on the political agenda and on the road due to its economical and ecological advantages</li> <li>Improving living environments in cities as well as in rural areas</li> <li>Making mobility possible for people of all ages and abilities</li> <li>Taking profit of the economical efficiency of hpm</li> <li>Reducing energy use and ecological impacts of transport</li> <li>Encouraging physical activity of the population in order to reduce health costs</li> <li>Boosting leisure and tourism-industry</li> </ul>	Increase modal share of human powered trips ("étapes" of at least 25m distance) from 47% in 2000 to 54% in 2010 (increase by 15%)
Spain	No	Decision-making concern local levels	Decision-making concerning cycling is only at regional and local levels	

Countries	Plan*	Description	Objectives	Specific Targets
Sweden	Yes	The Swedish National Strategy for More and Safer Cycle Traffic (2000)	<ul> <li>To increase the safety for cyclists</li> <li>To increase the modal share of cycling</li> </ul>	Increase the modal share of cycling from 12 % of all journeys to 16 %
United Kingdom	Yes	National Cycling Strategy (1996)	<ul> <li>To increase cycle use</li> <li>To achieve convenient cycle access to key destinations</li> <li>Improve cycle safety</li> <li>Provide for increased cycle use within all local highways and traffic management schemes</li> <li>Cycle parking facilities to be available at all major destinations, including town centres, shopping developments, educational establishments, hospitals and leisure facilities</li> <li>Reduce cycle theft - by improving cycle security</li> <li>Raise awareness and expertise amongst transport providers, service providers and employers</li> <li>Unlock financial resources to meet the Strategy objectives</li> <li>Progress the National Cycling</li> </ul>	<ul> <li>Double the number of trips by cycle (on 1996 figures) by end 2002</li> <li>Quadruple the number of trips by cycle (on 1996 figures) by end 2012</li> </ul>

Cot	Countries	Plan*	Description	Objectives	Specific Targets
United States	ps s	Yes	<ul> <li>1994 National Bicycling</li> <li>Improve mobility and Walking Study</li> <li>Give people more 2000 National</li> <li>Strategies for</li> <li>Better connect bic</li> <li>Provide safer way</li> <li>Safety</li> <li>Improve safety</li> </ul>	<ul> <li>Improve mobility</li> <li>Give people more transportation choices</li> <li>Better connect bicycling and transit</li> <li>Provide safer ways to bicycle</li> <li>Improve safety</li> </ul>	<ul> <li>Double percentage of trips made by foot and bicycle</li> <li>Reduce number of crashes involving bicyclists and pedestrians by 10%</li> </ul>
*	A natio	nal cyclir policy d	ng plan is not necessarily a ocument or part of a larger	A national cycling plan is not necessarily a separate document. The column shows separate policy document or part of a larger transport policy planning document	A national cycling plan is not necessarily a separate document. The column shows "Yes" when a cycling policy plan is either a separate policy document or part of a larger transport policy planning document

## 3.2. Key Objectives and Characteristics of National Policies and Plans

#### Key Objectives and Specific Targets

Cycling policies described in the 20 replies to the questionnaire have various aspects such as mobility, transport safety, environment, and health. Table 3.2 shows key objectives for national cycling policies as cited by countries responding to the questionnaire.

Objectives	Number of Countries
Promoting traffic safety	11
Reducing environmental problems/Improving air quality	9
Strengthening the role of bicycles as a means of transport/Increasing the modal share of cycling	8
Reducing congestion/car use	6
Improving mobility	6
Promotion of physical health/ Reduction of health costs	5
Promotion of leisure/tourism	3
Development and maintenance of infrastructure	2
Integration of all sustainable modes of transport	2
Reduce cycle theft	1

### Table 3.2. Key Objectives of National Cycling Plans

Improving safety and the environment appear at the top of the list of objectives for cycling policies within Transport Ministries, according to the survey. These key objectives are followed by increasing cycling's modal share, reducing congestion, improving mobility and promoting better physical health.

Out of the 14 countries that cite the existence of a national plan in some form, 10 countries have set specific targets in these plans, according to the survey.

Specific quantitative targets to increase the amount of cycling travel or the modal share of cycling are set in Finland, Sweden, Switzerland, the United Kingdom and the United States. The United States also has a quantitative target concerning safety, specifically to reduce the number of accidents involving

cyclists. Finland cites a number of qualitative targets including for improved safety. (These targets are described in Table 3.1.)

## Planning Process: Co-ordination among Relevant Bodies

As shown in Table 3.2, cycling promotion policies have a variety of objectives, including increasing cycling as a means of travel, as well as objectives related to environment, safety, health, and tourism. For this reason, not only Transport Ministries but also other national government bodies as well as regional and local governmental bodies are implicated in the cycling policy planning and implementation process. Industry and NGOs, as noted earlier, have their roles to play as well.

In order to bring together and co-ordinate the variety of actors and interests in cycling policy development, a number of countries, notably the UK, Finland and the United States, have formed steering committees or working groups, coordinated by the Ministry of Transport, with participants from government, NGOS, and industry among others.

## The United Kingdom

The National Cycling Strategy (NCS) was adopted in 1996 as a consensus document, the fruit of a co-operative initiative involving public and private entities as well as NGOs and associations.

The NCS process was overseen by a Steering Group under the Chairmanship of the Minister for Local Transport. It drew together representatives from the Department for Transport, the Scottish Office, the Welsh Office, the Department of the Environment, the Department of Health, the Association of County Councils, the Association of District Councils, the Association of Metropolitan Authorities, the Association of London Government, the Confederation of Scottish Local Authorities, the Confederation of British Industry, Transport 2000 and the Cyclists' Public Affairs Group.

The Steering Group set the following Objectives and Terms of Reference for the process.

## **Objectives**

- To establish a culture which favours the increased use of bicycles for all age groups.
- To develop sound policies and good practice.

• To seek out innovative, practical and effective means of fostering accessibility by cycle.

## Terms of reference

- Ascertain existing constraints to cycle use and develop means of removing them.
- Identify mechanisms and actors for encouraging, facilitating and establishing bicycle use.
- Unlock necessary private and public sector resources.
- Agree targets and indicators of progress.
- Monitor and evaluate the strategy's implementation.

Five main areas of concern were pursued in depth by four Working Groups set up by the Steering Group and the Steering Group itself:

- The value of identifying both national and local targets for increasing cycle use.
- Land use planning and the integration of travel modes, for cycling and sustainable transport.
- Integrating cycling within traffic management practices.
- Improving the safety of bicycles.
- Promoting cycling and changing attitudes.

Additionally a model framework for local cycling policies was developed. It covers the existing statutory process for planning and transport, and is commended to local authorities.

# Finland

The first national cycling programme for the encouragement of cycling in Finland in 1993 was prepared by a Working Group chaired by the Ministry of Transport and Communications with representatives from the Ministry of the Environment, Central Organisation for Traffic Safety for Finland, municipalities, regional councils and various NGOs.

However, as the objectives of the first programme had not been fully achieved, the "Steering Group for Cycling and Walking", established by the Ministry of Transport and Communications to promote non-motorised transport in November 1999, decided to establish a special Working Group to prepare a new cycling programme. The Working Group consisted of representatives from the following organisations: Ministry of Transport and Communications, Ministry of the Environment, Ministry of Social Affairs and Health, City of Helsinki, Association of Sustainable Transportation, Central Organisation of Traffic Safety and Road Administration.

The Ministry of Transport and Communications is responsible for transport policy and national transport system planning. In this respect, the Ministry has been in charge of defining the cycling strategy (as well as strategies for walking and public transport). It also has overseen the National Road Traffic Safety Strategy, one of the aims of which is improving the safety of cycling. The Ministry has a co-ordinating role in the implementation of the cycling programme, as well as follow-up and monitoring.

Other players include:

- Road Administration: Planning of road traffic infrastructure including cycling. Also in charge of improving the road traffic safety and improving environment.
- Road Enterprise: Construction of road traffic infrastructure including cycling paths.
- Ministry of the Environment: In charge of land use planning and policy. In this context the Ministry aims at promoting such urban and regional structure that provides good possibilities for cycling, walking and public transport.
- Ministry of Social Affairs and Health: Promoting the health and wellbeing of citizens. The role of cycling and walking has been recognised as one of the most important modes of physical exercise in Finland.

Ministry of Education: In charge of planning and developing physical exercise education.

- Ministry of Trade and Industry and National Board of Tourism: In charge of preparing a national plan to promote cycling tourism.
- Municipalities: In charge of promoting cycling and developing cycling conditions (including cycling paths and improvement of cycling traffic safety) at the local level inside of urban areas. When building and maintaining the transport infrastructure and services inside urban agglomerations, they are also in charge of constructing, maintaining and developing the cycling network.

 NGOs: Non governmental organisations such as Association for Sustainable Transportation (Suomen liikenneliitto), Association for Nature Protection (Suomen luonnonsuojeluliitto), Association for Exercise out-of-doors (Suomen Latu) and Association for Cycling (Suomen pyöräilyjärjestö) participate actively in campaigns that aim at promoting cycling (such as Cycling Week in May).

### The United States

In 1991, the US Congress commissioned the US Department of Transportation (US DOT) to conduct a National Bicycling and Walking Study. The study was led by the US Federal Highway Administration (US FHA) with assistance from the University of North Carolina's Highway Safety Research Centre. Over the study's two years of planning and development, meetings were held with a wide variety of stakeholders including state and local governments, federal agencies, user groups and other interested parties. The study was approved by the US DOT and transmitted to Congress on April 22, 1994. It includes a detailed Federal Action Plan with 64 specific action items, and a recommended action plan for state and local governments.

The US DOT has the lead on implementing the plan and administering the various funding and other transport programs that can be called upon for its implementation. Under the provisions of the plan, the US DOT co-ordinates the activities of its various agencies - FHA, Federal Transit Administration, National Highway Traffic Safety Administration and others. The US DOT has also established an Interagency Task Force on Bicycling and Walking that has met quarterly since 1994. Representatives from all other relevant federal departments and agencies are invited to participate in the Task Force, including Health, Education, Defense, Interior (National Parks), Agriculture (Forest Service), General Services (Federal buildings), and the Environmental Protection Agency. National and local user groups are also invited to participate in these meetings. The US DOT has encouraged state Departments of Transportation to apply the targets set in the Federal Plan (doubling the percentage of trips made by foot and bicycle; and reducing the number of accidents involving bicyclists and pedestrians by 10 percent) as their guideline for State cycling plans and programmes.

### Monitoring and Evaluation

The process of monitoring the implementation of cycling plans and evaluating the effectiveness of cycling policies is in its relatively early stages of development in most countries. This is probably because cycling plans and policies are relatively recent as a focus of explicit transport policy, with growing recognition of their potential to contribute to sustainable travel. Governments have traditionally put higher priority on policies to manage car use and enhance public transport, often paying only marginal attention to nonmotorised travel. Therefore, systematic monitoring and evaluation of cycling plans and policies remains in most countries a challenge for the future.

Another factor in the somewhat nascent status of monitoring and evaluation of cycling policy is that statistics on bicycle use (expressed in passenger-kilometres or number of trips) – essential for monitoring progress towards targets and evaluating the effectiveness of policies – are scarce, incomplete or not available in most countries. For monitoring and evaluation of cycling policies to improve, more systematic data collection and management is necessary.

Several countries, however, have established clear monitoring and evaluation systems for cycling policy. For instance, the UK has established the National Cycling Forum to ensure that national and local policies are contributing to increases in cycling in line with the NCS. This Forum is chaired by the Minister for Local Transport and is attended by representatives from organisations across the UK. The Forum meets regularly and publishes an annual review of progress in implementing the NCS.

In the United States, the Interagency Task Force mentioned in the previous section meets regularly to consider and review implementation of the plan.

Via the Federal "Mikrozensus" polls carried out every 5 years, Switzerland tracks progress in reaching its target of increasing modal share of humanpowered trips by 15% from 2000 to 2010. Norway plans to improve the monitoring of modal split at a national level and in specific towns and cities by establishing 24 counting stations around the country and performing traffic surveys.

As for the evaluation of policy effectiveness, Norway conducts analysis of the impact of cycling policies both within the Ministry of Transport and in the Public Roads Administration. This analysis has included that of the costs and benefits of building cycling paths in some specific cities (Hokksund, Hamar and Trondheim). In Sweden, the National Road Administration has initiated a research and development-project with the aim to create a handbook for effective cost-benefit analysis of cycling investments.

In the Netherlands, the Dutch Cyclists Union initiated in 1999 a long-term benchmarking project entitled the Cycle Balance. Funded by the Ministry of Transport, Public Works and Water Management, the project is designed to evaluate the effects of policy efforts by local authorities and to encourage improvements in cycling policy. The Cycle Balance assesses 10 different dimensions for cycling: directness, comfort (in terms of obstructions), comfort (in terms of road surface), attractiveness, competitiveness, bicycle use, road safety of cyclists, urban density, cyclists' satisfaction and cycling policy on paper.

#### Note

1. The 2002 target was not achieved. According to the UK Department for Transport, it became clear that more preparation was needed than originally anticipated. In addition, the improved infrastructure for cycling provided by increased Local Transport Plan funds for local authorities took time to be introduced. The 2012 target is still believed to be achievable. The 2012 target fits well with the Department for Transport target in the 10-year Transport Plan to treble cycling by 2010.

#### Chapter 4

# CHALLENGES TO EFFECTIVE POLICY-MAKING AT A NATIONAL LEVEL

Although a number of countries are making progress in promoting cycling travel with a national plan, as shown in previous chapters, difficulties persist in the process of planning and implementing cycling promotion policies. This chapter highlights some of the main challenges at a national level, based on concerns provided by the Transport Ministries in Member countries.

#### 4.1. Financial Constraints

Since cycling is relatively a minor measure in urban travel policy issues, it is difficult for the governments to allocate large part of their budget to cycling. As seen in Chapter 2, the amount spent for cycling is very limited. The governments always have higher priorities such as development of public transport facilities. On the other hand, some cycling policy measures such as infrastructure development require significant financial resources.

In Finland, the acknowledged and increasing role of cycling in the country has not led to a big increase in financial contribution on cycling. The governmental and local budgets are mainly built on the basis of existing and ongoing investments and outcomes. Therefore, new policies, such as investments for cycling have not managed to increase their share in public funds that much. There is little information available on the health and environmental impacts of cycling (particularly as concerns costs and benefits, including external ones), and exact statistical information, which could be used to communicate the benefits of cycling to the public or to monitor the implementation of cycling policies.

Similarly, the Czech Republic, Sweden, Norway, and Latvia point to the problem of lack of financial resources for cycling infrastructure and measures to promote cycling.

## 4.2. Institutional Barriers

Cycling policies have a variety of objectives and involve many actors including Transport Ministries, other national governmental bodies, regional and local authorities. Lack of co-ordination, both horizontally and vertically, can cause biased policy planning and implementation problems. Also, lack of national-level commitment, leaving responsibility for cycling policy exclusively at the level of local authorities, can cause lack of impetus to promote cycling, inadequate financial and other resources, unequal development among cities, and an incomplete inter-urban network.

There are basically three classes of roads in Norway: national roads, county roads, and municipal roads, with three different "owners". Norway points out that due to this specific arrangement of the road systems in Norway, problems may arise regarding the administration of the road network including the development of cycle paths, and therefore the government feels more co-operation between the different levels of authorities is necessary.

Similarly, Latvia mentions the lack of a co-ordinating body for cycling policies at the national level. Tasks are not clearly delegated to specific institutions, or authorities. As a result, initiatives to promote cycling have fallen mainly to cycling associations and enthusiasts.

France points out that the absence of a strong policy message from the national level on cycling and weak commitment from the central government to cycling issues has been a hindrance to developing cycling in France. When cycling policy is based entirely on the initiative of the local communities, initiatives to improve cycling vary greatly from region to region, city to city.

Switzerland indicates that its federal system has lacked a legal basis for a national cycling policy so far, and the government plans legislation to steadily implement its cycling policies.

### 4.3. Safety Concerns

Safety concerns – both real and perceived – are often cited as a key barrier to promoting cycling as a means of travel. The vulnerability of cyclists as they interface with motorised transport on roadways arises from chaotic traffic conditions, driver behaviour that does not consider the place of the cyclist on the road space, and lack of understanding on the part of both cyclists and individual car drivers as to how to conduct themselves in shared traffic conditions.

Malta points out that present traffic conditions and driver behaviour are not conducive to the safety of cyclists.

The UK raises safety fears as a main barrier to increased cycling: for example, parents are often unwilling to let their children cycle to school because of road safety concerns.

Several targeted initiatives have been developed to address these fears and their underlying safety problems: for example, a package of practical and educational measures entitled *Safe Routes to Schools* was designed to encourage children to cycle and walk to school by improving safety throughout the journey. Measures include reducing speeds and volumes, re-allocating road space, raising awareness of other road users and sponsoring bicycle training/road safety campaigns.

The Swedish National Road Administration is encouraging increased cycling while also promoting enhanced safety for the cyclist, and these two goals are proving sometimes difficult to reconcile. The National Road Administration is, for example, working in favour of a mandatory bicycle helmet law. A number of NGOs and cycling associations have expressed their opposition to such a law, citing evidence from studies that show a decrease in cycling activity in addition to more dangerous cycling conditions in some circumstances should wearing helmets be rendered obligatory. Moreover, there is concern that the proposed legislation could lead to conflicts with the bicycle industry and cycling organisations<sup>1</sup>.

### 4.4. Insufficient Understanding of Technical Issues

Better engineering can improve cycling conditions by making cycling infrastructure network safer, more convenient, and more complete. Measures include, for example, advanced stop lines for cyclists at traffic signals, one-way streets with contra-flow cycle lanes, rumble devices for traffic calming, and so on. However, technical understanding of cycling infrastructure issues is not always adequate and guidance documents to share technical information are not always available to traffic planners. Consequently, design is often flawed or cycle infrastructure is of poor quality leading to conflicting interfaces between cyclists, car drivers and pedestrians. Further, there is often a lack of continuity of networks, and road junction design that can endanger cyclists.

### 4.5. Scarcity of Road Space

Scarcity of road space is cited as a common challenge for developing cycling infrastructure in many cities, especially in Europe. Combined with

scarcity of financial resources, the constraint makes it difficult to provide adequate cycling infrastructure.

Sweden states that there is a lack of space available for the development of cycle paths and infrastructure in cities. In addition, there is often resistance to giving more space to bicycle use – this is a persistent problem necessitating the arrival at compromise among the parties involved.

Malta points out that its roads are generally too narrow to allow for the allocation of space to cycle paths. The desire to introduce dedicated bus lanes encounters the same constraint. In dense urban areas the difficulty has not been overcome, however in other areas included in Malta's Roads Master Plan, the road space problem is being overcome by introducing cycle paths when existing roads are renovated or new roads are built.

#### 4.6. Lack of Public Awareness

Although the benefits of cycling as a mode of transport for short distances are gaining wide recognition, cycling is still perceived in many countries only as a sport, leisure, or children's activity.

Poland, for example, notes that much remains to be done to improve the awareness of cycling as an environmentally sound and relatively inexpensive mode of transport. In Poland, as in other countries, cycling has been perceived as the "poor man's transport" or as a form of sport. There is, for the moment, no organised representation of cyclists' interests in Poland, nor is there an organised effort to draw on good practice in cycling in other countries to improve bicycle use in Poland. However, recently some actions have been taken at the local level and by NGOs to improve the awareness of cycling as a mode of transport. As a result of these initiatives, cycling is slowly gaining some recognition as a mode of transport in Polish cities.

Malta indicates that, at present, the Maltese do not have a "cycling culture" – bicycles are used only for fun by children and for sport. In fact, bicycles are owned mainly by children and youth under the age of 18, at which point their transport interests rapidly switch to car ownership. The government feels the necessity to promote the benefits of cycling, once good infrastructure facilities are developed and the general standard of road safety and environmental protection in urban areas reaches a high enough level.

#### Note

1. Though helmets are widely accepted as reducing the severity of head injuries, the issue of mandatory requirements for helmet use has been controversial for a long time. *PROMOSING*, a research project commissioned by the European Union and coordinated by the SWOV Institute for Road Safety Research (2001), suggests that from the point of view of restrictiveness, even the official promotion of helmets may have negative consequences for bicycle use, and that to prevent helmets having a negative effect on the use of bicycles, the best approach is to leave the promotion of helmet wear to manufacturers and shopkeepers. The report entitled *Head Injuries and Helmet Law for Cyclists* by Dorothy L. Robinson, Bicycle Research Report No. 81 (March 1997) shows that the main effect of the introduction of the general helmet law for cyclists in Australia was a drop in bicycle use.

#### Chapter 5

#### HOW CAN NATIONAL LEVEL COMMITMENT BE HELPFUL?

This chapter explores how national-level commitment can be an important factor in the promotion of cycling. The information for this chapter was gathered from countries based on a request for empirical evidence of the effectiveness of national initiatives in bicycle-oriented countries; the views of local authorities about the necessity of national level commitment were solicited in interviews of seven European cities. And based on this information gathered, possible roles for the national government, particularly of the Ministry of Transport, are proposed.

# **5.1.** National-Level Commitment - Experiences in the Netherlands and Denmark<sup>1</sup>

The Netherlands and Denmark have extraordinarily high modal share of cycling, thanks at least in part to long-term, committed national support in favour of cycling. In the two countries, the bicycle is one of the principal means of travel in cities, with a strong recognition that cycling is an important aspect of urban travel. There is much to learn from the intensive support of cycling in the two countries. This section shows empirical observations on why the national-level commitment has been so helpful in the two countries.

#### The Netherlands

In 1990, the Dutch Ministry of Transport developed a national strategy for the promotion of cycling, the Dutch Bicycle Master Plan (BMP) (1990-1997). The BMP was comprised of 112 projects to be carried out over the period, including 31 research projects and 41 pilot projects involving the improvement of bicycle routes, safety, and parking conditions in and around public areas as well as initiatives to reduce bicycle theft.

The Ministry considers that the value of the BMP was less in the results of the projects themselves than in the general recognition of **a national bicycle policy**, offering a clear-cut vision for cycling throughout the country and backed up by a national subsidy scheme for constructing bicycle facilities. The very existence of the BMP and the Ministry's decision to carry out numerous projects and activities demonstrated to a variety of stakeholders the Ministry's strong commitment to cycling; as a result, bicycle policy rose up the political agenda. It is clear that the BMP's influence was significant, in that by 1996, most municipalities had developed high-quality bicycle plans of their own.

The objectives and strategies of the BMP were adopted in the Second Transport Structure Plan (SVV2), which came into effect in June 1990. The main objective of the SVV2 was to halve the expected increase in car use. A five-part strategy was developed to reach this goal, one element of which was improving alternatives to car use. The BMP was developed in this context.

In developing and implementing the BMP, bicycle policy was regarded as an inextricable part of transport policy as a whole. Cycling policy was not considered an objective in and of itself, but rather as a means of contributing to solving transport problems, in particular, growth in car use. Through the BMP, the Netherlands established cycling schemes as **an integral part of transport planning**. Moreover, an integrated policy approach was taken, with spatial planning, environmental and recreational aspects integrated into the BMP.

Also important in the Dutch example is the **decentralised approach** taken in the development and implementation of the BMP. The Ministry of Transport's project group recognised early on that the role of Central Government in defining the details of local cycling policy and plans was limited: given the nature of cycling as a short-distance travel mode, municipalities and provinces were better placed to design and implement detailed cycling measures.

From the outset, interested parties including local and provincial authorities, consumer groups, bicycle industry associations, as well as and public transport operators were consulted on the different aspects of the BMP. In addition, the VERDI agreement of 1996 transferred greater responsibility for bicycle policy in urban areas to the provinces and municipalities. This did not, however, mean that cycling policy ceased to be a priority at a national level. The BMP project group considered that **decision-making at a national level** – especially, with regard to appropriating funds for research, and pilot and model projects – was essential to ensure a co-ordinated approach to cycling policy among cities, and to make certain that the money intended for innovation would actually get spent on projects breaking new ground. The central decision-making process also made it easier to monitor progress and evaluate the results of pilot and model projects.

Via the BMP, the government gave significant **financial support** to the improvement of cycling facilities and conditions in line with the objectives of the SVV2. The existence of a special "bicycle article" of the Road Traffic Facilities Contribution Regulation, the central government's means of subsidising infrastructure for bicycle traffic, sent a clear signal that the Ministry of Transport believed bicycle infrastructure to be of importance. This had a favourable influence on the attention paid to bicycle traffic. Over the BMP's seven-year life, Gld 303.6 million of central government funds was expended on cycling projects. In addition to this expenditure, about Gld 271 million were transferred to municipalities and provinces for their cycling projects. Since the time of the BMP, an additional Gld 460 million has been funded for the period 2000-2007 for improvements to bicycle parking facilities at railway stations.

One of the key objectives of the BMP was **to develop and disseminate knowledge** about bicycle use **and instruments** to promote cycling to relevant target groups. The BMP project group considered the central task of the national government to be to increase understanding of cycling through various research, pilot and model projects, and subsequently to facilitate the development of bicycle measures by local authorities.

The BMP Policy Document summarises the role of the national level in cycling policy as follows: "the role of the State is initially of a catalytic nature. The State aims for an integral approach in promoting bicycle traffic, stimulates innovative developments, collects and distributes knowledge, makes financial contributions, sees to legislation and the issuing of regulations and creates a broad basis for bicycle policy by the government (municipalities, transport regions, provinces, ministries, including the Ministry of Transport) and private organisations by means of public relations, model projects and consultation."<sup>2</sup>

#### Denmark

Denmark's National Bicycle Action Plan consists of three parts. The first, "Cycling into the  $21^{st}$  century", contains the political aims for bicycle traffic in Denmark, formulated jointly by the National Association of Local Authorities, the Association of County Councils in Denmark and the Ministry of Transport. It sets out the political goals for better towns and healthier citizens and proposes measures to bring about more cycle trips, greater road safety and fewer car trips. The second part is "Promoting safer cycling – A strategy" developed by the Ministry of Transport. The strategy combines measures for the benefit of all cyclists, with specific campaigns targeting certain groups (e.g. children and youth). The third part of the plan, "Collection of cycle concepts", was prepared by the Road Directorate and is aimed at officials in county councils and local authorities.

The Ministry of Transport intended that the national strategy would **inspire and motivate** county councils, local authorities and other participants to set targets and establish action plans for bicycle traffic together with concrete measures for the promotion of safer cycling.

**Co-operation and dialogue** are regarded as essential in order to achieve modal switching for short-distance journeys from car use to cycling and walking. According to the Plan, concerted and focused effort is required on many different fronts to achieve this goal, involving a wide variety of stakeholders and administrations. The Ministry states that the promotion of bicycle traffic is not simply a task for the technical directorates of regional and local government, but a task involving the efforts of many others: social and health authorities, local politicians, schools, interest groups, companies, public transport operators, sports clubs, medical doctors (in general practice) and individual citizens themselves. The **co-ordination** of all these stakeholders is crucial.

The "Collection of Cycle Concepts" mentioned above, commissioned by the Ministry of Transport and produced by the Road Directorate, was developed as a means of **disseminating knowledge and information** on cycling planning and design to officials in county councils and local authorities. The "ideas catalogue" contains suggestions and advice on how bicycle traffic can be promoted in local areas, both through optimal planning for cyclists and though the production of local action plans for bicycle traffic.

Another initiative of the Ministry was "a national cycle town," a cycling laboratory where different ideas and practices to promote cycling can be tested and evaluated together. The results of experiments can be passed on to other Danish cities and towns. The Ministry's Traffic Pool is financing a total of DKK 20 million in various tests in Odense. The so-called "cycle town" is a display window for the government's bicycle strategy. Trials will be carried out in the cycle town involving high-speed routes for cyclists, the participation of companies in promoting cycling, and a massive campaign to improve the image of cycling.

The Ministry has also established "a bicycle ideas group", a forum whose objective is to encourage new cycling research and new initiatives to promote bicycle use, and exchange knowledge and information on cycling. The group is composed of representatives from the Ministry, the Danish Environmental Protection Agency, the Road Traffic Board, the Road Directorate, the Danish Cyclists Federation, the Police, the Danish Tourist Board, the National Association of Local Authorities, the Association of County Councils in Denmark, the Technical University of Denmark, Aalborg University and the Danish Cycle Trades Association.

The government is implementing a long-term and systematic countywide **information campaign** in order to promote everyday use of the bicycle. An important target group is motorists with a positive attitude to bicycle traffic. The campaign intends to make more people aware of the health and environmental advantages of bicycling as a means of transport in urban areas and of the negative effects of car use for short trips.

For many years, the Danish government has earmarked **funds** for improving the conditions of cycling. An extra DKK 25 million was set aside in the Road Directorate's 2000 budget for investments to promote cycling and road safety. The funds can be used for improvement of the national road network as well as in joint investment schemes for county and local council roads.

In addition to these actions, the Danish government is working to strengthen the bicycle's position in urban travel through a combination of initiatives including revision of the **regulations** governing urban roads, the "Collection of cycle concepts", and through **guidelines and recommendations** on cycling to county and local authorities.

### 5.2. Policy Implementation at Local Level

As noted earlier, cycling is primarily a means for short-distance travel in urban areas, and as a result, responsibility for the design and implementation of individual measures to promote cycling falls most appropriately to local authorities. Even in cases where the general policy framework and goals are provided at national level, cycling policy tools and measures must be designed and tailored to fit the needs of individual local conditions, which can be very different from city to city.

A recent study<sup>3</sup> examining the implementation of walking and cycling policies within British local authorities shows that national policies have had a very strong influence on the ways in which implementation has taken place. Based on a survey of 92 local authorities in the UK, the study sought to identify the most important factors influencing local policy implementation. Table 5.1 below shows the three most important factors contributing to the adoption of local cycling policies and those hindering and helping their implementation. The respondents were asked to rank factors according to their perceived importance on a scale of 1 = very important/significant to 5 = not at all

*important/significant*. Thus low average scores indicate a high perceived level of importance.

In the table, the top two factors determining local policy implementation come from national policy makers. The biggest factor hindering implementation was considered to be a lack of resources – staff and funding. Since most capital funding for local transport measures is allocated by the national government, decisions taken at the national level have a significant impact on implementation at a local level. As for the factors helping implementation, two out of the top three factors are national policies again.

The study also points out that all main national policy documents which deal with walking and cycling policies were identified as important factors in local policy adoption and implementation, and that cycling is much better promoted within the national policy framework. Moreover, the absence of a national strategy for walking is likely to be a significant barrier to progress in this area.

Factors	Mean score
Factors contributing to policy adoption	
Local Transport Plan/Strategy requirements	1.90
National Cycling Strategy	1.91
Committed/motivated officer(s)	2.04
Factors hindering implementation	
Lack of staff time	1.93
Lack of staff	2.14
Lack of funding	2.34
Factors helping implementation	
Committed/motivated officer(s)	2.00
Other national transport strategies/policies	2.26
National policy framework for cycling	2.30

Table 5.1. The three most important factors contributing to the adoption of<br/>local policies and hindering/helping their implementation<br/>(scores ranged from 1 to 5)

In the context of the present ECMT study, municipal authorities in Europe were asked to provide their views on the role of national governments in cycling policy: How have the national level cycling policies been helpful in implementing local cycling policies so far?; and how could the national level policies be more helpful in the future? Table 5.2 shows a summary of the local views provided by the 7 cities.

It is not surprising that most cities expressed wishes for more financial and legislative support by the national government. Generally speaking, many municipalities have some level of fiscal deficit, and therefore it is not easy for them to invest in large infrastructure projects. National-level legislation could include commitment to infrastructure development, standards for cycling facilities and regulations for safety.

The existence of a national plan is strongly supported by local authorities. In Berlin, city authorities indicated that support – mostly "moral support – for local cycling promotion is emanating from the national cycling plan, even though financial resources allocated by the plan are limited. Helsinki officials said that they also highly value the existence of the Finnish national plan. In the Netherlands and Italy, where there are no specific national cycling plans at this moment, authorities in Zwolle (Netherlands) noted their hopes for a more prominent position of cycling in the new national transport policy with a follow-up to the Dutch BMP. In Ferrara (Italy) officials expressed wishes for a national cycling plan.

In summary, even though cycling is primarily a local mode of transport, national policies can be determinant in the policy implementation process by local authorities. The national policy framework or strategy, financial resources and legislation to improve cyclists' conditions, are the key areas for national policy action that local authorities feel would be helpful in local policy implementation.

#### **5.3.** The Role of the National Government

One of the principal conclusions of the ECMT's *Final Report on Implementing Sustainable Urban Travel Policies* is the need to establish a supportive national policy framework, which supports and influences national, regional and local goals for land-use, passenger and freight transport, and health and the environment, with vertical and horizontal co-ordination<sup>4</sup>. This applies to the cycling policies as a component of urban travel.

City	Cycling Profile	How the national government has been helpful to implementation in the past	How the national government can be more helpful in the future
Basel, Switzerland	Planning and construction of bicycle facilities with a strategic paper "Bericht 8019" (1987) Initiatives include separated bicycle tracks, one-way streets opened for two-way bicycle traffic, "Bike and Ride" scheme with bicycle parking at stations Modal share 8.5%, higher than Swiss total of 6.0% in 2000	E E E E	Financial support Legislation concerning improvement of cycle traffic
Berlin, Germany	Modal share around 10% in 1990s. Aiming at about 15-20% in 2015 Initiatives include development of cycle route network and traffic calming	"Moral support" from the national cycling plan, released in 2002 Financial assistance and legal improvements are limited	Financial and legislative framework
Ferrara, Italy	140 000 inhabitants and 100 000 bicycles. More than 30% of trips are made by bicycle*. "Bike Plan" for developing a complete bike network	In the past the national government adopted a planning law to finance infrastructure in favour of bicycle mobility	Preparing a bicycle national plan and financing

Table 5.2. The role of the national government in cycling policies from the perspective of the local government

City	Cycling Profile	How the national government has been helpful to implementation in the past	How the national government can be more helpful in the future
Helsinki, Finland	The city has a promotion programme and a bicycle officer aiming to double cycling use	The first national programme in 1992 The renewed national programme in 2001 and the "Jaloin" project which contains research and developing projects	Continuation of promotional projects Financial support
Odense, Denmark	Improving cycling infrastructure Conducting regular events and campaigns to promote cycling	The government granted Euros 1.4 million to the project "Odense - Denmark's National Cycle City"	Needs a national health plan integrated with cycling so that cycling promotion will become part of the overall health strategy. Funding for local cycling initiatives
Reading, UK	The city has a strategy and action plan with specific targets. Measures include developing cycle friendly networks and parking, encouragement and monitoring	Publication of "Guidelines for Cycle-Friendly Infrastructure"	Taking account of the needs of cyclists in designing improvements to highways and new highway schemes

City	Cycling Profile	How the national government has been helpful to	How the national government can be more helpful in the
		implementation in the past	future
Zwolle,	Modal share of cycling almost	The national government gave	More financial support
Netherlands		cycle use a high priority in	More dominant position in
	High marks for an attractive	national policy e.g. by the	national policy. A follow-up to
	network of bicycle routes	national master plan	the Dutch Bicycle Master Plan.
	The policy is integrated inter-	Financial assistance	Legislation for proper bicycle
	sectorally between different		parking facilities
	policy fields		
	Active participation of citizens		
	and politicians		
	Intensive use of knowledge		
	developed by the national policy		
* D 78 Furonean	Commission (2000)		

\* P 28, European Commission (2000).

While regional and local authorities bear the primary responsibility for detailed planning and implementation of cycling policies and measures, national-level commitment is important in setting the right legal, regulatory and financial framework so that successful implementation of cycling initiatives can take place. Following is a list of ways the national government can support and promote cycling in urban areas.

#### Co-ordinate promotion of cycling with other policy objectives

The national government should provide a basic policy framework for cycling that provides for balance among the interests of different policy objectives, and that local authorities can use as a policy context for cycling initiatives. Vertical and horizontal co-ordination among levels of government and among different sectors (particularly health, environment, land use as well as transport) is essential. Cycling and walking should be fully considered as integral parts of transport planning at all levels of government.

# Propose legislation, regulations, and guidelines to support implementation of cycling policies

In its report *Safety in Road Traffic for Vulnerable Users*, the ECMT stressed that bicycle-related facilities must be standardised at national level, since this will encourage both cyclists and other road users to behave in the same way, i.e. they will be better able to recognise such facilities, identify traffic conditions and thus better appreciate the potential risks they may face. While every cycling facility must be tailored to local conditions, it is important to ensure that approaches in the design of facilities are standardised to the greatest extent possible at a national level so that other road users will readily recognise the presence of cyclists on the road.

# Use financial and other instruments to provide incentives for and facilitate cycling initiatives by regional/local authorities

Significant levels of investment are needed, particularly for the development of proper facilities for cycling. Financial support by the national government can be of great assistance as seen in 2.1 and the previous section.

### Monitor and evaluate measures implemented by regional/local authorities

Setting a specific target in a national plan could give impetus to local authorities for implementation of cycling measures and enable monitoring of progress in reaching cycling objectives. It is very difficult, however, to evaluate the effect of a particular policy measure. More systematic methodologies are needed for good evaluation to take place.

## Conduct research and dissemination of knowledge and information

Promoting research and sharing knowledge is a key role of the national government. The experience of the Netherlands and Denmark is particularly illustrative of the effectiveness of this.

#### Notes

- 1. This section relies on the information in Ministry of Transport, Public Works and Water Management, The Netherlands (1999), Ministry of Transport, Denmark (2000), and Road Directorate, Denmark (2000).
- 2. P 52, Ministry of Transport, Public Works and Water Management, The Netherlands (1999).
- 3. Philine Gaffron (2003), *The implementation of walking and cycling policies in British local authorities.*
- 4. pp. 45-46 of the Final Report.

#### Chapter 6

#### CONCLUSIONS

Cycling presents many advantages as a short-distance transportation mode in urban areas: it can contribute to relieving congestion in city centres by reducing car trips; it is truly environmentally friendly, providing mobility free of  $CO_2$  emissions, pollutants or noise nuisance; it has a positive effect on physical health; and bicycles themselves are mostly available to people of any income level. For these reasons, there is widespread agreement that a modal switch from private vehicles to cycling for short distance trips is an important factor in moving towards sustainability in urban areas.

Cycling can also comprise an important link in an inter-modal journey throughout the urban transport system. With the assurance of adequate interfaces between cycling and public transport trips, for example – including the accessibility of cyclists to public transport stations and vehicles as well as the availability of safe bicycle parking at rail and bus stations – cycling can constitute the necessary complementary legs of an inter-modal journey.

It is clear that measures to increase cycling – applied in isolation – will not bring about sustainability in urban travel. In combination with policies to enhance public transport, manage car use, and integrate land use and transport planning, however, measures to promote cycling constitute a potentially powerful element in an integrated package of policies towards sustainability of urban travel.

Relative to other transport modes, cycling, along with walking, has until recently been considered by decision-makers only in the margins of urban transport policy development. While evidence in countries shows that this is evolving, authorities at all levels of government need to more fully recognise the benefits of de-marginalising non-motorised modes and focus on the benefits they can bring to enhancing the sustainability of urban travel at sometimes relatively little cost.

Cycling is primarily a means of local, short-distance transport. Therefore specific measures to promote cycling in urban areas are best designed and implemented at a local level. However it is increasingly recognised that the national level can play an important role in creating the right policy framework for encouraging the development of cycling in urban areas. Evidence of this is found in the increasing number of countries that are developing national cycling plans, strategies and policies.

This study does not prove statistical correlation between an increase in the modal share of cycling and the existence of national cycling plans, strategies and policies. Comparable, reliable data on cycling use is not sufficient at this time to carry out this kind of an evaluation. In addition, many of the national policies for cycling are relatively new, and it will take time for the effects of recent national-level initiatives to be revealed in modal share figures or other indicators.

A national cycling policy approach – be it a separate document or elements of a more general transport policy plan – does, however, appear to be a powerful tool for national governments to encourage cycling in urban areas. Such a national policy approach, tailored to a country's specific circumstances, can provide a common, integrated framework for the long-term development and implementation of cycling policies among various sectors and levels of government.

More specifically, a national cycling policy framework can:

- Articulate common objectives, goals, and a set of specific, integrated, co-ordinated actions among the different national Ministries and agencies (horizontally), as well as among national, regional and local authorities (vertically), and in partnership with industry, cycling associations and other stakeholders.
- Demonstrate political will and commitment at the national level, thereby pushing cycling policies higher up on the policy agenda.
- Raise awareness and "de-marginalise" cycling as a sustainable mode of transport.
- Provide a basis for the monitoring and evaluation of cycling policy implementation by national, regional and local authorities.

### BIBLIOGRAPHY

- Bundesministerium für Verkehr, Bau- und Wohnungswesen (2002), Nationaler Radverkehrsplan 2002-2012, FahrRad!, Maßnahmen zur Förderung des Radverkehrs in Deutschland.
- BYPAD Consortium, BYPAD (BicYcle Policy AuDit) website <u>www.bypad.org</u> (a project funded by the European Commission).
- Department for Transport, the United Kingdom (1996), National Cycling Strategy.
- Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH (2000). Final Report, Urban Transport Strategy Review – Experiences from Germany and Zurich.
- European Commission (1998), Transport Research Fourth Frame work Programme Urban Transport, Analysis and development of new insight into substitution of short car trips by cycling and walking (ADONIS)
- European Commission, Directorate-General for the Environment (2000), Cycling: the way ahead for towns and cities.
- European Conference of Ministers of Transport / Organisation for Economic Co-operation and Development (1995), Urban Travel and Sustainable Development.
- European Conference of Ministers of Transport (2000), Safety in Road Traffic for Vulnerable Users.
- European Conference of Ministers of Transport (2001), Implementing Sustainable Urban Travel Policies. National Peer Review: The Netherlands.
- European Conference of Ministers of Transport (2002), Implementing Sustainable Urban Travel Policies. Final Report.
- European Conference of Ministers of Transport (2002), Implementing Sustainable Urban Travel Policies. Key Messages for Governments.

- European Cyclists' Federation (ECF) (1998), Improving Bicycle Safety without making helmet-use compulsory.
- Gaffron, Philine (2003), The implementation of walking and cycling policies in British local authorities.
- Hydén, C., Nilsson, A. & Risser, R. (1998), WALCYNG How to enhance WALking and CYcliNG instead of shorter car trips and to make these modes safer (a project funded by the European Commission).
- I-ce(Interface for Cycling Expertise), VNG uitgeverij (2000), The Economic Significance of Cycling A study to illustrate the costs and benefits of cycling policy.
- Ministry of Transport, Denmark (2000), Promoting Safer Cycling A Strategy.
- Ministry of Transport, Public Works and Water Management, The Netherlands (1999), The Dutch Bicycle Master Plan.
- Ministry of Transport and Communications, Finland (2002), Towards healthy, sustainable transportation implementation of the WHO London Charter in Finland.
- Ministry of Transport and Communications, Republic of Slovenia (2000), National Cycling Network Development Strategy in the Republic of Slovenia.
- Road Directorate, Denmark (2000), Collection of Cycle Concepts.
- SWOV Institute for Road Safety Research (2001), PROMISING, Promotion of Measures for Vulnerable Road Users (a project funded by the European Commission).
- International Union of Public Transport (UITP) / European Cyclists' Federation (ECF) (1997), Transport Demand of Modes not covered in International Transport Statistics.
- U.S. Department of Transportation, Federal Highway Administration (1994), Final Report, The National Bicycling and Walking Study – Transportation Choices for a Changing America.

- Velo Mondial, I-ce, and OGM (2001), National Cycling Policy Benchmarking Program NATCYP Stage I, Final Report.
- World Health Organization (WHO) (1999), Charter on Transport, Environment and Health.

#### Annex

### QUESTIONNAIRE ON NATIONAL CYCLING POLICIES FOR SUSTAINABLE URBAN TRAVEL

The replies to this questionnaire will form an essential part of the report to be presented to the Ministers as part of the Transport Policy block at the Brussels Ministerial, April 2003.

Please respond by <u>20 November 2002</u>. Please edit this MS Word document and send it back by e-mail.

Any background documents and data would be welcomed and appreciated.

You may not have readily available information for some of the questions. But please answer to the extent as possible and feel free to provide alternative information that responds close by to the questions. In case there is no information you can answer "not available."

The information provided will be used to compile the report to the Ministers and will also be shared with other member countries unless you specify otherwise.

Thank you for your co-operation.

Country: Name of Contact (who can be contacted for further details or clarification): Position/Organisation: Address: Tel: Fax: E-mail:

# I. Key Data

	1995	Most recent year <u>Year</u>	<b>Trend</b> (-,=,+)
1. Number of bicycles			
2. Bicycle transport in passenger kilometres (p-km) per year and modal share of bicycle in transport (%)	%	%	
<ol> <li>Number of journeys/trips by bicycle per year and modal share of bicycle in transport (%)</li> </ol>	%	%	
4. Length of bicycle paths (km)			
5. Number of cyclists killed			
6. Provide forecast for bicycle transport if available.			
<ul> <li>Please specify for the above data</li> <li>Name of city, county, province, conurbation</li> <li>Population</li> <li>Density</li> </ul>			
Any comments, notes, etc.			

# II. The National Plan

1. Do you have a national plan to promote cycling in relation to sustainable urban travel<sup>1</sup>?

Yes/No

- If yes, please attach a copy and answer questions 2-8.
- If no, please answer questions 9 & 10.

2. What are the key goals or objectives of your cycling plan? (For example, reduce car use, relieve congestion, improve air quality, improve mobility, etc.)

3. Does your cycling plan have a specific target? (For example, 50% increase in bicycle transport (p-km) by 2010 etc.) Yes/No

• If yes, describe.

4. 1) Does your cycling plan try to integrate cycling policies with other policies concerning transport and land use (spatial distribution)? Yes/No

• If yes, provide details as to how they are integrated/linked.

2) Do you have any programme to combine cycle use and public transport?

5. How was your cycling plan drawn up? --- Which body has primary responsibility for the development of the plan? Which bodies (relevant national/regional/local authorities for transportation, education, health, environment, energy, NGOs, cyclists, the public etc.) were consulted? Did anybody authorise it? How are responsibilities of different levels of government

and of other participants being defined and coordinated for policy planning process?

6. How are responsibilities at different levels of government and other participants being defined and coordinated for cycling policy implementation purposes?

- Transport Ministry:
- Other national agencies/institutions (please specify):
- Regional/local authorities (please specify):
- Other participants (please specify):
- 7. How is progress monitored?

8. How is the effectiveness of cycling policies evaluated? (For example, cost/benefit analysis before and after implementing a certain policy)

(If you answered no to question 1, please answer the following.)

9. Do you have any plans for making a national plan to promote cycling?

10. Are there any actions at a regional/local/city level to encourage cycling? Yes/No

• If yes, please describe.

## III. Actions by Ministry of Transport

1. What is your national cycling policy? What measures/actions have you taken to deal with the following issues/problems?

Issues/Problems	Actions by Transport Ministry
Cycle routes/paths infrastructure	
Cycle routes guidance, traffic signs	
Cycle parking	
Connection with public transport	
Safety, accidents	
Please add other measures if any	

<sup>2.</sup> Please provide the details of financing in implementing your national cycling policies.

Particularly,

- (i) (What is the national annual budget allocated to cycling policies? What percentage is allocated to cycling policies in national transportation budget?
- (ii) How is the cycling budget spent? (For example, xx Euros for cycle path development, xx Euros for subsidies for cycling purchase etc.)
- (iii) How does the national government financially support the regional/local government for cycling policies?
- (iv) What are the sources of funding for the national cycling policy?

## IV. Good Practice and Difficulties

1. What kinds of successes have you had in planning and implementing cycling policies?

2. What barriers have you encountered and how have you overcome them?

3. What kinds of new difficulties/barriers are being encountered/are foreseen?

4. What have you learned that would be helpful for another country developing a new cycling plan and policy?

#### Note

1. ECMT's *Implementing Sustainable Urban Travel Policies: Final Report*, presented to Ministers at their 2001 Council in Lisbon, describes "Although definitions of and criteria for sustainability differ among countries and cities, most have common objectives for quality of life in urban areas that include, clean air, quiet neighbourhoods, and economic prosperity without detrimental health and environmental impacts and depletion of finite natural resources." These goals are consistent with those set out in the 1995 ECMT-OECD report *Urban Travel and Sustainable Development*.