

## Equipment and Operational Aspects

### Key Challenges and Main Recommendations

#### Questionnaire

Dear cluster experts,

During our three Working Group Meetings we discussed a lot of issues with respect to three core areas of Public Transport

- Infrastructure
- Rolling Stock
- New Technologies

One main objective of the SPUTNIC project is to develop and produce recommendations and guidelines for stakeholders and decision makers. In order to weight and to structure those challenges and recommendations that we identified in our meetings, we would appreciate very much, if you could proceed with the attached catalogue as follows:

Please take a look on the first area “Key challenges on Infrastructure” (next page). This area contains three challenges.

- Is this area complete and does it contain everything we have to take into account? Please feel free to add additional topics.
- Please arrange the challenges into an ordinal scale in order of their importance, i.e. the most important challenge is No. 1, the second important is No. 2 and so forth.
- Please do the same for the other areas (“Rolling Stock”, “New Technologies”, “General Challenges”, “Main Recommendations”).

After receiving your feedback we will produce an overall ranking that should be the basis for our discussion at the approaching Working Group Meeting in October 2008

Thank you very much for your support and see you in Prague!

*Please forward your feedback to all of the three addresses **until 12 September 2008:***

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<b>Key Challenges on Infrastructure</b>	<b>Your ordinal scale</b>
- Increase of Urban Space exclusively dedicated to Public Transport combined with the implementation of a priority system for PT and an effective enforcement of these measures in order to substantially increase travelling speed.	
- Improvement of quality of roads, tracks and track bed, stops, stations and interchanges in order to increase travelling comfort.	
- Improvement of interoperability between Metro, Tram, Light Rail and Bus systems in order to increase attractiveness of Public Transport	
- Any more? ...	
- ...	
- ...	
- ...	

<b>Key Challenges on Rolling Stock</b>	<b>Your ordinal scale</b>
- Improvement of technical safety and reliability of vehicle fleets in order to increase quality and reduce costs of Public Transport	
- Harmonisation of the often inhomogeneous bus and tram fleets in order to reduce maintenance costs	
- Improving the state of the fleet by either refurbishment of existing rolling stock, purchase of second-hand rolling stock or buying of new vehicles in order to increase quality of Public Transport and reduce operation costs	
- Improving accessibility of Public Transport, e.g. by introduction of low-floor vehicles, in order to enhance attractiveness of Public Transport especially for persons with limited mobility	
- Increasing use of alternative fuels in busses and of modern propulsion systems on IGBT basis (insulated gate bipolar transistor) for trams and light rail systems in order to reduce operating costs and to improve environmental sustainability of Public Transport. Security of supply has to be guaranteed.	
- Improvement of maintenance efficiency in order to reduce costs and enhance reliability of Public Transport	
- Improvement of Spare Parts availability in order to increase reliability of Public Transport and to avoid cannibalism of fleet	
- Any more? ...	
- ...	
- ...	
- ...	

<b>Key Challenges on New Technologies</b>	<b>Your ordinal scale</b>
<ul style="list-style-type: none"> <li>- Increased use of Computerised Operational Control Systems (COCS) and Automatic Vehicle Monitoring (AVM) (and respectively the implementation and optimisation of fleet traffic control systems as a bridge between infrastructure and rolling stock) in order to improve information of passengers, quality of services (e.g. guaranteeing connections), increasing commercial speed</li> </ul>	
<ul style="list-style-type: none"> <li>- Securing compatibility of different systems in one urban area (e.g. of different PT operators) and the integration of internal IT systems and passenger information or ticketing systems so that passengers experience the same quality level of Public Transport throughout their journey</li> </ul>	
<ul style="list-style-type: none"> <li>- Any more? ...</li> </ul>	
<ul style="list-style-type: none"> <li>- ...</li> </ul>	
<ul style="list-style-type: none"> <li>- ...</li> </ul>	
<ul style="list-style-type: none"> <li>- ...</li> </ul>	

<b>General Challenges</b>	<b>Your ordinal scale</b>
- Considering the still high share of PT travel mode that can be observed currently in CEEC, every effort must be made to keep that modal split stable despite rapidly changing circumstances (e.g. increasing car availability)	
- Utilisation of all available sources of financial resources in order to be able to tackle the challenges stated above	
- Any more? ...	
- ...	
- ...	
- ...	

Main Recommendations	Your ordinal scale
- Especially in the regional areas in many cases there exists a significant lack of comfort comparing to the established MS due to some outdated and/or outworn rolling stock and infrastructure. Measures that improve the quality of rolling stock and infrastructure are therefore of high priority.	
- Main scope of every technical measure is to increase the travel comfort and the commercial speed.	
- Upgrading and renewal of Public Transport Vehicles as well as of infrastructure can and (whenever it is affordable) shall include measures that lead to a higher accessibility by considering low floor compartments and sections.	
- The modernisation of Public Transport Systems should always work according to the principle “rolling stock follows infrastructure”, since high quality rolling stock is dependent on an equally high quality level of infrastructure in order to be effective	
- For any changes and improvements to be made in the Public Transport System, good knowledge about the technology, well-prepared realistic planning and professional project management is required in order to successfully implement the changes and improvements	
- Saving and upgrading of long established PT systems (also of tramway systems) is the best option for political decision makers to preserve sustainability and to protect citizens and the environment against ecological disadvantages. In this focus political stakeholders and local decision makers are recommended to strengthen their efforts for the survival of long established tramway systems.	
- The decision between the purchase of new vehicles or the renewal respectively upgrading of existing vehicles always has to be a core element of an economical case study.	
- The use of alternative fuels should be considered for reasons of environmental efficiency and possible cost reductions, if security of supply can be guaranteed	
- Wherever it is possible PT should use its own infrastructure which is separated from car traffic in order to increase travel comfort and commercial speed.	
- In most cases it is appropriate to make the decision for only one major transport mode (for example only trolley bus or only tramway). This will lead to a much more effective use of resources.	
- Basically every PT operator takes priority to the satisfaction of every safety related kind of law or guideline. The harmonisation of the European legislation will lead to a harmonisation of safety standards.	
- One of the main barriers for not using PT is the total lack and/or the low quality of information related to the network and the service.	
- Any more? ...	
- ...	
- ...	
- ...	