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**EUROPEAN CONFERENCE OF MINISTERS OF TRANSPORT
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Sustainable Urban Travel Steering Group

DRAFT REPORT ON NATIONAL CYCLING POLICIES

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Report on National Cycling Policies

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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.

Cycling transportation is one of a number of tools that can contribute to 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 getting growing recognition 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 the governments to "Establish a supportive national policy framework." It is desirable that such a national policy framework gives consideration to bicycle transport in integrated whole transport and land-use policies. The recommendation also explicitly states that the governments should "Ensure that measures to promote walking and cycling in urban areas as well as transport demand management tools, such as employer mobility plans, car sharing schemes and telecommuting are supported in the legal and regulatory framework."

In this context, ECMT decided to review current situation of the national cycling policies and to report it to the Ministers of Transport. The objective of this report is to provide an overview of policies for promoting cycling at a national level in ECMT Member and Associate Member countries (hereinafter referred to as "Member countries"), focusing on initiatives taken by Transport Ministries. The report is based on responses received to a questionnaire (Annex) sent to 48 ECMT Member and Associate member countries in the fall of 2002. The questionnaire was answered 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 score the progress of the development of a singular kind of national cycling plan in Member countries, because considering their diverse social and economic backgrounds, there is no one solution on this issue. Instead, the report aims to describe the current situation of national cycling policy planning and what the Transport Ministries are currently doing on this issue and to provide Member countries with useful information to get better understanding of the problem.

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 policy measures are actually taken in Member countries. Chapter 3 sets forth the status of development of national plans in Member countries as well as examples of good practice at national level and considers the efficacy of a national plan. Chapter 4 identifies a number of challenges in developing and implementing cycling policies. Chapter 5 explores why the national level commitment is important. Chapter 6 then concludes the report with recommendations as to how the Ministers of Transport can 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 general increasing trend of car use is going on, the level of bicycle use seems generally stable in the recent past with only minor increase and decline (Table 1.1, Figure 1.1 and Figure 1.2).

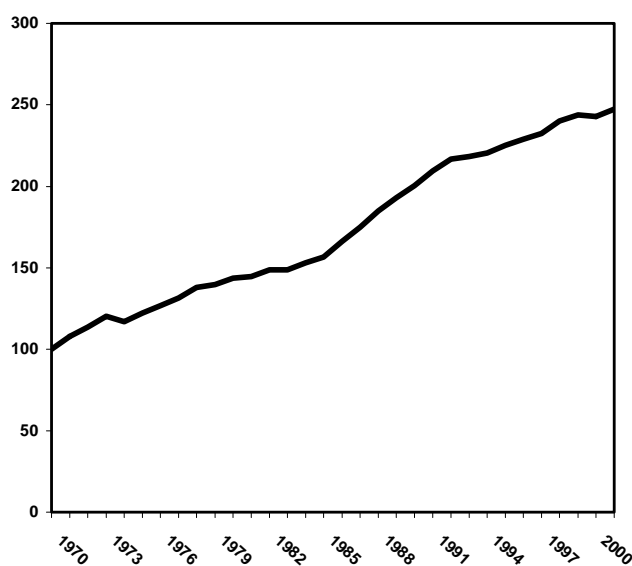
Table 1.1 Average mobility (number of trips per person per day by mode)

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

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

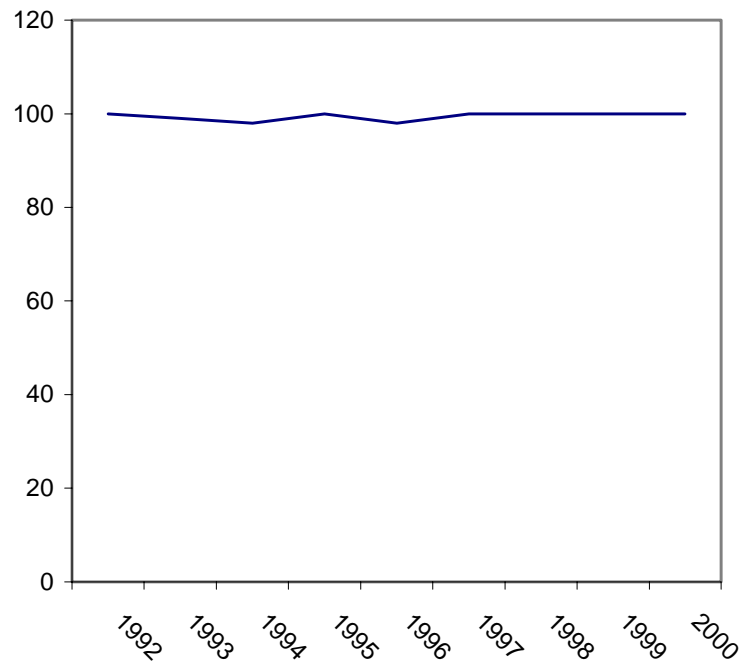


1970=100

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

Source: ECMT

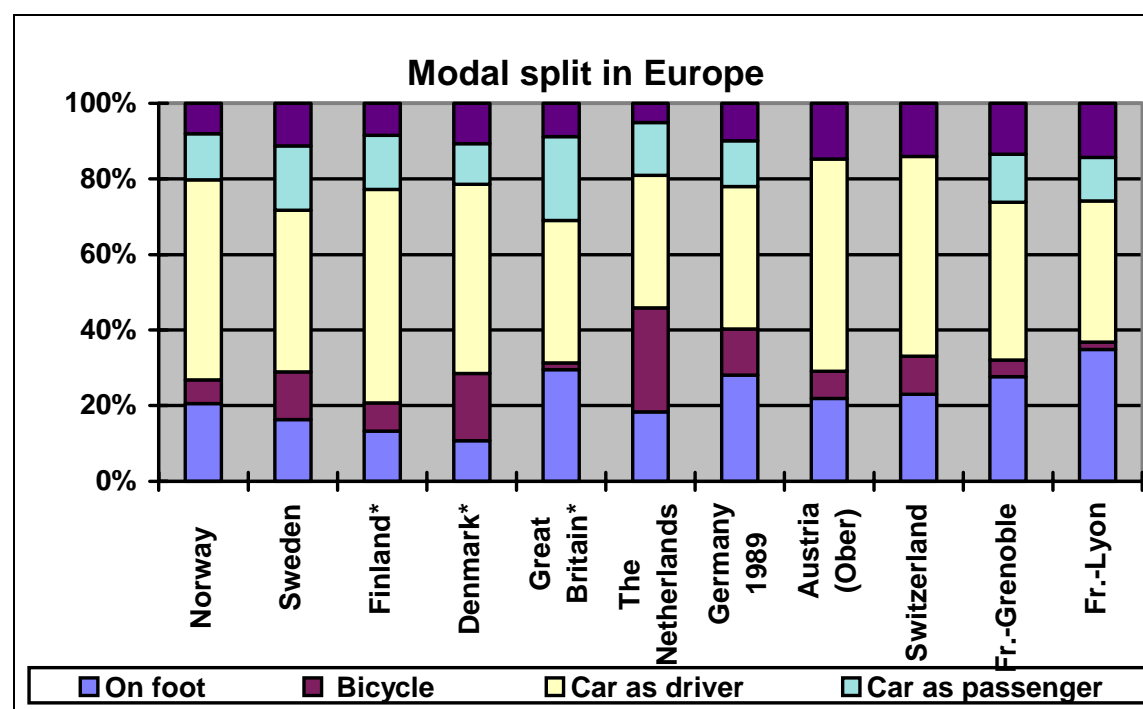
**Figure 1.2 Cycling transport trend (passenger-kilometres) in 15 EU countries
1992=100**



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

The situation of bicycle use is quite diverse city by city. While more than 50 % of all trips are made by bicycle in some cities, cycle travel almost non-existent in others. Behind the situation is very different background on economy, culture, climate, topology, and policies. 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. Two countries are eminent in the higher share of trips by bicycle, the Netherlands (27%) and Denmark (18%) (Figure 1.3, Table 1.2). The cycling mileage varies between 0.1km/person/day and 2.6km/person/day (Table 1.2)¹.

1 . Careful interpretation of modal share is needed in terms of its measurement in either it is 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.

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

*Trips longer than 200-500 m

Source: WALCYNG (1999)

Table 1.2 Cycling per person and per day (kilometres) and modal share (number of trips) in 15 EU countries.

Country	Cycling per person and day in kilometres (2000)	Modal share as a % of number of trips
The 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

Source: EU Energy and Transport in Figures Statistical pocketbook 2002

EU Transport in Figures Statistical Pocketbook 2000

1.3 Benefits of Cycling: How Cycling Contributes to Sustainable Travel Goals

Cycling has attracted to international attention as an environmentally-friendly mode of transport since the bicycle does not pollute or create noise. More cycling in urban areas instead of car use could reduce energy consumption from travel activity, reduce congestion, and improve the environment. 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 strategy².

Further, ECMT Member countries have taken steps to improve the efficiency of transport charges and taxes, differentiating charges in relation to emissions of air pollutants, CO₂, and congestion. While such demand management measures try to reduce car use by increasing charges to internalise the external cost of transport, cycling could 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.

Cycling also provides an opportunity for regular exercise. Cycling offers significant health benefits if people use bicycles as a daily transport mean. The WHO Charter on Transport, Environment and Health (June 1999) 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). The health benefits of cycling concern not only gains for an individual's health; but also they 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 brings forward that increased levels of bicycling and walking transportation would result in significant benefits in terms of health and physical fitness, the environment, and transportation-related effects³. 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 mobility:** The bicycle can be purchased and maintained for a modest price and it 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 reduce external costs of congestion.
- **Quick:** It is often a quickest mode of transport in urban areas.
- **Safe:** The bicycle rarely causes fatal injuries on other road users (pedestrians, other cyclists or car users).
- **Healthy:** Regular exercise can improve physical conditions and reduce the costs of health care.

² For example, "4. Air pollution" pp 60-63.

³ Chapter Two, Final Report, The National Bicycling and Walking Study – Transportation Choices for a Changing America, 1994

Table 1.3 Comparison of environmental impact of transport modes

Base=100 (private car)

	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

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

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. On the other hand, walking and cycling as daily activities 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.

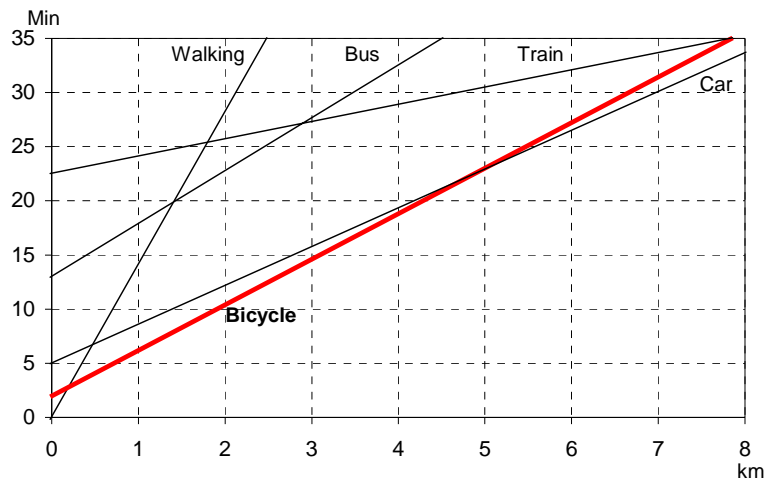
A total of 30 minutes' brisk walking or cycling on most days of the week, even if carried out in 10–15 minute episodes, is effective in providing these health benefits.

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)

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.

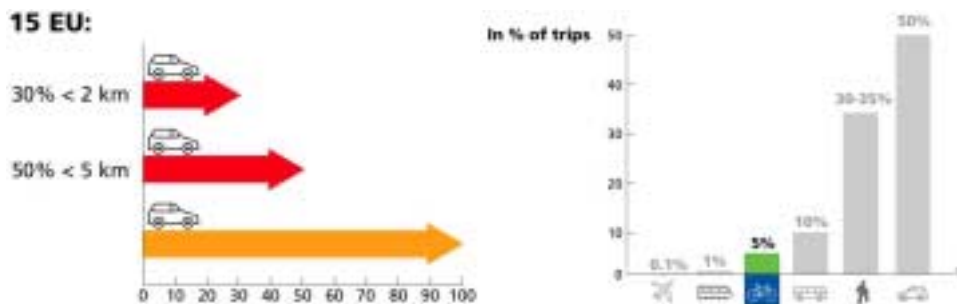
Figure 1.4 Comparative table of journey speeds in the urban environment



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 2km, and 50% of motorised trips are shorter than 5km in EU 15 countries (Figure 1.5). There seems to be ample room to replace car trips with cycling travel.

Figure 1.5 Frequent Car Use



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

1.4 Barriers to Increased Cycling Activity: Real and Perceived

In spite of such various benefits, cycling has not been dramatically increasing in recent years and remains a marginal transport mode in many countries except for several bicycle-oriented countries.

The real barriers and perceived barriers are not always the same. A study shows the differences on barriers and attractors raised by car drivers who do not have much experience in cycling and cyclists who practice cycling (Table 1.4).

Table 1.4 Barriers and Attractors for cycling separated in cyclists and car drivers

Road users	barriers for cycling	attractors for cycling
Car drivers	<ul style="list-style-type: none"> • you cannot transport heavy things • you depend on the weather • cycling is dangerous • the cycle network is incomplete • badly signed cycle routes 	<ul style="list-style-type: none"> • cycling is fun • cycling is healthy • cycling is environment-friendly • you make exercise
Cyclists	<ul style="list-style-type: none"> • high speed of car drivers • the cycle network is incomplete • lack of secure parking • car noise and fumes 	<ul style="list-style-type: none"> • cycling is healthy • you feel flexible and independent • you are fast • cycling is environment-friendly

Source: EU research project WALCYNG, Proceedings Velo-city '97 Barcelona 15-19 Sept. 1997

The following factors, both real and perceived barriers, can give negative impacts on the decision to take a bicycle:

- **Safety:** Cyclists are vulnerable to motor vehicle traffic. Cyclists may perceive a great risk under bad traffic conditions such as insufficient cycle paths infrastructure and high motor vehicle speeds.
- **Security:** Fear of theft or damage when lacking appropriate cycle parking facilities. 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 of average trip lengths resulted in a shift from bicycle to car and offset the effects of bicycle promoting policies⁴.
- **Health:** Cyclists may inhale vehicle exhaust emissions.
- **Social Status:** Cycling may be perceived as children's activities, or as socially inappropriate for those who can afford a car.
- **Weather:** Unfavourable weather conditions such as high or low temperature and frequent rainfalls is a perceived deterrent on cycle use. This explains why bicycle use rate is high in northern European countries. Finland points out that rather harsh and severe winter conditions are not a barrier for promoting cycling in Finland. For example, in a city of Oulu (situated closed to Arctic Circle, having about 120 000 inhabitants) cycling still has about 25 % modal share of daily trips.
- **Topology:** Hilly terrain can discourage cyclists.

2. THE POLICY AND INSTITUTIONAL FRAMEWORK

This chapter discusses the key policy and institutional framework that is being taken by governments for promoting cycling travel. Transport Ministries in many countries play an important role in promoting cycling, whether or not there is a clear national cycling plan. Here we try to share information on what the neighbouring countries are doing, which may

4 . Page 19, PROMISING Workpackage 2, 2001.

help for the governments to improve their national level commitment on this issue particularly by Transport Ministries.

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 longheld prejudices⁵. 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 was a crucial factor. From 1970s onwards, the new “image of the bicycle” came out in relation to energy, the environment, health and the 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 bicycle⁶.

The UK National Cycling Strategy explicitly has an item “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 lays down a communication programme to spread the message that cycling is a practical, safe and enjoyable form of daily transport.

Infrastructure

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

Some German cities such as Münster and Saarbrücken have a dense network of on- or off-street bicycle lanes at 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 permitted this very useful measure officially.

In Finland, the Ministry of Transport and Communications is responsible for overall transport policy and planning. In this respect the Ministry is in charge of defining what role the cycling and cycling network has in the transport policy and transport network planning. The Cycling Policy Programme gives priority to the development of cycling network, especially in urban areas aiming at promoting cycling and increasing its modal share. The Ministry allocates fund to Road Administration and Road Enterprise.

Norway focuses on constructing continuous cycle networks in the cities to make bikes a substitute/alternative to cars. 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 in one-way streets for a

5 . P5, European Commission, Directorate-General for the Environment (2000).

6 . P103, the Dutch Ministry of Transport, Public Works and Water Management (1999).

test period of one year in some cities. After the test period the results will be evaluated and it will be considered to make it a permanent arrangement.

Switzerland plans to produce a guideline on how to design good bicycle infrastructure in 2003. The cantons are responsible for implementation and construction of infrastructure.

Japan revised its Road Structural Code in 2001, where clarifies that the trunk roads with much traffic must have adjacent bicycle roads when they are newly constructed or reconstructed.

Route Guidance and Information

Development of a network of direct bicycle routes, which connects important starting places and destinations, will serve to improve bicycle use. Provision of cycle route information, such as route number or colour and distances to destinations on the route, can be signposted either on maps or traffic signs on the road so that it will ensure that the cycle routes are easy to find and be followed by cyclists. Improvement of cycling conditions would attract more cyclists and would also contribute to enhancing safety for cyclists, which will appear in the next section.

Norway gives a high priority to providing traffic and information signs and the Ministry of Transport and Communications feels 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 follows up this priority. The Police have the main responsibility for traffic signs in city and urban areas.

Swiss Federal Authority is publishing a guideline on cycle routes guidance, while the cantons are responsible for the implementation.

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 like 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 percent, 16.8 percent and 20.0 percent. In countries where the bicycle is used less widely, as in France or Greece, the proportion of cyclists represents respectively only 4.4 percent and 1.5 percent of all road fatalities. It is obviously in countries where the bicycle takes the highest shares in travel that the proportion of the cyclist casualties in road accidents is the greatest. In addition, the number of bicycle accidents is underestimated, for a number of less serious cycling accidents are not reported.⁷ ECMT Ministers, meeting in Berlin in 1997, noted in *Recommendation on Cyclists* that cyclists are far more at risk of injury in road accidents than other categories of road user, particularly owing to their vulnerability.

It is however not easy to compare accident statistics and evaluate the risks. An EU project WALCYNG (1998) shows a comparison of the risks for a fatal injury per kilometre cycling, which demonstrates that the more cyclists on the road, the better the safety record (Figure 2.1). This is probably because of experienced road users with cycling traffic and the great amount of facilities of high standards in the Netherlands and Denmark. Moreover, when road users are used to cyclists, they can perceive and anticipate cyclists properly.⁸

7 . 1995 ECMT statistics. P17, Table 1 and 2 in Annex, ECMT, 2000.

8 . P 12, PROMISING Workpackage 2, 2001

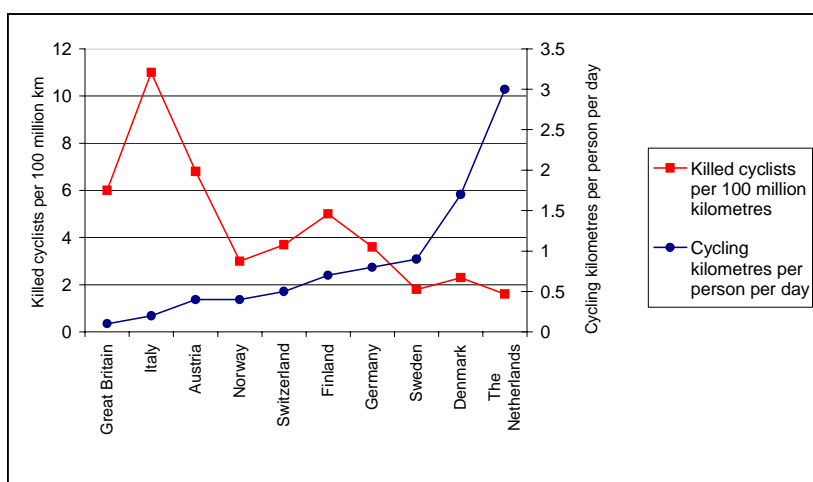
Another study shows that cycling is no more dangerous than car use, if the data is accurately corrected. In Table 2.1, in order to compare the safety of car and bicycle traffic, the kilometres made by car figures are corrected by taking out the kilometres driven on motorways.

While ensuring safety itself is a policy objective for Transport Ministers, safety can provide people with a good incentive to take bicycles and lead to a shift from private car use. As shown in Figure 2.1, high cycle-user countries such as Denmark and the Netherlands have already achieved relatively low number of cyclist casualties. Malta points out that lack of standard of safe driving on the road and mixture of bicycles and other heavy traffic discourage cycling. Cyclists' safety can be enhanced by reducing the speed of motorised traffic. Such a measure is good not only for the environment (noise and emissions) but also for road safety, as car users encounter lighter injuries to themselves and they cause less severe injuries to others. Cyclists' safety can be also improved by reducing encounter between cyclists and other faster traffic by separating them by cycle lanes. Other measures including better traffic signing on roads, better lighting on bicycles, and education of cyclists and car users can serve their safety, too.

Norway states that safety has the first priority in cycling policy. Accidents between cyclist and cars are of special attention. Cycle paths are not a panacea and are dangerous at intersections or when entering/leaving the paths. Particularly at intersections between roads and cycle paths they try to minimise the problem by building crossing with flyovers. Also information campaigns emphasising the importance of using helmets are also a part of the work they do to improve safety.

In Finland, the Ministry and the Central Organisation for Traffic Safety beyond the Ministry are in charge of traffic safety and taking legal and other safety measures. The most topical issue is a proposal for Act that aims at promoting the use of safety helmet for cyclist on a voluntary basis. Similarly in Sweden, the National Road Administration is actively working on a project to make the parliament adopt a law making wearing cycling helmets mandatory.

Japan appreciates that construction of bicycle paths contributed to the traffic safety, enabling the separation of bicycle traffic from cars and pedestrians. Japan also has been conducting experimental studies concerning better use of existing road space. For instance, Saga city conducted so-called "time sharing", which gives priority to bicycle use and restrict car use during commuting hours in the morning on 3-5m wide local roads

Figure 2.1 Inverse relationship between bicycle use and casualties

Relation between the number of cyclists and the number of casualties among cyclists in a road accident. Source: C. Hydén, A. Nilsson & R. Risser (1998), quoted by ECF (1998).

Table 2.1 Risk of accident per million kilometres

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

- a factor whereby driving on motor ways is 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 which do not exist among motorists are taken into consideration, groups which, moreover, include cyclists who have neither the caution nor the experience of their elders.

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

Source: cycling: the way ahead for towns and cities, European Commission, Directorate-General for the Environment (2000)

Connection with Public Transport

Combining cycling and public transport use can be a strong alternative to private car use. Improving connections between bicycles and public transport is important in designing consistent transport networks using all modes of travel. Better connection would attract more people to take bicycles and, as a result, more car travel would be replaced. Measures for better

connection includes development of parking facilities at railway stations and bus/tram stops, allowing to take bicycles on, and leasing bicycles at railway stations. Effects of such measures for better connection would not be negligible considering the fact that in the Netherlands, for example, 35% of all train users come to the railway station by bicycle.

Many countries replied that the importance of providing more cycle 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 cycle parking. Concerning cycle parking, the essence of the Transport Ministries' role may be to promote provision of parking facilities near public transport terminals in consideration of connection between non-motorised travel and public transport in the whole design of urban transport network, rather than solely constructing parking everywhere on the roads.

In the United Kingdom, *Bikerail*, a consultancy that promotes bike and rail integration established in 1996, 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 cycle parking at stations and provision for carriage of cycles on trains (Box 1).

The German National Cycling Plan 2002 to 2012 advocates linking up the various means of transport with a stress on the importance of providing services that have existed for the car. In advanced cities in bicycle use in Germany, bicycle stations were opened at the city central stations. Such bicycle stations aim at facilitating the combined use of rail and cycling. The bicycle station at Münster central station has a parking garage with 3,000 supervised parking places, bicycle maintenance service, bicycle shop, rent-a-bike, lockers and a bicycle-wash. The bicycle station at Freiburg offers additional services such as travel information for the whole transport chain, ticket sale for rail and public transport, reservation of rental cars and accommodation.

In the Netherlands, cycling policy is part of the Mobility Management Plan, which provides integrated management plan of all modes of transport. The Netherlands considers the improvement of bicycle parking important for improving connection with public transport and reducing bicycle theft. About 200 million Euros have been spent over a period of 7 years to build and improve bicycle parking at railway stations. Development of a national formula for easy bicycle renting at railway stations is also underway.

Japanese Ministry of Land, Infrastructure and Transport shows another interesting example of promoting building cycle parking facilities. Not only does the Ministry construct bicycle parking for itself as a part of traffic safety facilities improvement and street improvement programme, it also provides tax reduction when rail operators establish bicycle-parking facilities near their stations, including reduction of real property acquisition tax, property tax and office tax. Moreover, in some Japanese cities, some test studies are being conducted for better connection between bicycles and public transportation, such as promoting "Cycle & Ride" to reduce car use in commuting, and providing "rent-a-cycles" at railway stations.

Box 2 Bikerail – Winning with bikerail (UK)

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, 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:

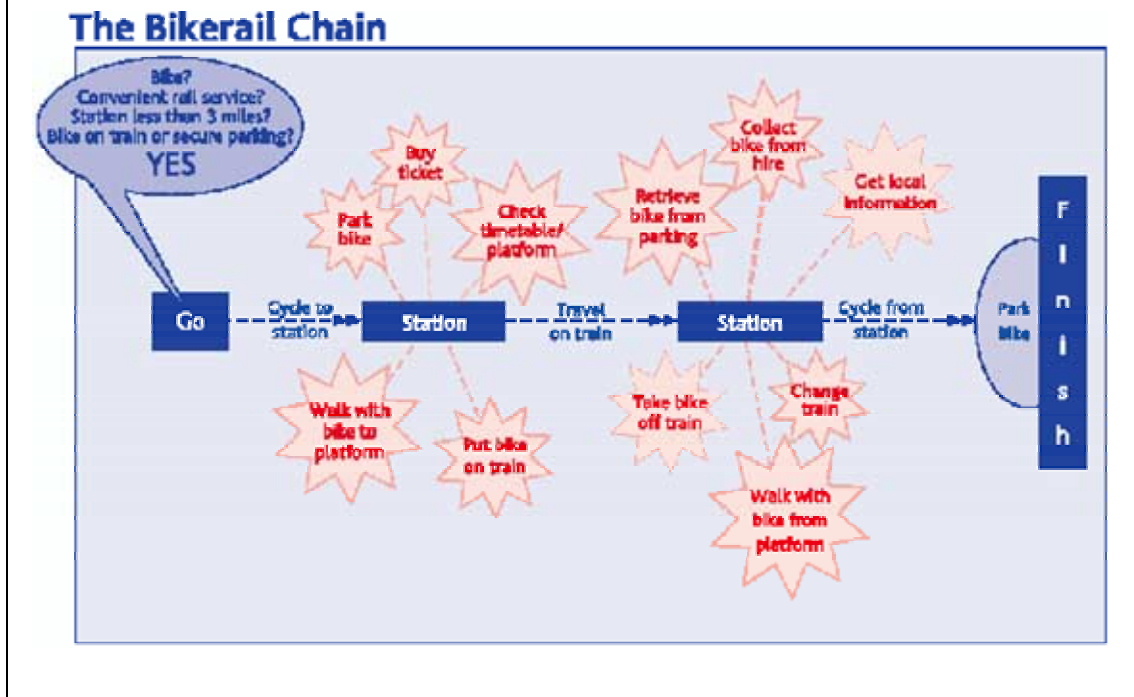
It is now recognised by the Strategic Rail Authority (SRA) that bikerail initiatives offer good value for money.

The simplified bidding process for the SRA's Rail Passenger Partnership (up to £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?



Financial Arrangements

Most of the countries that replied to the questionnaire have common characteristics in their financial arrangements to implement various cycling policies as follows:

- ◆ **Usage:** *Most funds available for cycling policies are spent on investment in infrastructure development, particularly for development of cycling routes, as part of road development.* In some countries such as Finland, France, and the United States, some funds are spent for educational programs and promotion programs as well. The United Kingdom allocates £1-2 million annually as Cycling Projects Fund, central government funding of small scale projects by employers, schools and charities/voluntary groups. The projects include cycle training schemes, secure cycle parking, facilities for cyclists (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 is actually allocated to cycling, because cycling routes development is incorporated in road development projects and it is difficult to separate cycling from others. For example, in Sweden, currently 100 million SEK (about 10.8 million Euros), 0.6 % of national transportation budget is allocated to cycling. In the United States, approximately 1 percent of Federal transportation funds is currently being spent on bicycle and pedestrian improvements, which amounted to \$416 million in fiscal year 2002. In Norway, in its 2003 budget, it allocates 360 million NOK (about 49.3 Euros) to cycling policies, which is 2.14 % of total road sector budget. Switzerland hopes to have an annual budget of 70 million Euros in the future for human powered mobility including walking, while current allocation is marginal (1-2 million Euros).
- ◆ **Resources:** *The national budget provides funding to regional/local governments.* In most cases, there is no specific budget earmarked for cycling and implementation is up to regional/local authorities. Namely, national funding is provided to regional/local authorities, and regional/local authorities decide how much of their available money will be spent on which bicycle projects. Of course, 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 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 Interministerial 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.

Bicycle Theft

Fear of theft can greatly discourage people to use their bicycle. Fear of bicycle theft is also a reason for many people to buy a cheap old bicycle that is often unsafe. The responsibility to deal with bicycle theft often goes beyond the Ministry of Transport.

The Dutch Ministry of Transport, Public Works and Water Management is implementing a national programme against 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

The levels of cycling promotion policy vary from country to country, because their geographical, climatic, cultural, economical backgrounds are largely different. So are the degrees of commitment by Transport Ministries. Since the cycling policy is not just a transport issue, it involves other Ministries in charge of health, education, infrastructure, environment, police and so on. Furthermore, in many countries, such as Spain, Russia and Japan, the cycling policy is viewed as a matter on which local and regional authorities have primary responsibility, where the commitment at a national level is very limited.

Cycling is a means of local, short-distance transport. Thus bicycle transport policy measures would be most efficiently overseen and implemented by local authorities. We found that quite a few Member countries leave the responsibility of cycling policies solely on regional and local authorities as shown in the next chapter. However, once you view cycling policies as part of integrated policy package, a commitment by the national government level would be indispensable. As mentioned above, cycling policies involve many actors and need horizontal co-ordination among different Ministerial branches, such as transport, environment, land use, finance, to achieve multiple policy objectives. Such policy co-ordination should be contained in general and basic planning and regulatory and legal framework at a national level. Such co-ordination is being done by establishing task forces or working groups in some countries such as Finland and the United States. While regional and local authorities bear the primary responsibility for detailed planning and implementation, possible roles of Ministries of Transport include:

- Overall, basic planning in co-ordination with other policy objectives
- Legislation, regulations, and guidelines to support implementation
- Stimulating and facilitating initiatives by regional/local authorities using financial and other instruments
- Monitoring and benchmarking of measures implemented by regional/local authorities
- Conducting researches and dissemination of knowledge and information

In short, vertical co-ordination and right balance in decentralisation will be essential to the success of policy, which is also recommended in the *Final Report*.

2.3 Integration of Cycling Policies

Cycling alone does not bring sustainability. Cycling, as a short-distance transportation mode, should be linked up with other modes, including rails, buses and walking and be incorporated in designing the whole transport network. Previous part of this report has shown examples of excellent initiatives by Member countries such as development of cycle parking facilities at stations, carriage of cycles on trains, or an innovative way of rent-a-cycles at stations similar

to car-sharing. Such “pull” policy of promoting cycling may be combined with other “pull” policy of promoting public transport and walking as well as “push” policy to restrict excessive car use.

From a broader viewpoint, as the *Final Report* suggested, integration and coherence among transport policies and other policies such as land use, environment, health, and finance are important. Cycling has a lot to do with other sectors outside transport. Cycling, along with public transport, is a very important mode of transportation in a high-density city which is spatially distributed so that important destinations are near by for residents. Thus, when city planners design urban structure, they would not be able to ignore the allocation of space to cycling. Cycling is also a subject of concern for the governmental agencies in charge of environment and physical health. The bicycle industry could be an important player as well, because it tries to meet cyclists’ demand for better and safer bicycles with technological development such as power-assisted bikes. Therefore, cycling policies need policy co-ordination and integration among various viewpoints and actors, since cycling encompasses various aspects in its nature.

In this regard, Finland provides an excellent example. Finland, aiming to promote all sustainable modes of transport equally, has developed the programmes for cycling and walking and the new public transport strategy “Public Transport – An Attractive Alternative” in 2001. With the programmes, the country aims to decrease the dependence on private car use and to integrate cycling and walking more closely together 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 promote the modal share of sustainable modes of transport. These commitments have led to selection of experimental projects in three medium-sized towns (Jyväskylä, Kerava, Lempäälä) where the various partners aim at promoting cycling, walking and public transport. Such a project is called JALOIN –project. The word “JALOIN” means in Finnish, first of all, something as “By foot” or “On your own energy”, and secondly “the noblest” describing the importance of the goal to promote sustainable modes of transport (Box 2).

Furthermore, the integration of transport and land use planning is an important principle when promoting all sustainable modes of transport (public transport, cycling and walking). Integration of land use and transport planning has been further emphasised in Finland’s new Land Use and Housing Act (1999) which aims at supporting sustainable development and taking better into account the environmental effects caused by land use planning. According to this act the general principle when preparing zoning plans in all levels should be providing good accessibility and well-functioning public and non-motorised transport system. When zoning new areas for housing, there has to be a plan how the public transport and non-motorised transport are planned to be organised. Zoning maps should also contain an evaluation of distribution of trips between different modes of transport.

Box 4. Jaloin⁹ - Promoting walking and biking for more sensible and sustainable transport in Finland

The goal of Finland's transport policy is defined as intelligent, sustainable mobility. There is reason aplenty to favor transport based on the use of one's own reason and muscle power. The Ministry of Transport and Communication's (MTC's) project promoting pedestrian and bicycle traffic (light traffic), which was started in 2001, will continue in 2002 – 2004. The focal point of the work initiated in the central administration is being shifted toward the municipalities. The work is based on three programs, which include dozens of ways to promote walking and cycling. The MTC's Jaloin project implements the transport policy in practice by being influential and employing cooperation. Due to the scope of the programs, it is necessary to prioritize their implementation.

Operating ideas.

The objective of the Jaloin project is to increase the combined share of light traffic and public transport as a form of mobility and decrease dependency on passenger cars. Pedestrian and bicycle traffic is one part of the entity and it needs to be taken into consideration along with other important issues during decision-making. A good living environment and a functional transport system are primary goals, while also being competitive advantages of communities. Light traffic is an indication of people's wellness. Good conditions for walking and cycling are a trademark of a good living environment and a tool for creating it.

The number of actors is growing.

Pedestrian and bicycle traffic is being promoted by four other Ministries under the direction of the MTC. The most significant partners are the Finnish Road Administration, the Rail Administration, the Association of Finnish Local Authorities, the Road Safety Association and municipalities. Branches of activity responsible for different tasks have realized how great the significance of physical exercise is to society's wellness and people's health. The Jaloin project is expanding. New cooperative partners include the Meteorological Institute, the Finnish Institute of Occupational Health, fitness exercise organizations, public health organizations, etc.

Where is the project influential?

The Jaloin project has no decision-making power in the issues included in its program. The idea is to be influential at the research, transport policy program and planning levels. The project provides municipalities with expert assistance in preparing transport issues whenever they express a desire for cooperation. The Jaloin project has understood the significance of spreading information in its operation.

Research programs are used as a tool.

A research program was started in the autumn of 2001 on the basis of applications and implemented in several localities. The results are reported in public media, at seminars and at other events. New research topics will be specified in the autumn of 2002 on the basis of gathered experiences. Wintertime pedestrian traffic and promotion of health in general will be included. Regionally, activity will be centered in model municipalities with sustainable transport.

⁹ See <http://www.tieliikelaitos.fi/jaloin/> for more information.

Top projects place challenges.

A few of the leading methods of the walking and biking-related programs are being promoted, and in such a way that they include methods from the areas of administration, traffic planning, road safety work, mass transport and light traffic planning, and maintenance. The Jaloin project has assisted responsible people from the MTC in specifying light traffic result objectives for transport channel organizations. Cooperation in road safety work has been started with implementers of Finland's road safety vision. The method of the road safety program that is particularly being promoted is increased use of stepped speed limits in built-up areas. Development of biking connections and services of terminals has been initiated in the Helsinki area. The Jaloin project is assisting the Ministry of the Environment in revising the law on maintenance and cleaning of streets and certain public areas. Finland's bicycle tourism policy is being defined.

Example sites are an opportunity for everyone.

The Jaloin project supports practical example sites as models for others. A study conducted in the Salo region examined how pedestrian and bicycle traffic is taken into consideration in transport system planning and letters of intent. A study in Imatra examined how a new residential area should be planned so it is advantageous for light traffic. Commuter biking is being promoted according to a Company Mobility Management concept. The operating plan of the wintertime pedestrian traffic work committee includes several projects that promote wintertime mobility. The Jaloin project also influences state and municipal budget-makers to include separate funding for exemplary promotion of light traffic.

“Model municipality with sustainable transport” activity has begun.

The model municipalities of Jyväskylä, Kerava and Lempäälä are developing not only their own programs, but also various ideas about arranging sustainable transport. This is not a question of localities with ready conditions, but of exemplary activity in conditions with a positive attitude toward development. Finnish towns are 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.

3. NATIONAL CYCLING POLICIES AND PLANS

The levels of development of national cycling policy plans vary from country to country because their diverse backgrounds. 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

Among the 20 countries who replied the questionnaire, only 5 countries replied that they does not have any national 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 included partially in larger transport, environment or health plans, as seen in Norway and Slovak. In other countries such as Poland

and Spain cycling policy is mainly under the responsibility of the regional and local authorities with limited commitment at a national level (Table 3.1).

One of the clearest example is the National Cycling Strategy (NCS) (1996) that has been developed through a partnership process involving public and private sector bodies, coordinated by the Department for Transport of the United Kingdom (Box 3). The NCS identified a number of key objectives, targets, mechanisms, outputs, and responsible bodies. It established a headline target of doubling bicycle use by the year 2002 (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 4. National Cycling Strategy¹⁰, Department for Transport, UK - *Introduction by the Steering Group*

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 five 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

¹⁰ Available at <http://www.dft.gov.uk/itwp/ncs/ncs.htm>.

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 co-ordination, 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.

Table 3.1 Current Status of National Cycling Plans in ECMT Member and Associate countries

Countries	Plan ¹¹	Description	Objectives	Specific Targets
Belarus	No			
Czech Republic	Planning	There is a draft of the National Cycling Strategy which is going to be submitted for governmental approval (June 2003).	(draft) <ul style="list-style-type: none"> - encourage every day use - encourage leisure use - increase safety of cyclists - reduce bicycle theft - improve facilities - meet the needs of different user groups 	
Finland	Yes	"Cycling and Walking Policy Programmes" in March 2001	1. Reduction of car use and integration/promotion of all sustainable modes of transport (cycling, walking and public transport.) 2. Reduction of environmental and health problems caused by transport (greenhouse gases, air pollution, noise, promotion of physical health and safety etc.).	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.
France	Partially	There is no cycling program but legal texts which put ahead the promotion of alternative modes to the car.	- reduce the use of cars, congestion of city centres - improve air quality	None

11 . 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.

Germany	Yes	National Cycling Plan 2002 to 2012 Ride your bike! Measures to promote cycling in Germany	<ul style="list-style-type: none"> - To increase the share of cycling in Germany until 2012. - To promote cycling as an element of a sustainable, integrated transport policy. - To promote modern, socially and environmentally compatible local mobility based on the concept of the "City of short distances". - To improve road safety. 	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 style="list-style-type: none"> - Improve traffic safety situation - Rise of cycle traffic modal share - Development of national and international cycling tourism - Stimulate healthy lifestyle 	Until year 2000 the total length of bicycle routes and paths separated from the road traffic could be risen to 2000 km.
Ireland	Partially	The Agreed Programme for Government between Fianna Fáil and the Progressive Democrats (May 2002) includes a provision on the subject of Cycleways and Footpaths outlining a commitment to invest in expanding the national network of cycleways etc.	<ul style="list-style-type: none"> Reduce Car Use, Relieve Congestion, Improve Air Quality, Improve Mobility, Improve Health, Heighten road safety for cyclists and other road users. 	For Dublin, <ul style="list-style-type: none"> - The completion of the strategic cycle network. - The provision of cycle links to transportation nodes, retail and employment centres. - An increase in cycle parking, the provision of tourist and leisure cycling and the promotion of cycling. - A 350km (two-way) network comprising strategic, local and recreational cycle facilities will be completed by 2006. - To increase the proportion of short trips (up to 6 km) made by bicycle to 30% by 2016.
Japan	No	Local authorities are responsible for basic planning.		
Latvia	Yes	"Cycle Transport Development State Program for 1999-2015"	<ul style="list-style-type: none"> - To ensure systematic cycle transport development. - Development and maintenance of cycle transport infrastructure. - Co-operation with neighbouring countries and alignment with the European Cycle Route network (EuroVelo). 	at least 20% of tourism facilities in Latvia should be offered in the form of cycle tourism

Malta	Yes	Incorporated in the master plan programme for the restructuring of the road network.	Reduce car use, relieve congestion, improve air quality, for leisure, for promoting tourism	None
The Netherlands	No	Cycling promotion measures on a national level are part of the Mobility Management plan.	Reduce car-use on short trips in favour of walking and cycling, relieve of congestion, improvement of air quality, reduction of fatalities in traffic, reduction of CO2 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.	- strengthen the role of the bike as a mean of transportation, especially in larger urban areas. - make it more safe and attractive to choose the bike as a mean of transport.	None
Poland	No	The 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.	increasing of transport safety, reducing the transport negative influence on environment, improving mobility, reduce car use, relieve congestion, improve air quality	None

Slovenia	Yes	National Cycling Network Development Strategy in the Republic of Slovenia (2000)	<ul style="list-style-type: none"> - Influence the change of the modal split to the benefit of cyclists - Ensure the connection of the state with cycling routes as well - Ensure the appropriate safety of cyclists - Decrease in the negative effect on the environment - Improve urban and suburban cycling connections - Ensure connection with the international cycling routes - Take into account the importance of the market oriented style - tourism 	<ul style="list-style-type: none"> - By encouraging the interest in cycling and appropriately ensuring safer conditions and a basic cycling infrastructure Slovenia aims to double the number of cyclists by the year 2005. - Building of at least 25km of independent cycling routes per year which means opening of one or two smaller independent cycling routes every year. - Designating and marking of at least 100km of public roads per year, outside inhabited areas, which are also appropriate for cyclists and are designed for long-distance cycling. - Introduction of 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. Cycling surfaces should be coloured with red colour. - Stimulating and educating cyclists that ride to school. - By the year 2010, in the period of the next national programme, another doubling of the use of bicycles. - Establishment or building of the complete cycling network of about 2000km in the next 25 years. - A decrease in the number of accidents involving cyclists.
Spain	No	Decision making of cycling policies is at regional and local level.		
Sweden	Yes	The Swedish National Strategy for More and Safer Cycle Traffic (2000)	<ul style="list-style-type: none"> - to increase the safety for cyclists - to increase the modal share of cycling 	<p>Increase the modal share of cycling from 12 % of all journeys to 16 %.</p>

Switzerland	Yes	"mission statement for human powered mobility (hpm)" in Dec. 2002 not only for cycling, but also on pedestrian traffic, hiking and inline-skating.	<ul style="list-style-type: none"> - 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. - Improving living environments in cities as well as in rural areas - Making mobility possible for people of all ages and abilities - Taking profit of the economical efficiency of hpm - Reducing energy use and ecological impacts of transport - Encouraging physical activity of the population in order to reduce health costs - Boosting leisure and tourism-industry 	<p>Increase modal share of human powered trips ("etappes" of at least 25 m distance) from 47% in 2000 to 54% in 2010 (increase by 15%)</p>
United Kingdom	Yes	National Cycling Strategy (1996)	<ul style="list-style-type: none"> - To increase cycle use - To achieve convenient cycle access to key destinations - Improve cycle safety - Provide for increased cycle use within all local highways and traffic management schemes - Cycle parking facilities to be available at all major destinations, including town centres, shopping developments, educational establishments, hospitals and leisure facilities - Reduce cycle theft - by improving cycle security - Raise awareness and expertise amongst transport providers, service providers and employers - unlock financial resources to meet the Strategy objectives - Progress the National Cycling Strategy 	<ul style="list-style-type: none"> - Double the number of trips by cycle (on 1996 figures) by end 2002 - Quadruple the number of trips by cycle (on 1996 figures) by end 2012
United States	Yes	1994 National Bicycling and Walking Study 2000 National Strategies for Advancing Bicycle Safety	<ul style="list-style-type: none"> - improve mobility - give people more transportation choices - better connect bicycling and transit - provide safer ways to bicycle - improve safety 	<ul style="list-style-type: none"> - Double percentage of trips made by foot and bicycle - Reduce number of crashes involving bicyclists and pedestrians by 10 percent

3.2 Key Objectives and Characteristics of National Policies and Plans

Key Objectives and Specific Targets

Cycling policies we have found in the 20 replies have various aspects mobility, transport safety, environment, health. Table 3.2 shows key objectives raised in national cycling policies and their popularity among the countries who replied the questionnaire.

Table 3.2 Key Objectives of National Cycling Plans

Objectives	Number of Countries
Promoting traffic safety	11
Reduction of environmental problems/Improving air quality	9
Strengthening the role of bicycles as a mean of transport/Raising the modal share	8
Reduction of 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

Safety and the environment seem to be the top concerns in cycling policies for the Transport Ministries at this moment. Of course, objectives of cycling policy plans vary from country to country, however, at least we should note the general recognition that since cycling is a environment-friendly, energy-saving mode of transport, national governments try to raise usage of bicycles to attain sustainable urban travel by improving infrastructure and safety and by integrating with other transport modes.

Out of 14 countries that have a national plan in some form, 10 countries have set specific targets in their plans.

Specific quantitative targets to increase the amount of cycling travel or 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 to reducing the number of crashes involving bicyclists. Finland for instance has a number of qualitative targets including safety. Details on the targets are shown in Table 3.1.

Planning Process: Co-ordination among Relevant Bodies

As described above, cycling promotion policies have a variety of objectives, which are not merely about increasing mobility but also involves many other aspects including environment, safety, health, and tourism. Thus not only Transport Ministries but also other national governmental bodies need to be involved in cycling policy planning and co-ordination. Moreover, according to the nature of a bicycle as a short-distance, local travel instrument, regional and local governmental bodies have significant

responsibilities in policy planning process as well as implementation process. Other players could be involved such as non-governmental organisations representing cyclists.

In order to co-ordinate such many players, many of the countries which have developed a national cycling plan formed a steering committee or a working group participated by governmental bodies and non-governmental organisations. Ministry of Transport has a leading role in co-operation and co-ordination with relevant bodies in the following three examples, which would provide us with useful suggestions for the future cycling policy planning processes.

The United Kingdom

The National Cycling Strategy (NCS) was adopted as a consensus document as a result of increased level of co-operation between organisations in the public, commercial and voluntary sectors.

The NCS process was brought forward by a Steering Group under the Chairmanship of the Minister for Local Transport. It drew together representatives from the Department of 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 Confederations of Scottish Local Authorities, 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; and
- 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 implementation

Five main areas of concern were pursued in depth by the four Working Groups established 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 security 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 aims of the first programme had not been achieved in all respects, the "Steering Group for Cycling and Walking" (that was set under the Ministry of Transport and Communications to promote non-motorised transport in November 1999) decided to establish a 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) as well as the National Road Traffic Safety Strategy that aims at 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 are:

- 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 well-being 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

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

The USDOT has the lead on implementing the plan and administering the various funding and other transport programs that can be used to implement the plan. The USDOT co-ordinated the activities of its various agencies – Federal Highway Administration, Federal Transit Administration, National Highway Traffic Safety Administration and others. The USDOT established an Interagency Task Force on Bicycling

and Walking that has met quarterly since 1994; representatives from all other relevant agencies are invited including Health, Education, Defence, Interior (National Parks), Agriculture (Forest Service), General Services (Federal buildings), Environmental Protection Agency. National and local user groups are also invited to participate in these meetings. The USDOT has encouraged State departments of transportation to use the national targets (Doubling percentage of trips made by foot and bicycle; and reducing number of crashes involving bicyclists and pedestrians by 10 percent) as their guide for state bicycle planning and programs.

Monitoring and Evaluation

The process of monitoring the implementation of the plan as well as the process of evaluating effectiveness of policies are not always clearly defined in many countries. This is probably because cycling policies are relatively new with only recent growing awareness as a sustainable transportation mode, and because the governments put higher priorities in dealing with cars and public transport rather than non-motorised travel. Therefore, monitoring and evaluation are still challenges that lies ahead to be solved in the future.

Some countries, however, already have clear monitoring and evaluation systems. For instance, the United Kingdom established the National Cycling Forum to ensure that national and local policy and provision are delivering increases in cycling in line with the NCS. The forum is chaired by the Minister for Local Transport, with secretariat support from the Department of Transport, attended by representatives from organisations across the UK. The forum meets regularly and publishes an annual review of progress. In the United States, Interagency Task Force mentioned in the former section meets regularly to consider and review implementation of the plan.

As for the monitoring of increase in cycling travel, Switzerland monitors the target of increasing modal share of human powered trips by 15% from 2000 to 2010 by the Federal "Mikrozensus"-polls every 5 years. Norway plans to improve, in the future, the monitoring of modal split at national level and in specific cities and towns by establishing 24 counting stations around the country and performing traffic census.

As for the evaluation of policy effectiveness, Norway conducts analysis concerning cycling policies both at the ministerial level and as well as the Public Roads Administration. For instance, one analysis looked at the cost/benefit of building cycle paths in some specific cities (Hokksund, Hamar and Trondheim). In Sweden, National Road Administration has initiated a research and development-project with the aim to create a handbook for making cost/benefit analysis of cycle investments.

In the Netherlands, a long-term benchmarking project started at the Dutch Cyclists Union: the Cycle Balance in 1999, though the country does not have a national cycling plan currently. The project is to evaluate the effects of policy efforts by local authorities and to stimulate the authorities to adopt a still better cycling policy. The Cycle Balance assesses 10 different dimensions: Directness, Comfort (obstruction), Comfort (road surface), Attractiveness, Competitiveness, Bicycle use, Road safety of cyclists, Urban density, Cyclists satisfaction, and Cycling policy on paper. This is funded by the Ministry of Transport, Public Works and Water Management.

In many countries, statistics concerning bicycle transport, such as passenger kilometres and number of trips, are not available. It would be helpful to improve data collection so that the governments can set targets, monitor the progress and evaluate the policy effectiveness.

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 of public funds that much. There are not much information available such as exact information on health and environmental effects of cycling (costs and benefits, including external ones), and exact statistical information, which could be used to persuade the public of the usefulness of cycling or to monitor the implementation of cycling policies.

Similarly, Czech, Sweden, Norway, and Latvia raise the problem of lack of financial resources for cycling infrastructure and other promotional measures.

4.2 Institutional Problems

Cycling policies have a variety of objectives and involve many actors not only Transport Ministry but also other national governmental bodies, regional and local authorities. Lack of co-ordination, both horizontally and vertically, may cause biased policy planning or stagnancy of implementation. Also, lack of national-level commitment with leaving the cycling policy solely on the responsibility of local authorities can cause lack of driving force of promoting cycling, lack of allocation of financial and other resources, unequal development among cities, and lack of 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 occur regarding the administration of the road network, and therefore the government feels the importance of more co-operation between the different levels of authorities.

Similarly, Latvia mentions the lack of steering committee for co-ordination measures in the state level. Tasks are not delegated to exact institutions, or authorities. Cycling supporters and enthusiasts mainly drives existing activities.

France points out that retrospectively there was not enough national level commitment, and feels the absence of a strong policy message or a structural support by the central government. When the cycling policy is based entirely on the initiative of the local communities, there are consequently unequal improvements depending on regions and cities.

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

4.3 Safety

Safety is always one of the most important concerns for the Transport Ministries. When promoting cycling travel, we should keep in mind the characteristics of bicycle travel that cyclists are vulnerable to other motorised traffic when there are interaction among them.

Malta points out that under present conditions anyone venturing onto the road with a bicycle would feel very vulnerable in the heavy traffic, where the standard of safe driving and consideration for other road users often leaves a lot to be desired.

UK raises safety fears as a main barrier, for example, parents unwilling to let their children cycle because of road safety concerns. To tackle these through targeted initiatives, for example, *Safe Routes to Schools*, a package of practical and educational measures, was designed to encourage children to cycle and walk to school by improving safety on the journey. This is done by making changes to the highway, principally reducing speeds and volumes and re-allocating road space; and by raising awareness of other road users and sponsoring cycle training/road safety campaigns.

The Swedish National Road Administration is encouraging increased cycling and favours also increased safety. For the second goal, the National Road Administration is working in favour of a mandatory cycle helmet law. Some of the non-governmental organisations does not want a mandatory helmet law since a study has shown that such a law will decrease cycling and make cycling more dangerous for those who go on cycling. The project to introduce a mandatory helmet law for cyclists could lead to a conflict with the cycle industry and the cycling organisations¹².

4.4 Scarcity of Space

Scarcity of space is a common challenge in many cities especially in Europe. Combined with scarcity of financial resources, the constraint makes it difficult to provide sufficient bicycle infrastructure.

Sweden states that there is a lack of space in cities and there is often opposition to give more space to cyclists and that the conflict is not resolved but persists and could be overcome by different kinds of compromises.

In Malta, in general its roads are too narrow to allow for the laying of cycle paths on the existing roads. The desire to introduce bus lanes encounters the same serious constraint. In dense urban areas the difficulty has not been overcome, however in other areas which form part of the Roads Master Plan the difficulty is being overcome by incorporating cycling paths within the reconstruction and building of roads.

12 . Though helmets reduce the severity of head injuries, mandatory requirement has been controversial for a long time. PROMOSING (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 to the manufacturers and shopkeepers. *Head Injuries and Helmet Law for Cyclists* written 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.

4.5 Public Awareness

Although cycling provides great mobility for short-distance travel, it is not necessarily accepted as a mode of transport, but it is often perceived as a sport, leisure, or children's activity.

Poland considers that it is still necessary to improve the awareness of cycling as an ecological and relatively cheap mode of transport. In Poland, cycling was perceived as the poor man's transport or sport. There was no organised representation of cyclists' interest. There was no organised effort to use Best Practice and facilitate bicycle use. 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. Cycling slowly becomes the recognised mode of transport in cities in Poland.

Malta indicates that at present the Maltese do not have a cycling culture – bicycles are used only for fun by children and for sport, bicycles are owned mainly by children and youths under the age of 18, at which point their interest rapidly switches 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.

(Chapters 5 & 6 still need to be developed further.)

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, using empirical evidence seen in experiences in bicycle-oriented countries.

5.1 National-Level Commitment - Experiences in the Netherlands and Denmark

The Netherlands and Denmark have extraordinarily high modal share of cycling, thanks to long-term, strong national support favouring cycling. In the two countries, the bicycle is one of the principal means of travel in cities with a strong recognition that cycling is a valuable part of transport. 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

The Dutch Ministry of Transport has executed a masterplan for cycling, the Dutch Bicycle Master Plan (BMP) (1990-1997). The BMP projects are comprised of 112 projects over the period, including 31 research projects and 41 pilot projects including provisions for the improvement of bicycle routes, safety, and parking conditions in and around public areas as well as the reduction of theft.

The Ministry evaluates that the value of the BMP lies less in the results of the concrete projects than in the constant acknowledgement of **the existence of a bicycle policy** with a clear-cut vision, supported by the existence of a subsidy scheme for constructing bicycle facilities. The very existence of the BMP and the Ministry's decision to carry out numerous projects and activities has shown various target groups the Ministry's strong commitment in the bicycle policy and made the bicycle policy be placed higher up on the

political agenda. It is clear that the BMP's influence was noteworthy, since the municipalities were well organised by 1996, with regard to the existence and quality of bicycle plans.

The objectives and strategies of the BMP were adopted into the Second Transport Structure Plan (SVV2), which came out in June of 1990. The main objective of the SVV2 was the halving of the increase in car use that would be expected, whilst the strategy consisted of the five steps: 1) Dealing with the source, 2) Reducing and managing mobility, 3) Improving the alternatives to the car, 4) Providing selective accessibility by road, and 5) Strengthening the foundations. The BMP was structured as part of the third step. In the BMP process, the bicycle policy was regarded as an inextricable part of the whole transport policy. The bicycle policy was not conceived as objectives in itself but rather as a means of contributing to solving transport problems and restricting the growth in car use, synthesised with other policy measures. The Netherlands had established sound bicycle policies, which is **an integral part of the whole transport planning**. Moreover, integration with other policies was taken into consideration in the BMP projects, because bicycle policy is highly dependent upon other national policies such as spatial planning, the environment and recreation.

The decentralised approach in policy execution also formed an important aspect of national policy in the framework of the BMP. In formulating the BMP, the BMP project group, comprised of individuals with relevant knowledge and experiences in the Ministry of Transport, was aware that the central influence on the detailed contents of local traffic policy was limited given the bicycle's nature as a short distance travel mode and that municipalities and provinces were the most important executors of bicycle policies. Therefore, from the outset, interest parties such as municipalities and provinces, consumer groups, organisations of bicycle industry, bicycle trade and bicycle parking facilities, and public transport operators were consulted. Furthermore, the VERDI agreement in 1996 transferred greater responsibility for bicycle policy in urban areas to the provinces and municipalities. However it did not mean that cycling policy stopped to be a priority in transport policy at a national level. The BMP project group considered that **central decision-making**, with regard to appropriating funds for research, pilot and model projects, is essential to avoid the re-invention of the wheel and to make certain that the money intended for innovation would actually get spent on projects breaking new ground. The central decision-making regime also made it easier to carry out measurement of effects and evaluation of pilot and model projects.

Via the BMP, the government undertook a significant **financial support** in the improvement of facilities and conditions for bicycling to support the objectives laid out in SVV2. The existence of 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 seven-year period, Gld 303.6 million were expended on the central government's activities under the plan. In addition to this expenditure, about 271 million guilders were channelled from the central government to the municipalities and provinces for their cycling projects in the context of the BMP. 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.

The key objective of the BMP was a **carry-over of knowledge, arguments and instruments** to relevant target groups. The BMP project group considered the central task of the national government to be to develop knowledge through various research, pilot and model projects, and subsequently to disseminate to stimulate and facilitate the bicycle policy pursued by local authorities rather than executing detailed projects by itself.

To sum up, here is a quote from the BMP Policy Document: "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.”

Denmark

Denmark’s National Bicycle Action Plan consists of three parts. The first part “Cycling into the 21st 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 set out the political goals for better towns and healthier Danes and proposes to work for more cycle trips, greater road safety and fewer car trips, thus presenting a political vision of what the future should look like. The second part is “Promoting safer cycling – A strategy” developed by the Ministry of Transport. The strategy combines physical measures for the benefit of all cyclists with campaigns targeted towards certain groups, for instance, children and youth and also firms. The third part of the plan is “Collection of cycle concepts” by Road Directorate, aimed at the appropriate 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 create targets and action plans for bicycle traffic together with concrete measures for the promotion of safer cycling.

Co-operation and dialogue are regarded as the key in order to achieve the conversion of short car journeys to bicycling and walking. A concerted and focused effort is required on many different fronts involving many different participants and administrations. The Ministry states that the promotion of bicycle traffic is not simply a task for the technical directorates in regional and local government but a task, which involves many others: social and health authorities, local politicians, schools, interest groups, companies, public transport operators, sports clubs, GPs (doctors in general practice) and, not least of all, individual citizens themselves. The **co-ordination** of all these involved parties, and their efforts, is an important.

The collection and dissemination of knowledge is a key role of central government. Aforementioned “Collection of cycle concepts”, which the Ministry of Transport have asked the Road Directorate to produce, was intended to guarantee that the knowledge of planning, design, etc, for cyclists is disseminated to the appropriate 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 through the production of local action plans for bicycle traffic.

Another unique initiative by the Ministry is “a national cycle town,” a cycle laboratory where many different ideas can be tested and evaluated together. The results of experiments can be passed on to other Danish towns. The Ministry’s Traffic Pool will finance a total of DKK 20 million in various tests in Odense. The cycle town is a display window for the government’s strategy. For instance, trials will be carried out in the cycle town involving high-speed routes for cyclists, the participation of companies and a massive campaign effort for the improvement of the cycling image.

The Ministry has also established “a bicycle ideas group”, a forum aiming to inspire new research and new initiatives, together with ensuring the spread of new knowledge. 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 the 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 unfortunate side effects associated with the car when used on short journeys.

For many years the government has set aside **funds** earmarked for improving cyclists' conditions. An extra DKK 25 million was earmarked in the 2000 budget in the Road Directorates disposable pool for investments to promote cycle traffic and road safety. The funds can be invested in the improvement of the State road network as well as in joint investment projects on county and local councils' roads.

The national government is naturally in charge of issuing regulatory **legislation and guidelines**. The government is to contribute to the improvement of cyclists' access and safety in towns by passing legislation, providing guidelines and issuing regulations. The government is strengthening the bicycle's position through a combination of the revision of the road regulations governing urban road areas, "Collection of cycle concepts", and through recommendations to county and local authorities.

5.2 Why the national level commitment and planning is important?

While cycling is a means of local transport, the national government's involvement in certain aspects of cycling policy can be helpful, as mentioned in 2.2. The key conclusion of the ECMT's *Final Report on Implementing Sustainable Urban Travel Policies* is to establish a supportive national policy framework, which supports and influences national, regional and local goals for land-use, passenger and freight transport, health and the environment, with vertical and horizontal co-ordination¹³. This applies to the cycling policies as a component of urban travel. Regarding cycling policies, Transport Ministries at a national level could play a significant role in cycling policies as follows:

- **Overall, basic planning in co-ordination with other policy objectives**

The national government should provide basic policy framework that local planning can follow, with a fair balance among the interests of different policy objectives. The necessity of vertical and horizontal co-ordination and integration of cycling policies was already mentioned in 2.2 and 2.3. Within the transport policy, for instance, safety of cyclists can be improved not only by setting up bicycle routes or providing specific facilities, but also by introducing measures such as traffic calming limiting the maximum speed of motorised traffic on roads where mixed with bicycle traffic.

- **Legislation, regulations, and guidelines to support implementation**

ECMT (2000) stressed that bicycle-related facilities must be standardised at national level, since it 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 appreciate the potential risks they may face. While every cycle facility must be tailored to local conditions and planned in great detail, it is important to ensure that approaches to the design of facilities are standardised to the greatest extent possible at national level so that other road users will readily recognise the presence of cyclists on the road.

- **Stimulating and facilitating initiatives by regional/local authorities using financial and other instruments**

¹³ pp 45-46.

Significant amounts of investment are needed particularly for the development of proper facilities for cycling. Financial support by the national government is of great assistance as seen in 2.1 and the next section.

- **Monitoring and benchmarking of measures implemented by regional/local authorities**
Setting a specific target in a national plan could enable monitoring the progress and give impetus to implementation by local authorities. It is very difficult, however, to evaluate the effect of a particular policy measure. More systematic methodologies need to be developed in future.
- **Conducting researches and dissemination of knowledge and information**
Central research and sharing of knowledge is a key role of the national government. Details in the Netherlands and Denmark will appear in next section. A number of researches at European level are supported by European Commission.

Developing a specific national cycling policy plan, which stipulates the country's basic policy framework, will be a very effective way to show such commitments by the national government. Long-term planning is desirable to create the fundamental changes in urban travel behaviours. A national plan could make it possible to:

- share the recognition that cycling is a normal and sustainable mode of transport
- share common objectives, goals, and a set of specific, integrated, co-ordinated actions among the different national Ministries (horizontally) and among national, regional and local authorities (vertically).
- show strong commitment by the national government
- encourage, monitor and evaluate the policy implementation by the national government or local authorities.

6. CONCLUSIONS AND RECOMMENDATIONS

Cycling has a lot of advantages as a short-distance transportation mode in urban areas – it relieves congestion in city centres by reducing car trips; it improves the quality of life providing people with mobility without CO₂ emissions, pollutants or noise nuisance; it is a relatively safe mode which rarely inflicts fatal injuries; it has a positive effect on physical health; and bicycles are not expensive and available to people of any income level. There seems to be a general agreement that modal switching from short distance car trips to bicycle use in urban transport is one of effective ways working towards sustainability in cities.

However, cycling alone does not bring sustainability. Instead, Transport Ministries should regard it as a part of policy package towards sustainability. Within the transport polices, cycling should be clearly perceived as a mode of transportation, and the government should consider designing the whole transport network and linking up the different modes of transport, including rails, buses, cycling and walking. From a broader perspective, integration and coherence among transport policies and other policies such as land use, environment, physical health and finance are also important. Cycling policies need policy co-ordination and integration among various viewpoints and actors.

Cycling is a means of local, short-distance transport, however the national government could play an important role as seen in Chapter 5, since the cycling policy is part of integrated policy package which requires horizontal and vertical co-ordination. A national cycling plan, whether it is a separate document or it is part of urban travel plan, can be a powerful tool for the national government to share a series of co-ordinated goals and actions, and to show the national level commitment in order to strongly push forward cycling policies further. Needless to say, the national plan cannot be uniform across the countries because of their diverse background. It should be tailored to a country's circumstances.

Therefore, this report recommends that Ministers of Transport:

- **Develop an integrated national cycling plan with clear goals, targets, and actions**
- **Consider cycling as a normal mode of transport and create a seamless cycle route network with good connections with other modes in urban travel**
- **Improve data collection on cycling travel and cyclists behaviour**
- **Monitor the progress of implementation of the cycling policy plan**
- **Improve evaluation of net benefit of increasing cycling travel or of investment in cycling infrastructure, which could enable more resource allocation to cycling**
- **Keep on improving safety for cyclists by reducing speed and volume of motorised traffic where appropriate**
- **Give financial and legislative support to regional and local authorities where appropriate**
- **Share common knowledge on cycling policy measures and disseminate it to local authorities**

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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 **20 November 2002**. 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 cooperation.

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>	Trend (-,=,+)
1. Number of bicycles			
2. Bicycle transport in passenger kilometres (p-km) per year and modal share of bicycle in transport (%)	%	%	
3. Number of journeys/trips by bicycle per year and modal share of bicycle in transport (%)	%	%	
4. Length of bicycle paths (km)			
5. Number of cyclists killed			

6. Provide forecast for bicycle transport if available.	
Please specify <ul style="list-style-type: none"> ▪ Name of city, county, province, conurbation ▪ Population ▪ Density For the above data.	
Any comments, notes, etc.	

II. The National Plan

1. Do you have a national plan to promote cycling in relation to sustainable urban travel¹⁴?
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.

¹⁴ 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*.

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	

2. 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?

Thank you for your cooperation.