

**BESTUFS Position Paper**  
(March 2008)

regarding  
the

**Green Paper**  
**Towards a new culture for urban mobility**

*This position paper is formulated by the BESTUFS network team with major contributions by Laetitia DABLANC (Inrets), Janos MONIGL (TRANSMAN), Petr NEMEC (CDV), Jarl SCHOEMAKER (NEA), Julian ALLEN and Mike BROWNE (University of Westminster) and Dieter WILD (PTV).*

**Preface**

BESTUFS started in the year 2000 as a Thematic Network addressing urban freight transport for 4 years. BESTUFS II followed as a Coordination Action and is still ongoing in the year 2008. BESTUFS appreciates the GREEN PAPER in general and recognizes that many urban freight transport oriented arguments are already directly addressed by the document. This position paper tries to complement and extend the freight related dimension of urban mobility and it tries to provide answers to the questions posed. The BESTUFS team hopes that this position paper will contribute to the further development of the GREEN PAPER, to transfer objectives and recommendations into the FREIGHT TRANSPORT LOGISTICS ACTION PLAN and finally to improve urban freight transport mobility.

This position paper has been organised into several sections that have the same titles as those used in the GREEN PAPER. Each of these sections provides discussion of the issues raised in that section of the GREEN PAPER together with a summary response to specific questions posed in the GREEN PAPER presented in a box at the end of each section.

Freight transport in cities responds very effectively to the requirements of modern urban economies. However, it is a major contributor to environmental impacts, particularly to local air emissions and noise and, as a result, has an important impact on the health of the most vulnerable residents of cities. Urban freight activities, therefore, reflect a global approach to sustainability. They involve economic, social as well as environmental issues simultaneously, and can result in conflicts. Under the current conditions of the urban freight industry, the economic viability of cities might actually be benefiting from socially and environmentally damaging transport operations. Moving towards sustainability – a better socially and environmentally performing but still affordable transport system - would require the development of a modern and innovative sector. This would mean quite a major change to the urban freight paradigm, which can still be characterized, in many European cities, as “low cost, low standards”.

Recognizing this general context, the BESTUFS network aims at identifying, assessing and disseminating the best solutions available to make urban freight activities cleaner, more efficient, more professional. In this regard, the BESTUFS network wishes to address some of the issues and questions raised in the Green Paper “Towards a new culture for urban mobility”, highlighting what appear to be the most important issues for urban freight.

## **Towards free-flowing towns and cities**

Congestion is severely affecting the quality of commercial transport operations for both freight and service movements. It is increasing the transport related costs of the urban economy. Measures taken against congestion are well appreciated by commercial actors as far as their own access is not more hindered by these measures compared to the advantage received. Any measures controlling access and tackling congestion should therefore be thoroughly analysed beforehand regarding their implications for commercial transport.

Commercial transport operations are certainly also contributing to congestion and attention can be given to commercial transport oriented measures which have also a positive impact on the general urban transport flows. Measures to enhance commercial transport efficiency are one major area to achieve improvements. This includes tools to improve the trip and route planning and measures to increase the load factors or to support consolidation or city logistics solutions. The other important area is the shift of freight transport to non-peak hours. This can be addressed for example by supporting night deliveries, by introducing daytime dependent urban pricing schemes or by offering forecasted traffic information to be used by trip planning tools.

Question 3: Mode shift in freight transport is more an issue for long-distance or inter-urban transport. Nevertheless, the interfaces between a long-haul on rail or via waterways and a local urban distribution are an urban issue and affect also the local and regional traffic generation. More knowledge is needed to understand the implications of freight villages, urban terminals and transshipment facilities for the urban mobility, as well as how to fairly distribute the costs and benefits of such facilities and operations between various public and private sector parties so as to encourage involvement.

## **Air pollution, CO2 emissions and noise**

Vehicle technology is improving rapidly. However, one of the main issues is **the poor state of some of the current commercial vehicle fleets in cities**, mostly operated by small operators, often acting as subcontractors to large freight transport companies. It is therefore important that cities encourage a modernisation of these *currently used* vehicles. Some cities have implemented regulations favouring low-emission trucks (in Green/Environmental Zones or elsewhere). These initiatives should be promoted and encouraged. Cities should be encouraged to give subsidies to small operators converting to cleaner trucks. Regarding CO2 emissions, hybrid vehicles look promising because of the “stop and go” character of urban deliveries (energy consumption by a vehicle is exponentially increased during stop and go). Finally, alternative fuels can be introduced easier with large initial user groups and here common approaches of commercial fleets, public vehicles and buses sharing the same fuelling stations can be considered.

The next step to achieve with respect to single clean and efficient vehicles is the efficient operation of these vehicles in fulfilling transport tasks. As already addressed above, commercial transport efficiency is a key area to achieve environment and energy improvements. Already mentioned are tools to improve the trip and route planning and measures to increase the load factors or to support consolidation or city logistics solutions. Access limits, sometimes related to vehicle dimensions or weight but also based on time

restrictions can have very negative effects on the efficiency of the overall freight transport task.

Although most cities use EURO standards when regulating truck access to Green Zones, other local truck ordinances can vary considerably from one city to another (dimensions, tonnage, age, time, etc.). There is not always a true technical rationale behind local decisions. Therefore, guidance and proposed harmonised rules for truck access in cities could be proposed at a European level.

Furthermore, the EU should encourage benchmarking on technological solutions for **Green Zone and congestion charging enforcements**, especially regarding commercial fleets, which have specific needs (such as fleet registration schemes and automatic billing systems).

Noise reductions in urban delivery operations could lead to a very substantial benefit for cities because, contrary to people's mobility, freight mobility can be transferred from peak hours to off-peak (including night) hours, leading to a potentially important decrease in congestion. Current good practice (Piek program in the Netherlands, experimental schemes in London, Barcelona, Dublin...) should be promoted at a higher – European – level in order to accelerate their development elsewhere in Europe. A clear European role and action to be taken is the **standardisation of noise limits for urban delivery operations, addressing the loading/unloading activities as well as the different equipment types in use.**

Question 4: Cities should be encouraged to give subsidies to small operators converting to cleaner trucks. The development of hybrid commercial vehicles should be encouraged at a European level.

Question 6: Guidance and proposed harmonised rules for truck access in cities, particularly within a Green/Environmental Zone scheme, should be proposed at a European level.

Question 7: Noise reductions in urban delivery operations could lead to a very substantial benefit for cities because these operations can be transferred from peak hours to off-peak (including night). The EU should specifically promote best practice in quieter driving, handling and organisation of freight activities. Furthermore, the development of quieter technologies to be used in delivery processes should be funded and supported. There is also an important training requirement to help drivers and other logistics personnel achieve quieter operations.

### **Smart urban freight operations**

Relatively few trucks circulating in urban areas are equipped with up to date technology such as GPS or delivery tour optimisation tools. ITS (Intelligent Transport Systems) products are generally not targeted towards urban freight operations. Although many urban operators are too small to benefit from sophisticated optimisation tools, they could benefit from receiving specific information about traffic conditions and regulations in the cities they operate in.

**Local rules (about access, parking, delivery windows), should be better integrated** into mainstream on-board digital mapping systems or made available through variable message signs and internet web sites operated by municipalities.

Forecasted traffic information in the form of daytime related travel time patterns per network link can be used for trip planning. Commercial fleets will especially benefit from this information as pick-up and delivery round trips are often planned on the day before and could thus avoid expected congested situations. Standardisation of formats and interfaces at

European level is needed. Strong promotion of awareness among ITS developers and stakeholders (transport operators, shippers, local authorities) may bring additional benefit.

It has been shown that **urban freight consolidation** (“City-Logistics schemes”) can lead to a decrease in the number of vehicle-kilometres and emissions generated by urban deliveries. These schemes generally have a high cost attached to them. The EU should encourage increased awareness especially among small urban freight and logistics operators regarding the potential benefits of consolidation. It should encourage the development of local public-private partnerships:

- to establish local charters on urban deliveries
- to promote the development of private or public/private consolidation schemes, including schemes targeted on specific locations (pedestrian streets, urban commercial centres, large building sites). These solutions could benefit from optimisation tools and ITS.

Questions 9 and 10: Standardisation at EU level is needed to define common interfaces towards maps, towards on-board applications and urban ITS solutions regarding dynamic traffic information and regarding information about the urban freight transport “situation”. Technical systems could support the driver as well as the operational planning by knowing for example delivery time windows, current waiting times at infrastructure bottlenecks, or locations of loading/unloading zones. Another field is the routing and navigation, which is starting to become more specific to freight vehicles. Still missing are solutions and standards on how to address preferred networks for heavier vehicles, where cities would like to obtain a more direct means of influence. Operators require products that are targeted towards urban needs, including the integration of local access and delivery rules into mainstream on board mapping information, variable message signs and internet municipal websites. The EU could play a role in promoting awareness and research programs to develop further these types of ITS. Consolidation schemes for urban deliveries could be encouraged through the establishment of local public-private consultation processes and partnerships. ITS could support specialised consolidation projects such as on building sites or historic city centres.

### **Training programs and expert staff**

BESTUFS strongly supports the Green paper suggestion that urban transport needs knowledgeable and highly qualified staff with specialist expertise. This is particularly true for freight policies. Few European cities currently have trained staff dedicated to freight issues. Training and hiring specialized staff could lead to a substantial increase in the efficiency of local freight policies, improved working relationships between the public and private sectors, as well as best practice exchanges among European cities.

### **Land use and freight flows**

Freight infrastructure planning is generally inadequate in many European metropolitan areas. The location of freight terminals and large infrastructures (including intermodal facilities) is often regulated at a local level (municipalities), whereas metropolitan and regional governments do not have jurisdiction over land use decisions and building permits.

It has been demonstrated by the French mobility plans that even when good strategic freight planning takes place, it is poorly enforced if only local (municipal) governments have legal

jurisdiction to apply measures (such as planning permission or traffic ordinances). Municipal decisions over building permits for large warehouses and freight facilities can lead to the development of “logistics sprawl” and logistic facilities with poor accessibility. These zones can generate important vehicle-kilometres (for both trucks and cars) within the area.

The EU should encourage the creation of integrated logistics planning authorities with full jurisdiction over land uses and warehouse and logistics facilities building permits at a metropolitan or regional level.

The French policy, to force medium and large size cities to provide an urban transport plan (PDU) where commercial transport must be an integral part, led to a very positive stimulation of innovation and a much more active reflection on commercial transport in French cities. The intention of the EC to initiate and to support the introduction of SUTPs would be the right opportunity to strengthen the urban freight dimension within urban transport planning.

**Commercial transport must become an integral part side by side to passenger transport within the SUTP approach.**

Questions 14 and 15: The EU should encourage national training programs for personnel on urban freight transport issues. The setting up of logistics metropolitan or regional planning authorities with full jurisdiction over land uses and building permits for warehouse and logistics facilities should be encouraged. Freight and service oriented transport must play an adequate role within SUTPs.

### **Data collection on urban freight flows**

Cities should be encouraged to finance regular freight surveys, as most cities do for personal travel surveys. There are big gaps in urban mobility statistics at the EU level, but also at the local level where freight flows are concerned. The work in BESTUFS clearly showed that regular freight surveys are rare, and often very difficult to compare because of the different methodologies used. On the other hand, monitoring of the effects of measures is also often quite insufficient and difficult to compare. Guidance on efficient and comparable data collection and monitoring could help cities. Data collection pilots in cities in different countries could provide interesting comparisons.

BESTUFS has demonstrated the benefits of detailed exchanges between universities, administrations, experts of the different Member-States and at a EU level on urban freight surveys. There is a **need for further research activities in data collection and modelling methods and results.**

Further research effort should contribute to the comparison of city-wide urban logistics activities and structures. The establishment of suitable performance measures and benchmarking would help cities to determine the most relevant fields of action and would deepen the understanding and monitoring of urban freight related measures.

Question 20: A European Observatory on Urban Mobility could be useful in promoting and helping to coordinate cities’ and academics’ efforts on urban freight data collection methods and monitoring and evaluation work.