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Preparation of the Green Paper on Urban Transport

Fourth Technical Workshop

"Integrated urban transport approaches for successful and attractive cities"

Brussels, 16 May 2007

Background paper

NOTICE

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1. A Green Paper on Urban Transport

In its mid-term review of the 2001 Transport White Paper¹ 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 urban 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 Transport². Several clear messages were given during the conference. The first message was that there was broad support for the 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 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

During the past months the Commission has organised three technical workshops with stakeholders and experts, and a first stakeholder conference on 31 January 2007. The fourth technical workshop will take place on 16 May 2007. The preparations for the Green Paper on Urban Transport will end with a major stakeholder conference on 4 June 2007. For each of these events the Commission prepares and distributes background papers.

This is the background paper for the fourth technical workshop which deals with integrated urban transport approaches and that looks at policy-links. This paper should be seen against the background of and in combination with the other background documents. 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 working document that the Commission will publish on its website, later followed by a summary of the discussions that have taken place during the workshop.

2. An overview of the main issues

Different aspects will be elaborated during the four sessions of this workshop. These sessions will deal with urban freight and logistics; urban transport and successful cities; urban transport, innovation and research; and, planning, behaviour and lifestyle. Some of the main issues that will be addressed during these four sessions are elaborated below.

2.1 Integrated approaches in urban transport

Background

How does an attractive and successful European city look like, and how does urban transport contribute to its success? Efficient and effective urban transport can be linked with, and significantly contribute to achieving objectives in a wide range of EU policy domains. The success of policies that have been agreed at the EU-level on, for example, European energy policy and Climate Change, partly depends on actions in the transport field that are taken by local authorities. This requires an effective and continuous 'vertical' integration between policies in fields such as transport, energy, environment, health, internal market, regional policy, etc. A good 'vertical' integration between policies at the European, national, regional and local levels can also significantly contribute to 'win-win' situations.

Regarding transport, a key question is how to implement integrated transport policy approaches at the local level and how to remove barriers towards implementation. Development models that promote the use of public transport, organisational models for co-ordination between the local and regional level, and the promotion of mixed land use are of special interest. Single ('stand alone') measures that address only one aspect of transport policy tend to be less effective than integrated policy packages combining push and pull measures.

Successful policy packages should be based upon combinations of measures that mutually strengthen each other. The evaluation of the first group of CIVITAS demonstration cities provides further insights on the impacts of measures.

The difficulty of building consensus on urban transport policies lies in the fact that citizens often play different roles at the same time. For example, when one looks at measures to manage car use then one can say that as inhabitant citizens often support measures that would restrict car traffic, and its negative effects. But as a car-user citizens might feel they are ‘victims’ of such measures. As an employee they are concerned about impacts of measures on economic competitiveness. As a parent of a future generation, citizens are concerned about the long-term effects of car use on health and the environment. And as a voter or politician a political judgement has to be made, usually balancing a range of objectives or expectations.

Experiences show that it can take local authorities up to 10 years to gain support and build consensus among all key stakeholders on policy packages. This is a time span that clearly goes beyond one, even two-election periods, and it is not sure that support will remain stable over time. However, it is important to note that support for change is often stronger than perceived by politicians.

Issues

The CIVITAS Initiative helps cities to test and demonstrate integrated packages of measures that aim at achieving a more sustainable, clean and energy efficient urban transport system. CIVITAS has so far co-financed actions in 36 cities with a co-financing of 100 Million Euro. The CIVITAS Initiative will continue during the coming years.

At the end of the year 2006, the Commission has received a scientific analysis of the evaluation results of the first nineteen CIVITAS demonstration cities³. The researchers have analysed the process of implementation of in total 212 measures, including all stages of measure planning. The researchers have identified eighteen categories of barriers and drivers. The barriers have a negative influence on the implementation, drivers a have a positive influence.

Here are some of the conclusions of the analysis.

Cities cannot improve their transport system on their own. For two-third of the measures all barriers can be removed locally. But, for one-third of the measures one or more barriers cannot be removed locally. This would then require the involvement of an actor at the regional, national and/or European level.

Some measures are easier to implement than others. Types of measures with a high rate of success in meeting the expectations within the foreseen time planning, i.e. where the drivers often surpass the barriers, are:

- Clean vehicles and alternative fuels
- Mobility management tools, such as travel plans and awareness campaigns

³ The report is available on the CIVITAS website www.civitas-initiative.eu

- Cycling measures
- Parking measures
- Intelligent transport management and information.

Types of measures where the chance of success and the risk of non-delivery within the foreseen time planning are close to each other, i.e. where there is a balanced influence of barriers and drivers, are:

- Promotion of public transport
- Shared car ownership or car use.

More difficult types of measures, where the risk of failure to meet the expectations within the foreseen time planning is relatively high, i.e. where the barriers often surpass the drivers, are:

- Goods distribution and logistics services
- Multimodal interchanges
- Zones with controlled access
- Road pricing.

Among the wide range of barriers and drivers that were identified by the researchers, some merit specific attention, as they point towards a more general need to modify the implementation-approach taken by European cities. The evaluation showed that the results of the implementation could have been better if a stronger commitment from stakeholders in general, and from politicians in particular, would have been ensured during the early phases of development of measures. Structural and visible partnership arrangements are needed to obtain the necessary involvement of all stakeholders. European financial and political commitment has also been confirmed as a crucial element of support.

The CIVITAS evaluation also concluded that cities should better exploit the opportunities of synergies between policies and creatively use different tools to increase user acceptance. Barriers related to the availability of funds require a more sound management and a better planning. A highly professional approach to targeted marketing and public relations is a strong asset to reinforce any measure implementation. Finally, where a measure depends on new technology, the availability and maturity of that technology at the time of implementation should be reviewed critically.

Considerations at EU level

The speakers and stakeholders in this technical workshop will be invited to focus their interventions on the following questions in the context of integrated approaches in urban transport:

1. How does the integration between the different policies and government bodies work at national, regional and local level, and are there any good practices from which we could learn?

2. Are there good examples of local participation and consensus building processes on urban transport and if yes, what are the critical factors?
3. What can be done to reduce the risk of failure for the types of 'difficult' measures that have a relatively high risk of not meeting the expectations within the foreseen time planning?

2.2 Global trends and social change

Background

Our society is continuously changing. There are a number of major societal trends that have a clear impact on the demand for transport, and on how urban transport influences citizen's daily life.

It is of strategic importance to have a good understanding of the impact of global trends on urban transport, both short term and long term, and both on the supply and on the demand side. For example, demographic trends have a direct impact on the demand side. But changes in demand might in the longer term lead to changes in supply. There is a potential risk that public transport supply, especially in smaller and medium sized cities, comes under pressure when the population shrinks or becomes more fragmented.

New technology may help to make car alternatives more attractive, improve the quality of services, and reduce the direct impacts of transport on citizens' health, for example of pollution and noise.

Issues

There is a continuous trend of urbanisation of the European society, resulting from inflows from rural or less prosperous areas and from migration, especially from third countries. This is however a general picture. There are major cities that experience exactly the opposite pattern: decline, i.e. they loose significant numbers of inhabitants.

The demographic change that will take place in Europe in the next decades is significant. Europe will soon see a decline in the group of younger people, have a smaller working-age population and much larger proportion of older persons. These demographic developments will have a huge impact on the overall demand for transport, and the characteristics of the solutions that are offered.

The development of the Single Market, the globalisation of the economy and the general shift from industrial production to services all have an impact on the spatial development of Europe. As a result, cities located at strategic and well 'service-equipped' locations are likely to gain more benefits than more peripheral and less 'service-equipped' cities. Good accessibility, and this includes quality of the interface between the local and regional transport systems and the longer distance networks, provides a city with a clear competitive advantage. This is true for passenger transport, and also for freight logistics.

In many urban areas the population is moving from the city centres to the city periphery, i.e. peri-urbanisation. In other cases, the population moves completely out of the city. The resulting dispersal of home, work and leisure facilities leads to an increased need to travel. The lower densities of the cities' peripheral areas make it difficult to offer public transport solutions that have sufficient quality to attract substantial amounts of users.

The development of new information and communication technologies has a strong impact on the access to and the use of freight and passenger transport systems. They allow the development of a 24-hours economy, e-commerce, just-in-time delivery concepts, or the introduction of less-transport intensive working and learning methods. Modern traffic management and information systems, in the future integrated with Galileo, have the potential to considerably increase the capacity, efficiency and safety of the urban transport networks. They allow for real-time transport management and an individualisation of information services.

It is important to recognise that a significant number of households in the EU do not have access to a private car and, therefore, depend upon public transport, walking and cycling to gain access to social contacts, services and employment opportunities.

People with reduced mobility are those citizens that encounter temporarily or permanently difficulties to move easily. This includes disabled people, elderly people, persons with heavy/big luggage, mothers with children in buggies, and people with temporarily injuries. According to some estimations, with 30%, this group represents an important portion of the EU population. This percentage will probably increase as the population gets older. For both people without car and people with reduced mobility urban transport plays a key role in combating social exclusion.

There are many definitions of social exclusion. An individual or a group could be defined as socially excluded if it lacks the resources to be able to participate in commonly accepted activities in society. Transport's contribution to combating social exclusion is obvious. For example, public transport has to be adequate, which means that it has to be affordable, available, accessible and acceptable – the latter referring to the respect shown by the supplier to the traveller.

Transport plays a role in addressing the widening 'gap' between advantaged and disadvantaged groups in society. For example, children from low-income families are more likely to die in a road accident than children from high-income families. In the past decades, rail and bus fares have sometimes increased in real terms while motoring costs have relatively declined. And many of the new cars registered are company cars to which only certain groups in society have access. Social exclusion in many cases has led to spatial segregation of less advantaged social groups, forcing them to live in areas with poor transport facilities.

Considerations at EU level

The speakers and stakeholders in this technical workshop will be invited to focus their interventions on the following questions in the context of global trends and social change:

1. How should the problem of declining cities be addressed and what are the implications for urban transport?
2. Are there good examples of combating social exclusion through urban transport measures and who should pay for this? Should the urban mobility-related rights of certain groups of citizens be protected?
3. When is the integration between urban planning and transport successful? Are there specific concerns related to cities in the new Member States?
4. Are there minimum standards that authorities and operators should respect for urban transport users, for example by introducing a user charter?

2.3 Urban freight transport and logistics

Background

Freight logistics has an essential urban dimension. Distribution in urban conurbations requires efficient interfaces between trunk deliveries over longer distances and distribution to the final destination over shorter distances. In addition, the distribution process between production centres and customers inside an urban area needs to be efficient and clean.

Centralisation of logistics organisation into European and regional/local distribution centres is taking place, on the one hand, and decentralisation is emerging in the light of saturation on the European roads, enabling quick response from local warehouses or buffer storages to customer requirements, on the other. Both trends meet in urban areas.

When optimising their supply chains, enterprises in the EU increasingly recognise that there are competitive alternatives to road freight, especially, over longer distances. Lorries and vans are, however, indispensable for urban deliveries even though other means, such as pipelines, underground or rail deliveries are, in some cases, possible.

Following the internet revolution, the opening up of the postal services and the trend towards just in time production, the numbers of small packages that need to be delivered is increasing rapidly. As a result of the trend towards outsourcing, the number of 'small van' distribution trips by 'service providers' (repair and maintenance work, caterers, etc) is also increasing rapidly.

As part of an integrated approach, the cities can obtain significant improvements in urban freight distribution, as cities participating in the CIVITAS initiative have demonstrated. Some examples are included in this text. The use of dedicated clean vehicles and alternative fuels is important for the public and political acceptance of the ever increasing, but economically important, urban freight transport activities.

Issues

The efficiency of transshipment facilities, including collection and distribution terminals, is crucial for logistics performance. These facilities can be fully private or based on public initiatives. They should employ modern technological solutions, such as advance informatics, and have quality infrastructure connections for co-modal solutions. Attracting and securing private investments is essential, and European rules must provide the appropriate legal framework. Quality of performance must be continuously improved through, for example, co-operation between stakeholders, social dialogue and legislation. Performance indicators are one way of measuring efficiency in warehouse operations and terminals.

Owing to infrastructure and other restrictions in urban areas, logistics distribution centres or terminals are often located in suburban areas or outside cities. These centres receive goods in large quantities by road, rail or water, and then sort them out. They then distribute them to recipients in the urban area, usually with fleets of smaller road vehicles. In reverse logistics, they operate the other way round.

These centres need to provide for just-on-time deliveries which are often required by shops and manufacturing industry. Their location and operation are usually subject to several administrative rules and restrictions, such as land use planning, environmental considerations and traffic restrictions.

Also larger industry or manufacturing plants are often located just outside cities in areas with good infrastructure connections with or without significant buffer storage facilities. They expect just-on-time deliveries and dispatch goods at predetermined times.

Distribution in urban centres, except bulk, is mainly carried out by small road vehicles of less than 3, 5 tonnes. Courier companies use even motor-cycles or mopeds. This makes consolidated distribution in congested urban areas and zones with access regulations possible but requires solid planning of the routes to avoid empty runs or unnecessary driving. A consolidation scheme in Graz helped to reduce the delivery trips in the area around the largest local shopping centre with 45%.

Congestion is a problem faced by both travellers and freight in urban areas. Other negative effects are environmental damage, noise and stress. Night deliveries are often problematic owing to restrictions, noise or working hours. A better coordination of goods deliveries is often an important first step. For example, through a voluntary agreement between 17 companies in Goteborg the number of transport movements of office materials has been reduced by 30%.

Public passenger transport and the related logistics are usually supervised by the competent administrative body while freight distribution is normally a task for the private sector. This complicates any holistic transport planning and operation in urban areas. A holistic vision at the local level is therefore needed to consider all urban logistics together as a single logistics network that covers passenger and freight transport, and that pays attention to aspects of land use planning, environmental considerations, traffic management and other factors. Facilitating freight and passenger transport demand management should be an integral part of town planning.

Special arrangements are usually needed to facilitate freight deliveries in slots outside the peak hours. For instance, the periods between 8 - 10 o'clock in the morning or 16 - 18 o'clock in the afternoon are highly congested with freight transport adding to the complexity. Freight should be able to move outside peak hours to minimise disruptions. This could mean putting in place certain driving restrictions while relaxing others, either through regulatory means or voluntary agreements. Minimum load factors could be agreed or the use of underused modes and infrastructures promoted. Demand management tools such as green zones, or road user charging, can be used to dissuade freight and/or passenger traffic at certain times in certain zones.

Innovative solutions could be jointly developed and applied for passenger and freight transport. Intelligent Transport Systems (ITS), telematics and Galileo applications, with reliable digital maps and trip planning that indicate congestion and suggest alternative routes, could make a contribution. Suggested passenger and freight delivery routes could be co-ordinated in a more appropriate way. Telematics can also allow public authorities to effectively manage access to congested areas, detect incidents, provide quick response, and improve general traffic management.

The delivery from a freight vehicle to the recipient could be regulated by dedicated short-time parking spaces allowing vehicles with a special digital signature to stop over a short period and be monitored electronically. Harmonised specifications for procurement of ITS and telematics equipment and solutions for public bodies in cities could be considered together with standardisation initiatives. But not all solutions need to be high-tech to be successful. The publication of a commercial vehicle driver atlas, together with the use of community delivery points and a freight consolidation scheme, resulted in a reduction of 70% of vehicle movements in Bristol.

A holistic approach could also allow improvements to air quality and energy efficiency in urban areas. The use of dedicated clean vehicles and alternative fuels is important for the public and political acceptance of urban freight deliveries. Public rules, regulations and incentives, such as environmental standards, could increase the use of new distribution vehicles and alternative fuels. The use of joint vehicle procurement with environmental and energy requirements could help to make of freight services cheaper and cleaner.

Considerations at EU level

The speakers and stakeholders in this technical workshop will be invited to focus their interventions on the following questions in the context of urban freight transport and logistics:

1. What role can the European Commission play to move towards a general framework for urban freight transport and logistics in Europe, that could consist of a set of recommendations, indicators or standards, including freight deliveries and delivery vehicles, which could be adapted locally to different circumstances?

2. Are there commonly agreed benchmarks or performance indicators to measure efficiency and sustainability of delivery and terminals and, more generally, in urban logistics and planning?
3. How can a better co-ordination and perhaps even integration be achieved between passengers and freight transport, and between interurban (long distance) and urban freight transport and logistics?
4. What innovative dedicated delivery solutions, new regulatory means and best-practice examples of voluntary agreements for freight deliveries and 'small van' services exist?

2.4 Influencing people's behaviour and lifestyle

Background

The car plays an important role in society, in cities and in the daily life of citizens, and this will continue to be the case in the future. It is clear that the car has become more than a means for travel. But unnecessary car use can be reduced while at the same time a good level of mobility can be maintained. In their policies, authorities should give priority, taking into account specific local circumstances and acceptance, to those transport modes that:

- facilitate mobility and offer good access to all citizens;
- provide most benefits in terms of economic and social wellbeing;
- are most efficient in the use of resources, such as energy and urban space;
- are safe and can be part of a responsible and healthy lifestyle.

Walking, cycling and public transport, and new ways of efficient car use such as car pooling and car sharing, need to be attractive and citizens should be informed about their availability and benefits. New approaches that promote a more efficient use of the urban transport networks can be developed in partnership with private and public sector organisations. One example in the passenger transport field is mobility management. In urban freight transport loading factors of urban freight vehicles can be increased through voluntary agreements or incentive schemes, or through the development of freight consolidation schemes.

Issues

The car has developed to "something" that is of a much higher value to its owner than just a means to travel from point A to B. People see the car not only as a means for transport but also as a symbol of freedom, leisure and enjoyment. The car offers a feeling of safety, it's a nice place for listening to music, cars have many technical refinements and are well designed. Can any alternative to the car ever become so enjoyable?

The practical advantages of car use encourage it to become a habit. People develop activity patterns and a lifestyle that is tuned towards the use of the car. Once car dependency has been established, it is very difficult to alter habits and lifestyle.

People re-consider their behaviour only when radical changes are introduced into their situation, causing them to re-evaluate the choices made hitherto automatically. As a result, the market share of public transport and of the most healthy transport modes, walking and cycling, is reducing.

Every citizen has his or her own individual responsibility in solving urban transport problems and should be aware of the consequences of his or her behaviour, for example on Climate Change. This means that every citizen has to be an informed citizen. As part of any policy that promotes the use of car-alternatives, citizens have to be informed about the existence these alternatives. It should also be made attractive for them to test these alternatives. But it is fruitless to engage in awareness, information and education activities if the quality of the alternative transport options is insufficient.

Small-scale awareness, information and education initiatives do have a short-term impact. To be really effective, it is clear that awareness, information and education initiatives should be maintained over a long period in order to achieve and maintain a full behavioural change. This leads often to questions about costs and benefits. In addition, there is a need to integrate campaigns and actions at different levels (local, regional, national, etc), using a mix of different media.

According to some experts, an alternative exists for about 50% of all current car trips, without any change or investment in that alternative. Specialised transport marketing initiatives are able to reduce car trips by 10%. A regional mobility management approach may remove up to one-fifth of the road congestion on the highway network. Mobility management offers excellent opportunities to establish new partnerships with private and public sector organisations that previously were not fully taking their responsibility in addressing transport problems, such as employers, trade unions, site-owners and providers of transport services. Mobility management can bring practical and financial benefits to all these actors.

For example, organisations, or clusters of organisations, that attract larger numbers of employees, customers or visitors (such as companies, schools, shopping centres, hospitals, airports, hotels) can be encouraged to prepare a site-specific mobility plan as part of the procedure to obtain a building permission or an environmental permission. This mobility plan could set clear targets. The plan should cover all measures taken to ensure a sustainable site-access and to promote the use of public transport, walking and cycling or car-pooling. Mobility plans can also address road safety, business-travel and access for people with reduced mobility. Instruments to support behavioural change could include education, information and awareness raising campaigns.

Another opportunity to change people's behaviour is through the education of children, students, and transport professionals. Authorities and other transport actors normally do not have direct influence on educational programmes. They do sometimes play a role in project weeks, school visits, etc. and can use these opportunities to raise awareness about sustainable transport behaviour. Often, these groups can be considered as 'quick win groups' who are already quite convinced of change and where changes have a long-lasting effect.

All the issues linked to trends and changing lifestyle have been well taken on board by the car industry in its product development and marketing activities. The car industry is considered as the largest single generator of consumer advertising and spent, for example, six billion Euros in the year 2000 to market its products in the five biggest European countries. So far the issues linked to trends and changing lifestyle seem to have received insufficient attention from the public transport sector, and from the organisations with an interest in promoting walking and cycling.

Considerations at EU level

The speakers and stakeholders in this technical workshop will be invited to focus their interventions on the following questions in the context of influencing people's behaviour and lifestyle:

1. Are there concrete project or programme results that provide evidence on the possibility to influence people's behaviour and lifestyle?
2. How can private sector actors, and social partners, become more involved in the urban transport debate and take more responsibility for addressing urban transport problems?
3. What could the European Commission do to improve the understanding of people's transport behaviour and modal choice, and support innovation, product development and marketing for public transport, walking and cycling?
