EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR ENERGY AND TRANSPORT

DIRECTORATE G - Logistics, innovation, co-modality & maritime transport
Clean Transport & urban transport

Brussels, 28 February 2007
TREN/G4/

Preparation of the Green Paper on Urban Transport

Second Technical Workshop
"Urban transport financing: experiences from different cities"
Szentendre, Hungary, 6 March 2007

Background paper

1. A Green Paper on Urban Transport

In its mid-term review of the 2001 Transport White Paper[1] the Commission announced the publication of a Green Paper on Urban Transport in 2007 to identify potential European added value to action that is taken at the local level.

The Green Paper will examine whether obstacles to successful urban transport policies exist at the EU level. The Green Paper on Urban Transport will address all transport modes, including public transport, walking, cycling, motor cycles and motor vehicles, and will cover both urban freight (and logistics) and passenger transport. The functioning of the private car in cities will be addressed. In addition, the paper will emphasise the need for an integrated policy approach. The paper will have a strong technology component and may also address issues related to the Commission's proposals on public service obligations in public transport and clean vehicle procurement.

The conference "Urban transport: problems, solutions and responsibilities" on 31 January 2007 marked the launch of the preparations of the Green Paper on Urban Transport[2]. Several clear messages were given during the conference. The first clear message was that there was broad support for our initiative to prepare a Green Paper. There was consensus on the need for a joint approach, despite the fact that urban transport has traditionally been considered a too controversial issue.

Subsidiarity was considered not to be an obstacle, but rather a challenge and an opportunity that could enrich actions taken at different levels, be it local, regional, national or European. The speakers recognised that European cities offer a successful model for urban transport and that the cities themselves are in the best position to select and implement the right portfolio of measures. The role of the EU will be to identify, in partnership with all parties, whether there are obstacles to successful urban transport policies and, for specific actions, propose joint solutions.

Another important message from the conference was the unanimous agreement on the need for an integrated approach. The speakers underlined the importance of urban transport, not only in the context of the European transport policy, but also in a wider context of other European policies.

The importance of the EU's Regional Policy was stressed on several occasions during the conference. The need for financial support for public transport through the structural funds, the cohesion fund and other, innovative, instruments, is essential for a successful urban transport policy. A strong appeal was made to the cities in the new Member States, not to repeat mistakes made by the old Member States, for instance, not to abolish existing public transport infrastructure, like tramways.

[1] Keep Europe moving – Sustainable mobility for our continent. COM (2006) 314 final
[2] The preparatory work for the Green Paper can be followed via http://ec.europa.eu/transport/clean/index_en.htm

The preparatory phase of the Green Paper will end in June 2007. During this phase the Commission will organise four technical workshops with stakeholders and experts. In addition, the Commission will organise two public stakeholder conferences: one at the beginning of the process and the second one at the end. For each of them the Commission will prepare and distribute a background paper in advance.

This is the background paper for the Second Technical Workshop which deals with urban transport financing. It should be seen against the background and in combination with the other background documents that the Commission has presented so far. For example, the paper that was prepared for the Launch-Conference "Urban transport: problems, solutions and responsibilities" provides information on governance related issues as well as an overview of the planning of the preparations of the Green Paper.

The objective of this paper is to provide background to the workshop participants, define questions and guide the debate during the workshop. This is a public document that the Commission will publish on its website, together with a summary of the discussions that will take place during the workshop. The reader is reminded that programme and background paper for the Third Technical Workshop, that deals with public transport, also touch upon questions related to financing.

2. An overview of the main issues

Different aspects of urban transport will be elaborated during four workshop sessions. These sessions will deal with cohesion policy, financing of transport investments and operations, financial innovations and transport pricing and access and charging schemes as one possible solution for raising revenues for transport investments. Some of the main issues that will be addressed during the sessions are elaborated below.

2.1 Cohesion Policy

Background

More growth and jobs for all regions and cities of the European Union – this message will be at the heart of Cohesion Policy and its instruments between 2007 and 2013. During that period, the greatest investment ever made by the EU through cohesion instruments will be worth € 308 billion (in 2004 prices) to support regional growth agendas and to stimulate job creation. Of the total amount 82% will be concentrated on the “Convergence” objective, under which the poorest Member States and regions are eligible.

In the remaining regions, approximately 16% of the Structural Funds will be concentrated to support innovation, sustainable development, better accessibility and training projects under the “Regional Competitiveness and Employment” objective. Another 2.5% finally are available for cross-border, transnational and interregional cooperation under the “European Territorial Cooperation” objective.

Certain spending targets have been agreed upon to pursue the objectives of the Growth and Jobs Agenda. In the case of the "Convergence" objective, the target is 60%, and in the case of the "Regional Competitiveness and Employment" objective, the target is 75% of the total available funding, which needs to be "earmarked" for interventions supporting, e.g. research and innovation, the information society and sustainable development.

The EU's Cohesion Policy for the period 2007 – 2013 includes the following two main financial instruments that are relevant for urban transport:

- The Cohesion Fund that co-finances mainly transport and environment projects in Member States whose GNP is less than 90% of the EU average;

- The European Regional Development Fund (ERDF) that operates in all Member States and co-finances physical investments and, to a limited extent, training for citizens. The funding is concentrated on the poorest regions in terms of GDP per head.

The importance of urban questions within the EU's Cohesion Policy has been recognised by the Council, the Parliament and many external stakeholders during the past years. The Community Strategic Guidelines 2007-2013 pay particular attention to the needs of urban areas and to urban transport. Furthermore, the JESSICA initiative – launched by the Commission, the European Investment Bank and the Council of Europe Development Bank – has been created to help the Member States in their investments in urban renewal and development projects[3].

But money is not everything. The EU also puts strong emphasis on working in partnership with national authorities at different levels. For example, actions at EU-level provide possibility for cooperation and exchange of experience. Within the URBACT cooperation initiative there are already several networks of cities across Europe working on urban transport issues covering a variety of themes such as alternative transport modes, mobility policy and accessibility. Additionally, the recently launched Commission initiative "Regions for Economic Change" foresees the creation of a network of cities to spread best practice on integrated policies for urban transport.

[3] JESSICA will offer the managing authorities the possibility to take advantage of outside expertise and to have greater access to loan capital for the purpose of promoting urban development, including loans for social housing where appropriate. Where a managing authority wishes to participate under the JESSICA framework, it would contribute resources from the programme, while the EIB, other international financial institutions, private banks and investors would contribute additional loan or equity capital as appropriate. Since projects will not be supported through grants, programme contributions to urban development funds will be revolving and help to enhance the sustainability of the investment effort. The programme contributions will be used to finance loans provided by the urban development funds to the final beneficiaries, backed by guarantee schemes established by the funds and the participating banks themselves. No State guarantee for these loans is involved, hence they would not aggravate public finance and debt.

The Commission's Communication on Cohesion Policy and cities[4] emphasises the importance of good accessibility and urban mobility for urban growth and jobs. This Communication is a crucial statement that makes key suggestions to the Member States about their investments in urban areas for the 2007-2013 Regional Policy programmes.

Topics raised in the Communication include the need for co-ordination between various transport modes, better coordination of transport planning between cities and surrounding areas, improvement of the affordability, efficiency and effectiveness of public transport and the promotion of cycling, walking and other alternative forms of transport following an integrated approach. The Communication also stresses the need of good links to major airports and to the major axes of the Trans-European Transport Networks.

Issues

Adopted by the Council of the European Union on 5 October 2006, the Community Strategic Guidelines for Cohesion give recommendations to Member States on the kind of investments that is of priority for the 2007-2013 Structural Funds period. Integrated urban development policy, in the framework of Cohesion Policy is based on an integrated approach that covers these main fields:

- development of urban and metropolitan areas, which requires the setting up of appropriate planning and governance tools. These tools are a necessary condition to ensure effective and coordinated interventions of structural funds in these areas;

- development of urban districts, transferring in the mainstream programmes the experience and tools developed in the Urban Community Initiative;

- thematic interventions, covering themes such as sustainable urban transport, and energy management.

As regards urban transport, the Strategic Guidelines refer to the promotion of "environmentally sustainable transport networks, particularly in urban areas. This includes public transport facilities (including park-and-ride infrastructures), mobility plans, ring roads, increasing safety at road junctions and soft traffic (cycle lanes, pedestrian tracks). It also includes actions providing for accessibility to common public transport services for certain target groups (the elderly, disabled persons) and providing distribution networks for alternative vehicle fuels. Inland navigation routes can also contribute to the sustainability of networks."

Member States that receive funds under the Cohesion Policy need to prepare a National Strategic Reference Framework (NSRF's) and Operational Programmes (OP's). The content of operational programmes depends on the funding source. Programmes prepared under the Cohesion Fund are devoted to environment and transport. Under the ERDF Member States may prepare operational programmes at national or regional level covering a wide variety of topics.

[4] COM (2006) 385

All these programmes are the subject of negotiations between the national authorities of the Member State and the Commission. Both Cohesion Fund and ERDF-funded programmes can include actions related to urban transport.

An initial assessment of the NSRFs received, shows that issues related to urban transport are included by a majority of Member States. As regards the content of operational programmes it is still too early to make any conclusions, but it seems as if many programmes will include actions related to urban transport.

Considerations at EU level

1. Which actions could be undertaken, taking into account the separation of responsibilities between the EU and Member States' governments, to ensure that local, regional and national authorities can fully exploit the opportunities that the EU's Cohesion Policy offers for urban transport improvements?

2. The JESSICA initiative helps the Member States in their investments in urban renewal and development projects. Are there any specific requirements for this initiative from an urban transport perspective?

3. Are there any specific needs in the field of information exchange and networking of cities?

2.2 Financing of investments and operations for all modes of transport

Background

Good transport is a key element of cities' attractiveness. To attract employment and facilitate growth, cities need good connections to inter-urban and long distance networks. They also need to ensure clean, efficient, affordable and effective intra-urban mobility. The large majority of European citizens lives in urban areas and they all share the same infrastructure for their mobility.

It is therefore no surprise that all major cities in Europe face common challenges of reducing congestion, accidents and pollution while at the same time wishing to increase mobility for businesses and citizens - including those that face social exclusion or are unable to drive a car. At the same time, the question is how to finance investments in existing and new (intelligent) transport networks, in maintenance, and in the operations of public services, including public transport services.

Public budgets are under pressure in many cities but will continue to play an important role, as do the revenues raised from users. The EU makes funds available to eligible regions through its Cohesion Policy. The European Investment Bank and the European Bank for Reconstruction and Development can contribute with capital and expertise but projects usually need to have a significant minimum size. Private financing, usually in the form of public-private partnerships, can also contribute but requires stable legal frameworks and long term strategic policy visions.

But is should not be forgotten that achieving sustainable urban mobility includes, in the first place, making best use of existing transport infrastructure, a good co-ordination and co-operation between the various transport modes, improving the affordability, efficiency and effectiveness of public transport, and the promotion of the clean and energy efficient transport modes. It also means recognising that road transport plays an important role in society and in daily life, and ensuring the development of good transport links to major airports and to the axes of the trans-European Transport Networks (TEN-T).

Issues

Cities that invest in urban transport are economically successful cities. For example, public transport facilitates economic growth, employment and social inclusion. An analysis of economic growth in the regions centred in 16 cities for the period 1987-97 showed that economic development in the regions centred in the cities with a rising public transport share outpaced their national economies by 8%. Economic development in the regions centred in the cities where public transport's market share was falling outpaced their national economies by only 2%.

Public transport in Europe offers a mobility solution to tens of millions of people every day. The annual turnover of the bus, coach and urban rail services is estimated at 150 billion Euro per year for the EU 25. About half of this money comes from passenger income, the other half from public subsidies. These public subsidies vary between 1/3 and 2/3 of the total costs and are expected to continue to play an important role in the future.

The urban transport sector is an important sector for direct and indirect employment. Let's take the example of public transport vehicles and infrastructure. The total urban tram and light rail fleet in Europe amounts to around 25,000 vehicles and it has been estimated that the replacement market ranges between 7500 and 9300 during the period 2000 – 2020. Total track length is 4793 km in the EU 15 and 2240 km in the new Member States.

New systems and lines are expected to increase track length by 40% over the period 2000 – 2020. In monetary terms this means markets for infrastructure investment (excluding refurbishment, which is expected to boom in the new Member States) of 30 billion Euro and for rolling stock of 9 – 14 billion Euro. During the 1990-s, the share of the new Member States in newly purchased rolling stock has been rather low.

Rail product suppliers claim that urban, suburban and regional rail systems account for about 50% of their total annual global turnover (including all rail supplies, but excluding infrastructure). There are an estimated 150,000 public transport buses in the EU 15, the annual turnover is 15,000 buses. In monetary terms this represents a turnover of 2.7 billion Euro per year.

A particular topic that requires attention is the link between urban networks and the TEN-T networks, where users expect a continuity of networks and services. Efficient urban by-passes and connections to and between TEN-T nodes, particularly (urban) rail connections to airports, are important.

For the same reason the TEN–T - urban "interfaces" for passenger and freight transport need to operate smoothly. These "interfaces" facilitate intermodality[5].

Considerations at EU level

1. The European Investment Bank (and the European Bank for Reconstruction and Development) can contribute with capital and expertise but projects usually need to have a significant minimum size. How could their role in urban transport financing be increased?

2. Private financing, usually in the form of public-private partnerships, can contribute to financing urban transport improvements and services. Is there a need to increase the involvement of private capital and expertise and if yes, how should this be done?

3. Public transport operators and authorities need modern management tools and knowledge to manage investment projects and operations. Are adequate tools available and how could the use of such tools be increased?

4. Are the urban by-passes, connections to and between TEN-T nodes and the TEN-T "interfaces" for passenger and freight transport offering a full continuity of networks and services?

2.3 Urban zones with regulated access and charging schemes

Background

A significant part of transport kilometres in Europe are made in cities. Road transport produces the big majority of all transport emissions and urban transport is responsible for around 40% of the road transport CO2 emissions. Increases in traffic levels counteract efforts being made to reduce greenhouse gas emissions, with the share of urban traffic in transport-related CO_2 emissions set to rise significantly.

The basic framework for air quality requires, amongst others, Member States to produce action plans for zones and agglomerations where limit values are exceeded. The limit values have been set by daughter Directives. Nearly all of Europe's urban citizens are exposed to air pollution levels that exceed EU limits. Motorised traffic is a major source of these and other air pollutants. In central urban areas the contribution of road transport to pollutants such as NO2 and benzene, is in the order of 40 – 80%. Substantial progress has been made in reducing vehicle emissions, but hotspots continue to be a problem and the growing traffic levels will cancel out progress.

A number of European cities are implementing demand management measures in their sensitive inner-city zones. Such restricted access/environmental zones, or green zones, could build on successful zones that have been implemented in many cities, where large areas have been reserved or prioritised for pedestrians, cyclists and resident vehicles only. Possible means for regulating traffic in green zones include (combinations are possible):

[5] Examples from passenger transport: interchanges, park and ride, intelligent traveller services, …

- Reallocation of space, including the pedestrianisation of streets or areas;
- Fixed entry restrictions to prevent vehicles with certain (environmental) characteristics to enter;
- Flexible entry restrictions, based upon financial incentives and dis-incentives – this could be implemented through road user charging or parking charging schemes and could take into account the external costs (link with vehicle characteristics);
- Speed restrictions, reducing the maximum speeds of road traffic – either through signage and street design or through automatic speed adaptation for vehicles.

The congestion charging schemes in London and Stockholm have provided useful lessons in terms of impacts, process and public support. The quality of life in several Italian cities has significantly improved after the introduction of access restrictions. So far cities chose low-tech solutions that often take into account the characteristics of the vehicle that enters a zone. To allow a control of the environmental characteristics of the entering vehicles often an 'on vehicle' labelling scheme or database based upon individual vehicle characteristics is required.

Issues

Through the creation of green zones, local/regional authorities have a powerful transport demand management tool to create an environment that is less congested, has less parking problems, and that is more healthy and pleasant. However, in a number of Member States the establishment of such zones, or certain forms of them, is forbidden by national legislation. In addition, the approaches of the Member States that have implement restricted access/environmental zones are not harmonised.

Restricted transport zones have been introduced in different forms and with different names in a number of European countries. Here are some examples. Environmental zones or low emission zones exist for instance in Norway, Sweden and Denmark. The limited traffic zones in Italy are sometimes linked with "hybrid" road user charging schemes. The charging schemes in London and Stockholm include certain incentives for clean and energy efficient vehicles. London wants to introduce an environmental zone covering a major part of the city. Zones with speed restrictions have been introduced in the Netherlands and Germany.

The implementation of the environmental zones in Sweden, and restricted access zones in Italy, has in the past raised concerns about a smooth functioning of the Single Market and the free movement of people and goods. Discrimination on the basis of nationality using vehicle performance, on board technology or tariff structures must be prevented.

Links or nodes of the TEN-T network might be located in, linked to or run through green zones. A harmonised approach towards green zones will contribute to a smooth functioning of the TEN-T. In cases where technology is used to regulate the traffic entering a zone, there is a possible link with the development of new charging technology and Galileo-related applications, automatic vehicle identification and automatic speed adaptation. Finally there is link between green zones and EU noise policy, the recommendation for sustainable urban transport plans, the promotion of clean and energy efficient vehicles. It should also be noted that speed restrictions or space re-allocation can help to save energy and improve road safety.

Urban road user charging, combined with supporting regulatory policies (e.g. speed control, parking charges), might reduce the external costs of transport by 13-35%. In monetary terms, this equals to external costs savings (congestion and safety) up to 150 Million Euro per year in highly congested cities. This high amount is no surprise if one considers that, for example, the congestion charging scheme in London has led to reductions of CO2 in the range of 20%. The introduction of the environmental zone in Göteborg has led resulted in a reduction of PM by half.

Considerations at EU level

1. How should the EU support the implementation of green zones? Would it be useful to develop a general framework to facilitate cities, regions and Member States who wish to introduce green zones? Should green zones be defined in broad terms and should the framework clarify the basic fundamentals.

2. How should the EU internal market concerns be addressed as currently different zones have different rules and access requirements?

3. Should the EU develop a tool (website?) to provide information on traffic restrictions in Member States/cities that would (partly) target citizens and professional drivers? Do we need a harmonized road sign for green zones (through UN-ECE)?

4. Is there a need for the EU to improve cross-border enforcement of access-violations?