

# Working Group on Sustainable Urban Transport

**Final report**  
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# Preface

The Working Group on Sustainable Urban Transport is one of four working groups established by the EU's Expert Group on the Urban Environment. The purpose of the Working Groups is to contribute to the preparation and definition of the Thematic Strategy on the Urban Environment as outlined in the Sixth Environment Action Programme of the European Union. The Working Group on Sustainable Urban Transport consisted of 10 experts with different professional occupations ranging from local authorities and European organisations, to NGO's and academic institutions. The Working Group members found their key objective, to recommend specific policy measures and actions to the EC in order to realize the goal of sustainable urban transport, to be very challenging.

Although local authorities and member states remain the central actors in developing a sustainable urban transport system throughout Europe, it is clear that action at the EU level could improve the effectiveness of local and regional efforts. The Working Group also respects the principle of subsidiarity, however this principle should not be used as a reason for inaction at the European level. Furthermore, the Working Group recognises the significant number of ongoing policy initiatives and actions, at the European level, related to the field of sustainable urban transport. Nevertheless, the Working Group believes that these initiatives are insufficient; additional action is required at the European level in order to achieve a sustainable urban transport system. Ultimately, the aim of this report is to support the EC in developing their Thematic Strategy on the Urban Environment. The Working Group has accomplished this by putting forward recommendations about actions and policy initiatives needed at the European level to realize a sustainable urban transport system.

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Chantal Duchène  
(Chair of the Working Group)

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# EXECUTIVE SUMMARY

This report is the final product of the work undertaken by the Working Group (WG) on Sustainable Urban Transport. The report outlines the scope of the work undertaken by the WG, identifies the key problems and barriers in reaching the objective of sustainable urban mobility, and identifies a few key areas for action by the European Commission (EC).

The WG on Sustainable Urban Transport was created by the European Union's (EU) Expert Group on the Urban Environment to contribute to the preparation, and definition of, the Thematic Strategy on the Urban Environment as outlined in the Sixth Environment Action Programme of the European Union.

The Working Group had two main objectives:

- (i) define the role the EU can, and needs, to play in order to promote sustainable urban mobility throughout the European Union; and
- (ii) propose specific measures and actions that can be taken at a European level (by the EU) to realize the above goal of sustainable urban transport.

The WG adopted the definition of sustainable transport of the so-called April resolution of the European Union's Ministers of Transport Council. This definition states that sustainable transport:

- *Allows the basic access and development needs of individuals, companies, and societies to be met safely and in a manner consistent with human and ecosystem health, and promises equity within and between successive generations;*
- *Is affordable, operates fairly and efficiently, offers choice of transport mode, and supports a competitive economy, as well as balanced regional development;*
- *Limits emissions and waste within the planet's ability to absorb them, uses renewable resources at or below their rates of generation, and, uses non-renewable resources at or below the rates of development of renewable substitutes while minimizing the impact on land and the generation of noise.* (Council of the EU 2001.)

## **Role of the EC**

There are two important issues to keep in mind when considering the potential role the EC can play in promoting sustainable urban transport. First, there is the principle of subsidiarity which implies that, to the greatest extent possible, the EU will leave matters that are best considered at lower levels to these lower levels. The WG understands and is mindful of the principle of subsidiarity, but it must also point out that the EU should refrain from using the subsidiarity principle as a justification for

not taking action to promote sustainable urban mobility. European guidelines and direction can be useful and helpful in bringing the issue of sustainability to the forefront of urban transport decision-making. EC involvement in sustainable urban transport should be based on a long-term and clear vision of sustainable urban transport.

Secondly, the WG recognises that every city or metropolitan region is different, thus a “one size fits all” approach will not be successful. Therefore, instead of instructing or mandating specific policy measures for a city or a region, the role of the EC should be to support and aid in the creation of a framework that would be used for determining the precise set of policy measures that should be undertaken by a city or a region.

### **Recommendations for the Commission**

The WG’s recommendations have been grouped into seven areas representing the target areas where the EU can and should play a role. These areas are:

- Policy Coherence at the EU Level;
- Sustainable Urban Transport Plans;
- Financial Policies;
- Monitoring of Progress Towards Policy Objectives by Using Indicators and Conducting Impact Assessments;
- EC Policy Initiatives;
- Improved Governance;
- Dissemination of Good Practice and Knowledge; and
- Promoting Awareness about Sustainable Urban Transport.

#### *Policy Coherence at the EU Level*

Greater effort needs to be put into ensuring that EC policies affecting urban transport are consistent with each other. Furthermore, the sustainable urban transport policies should be linked to policies in other areas that are relevant for achieving sustainable urban transport such as health, education, and social development. Currently, EC actions with potentially large consequences for sustainable urban transport, and a high need for co-ordination include the following listed below.

- Where TEN-T or cohesion/structural fund proposals affect urban areas, their local and regional impacts should be assessed against the objectives of sustainable urban transport.
- Projects financed (partly or wholly) using structural/cohesion or TEN-T funds should follow the principles set out in the WG recommendations on financial policies.
- EU funds should be switched from modally specific projects and reallocated to multi-modal regional/corridor plans.
- The EC should review the tax policies in most member states to make them consistent with the objectives of a sustainable urban transport system.
- The EC should ensure coherence between sustainable urban transport policies and air quality, noise, safety, and technology policies.

## *Sustainable Urban Transport Plans*

The WG believes that sustainable urban transport plans can play a useful role in achieving sustainable urban transport. There should be European action to support sustainable urban transport plans at the local level. The WG recommends to local authorities to draft these sustainable urban transport plans. The EC should provide a framework for the drafting of these plans, including a local vision on sustainable urban transport, objectives, indicators and policy measures. Key elements of local sustainable urban transport plans should also include the development of a policy monitoring system, as well as transparency and stakeholder involvement. These plans should spur the integration of land-use and transport planning.

The WG recommends that the EC:

- make EU funding conditional on the existence of such a plan at the local level (this is in line with the WG recommendation on EU funding);
- provide guidance on how to structure such a plan and disseminate knowledge on best practices; and
- support national governments in making these plans a requirement for large cities.

## *Financial Policies*

The WG believes that sustainable urban transport does not have to be more costly than current urban transport practice. This can be accomplished by targeting existing and available financial resources, at the local, regional, national, and European levels, towards those actions that are the most cost-effective and provide the largest gains. The WG further notes that, for a variety of reasons, current policy is inclined towards the financing of infrastructure projects. What this means is that it is easier for urban areas to obtain financing for infrastructure projects than for non-infrastructure projects. For example, EC financing for a citizen outreach campaign to promote public transport is more difficult to obtain than financing for the construction of a new bridge or road.

EC financial actions that affect urban transport should be evaluated based on criteria that will ensure consistency with sustainable urban transport objectives. Specific recommendations with respect to the targeting and regulation of EU funding are summarized below.

- Cities should be required to develop a transport plan as part of the process by which they can receive EU financing. The provision of funding should be made conditional on the city agreeing to monitor the implementation and performance of the submitted transport plan. It should be noted that funding is only available for plans/strategies and not for specific projects.
- The EU should encourage or direct similar mechanisms at the country level for national funding of local projects.
- The EU should refrain from focusing exclusively on the problems and needs of long distance transport. More attention should be given to problems of local, regional, and inter-regional transport, especially since almost 80% of European citizens live in urban areas and are impacted by vehicle emissions.

The WG also recommends that the EU can contribute to a better targeting of financial resources at the local/national level by:

- disseminating advice on successful policy instruments;
- promoting relatively cheap software measures that will generally encourage the comparison of infrastructure with non-infrastructure alternatives; and
- supporting the internalisation of external costs in local transport policies.

#### *Monitoring of Progress Towards Policy Objectives by Using Indicators and Conducting Impact Assessments*

The EC should develop and disseminate knowledge on suitable policy *objectives* to achieve sustainable urban transport, and on related *outcome indicators*. A clear vision, at the EU level, on sustainable urban transport and accompanying objectives will help to give guidance to cities/regions. Therefore, the WG recommends that the EC disseminate, to urban centres and regions, a separate communication on sustainable urban transport that will provide a definition of sustainable urban transport, a vision, objectives, indicators, and a monitoring system.

The EU should also develop a set of common indicators to enable benchmarking, monitoring, and decision-making at the national and European level.

Specific recommendations to the EC for monitoring progress towards policy objectives are as follows:

- the EU should forge links and co-ordinate with the OECD/ECMT's work on urban data collection and local/regional decision-making;
- existing EU research on indicators should be used to select a set of common indicators; and
- at the local/regional level, indicators that are tailored to the city/region can be used to supplement the EU set of common indicators.

#### *EC Policy Initiatives*

The WG recommends that the EC undertake action in the areas outlined below.

- Accessibility for people with reduced mobility and the elderly population should be part of mainstream transport policy. A more accessible transport system results in benefits for everyone (and not just the disabled).
- These accessibility considerations should enter into the strategic long-term planning process to avoid high costs of changing existing systems. The WG believes that a thematic strategy on accessibility within all modes of transportation is needed.
- Although there are a number of initiatives to give more relevance to non-motorised transport at the EU level, non-motorised transport modes play a muted and rather insignificant role in EC policies. EC actions and initiatives at the urban level should, therefore, give cycling and walking a more prominent role.



### *Improved Governance*

The EU should provide guidance on how to overcome the many institutional barriers that can make sustainable urban transport policies ineffective. In order to improve governance, the WG recommends:

- co-ordination between transport and other policy areas (particularly land-use), including coordinating responsibility for different instruments;
- co-ordination between authorities within a region, with a good example of co-ordination being set at the EU level;
- co-operation beyond administrative borders in geographical regions (one option might be to link EU funding to this kind of co-operation);
- co-ordination between public and private sector;
- co-ordination between different tiers of government; and
- the development of a mechanism to increase the participation and influence of those stakeholders and grassroots organizations that usually have a limited capacity to access and influence decision-makers, such as funding of technical assistance or involvement in planning processes.

### *Dissemination of Good Practice and Knowledge*

The WG recognizes the efforts of the EC in this area, and recommends that the EC direct its focus on replication of good practices. Recommendations of the WG in this area are profiled below.

- The EC should support ex-post evaluation of policy measures. This is a powerful instrument to understand the impacts of a policy measure, and will lead to the improved monitoring of demonstration projects.
- The EC should advise and support, at the local level, the training of key personnel on complex decision-making. This advice should include the topics of flexibility, transparency, and participatory processes. Recent OECD/ECMT work on integrated decision-making can be utilised for this purpose.
- The EC should focus on target groups, such as politicians, the business community, the general public, senior officials, and academics, and follow a tailor-made approach to reach each group.
- The EC should establish a specific strategy for strengthening the links between research, demonstrations, and current practice. One example would be to develop programmes that support cities in continuing their demonstrations once the research project has been completed.

### *Promoting Awareness About Sustainable Urban Transport*

In the long-term, information and educational campaigns are effective instruments to realise changes in the behaviour of citizens. The EU should continue and intensify its efforts in this area by allocating additional funds to support EU-wide information and educational campaigns. More specific recommendations, include the following:

- the EU should enlarge and intensify *European campaigns on environment and health* to support the use of non-motorized transport means;

- more campaigns are needed with a specific focus on children as there is a strong cohort impact in transport;
- the EU should consider alternative approaches like individualized marketing;
- the EU should give *publicity* and *awards* to well performing regions on sustainable urban/regional transport;
- the EU should develop a benchmark, indicating how sustainable the transport system of each city is, based on comparable indicators of each municipality's transport system.

# 1 Introduction

This report is the final product of the work and discussions of the Working Group (WG) on Sustainable Urban Transport. The report outlines the the scope of the work undertaken by the WG, identifies the key problems and barriers in reaching the objective of sustainable urban mobility, and identifies and selects a few key areas for action by the European Commission (EC).

The report is divided into five chapters. Chapter one provides the background of the WG, and the policy context in which the WG operated. The second chapter highlights the main trends in urban transport and its impacts on the environment, safety, and health. In chapter three, policy options to promote sustainable urban transport are presented, and guidance is given on developing policy packages for promoting sustainable urban transport. Chapter four discusses the WGs' vision on sustainable urban transport and the need for action. Finally, chapter five, the key section of the report, presents the recommendations for sustainable urban transport to the Commission for the Thematic Strategy on the Urban Environment.

## 1.1 Urban Transport: The Need for Action

Almost 80 % of the European Union's (EU) population resides in urban areas. The transport of goods and people in Europe's urban areas accounts for over 30 % of all transport kilometres in Europe. Forecasts, while differing in their details, are unanimous in pointing to the continued growth of transport, however measured. The situation in cities, where most people live, is forecast to significantly worsen if corrective steps are not taken soon. Although policy-makers are almost united in their need to take action, there is less agreement about the exact steps that should be taken. Thus, European policy-makers face the thorny problem of providing affordable urban transport (for both goods and people), while simultaneously reducing pollution and congestion, and improving the safety of both users of the transport system and city dwellers.

The European Commission recognises that the problems arising from urban transport, and its growth, are assuming critical proportions, and concrete action cannot be delayed much longer without imposing large costs. This realisation is reflected in the presence of a strong urban dimension to many of the EC's environmental policies. The importance of the urban environment is reflected in the requirement in the Sixth Environmental Action Programme to prepare a Thematic Strategy on the Urban Environment.

## 1.2 Thematic Strategy on the Urban Environment

The Sixth Environmental Action Programme of the EC outlines several objectives related to the urban environment, to be pursued by means of:

‘a thematic strategy promoting an integrated horizontal approach across Community policies and improving the quality of urban environment, taking into account progress made in implementing the existing co-operation framework, reviewing it where necessary, and addressing:

- the promotion of Local Agenda 21;
- the reduction of the link between economic growth and passenger transport demand;
- the need for an increased share in public transport, rail, inland waterways, walking and cycling modes;
- the need to tackle rising volumes of traffic and bring about a significant decoupling of transport growth and GDP growth;
- the need to promote the use of low emission vehicles in public transport;
- the consideration of urban environment indicators.’

The Thematic Strategy is a new way of developing environmental policy for complex priority problems requiring a broad approach that cuts across several sectors and areas. The Sixth Environment Action Programme identifies seven thematic strategies, one of which is the strategy on the urban environment. The strategy on the urban environment will consider the environmental problems in urban areas, set objectives for dealing with these problems, and identify proposals to reach these objectives.

As part of developing the strategy for the urban environment, the Commission has identified four priority themes, namely:

- Sustainable Urban Transport,
- Sustainable Urban Management,
- Sustainable Urban Construction, and
- Sustainable Urban Design.

Independent working groups addressing each one of the above four themes have been established. This report reflects the work of the Commission’s Working Group on Sustainable Urban Transport.

The conclusions and recommendations of the working groups will be used as inputs to the European Commission’s interim communication titled, *Towards a Thematic Strategy on the Urban Environment*. In addition to the work of the four working groups, a stakeholder consultation exercise was held in June 2003 where representatives from the local authority, business, academic, and NGO sectors discussed their views on issues related to sustainable urban transport.

The European Commission plans to issue the interim communication by the end of 2003. This will form the basis for a larger consultation exercise sometime in 2004.

The final strategy for the urban environment needs to be presented to the European Parliament and the Council by July of 2005.

### **1.3 Working Group on Sustainable Urban Transport**

As mentioned above, as part of its efforts to develop a thematic strategy for the urban environment, the Commission established the Working Group on Sustainable Urban Transport. This Working Group consisted of 10 independent experts and representatives from the Commission's DG-Environment, DG-Research, and DG-Transport and Energy (see Annex I). It should be noted that the experts are involved as individuals; they do not represent their organizations as such.

The primary objective of the Working Group on Sustainable Urban Transport was to identify actions that can be taken at the European level to promote sustainable urban transport. The operational objectives of the Working Group were to:

- develop a vision for sustainable urban transport that is realisable in the medium term (10-15 year time horizon);
- identify 'good practice' techniques for realising this vision for sustainable urban transport;
- provide insights into the barriers obstructing the more widespread adoption of these 'good practice' techniques in EU cities;
- identify steps that can be taken to address and overcome the barriers limiting the more wide spread use of 'good practice' techniques;
- propose specific measures and actions that can be taken at the European level to increase the use of 'good practice' techniques in sustainable urban transport; and
- identify targets and indicators that help inform us about whether or not we are moving towards sustainable urban transport.

The Working Group has performed its tasks through four working group meetings in 2003, and many informal discussions and individual contributions. This report reflects the opinion and consensus of the Working Group as a whole.

#### **1.3.1 Sustainable Transport**

At their meetings on 4 and 5 April 2001, the European Union's Ministers of Transport adopted a definition for what constitutes sustainable transport. This definition states that a sustainable transport system is one that:

- 'Allows the basic access and development needs of individuals, companies and societies to be met safely and in a manner consistent with human and ecosystem health, and promises equity within and between successive generations;
- Is affordable, operates fairly and efficiently, offers choice of transport mode, and supports a competitive economy, as well as balanced regional development;

- Limits emissions and waste within the planet's ability to absorb them, uses renewable resources at or below their rates of generation, and, uses non-renewable resources at or below the rates of development of renewable substitutes while minimizing the impact on land and the generation of noise.' (Council of the EU 2001.)

The Ministers of Transport, in the so-called April Resolution, accepted the above definition. The Working Group has also adopted this definition, as its starting point.

## **1.4 The Policy Context for Sustainable Urban Development**

In 1991, the Council of Ministers passed a resolution establishing the Expert Group on the Urban Environment. The resolution concerned the 1990 *Green Paper on the Urban Environment* (91/C 33/02), which marked the start of a new focus on urban issues at the European level. More recently, the Commission published the following communication document, *Sustainable Urban Development in the European Union – A Framework for Action* (COM (98) 605, adopted October 1998).

The European Commission is now actively considering the urban implications of EU policies and instruments, and how these can be better implemented and co-ordinated. A wide range of policies and instruments affecting the urban environment already exist at the EU level, and the EU wants to make these more “urban – sensitive.” The European Commission can increase the effectiveness of EU policies by adjusting existing instruments, or by developing new instruments.

The role of the EC, to ensure the successful implementation of sustainable urban transport at the local level within the EU, was discussed by the WG. The role of the EU should respect the principle of subsidiarity, which provides for decision-making at the lowest appropriate level. The EU should take action that cannot be taken, with the same effectiveness and cost, at a lower level. The EU can, for example, render the framework of EU policy more responsive to urban needs and create tools and concepts that urban areas can utilise. The EU should avoid using the subsidiarity principle as a justification for not taking action to promote sustainable urban mobility.

The core objective of the Working Group was to recommend specific actions that could be taken at the EU level, while considering an appropriate role for the EU to support the implementation of a sustainable urban transport system. The recommendations could include new actions, as well as the redirection of existing European policies and initiatives.

### **1.4.1 Relevant Policy Initiatives Undertaken by the EC**

More recent European policy initiatives of particular interest for the Working Group are outlined below.

- The first important initiative, as identified in Section 1.2 of this report, is the Sixth Community Environment Action Programme. The common position adopted by the EC states that ‘the programme shall ensure that the Community’s environmental policy-making is undertaken in an integrated way

and to all available options and instruments, taking into account regional and local differences.’

- The EU strategy for sustainable development was then addressed at the Gothenburg European Council in June 2001. In section III of the Council report, ‘Setting Long-term Objectives and Targets,’ the strategy defines ‘Measures at [the] EU Level.’ Among the measures related to the section on ‘Improving Transport and Land-use Management’ the Council favoured an approach that would ‘Encourage local initiatives to tackle the problems faced by urban areas; [and] produce recommendations for integrated development strategies for urban and environmentally-sensitive areas.’
- The *Structural Funds Regulation 2000 – 2006* focuses new attention on sustainability in urban developments, as do other funding programmes, albeit in different ways, such as LIFE, Interreg III, Urban II, and the Research Framework Programme.
- The *White Paper on European Governance* proposes to open up the policy-making process, recommending accountability and responsibility for all those involved. The White Paper proposes a less top-down approach that will complement policy tools more effectively with non-legislative instruments. Among the proposals one finds the following objective, to ‘Bring greater flexibility into how Community legislation can be implemented in a way which takes account of regional and local conditions; promote greater use of different policy tools (regulations, “framework directives”, co-regulatory mechanisms).’
- The *White Paper on European transport policy for 2010: time to decide* emphasizes the need for integration of transport in sustainable development policies, and the need for a comprehensive strategy that goes beyond European transport policy. The White Paper proposes measures to develop high quality urban transport, to support and disseminate ‘good practices,’ and to encourage investment in research and technology of clean and efficient transport. These are the main relevant instruments the EU has employed thus far at the local level.

The Working Group recognises the significant amount of policy initiatives and actions related to the field of sustainable urban transport at the European level. However, the Working Group believes that the ongoing policy initiatives are insufficient and **more needs to be done by the EC to achieve a sustainable urban transport system**. New and more focused policy initiatives are needed. This can also include refocusing existing programmes or actions to ensure their support for sustainable urban transport objectives.

# 2 Trends in Urban Transport

This chapter briefly presents the main trends affecting the urban transport system and it presents the impacts of the transportation system on the environment and society. An understanding of these trends is central to formulating a successful sustainable urban transport strategy. The trends in urban transport are grouped under five headings, namely:

1. Urban development trends,
2. Transport developments,
3. Congestion,
4. Environment and health impacts, and
5. Administration.

## 2.1 Urban Development Trends

### 2.1.1 Sub-urbanisation

In most urban areas, the process of sub-urbanisation is ongoing; the highest population growth rates are in satellite towns and low-density sub-urban neighbourhoods. This process of sub-urbanisation is turning mono-centric urban areas into complex polycentric urban conurbations, with several local and regional centres, having complex institutional structures involving many local municipalities.

However, there are some signs that the sub-urbanisation trend may be slowing down. Active urban renewal and re-development policies in many urban areas seem to be having some success in reversing the depopulation of urban population centres and the decay of central city districts. This trend applies to selective segments of the population, and is especially the case for small, one or two person households.

Developments in the Amsterdam area are an example of the sub-urbanization trend. Between 1970 and 1990, the city of Amsterdam lost 25 % of its population due to net migration. The dominant direction of this outward migration was to the satellite cities north of Amsterdam. Since 1990, however, population figures have somewhat stabilised.

### 2.1.2 Urban Density

Several studies, such as National Academy of Engineering (2003) or Kenworthy and Laube (1999), have found that motorisation levels and urban densities are negatively



correlated. There is an especially sharp decline in car use when urban densities increase from low densities up to densities of 50 – 60 person/ha. The sub-urbanisation trend, partly driven by an increase in disposable incomes, and the desire for larger dwellings and green areas, is resulting in lower densities in large and medium-sized urban centres.

### **2.1.3 Spatial Structure, Location of Activities**

For a number of decades, the spatial separation of houses and jobs (or services) has been increasing in Europe. The main forces behind this process are the sub-urbanisation of residents, and the clustering of economic activities (to exploit economies of scale and scope). The locations of both the residences, and the activities at the destinations (offices, factories, schools, shops, etc.), are important drivers of the average trip length.

In most urban areas, more attention is being given to the interactions between the development of public transport, and the location of activities. Policies are being developed to locate destinations that attract a large number of people (shopping malls, hospitals, office complexes, universities) near public transport nodes (e.g. railway stations). A good example is the Manchester Metrolink project, where expansion of light rail was well coordinated with the development of settlement on light rail locations.

### **2.1.4 Urban Nodes in a Global Network**

Large urban areas are functioning as core nodes in the global network and the trend of ongoing globalisation, and related transport flows, is only strengthening this position. The traffic using (or going through) international points of entry, such as harbours and airports, competes with regional and local transport flows in urban areas for scarce infrastructure capacity.

## **2.2 Transport Developments**

### **2.2.1 Car Ownership**

Per capita car ownership rates have increased over the past decades in virtually all cities. In the EU, it is expected that this growth, although slowing down, will continue in the coming decades. The growth rates of car ownership, differ largely between urban areas, and are closely related to current motorisation rates and economic growth. In urban areas with low motorisation rates, the accession countries for example, the growth rates are expected to be the highest. For example, between 1990 and 2000, car ownership rates have almost doubled in Poland, and more than doubled in Latvia (European Academy of the Urban Environment 2003, *Twelve Candidate Countries Overview Report*).

Car ownership tends to be lowest in urban centres, and increases towards the outskirts of the urban area. Availability of public transport, and limited parking space, are important factors in explaining low car ownership rates in urban centres. However, it should be noted that socio-economic variables, especially household disposable income, have a far greater impact on car ownership than factors such as public transport availability or urban form.

### **2.2.2 Car Use**

An OECD-ECMT survey of cities (ECMT-2002, *Final Report*) presents a growth of 10 % in the number of trips by private car (per person per day) in the EU, from 1.51 in 1990 to 1.66 in the most recent year (mainly 1999 and 2000). This is quite significant growth considering that the overall number of trips per person per day remained rather stable (3.52 to 3.55 trips per day). In this same period, central and eastern European countries show a sharp growth of 70 %, from 0.66 in 1990 to 1.13 trips per person per day. The growth in car use is not only a result of an increase in the number of trips, but the average trip length is also growing in most urban areas. Ongoing sub-urbanisation is clearly a driver of this development.

### **2.2.3 Public Transport**

The market share of public transport has been decreasing in most of the urban areas within the European Union; in the accession countries, this trend was even stronger over the last decade. It seems that an active public transport policy of the local government, which includes investments, traffic management, and public promotion, is needed to maintain market share for public transport. In most urban areas, as public transport improves, there is an unintended effect: public transport attracts pedestrians and cyclists. The mode shift from private car towards public transport is often rather low, and public transport measures alone are not very successful in reducing car use. A co-ordinated package of measures, presented within a clear strategy, is needed.

### **2.2.4 Non-motorised Transport**

There is a considerable variance in the market share of non-motorised means among European cities. The overall market share of the bicycle appears relatively stable, while the market share of walking has dropped over the past decade. However, large differences exist in this trend between urban areas.

### **2.2.5 Freight Shipments in Urban Areas (Growth of Light Commercial Vehicles)**

The fastest growing type of freight vehicle in urban areas is the light commercial vehicle. Reasons for the rapid growth in light commercial vehicle transport include:

- the ongoing shift towards a service based economy, which results in the need for smaller and more flexible deliveries;

- logistic developments, such as just-in-time management, which reduces the need for warehouse space, and results in more deliveries of a lower average size; and
- increased shopping from home, which creates a need for more package delivery services.

The above developments increase demand for smaller, more frequent, more flexible, and more spatially diverse deliveries.

## 2.3 Congestion

The phenomenon of congestion is certainly not new, and in many urban areas it has been part of urban life for several decades. However, the situation has deteriorated during the 1990s, and the costs of congestion are significant, especially in the larger urban areas. The White Paper on transport (*European transport policy 2010: time to decide*) mentions a study showing that the external costs of road traffic congestion alone amount to 0.5 % of Community GDP. The rail network is also congested with around 20 % of it, 16000 km, classed as bottlenecks. A continuation of past and present policies will not reduce congestion levels, but a significant increase will occur in the European cities. The expectation is that congestion will spread in time and space in the coming decades, however problems at existing local bottlenecks may be reduced. If nothing is done, the costs attributable to congestion will increase in 2010 to approximately 1 % of Community GDP.

## 2.4 Environmental and Health Impacts

### 2.4.1 Air and Noise Pollution

Air pollution levels, especially sulphur dioxide, nitrogen dioxide, particulates, and hydrocarbons, have been falling, and continue to fall, in many western European cities, mainly due to vehicle technology improvements. But it seems that air pollution problems will not be completely solved by technological developments in the foreseeable future. Demand management, vehicle size regulations, and taxation are important supportive policy instruments. A White Paper on the future of urban areas in the UK supports this observation and states, ‘while air quality in towns and cities has improved considerably in the last decade it is still a serious problem. On current projections, the improvements in vehicle emissions will begin to reverse beyond 2010 unless traffic growth reduces.’

The falling trend for most air pollutants is not repeated for CO<sub>2</sub> emissions. The successes of new technologies on CO<sub>2</sub> emissions have been countered by traffic increases, and the ongoing growth of average vehicle weight. The White Paper on transport (*European Transport Policy for 2010: A Time to Decide*) argues that if nothing is done to reverse the traffic growth trend, CO<sub>2</sub> emissions from transport can be expected to increase by around 50 % between 1990 and 2010.

Along with vehicle pollution, the reduction of noise pollution also seems to be a difficult task. In most urban areas, noise pollution is constant or it has improved marginally. Noise pollution is certainly a concern for the coming decades.

### **2.4.2 Safety**

In the EU countries, traffic accidents are falling in total numbers, or are at least decoupled from traffic growth. It should be noted, however, that considerable variation in this trend exists among cities. In the accession countries, traffic accidents are rising, and a decoupling between traffic growth and accidents still needs to be realised. Urban areas play a critical role in traffic accidents and a study by the Austrian Transport Club shows that two thirds of all road accidents occur in urban areas. It is clear that much work still needs to be done to realise the EC objectives in this field of halving the number of road deaths between 2000 and 2010 at the EU level (White Paper, *European Transport Policy for 2010: Time to Decide*), and to create a dramatic decrease in the number of injuries.

### **2.4.3 Health**

Vehicle emissions, such as carbon monoxide, fine particulates, hydrocarbons, nitrogen oxides, and sulphur oxides have severe effects on health. The whole range of effects includes premature death, illnesses, medical care, and reduced physical activity. Average air pollution cost estimates range from 1 to 8 dollar cents per vehicle mile. For example, during urban peak times, local air pollution is estimated to cost 5 dollar cents per average automobile mile (Victoria Transport Policy Institute, 2002).

Transportation decisions have significant health impacts as they affect the amount of physical activity people engage in. Active transportation (walking, cycling) can be seen as the most practical and effective way to promote public fitness. The trend of a declining market share for walking can result in serious health effects. Health considerations argue for more walking, and bicycle friendly communities.

## **2.5 Administration**

In most EU countries, the responsibility of urban transport is decentralised; local municipalities have the main responsibility for the urban transport system. These local authorities often use the argument of competition between cities to reject the implementation of sustainable urban transport solutions. Inter-jurisdictional co-ordination of policies in regions with competitive cities is often not very well developed. The metropolitan transport authorities in Europe are a good example of geographical co-ordination.

Competition between cities makes national policies, as a framework for local transport policies, an essential factor in realising sustainable urban transport. A common framework at the European level would also be helpful in overcoming the argument of competition. National or supranational involvement is also needed to ensure progress on specific objectives. An example is the reduction of greenhouse

gases, which does not have a very high priority at the local level. Other complicating factors are the inefficient integration between locally managed urban public transport and urban road systems and often nationally managed railway and highway systems, or the interactions between private and public sector involvement.

### 3 Policy Measures to Promote Sustainable Urban Transport

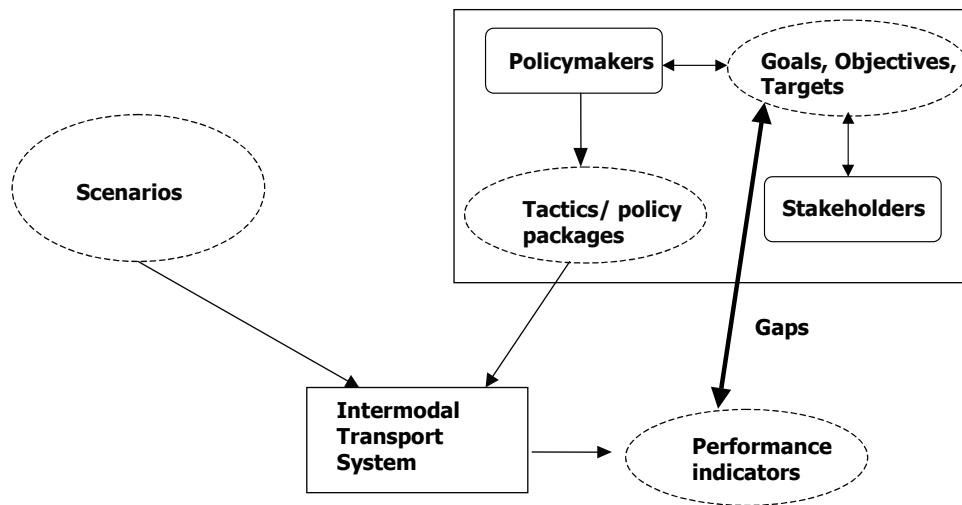
Figure 1, on the following page, illustrates a framework for policy analysis. In this framework, two sets of forces act on the urban transport system: external forces outside the control of the actors in the policy domain (we group these into *scenarios*, each of which constitutes a different plausible description of a future world), and policy changes (we call single changes *tactics*, and groups of changes *policy packages*). Both sets of forces are developments outside the system that can affect its structure, hence, the outcomes of interest to policymakers and other stakeholders are measured using *performance indicators*.

Tactics and policy packages are the forces within the control of the actors in the policy domain that affect the structure and performance of the urban transport system. Loosely speaking, a policy is a set of actions taken by a government to control the system, to help solve problems within it or caused by it, or to help obtain benefits from it. In speaking about European policies, the problems and benefits generally relate to broad goals – for example, tradeoffs among environmental, social, and economic goals. A *goal* is a generalised, non-quantitative policy objective (e.g., ‘reduce air pollution’ or ‘ensure traffic safety’.) Policy actions are intended to help meet the goals.

For each policy goal, *performance indicators* are used to measure the degree to which policy actions can help to reach the goal. Unfortunately, although a policy action may be designed with a single goal in mind, it will seldom have an effect on only one performance indicator. Policy choices, therefore, depend not only on measuring the performance of different policies, relative to the policy goals and objectives, but they also depend on identifying the preferences of the various stakeholders, and identifying tradeoffs among the performance indicators given these various sets of preferences. The exploration of the effects of alternative policies on the full range of the outcomes of interest under a variety of scenarios, and the examination of tradeoffs among the policies, requires a structured analytical process.

The unintended effects of policies also include the problem that policies formulated at a higher level, e.g. regional or national infrastructure measures, can have counteracting impacts on local policy goals. The policies are normally not evaluated on their local impacts, and the problem of the different scales of decision-making and impacts is especially prominent at the supra-national level.

**Figure 1 – A Framework for Policy Analysis**



In thinking about policy measures it is useful to think of two categories of issues, namely:

1. hardware, and
2. software.

As the headings suggest, the category ‘hardware’ has to do with the physical aspects of the urban transport system, namely the infrastructure, and the vehicles using this infrastructure (roads, bridges, tunnels, parking places, bicycle paths, tram lines, bus/tram/metro stations and stops, cars, buses, trams, etc.). There are three important issues with respect to the infrastructure: quality, capacity, and reach. Policy-makers typically worry about finding ways to improve quality, increase capacity, and extend the reach of the infrastructure and vehicles.

The category ‘software’ includes everything that is related to the operation, use, management (including enforcement of the regulations and laws), and perception/awareness of the urban transport infrastructure. It includes the operators of infrastructure and vehicles, the pricing (and tax) regime for using the infrastructure, the organisational structure of the urban transport system, the timetables for the various transport services, and the general rules, regulations, and laws for using the infrastructure. Typical issues related to the operation, use, and management of infrastructure are: speed limits on different types of roads and in different parts of a city, parking charges, public transport fares, better links between public transport and individual transport (cars and bicycles), licensing requirements for operators of various types of vehicles, legal structure of the organizations responsible for providing public transport (publicly owned versus privatized), and the decision-making processes.

The software category also covers issues related to the perceptions and attitudes of the users, operators, and managers of the urban transport system. It includes, for example, the perception and attitudes of users about the safety, comfort, reliability,

value of various transport modes, the sense of ‘belonging’ to a community, and the sense of being ‘involved’ in decisions affecting them.

Another important issue for policy makers is to take a total systems view, and to balance their consideration of short and long-term issues. For example, and understandably so, solving the problem of congestion in city centres is a priority for most city administrations. However, one of the policy measures for doing this has been the implementation of parking charges in city centres. The parking charge policy has been quite effective in reducing congestion in city centres. Although quite successful in the near-term, the long-term impacts and effects will not be known for quite some time. One long-term consequence of this policy might be that small retail outlets in cities would have to move to locations outside the city. From a policy-maker’s perspective this calls for an integrated approach towards land-use and transport policy making.

### **3.1 Policy-making Context**

As stated in section 1.3, the primary objective of the Working Group was to provide recommendations as to how the EC can play a role in stimulating sustainable urban transport. There are two issues that are of importance in delineating a possible role for the EC. First, there is the issue of subsidiarity; and second, each metropolitan region or city is unique, and thus a “one size fits all” approach is unlikely to be successful. In the remainder of this chapter we briefly discuss the subsidiarity issue and the heterogeneity of urban areas.

#### **3.1.1 The Subsidiarity Principle**

Traditionally, issues dealing with local and urban transport have been left to member states. National governments have provided policy guidelines, while regional or local governments have been responsible for interpreting and implementing these guidelines. The role of the EC has been mostly to set voluntary standards, and to finance demonstration and pilot projects. The rationale for this division of labour between the EC and the member states has been the principle of subsidiarity: decisions should be made at the best level to maximize efficiency.

Local/urban transport is by definition an issue where the decisions are best made at the local/urban level. However, there is a Europe-wide interest in getting urban transport policy right, and which argues for an element of European direction. Another argument for EU involvement is that cities compete with each other, and a common framework is needed so that the cities acting sustainably are not undermined by cities that are not. This competition, as well as transport pollution, has a regional and cross border nature. Clearly, the principle of subsidiarity circumscribes the range of actions available to the EC. However, the Working Group believes that there is enough space within the context of this principle to increase the number of actions by the EC to realise sustainable urban transport at the European level.



### 3.1.2 The Heterogeneity of Urban Environments

Every urban environment is unique. For example, the transport problems facing London are very different from the transport problems facing a city such as Helsinki. Two cities in the same country can also face very different transport problems, depending upon the specific characteristics of the cities. Given that the character of the problems is distinct, the solutions must also be different. However, differences stem not only from a difference in size. London, for example, is roughly comparable in size with Paris; yet, the transport problems facing these two cities are quite distinct. Thus, whatever role is considered for the EC, it should be sensitive to the differences among urban areas.

## 3.2 Policy Options

There is a wide range of options available to achieve a variety of policy goals. In this section, we have chose to list those options available in the categories of hardware and software.

### 3.2.1 Hardware

#### *Land Use*

- Development densities, involving an increase in density of development throughout an area to reduce the need to travel, should be encouraged.
- Development patterns, including transport corridor-based developments designed to encourage the provision and use of public transport, should be promoted.
- Development mixes, in which homes, jobs, and shops are placed close together, thus reducing the need to travel, should be supported.
- Certain sites should be protected from development.
- Parking standards for new development should be ensured.

#### *Infrastructure*

- new road construction
- new off street parking
- conventional rail provision
- light rail
- guided bus
- high occupancy vehicle lanes
- park and ride facilities
- terminals and interchanges
- cycle routes
- pedestrian routes
- pedestrian areas
- city distribution centres for freight
- dedicated lorry lanes and routes

- accident remedial measures (eg: skid resistant surfacing).

#### *Technology*

- accessible and user friendly vehicles
- clean engine technology
- urban traffic control systems
- intelligent transport systems (ramp metering, selective vehicle priority, incident detection systems, etc.).

#### *Energy Sources*

- hydrogen based energy
- electricity.

### **3.2.2 Software**

#### *Organisation of Work*

- flexible working hours
- teleworking
- company travel plans.

#### *Car Use*

- traffic calming
  - speed limits
  - traffic cells in city centres
  - re-routing of traffic flows
- physical restrictions on car use
  - access permits
  - number plate restrictions
- parking restrictions
- car sharing and car clubs.

#### *Public Transport Service Levels*

- on-demand service
- door-to-door service
- higher frequency of service
- bus partnerships
- transparent charges (especially in areas with many sub-systems).

#### *Information Provision*

- real time passenger information
- trip planning systems
- conventional timetable.

### *Pricing/Charges for use of Infrastructure and Services*

- parking charges
- charging for private parking spaces (workplace parking levy)
- congestion charging
- vehicle ownership taxes
- fuel taxes
- fare levels
- fare structures (flat fare, off-peak fares, etc.)
- concessionary fares for certain groups.

### *Traffic Planning and Management*

#### *Financing of Projects*

- Payments could be commuted, whereby developers could provide less parking, but pay for public space.
- Developers could be encouraged to contribute to the financing of infrastructure projects.
- Value capture taxes could be implemented that are designed to reflect the windfall benefits to existing developments from improved accessibility.
- Counteracting subsidies should be avoided, such as building subsidies for private homes, as these kind of subsidies support urban sprawl.
- Other land-use taxes could be targeted, including property taxes.

#### *Public Awareness Campaigns*

- Individuals should be encouraged to use alternatives which reduce overall travel, increase the use of public transport, and reduce travel by car.
- Eco-labeling should be promoted.

#### *Promotion of Slow Modes*

- health campaigns.

#### *Behavior Modification Campaigns*

- Driving behavior that is environmentally friendly should be encouraged.

#### *Participative Policy-making (Stakeholder Involvement)*

- open forums
- consultation rounds.

### **3.3 Developing Policy Packages**

The policy options listed in the previous section can be combined to create policy packages designed to promote sustainable urban transport. Clearly, the number of policy packages that can be created is, for all practical purposes, infinite. Furthermore, given the problem of heterogeneity mentioned earlier, it is not desirable to try and define the policy packages. Thus, in this section we outline some points that should be considered in developing policy packages for promoting sustainable urban transport.

#### **3.3.1 Integrated Land-use and Transport Policies**

Transport can be considered as a derived demand of the wish to perform activities, while land-use can be described as the spatial distribution of activities. The linkage between land-use and transport is widely recognised, and a growing number of cities are developing integrated land-use and transport plans. Good examples of integrated policies are the fingerplan-structure in Copenhagen, the integrated land-use, landscape, and transport planning in the Greater Region of Stuttgart, or the ABC-parking policy in the Netherlands. These policies are successful in linking public transport and land-use concerns. It should be noted that the potential success of the ABC-policy in the Netherlands is diminished due to the regional circumstances of many competing cities. Competition between urban areas is often the argument employed to undermine parking policy at the local level.

A carefully chosen combination of instruments is, in general, more efficient and better capable of overcoming barriers, than the use of individual instruments on their own. The instruments can complement each other by reinforcing benefits, overcoming financial barriers, overcoming political barriers, and compensating losers. The identification of instruments, which might achieve such synergy, is at the core of successful transport planning.

#### **3.3.2 Software and Mindware**

The hardware in urban transport systems is by far the largest recipient of both attention and available resources from policymakers. However, new hardware does not always provide the answer to problems of urban transport. Part of the reason for this is that decision-making processes, and the embedded project evaluation techniques and tools, are predisposed towards the provision of hardware. Ideally, policy packages should contain a mix of measures from the hardware and software categories. The optimal mix of these measures can only be determined at the local level.

#### **3.3.3 Monitoring Progress**

One of the essential aspects of a policy process should be the monitoring of progress towards stated policy goals. More often than not, the contribution of policies, with regard to achieving defined goals, is not monitored at all, or at best this is done in an ad hoc manner. Without the information provided by such monitoring, the situation

of policy-makers trying to tune their policy package to the needs of their city/region, is like the captain of a super-tanker attempting to navigate a harbour using only a map of the country instead of detailed navigation charts.

### **3.3.4 Institutional Aspects**

To successfully develop and implement policy packages, co-ordination and co-operation between different tiers and sectors of government is required. A national or supranational framework for policy-making spurs an efficient implementation of policy packages. The ECMT report on implementing sustainable urban travel policies contains many valuable recommendations for the implementation of sustainable urban travel policies.

### **3.3.5 Involvement of Stakeholders**

A successful implementation of policies relies on consultation and involvement of all relevant stakeholders. In Europe, Switzerland has a long established tradition of public consultation, and in many European metropolitan areas the public is becoming more actively involved in the policy-making process. A successful involvement of stakeholders means direct involvement throughout *all* stages of the planning process, and transparency in decision-making.

Far too often, privileged lobbying groups (the automotive industry, construction companies, urban developers, major local firms) have, on mobility issues, disproportionate access to, and influence on, decision-makers. A pro-active attitude from local leaders is urgently needed to create a consultation framework of equality. Some options for empowering grassroots organisations might be through access to information, ad hoc technical assistance, transparent processes, and the general use of participatory planning schemes. Effective participation could be fostered not only by creating clear rules on how the public can influence final decisions and resource allocation, but also by including a monitoring process (see 3.3.3) as a key element for access to information and the assessment of actual policy achievements.

Care should be taken to prevent the stakeholder consultation process from leading to inaction. This is not a result of the process itself, but there is a risk that elected decision-makers will use stakeholder involvement exercises, and consensus building, as an explanation for inaction.

# 4 Vision for Sustainable Urban Transport

Although the EU White Paper on Transport points out that the majority of transport problems (as well for congestion as for environmental and health aspects) are concentrated in urban areas, the EU does not have a well-developed vision or policy follow-up for its own fair analysis. Such a vision is the starting point to develop a plan of action to ensure sustainable urban transport. Therefore, the WG has created its own vision on sustainable urban transport; this vision is in line with *Local Agenda 21* and the definition adopted by the European Union's Ministers of Transport (see section 1.3.1).

## 4.1 Working Group Vision for Sustainable Urban Transport

A sustainable urban transport system:

- supports the freedom of movement, health, safety, and quality of life of the citizens of current and of future generations;
- is environmentally efficient; and
- supports a vibrant, inclusive economy, giving access to opportunities and services to all, including less affluent, elderly or disabled urban citizens, and non-urban citizens.

It achieves these objectives by, amongst others:

- promoting a more rational use of private cars, and favouring clean, quiet energy efficient vehicles powered by renewable or alternative fuels;
- providing a regular, frequent, comfortable, modern, competitively priced, well linked network of public transport;
- strengthening the share of non-motorised transport (walking and cycling);
- making the most efficient use of land;
- managing transport demand through the use of economic instruments and plans for behavioural change and mobility management;
- being actively managed, in an integrated manner, with the participation of all the stakeholders; and
- having quantified short, medium, and long-term objectives, with an effective monitoring system.

The WG proposes this vision of sustainable urban transport to the EC. An EC vision on sustainable urban transport will inspire national governments and local communities to develop their own vision in this area.

## 4.2 A Framework for a Vision at the City Level

Ultimately each city should develop its own vision and set of objectives based on an agreed definition of sustainability. This process needs to include all relevant stakeholders in the urban area. A transparent process is a key condition for developing a successful, and widely accepted, sustainable urban transport vision and objectives. Key elements of such a vision at the local level should include those listed below.

- 1) A strategy designed to achieve these objectives, should include all of the following elements:
  - a. reduction in the need to travel;
  - b. reduction in the level of car (and commercial vehicle) use;
  - c. enhancements to alternative modes; and
  - d. improvements in the way in which the road network operates and is used.
- 2) There should be close links between this transport strategy and those for related sectors, including health, social issues, education, and economic development.
- 3) An integrated approach to designing the strategy, which uses a range of policy instruments and the synergy to be gained by implementing them together, should be pursued. Such an integrated approach should involve, in order of importance:
  - a. ways of controlling car use, preferably through pricing of road use and/or parking, but with limits on road use and parking restrictions as a second best approach;
  - b. improvements to public transport operation in the form of changes in fares, service levels, reliability, and quality;
  - c. land use policies to support (a) and (b) in the form of increased density, mixed development, and development in association with public transport;
  - d. improvements to the operation of the road network, including reallocation of road space, traffic calming, selective low cost capacity improvements, and support for less polluting vehicles;
  - e. information technology to help users to use the resulting transport and land use system efficiently and, through telecommunications, to travel less;
  - f. improvements to walking and cycling within this context;
  - g. the use of ‘soft’ measures, including the raising of awareness to reinforce the strategy;
  - h. improved management of freight within this context; and
  - i. provision of new infrastructure only where it remains fully justified in the context of the measures listed above.
- 4) An approach to decision-making that involves all stakeholders in designing and implementing the strategy, and works effectively within the existing distribution of responsibilities, while endeavouring to remove unnecessary divisions of responsibility, should be adopted.

- 5) An approach to implementation, which identifies a logical sequence for introducing the instruments in (3), involves stakeholders in the implementation process, and avoids unnecessary changes in direction, should be pursued.
- 6) An approach to financing, which accepts that a strategy as defined above may well be largely self-financing over time, and that high levels of expenditure on infrastructure may well be counterproductive, should be encouraged.
- 7) A commitment to monitoring the performance of the strategy should be based on appropriate outcome indicators (related directly to the objectives). In addition, the use of that monitoring process to help identify successes, and to increase our understanding of the transferability of particular strategy elements, should be supported.

### 4.3 Need for Action at Different Levels of Government

All tiers of government need to co-operate and take action to ensure the implementation of sustainable urban transport at the local level. This section highlights the need for action and the appropriate tier of government to undertake this action most efficiently.

The tiers of government are annotated as E (EU); N (national); L (local). It should be noted that many barriers require action at all these levels, and the focus in this section is on action needed at the supranational and national levels.

#### Vision/Objectives

- requirements to take a long-term view (E, N)
- recommendations as to suitable objectives and the need for trade-offs (E, N).

#### Policy Packages

- requirements to consider all elements of strategy (N)
- greater co-ordination between sectors (E,N, L)
- improved and up to date guidance on the performance of policy instruments (E, N)
- increased research into policy instruments which are less well understood, and the principles of integration (E, N)
- greater willingness to evaluate novel policies and disseminate results (L)
- use of appropriate national policy instruments (regulations, taxes) (E, N)
- framework to implement the most effective policy instruments (N)
- advice on complex decision-making (E, N)
- improved decision-support tools (E, N)
- guidance and case studies on good practice (E, N)
- greater consistency in policy (E, N, L).

#### Financial

- reduced emphasis on investment (E, N, L)
- more consistent financial signals (E, N).



## Monitoring

- requirements to monitor (N)
- specification of consistent, appropriate indicators (E, N)
- support for dissemination of results (E, N).

# 5 Recommendations for the Commission

The main objective of the Working Group was to propose recommendations for the European Commission that would support the successful implementation of a sustainable urban transport system at the local level. In order to make effective recommendations, the Working Group needed to consider the role the EC can play in light of the principle of subsidiarity, the mandate to develop a thematic strategy on the urban environment, and budget constraints. It is the view of the WG that the principle of subsidiarity is too often used as a justification for inaction. Subsidiarity implies decision-making/task allocation at the appropriate level; it does not exclude participation at national and supra-national levels. Supranational or national guidance on local policy-making is considered a powerful tool for bringing sustainability to the forefront of urban transport decision-making.

EC involvement in sustainable urban transport should be based on a long-term and clear vision of sustainable urban transport. The recommendations in this chapter are in line with the WGs' vision on sustainable urban transport, as presented in section four. The WG believes that the main role of the EC is in supporting and creating a framework for action at the local level. Local authorities could greatly benefit from such a framework when developing local sustainable urban transport strategies. The framework should address content (suitable objectives), process, evaluation criteria, and monitoring. It should be highlighted that the process is critical for successful implementation of a sustainable urban transport strategy. The process needs to include all relevant stakeholders, and it needs to be transparent and flexible. Flexibility is a key condition given the uncertainty of the future. Overall, the EC should take action by:

- establishing a clear EU vision on sustainable urban transport, and this vision should be consistent throughout all EU institutions and EU funding;
- creating a framework for action, and offering guidance to promote sustainable urban transport at the local level.

The Working Group has also formulated specific recommendations to the EC for the following target areas:

- Policy Coherence at the EU level;
- Sustainable Urban Transport Plans;
- Financial Policies;
- Monitoring of Progress Towards Policy Objectives by Using Indicators and Conducting Impact Assessment;
- EC Policy Initiatives;
- Improved Governance;
- Dissemination of Good Practices and Knowledge; and

- Promoting Awareness about Sustainable Urban Transport.

## 5.1 Policy Coherence at the EU Level

Greater effort needs to be put into ensuring that EU policies affecting urban transport are consistent with each other. Furthermore, the sustainable urban transport strategy should be linked to policies in other areas that are relevant for achieving sustainable urban transport such as health, education, and social development. Current EC actions with potentially large consequences for sustainable urban transport, and a high need for co-ordination include the following list below.

### *TEN-T*

- Where TEN proposals affect urban areas, their local and regional impacts should be assessed against the objectives of sustainable urban transport.

### *Structural/Cohesion Funds*

- The local/regional effects of projects financed using structural/cohesion funds should be assessed against the objectives of sustainable urban transport.
- Projects financed (partly or wholly) using structural/cohesion funds should follow the principles set out in the WG recommendations on financial policies (covered in section 5.4).
- EU funds should be switched from modally specific projects and reallocated to multi-modal regional/corridor plan, including demand management and accessibility.
- The EC should think about allocating some budget from the cohesion funds to the special problems of the urban areas, especially for solving transport pollution problems.

### *Air Quality and Noise Directives*

- The existing air quality and noise directives are consistent with the principles of sustainable urban transport. However, specific targets need to be set with care, and it should be ensured that the ‘total set of targets’ is consistent and complete. Setting and using individual targets can lead to problems. For example, individual noise or air quality targets often lead to undesirable responses such as the rerouting of transport. While re-routing of traffic solves the local problem of noise or air quality, it can lead to longer distances being driven, and thus actually increase total noise or emission levels.
- To ensure consistency between environmental regulations, and stimulate local/regional authorities to look at the total problem, the WG recommends to these authorities that they prepare an environmental management plan. This recommendation is in line with the recommendations of the WG on urban sustainable urban management.

### *Safety*

- Authorities should ensure that these policies are consistent with the principles of sustainable urban transport. The targets for safety should be considered as

part of the overall set of targets, and not in isolation. Furthermore, the use of slow transport modes should not be restricted or hindered by using the argument that these modes are unsafe.

### *Technology*

- While new technologies often have the potential to reduce urban transport problems, there is a danger that they may stimulate new ones. A one-dimensional focus on technology at the EU-level needs to be avoided. All applications of new technology to transport in urban areas should be assessed against the objectives of sustainable urban transport.

### *Taxation Policies*

- The WG recognizes that the incentives and subsidies given by the tax policies in most member states, are often at odds with the objectives of sustainable urban transport. Changing this is certainly a long-term task, and a broad consensus must be created for sustained action. However, some initial steps may be taken in the medium-term, such as creating conditions for a more coherent and better harmonized treatment of vehicle and fuel taxes, and of more rationalised transport infrastructure use in urban areas, to make policies more consistent with the objectives of a sustainable transport system.

## **5.2 Sustainable Urban Transport Plans**

The WG believes that sustainable urban transport plans can play a useful role in arriving at sustainable urban transport. There should be European action to support sustainable urban transport plans at the local level. The WG recommends to local authorities to draft these sustainable urban transport plans. The EC should provide a framework for the drafting of these plans, including a local vision on sustainable urban transport, objectives, indicators and policy measures. Key elements of local sustainable urban transport plans should also include the development of a policy monitoring system, as well as transparency and stakeholder involvement. These plans should spur the integration of land-use and transport planning.

The WG recommends the EC to:

- make EU funding conditional on the existence of such a plan at the local level (this is in line with the WG recommendation on EU funding);
- provide guidance on how to structure such a plan and disseminate knowledge on best practice;
- support national governments in making these plans a requirement for large cities;
- take advantage of existing national level initiatives, such as the local mobility plans in France, or transport plans in the UK.

## **5.3 Financial Policies**

The WG does not believe that achieving the goal of sustainable urban transport has to be more costly than current urban transport practice. Rather, it is the view of the WG

that existing and available financial resources at the local, regional, national, and European levels needs to be better targeted towards those actions that are the most cost-effective and provide the largest gains. The WG further notes that, for a variety of reasons, current policy is partial towards financing of infrastructure projects, i.e., it is easier to get financing for infrastructure projects than for non-infrastructure projects. For example, obtaining EU financing for a citizen outreach campaign to promote public transport is more difficult than attaining financing for the construction of a new bridge or road.

### *EU Funding*

Financial actions of the EU, affecting urban transport, should be evaluated on their urban transport effects to ensure consistency with sustainable urban transport objectives. Specific recommendations considering the targeting and regulation of EU funding are outlined below.

- Cities should be required to develop a transport plan as part of the process by which they can receive EU financing. The provision of funding should be made conditional on the city agreeing to monitor the implementation and performance of the submitted transport plan. It should be noted that funding is only available for plan/strategy and not for specific projects.
- The EU should encourage or direct similar mechanisms at the country level for national funding of local projects.
- The environmental assessments required by EU regulations, and especially the strategic environmental assessment directive, are an important step forwards and a successful implementation needs to be ensured. The environmental assessment methods should be revised along the following lines:
  - assessment of all transport plans should include an assessment of possible impacts on cities and regions;
  - these assessments should be done early on in the planning process, and should include an assessment of real alternatives as opposed to only ways to mitigate the negative impacts; and
  - the environmental assessment directive should clearly state that the alternatives to the chosen option considered as part of this assessment, should include non-infrastructure and multi-modal options.
- The EU should not focus exclusively on the problems and needs of long distance transport. More attention needs to be given to problems of local, regional, and inter-regional transport. This is because almost 80 % of European citizens live in urban areas, and are impacted by vehicle emissions. In keeping with this, the EU should allocate more of the available resources to helping solve these local and regional problems.
- The EU and member states should develop a mechanism by which cities and regions can improve their position in the current process. Lacking a voice at the table, the concerns and needs of cities and regions are often not well represented in the discussions between the member states and the EU. Two suggestions to improve current practices follow below.
  1. A start can be made to promote the issue of sustainable urban transport at the member state level. In this way the vertical policy coherence

between EU, member states, and local/regional areas can be improved. National governments that have withdrawn from urban issues should be encouraged to take a more active role.

2. Cities often know very little about EU funding options, thus a more active dissemination of the information on EU funding is needed.

#### *Financing at the Local/National Level*

Working Group recommendations, that will enable the EU to contribute to a better targeting of financial resources at the city level, are profiled below.

- The EU should disseminate advice on successful policy instruments. A good example of linking interregional transport investments and the local dimension is the requirement in Germany that all railway projects reserve and spend 20 % of their total budget on improving the local transport infrastructure.
- The EU should promote relatively cheap software measures. In general, infrastructure alternatives need to be compared with non-infrastructure alternatives.
- The EU should support revenue generating policies (parking fees, road pricing), and the user-pay principle.

#### *Internalisation of External Costs*

- The EU should support the internalisation of external costs in local transport policies. Therefore, urban areas should be included in the framework directive on Infrastructure that is currently being drafted within DG TREN.
- Many EU regions or cities are considering some form of urban road pricing. Without co-ordination, this could lead to many differing urban pricing systems in the EU. The EU should take the initiative to ensure that an EU-wide harmonization, of the technology necessary to implement an automatic road pricing mechanism, is implemented.
- Pricing mechanisms at the urban level should consider cross financing from road pricing fees to public transport funding. If one considers urban areas as important habitats, this mechanism could apply to urban areas like it exists for important habitats such as the Alpine and Pyrenees areas.

## **5.4 Monitoring of Progress Towards Policy Objectives by Using Indicators and Impact Assessment**

The EC should develop and disseminate knowledge on suitable policy *objectives* to achieve sustainable urban transport, and on related outcome *indicators*. A clear vision, at the EU level, on sustainable urban transport and accompanying objectives will help to give guidance to cities. The WG recommends that the EC disseminate a separate communication document on sustainable urban transport that will provide a definition of sustainable urban transport, a vision, objectives, indicators, and a monitoring system.

The EU should also develop a set of common indicators to enable benchmarking and decision-making at a National and European level. Specific recommendations of the WG are:

- the EU should forge links and co-ordinate with the OECD/ECMT work on urban data collection and decision-making. The EU should explore if it is possible to harmonize urban data collection through Eurostat and National Statistical Offices;
- knowledge on data collection at the local level, especially for non-highway related transport information, should be disseminated;
- existing EU research on indicators, to select a set of common indicators, should be utilised to the fullest extent possible. A potentially useful example is ongoing OECD/ECMT work in this field. The relevance of this work, with a focus on the national level, for policy-making at the supra-national level needs to be discussed further;
- at the local level, local indicators that are tailored to the city/region can be used to supplement the set of common indicators.

The EC should support the development and implementation of an *appraisal method* for ex-ante and ex-post evaluation of publicly funded transport projects at the city level. The method should determine whether or not the project has contributed to making the city's transport system more sustainable.

## 5.5 EC Policy Initiatives

The WG recommends that the EC undertake action in the areas outlined below.

- Disability should be part of the mainstream accessibility policy. A more accessible transport system results in benefits for everyone (and not just the disabled).
- These accessibility considerations should enter into the strategic long-term planning process to avoid high costs of changing existing systems. The WG believes that a thematic strategy on accessibility within all modes of transportation is needed.
- Although there are a number of initiatives to give more relevance to non-motorised transport at the EU level, non-motorised transport modes play a muted and rather insignificant role in EC policies. EC actions and initiatives at the urban level should, therefore, give cycling and walking a more prominent role.

## 5.6 Improved Governance

The EU should provide guidance on how to overcome the many institutional barriers that can make sustainable urban transport policies ineffective. In order to improve governance, the WG recommends:

- co-ordination between transport and other policy areas (particularly land-use), including coordinating responsibility for different instruments;
- co-ordination between authorities within a region, with a good example of co-ordination being set at the EU level;

- co-operation beyond administrative borders in geographical regions (one option might be to link EU funding to this kind of co-operation);
- co-ordination between public and private sector;
- co-ordination between different tiers of government; and
- the development of a mechanism to increase the participation and influence of those stakeholders and grassroots organizations that usually have a limited capacity to access and influence decision-makers, such as funding of technical assistance or involvement in planning processes.

## 5.7 Dissemination of Good Practices and Knowledge

The WG recognizes benchmarking and exploration of *good practice* or *demonstration projects* in sustainable urban travel as useful EU activities. Although the EU has accomplished a great deal of work in this field (e.g. CIVITAS project by DGTREN, ELTIS database DGTREN), the Working Group believes that it is now time to proceed toward the next level. It is time that the EC direct its focus on replication of good practices.

Working Group recommendations in this area are profiled below.

- The EC should support ex-post evaluation of policy measures. This is a powerful instrument to understand the impacts of a policy measure, and will lead to the improved monitoring of demonstration projects.
- The EC should advise and support, at the local level, the training of key personnel on complex decision-making. This advice should include the topics of flexibility, transparency, and participatory processes. Recent OECD/ECMT work on integrated decision-making can be utilised for this purpose.
- The EC should focus on target groups, such as politicians, the business community, the general public, senior officials, and academics, and follow a tailor-made approach to reach each group.
- The EC should establish a specific strategy for strengthening the links between research, demonstrations, and current practice. One example would be to develop programmes that support cities in continuing their demonstrations once the research project has been completed.

## 5.8 Promoting Awareness about Sustainable Urban Transport

In the long-term, information and educational campaigns are effective instruments to realise changes in the behaviour of citizens. The EU should continue and intensify its efforts in this area by allocating additional funds to support EU-wide information and educational campaigns. More specific recommendations are listed below.

- The EU should enlarge and intensify *European campaigns on environment and health* to support the use of non-motorized transport means. Health campaigns, in particular, have a greater possibility of success because people are generally more willing to change their behaviour for their own good, than for a societal purpose.



- More campaigns are needed with a specific focus on children as there is a strong cohort impact in transport.
- The EU should consider alternative approaches like individualized marketing.
- The EU should give *publicity* and *awards* to well performing regions on sustainable urban/regional transport.
- The EU should develop a benchmark, indicating how sustainable the transport system of each city is, based on comparable indicators of each municipality's transport system.

# ANNEX A: Working Group Members

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