

Bucharest public transport rehabilitation

La réhabilitation du transport en commun du Bucarest

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ABSTRACT: For city of Bucharest and metropolitan area, it is essential to rehabilitate the public transport, through implementation of an adequate multimodal system concept. An independent Transport Authority will have the main role in ensuring the right balance between all transport system actors. What we do and which are the next steps that must be done to have a modern, efficient and integrated public transport system.

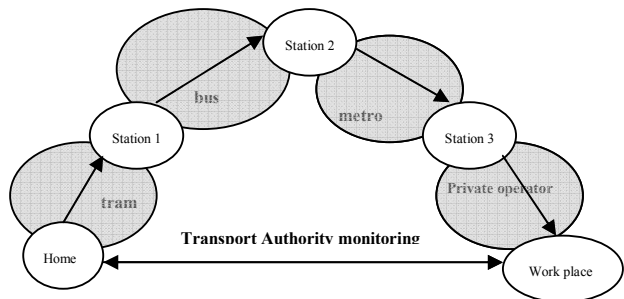
RÉSUMÉ: Pour la cité de Bucarest et sa région métropolitaine, c'est essentiel de réhabiliter le transport en commun par la mise en oeuvre du concept d'un système multimodal opportun. L'Autorité de Transport indépendante aura le rôle principal de réaliser un équilibre entre tous les acteurs du système de transport. Ce qu'on fait et qui sont les étapes suivantes qui doivent être suivies pour avoir un système de transport en commun efficace et intégré

1 MULTIMODAL SYSTEMS CONCEPT REGARDING BUCHAREST

Modern approaches in the field of planning for public urban and suburban transport define the creation of multimodal systems as a strategic objective. The multimodal transport is a relative new approach of transport whereby using different means of transport/vehicles specific to different transport modes, the results are cost optimisation (from the operators' point of view) and the trip longer optimisation (from passengers' point of view).

Increasing diffusion of travel demands in space and time, as well as growing variability in consumer preferences will make conventional unimodal transport systems less attractive and inefficient. Currently, about 48% of person trips in the Bucharest are performed as a multimodal chain. Optimisation of planned transfer times in timetables involves determination of optimal transfer-buffer times. A stochastic approach to determine optimal transfer waiting times must be developed by which optimal transfer-buffer times at individual transfer points will be obtained. This reason requires meas-

urements and statistical analysis of actual delays of vehicles at transfer-points to obtain probability distributions of the arrival times of vehicles.



Multimodal systems may be implemented by coordinating development, operation and fare policies and must be attained regardless of the number, ownership status and subordination of transport operators. Systems that feed and are complementary to each other, intermodal stations located in the nodal points of Bucharest, easy and quick transfer between transport modes, intermodal farecards, all the above are factors that – when combined – turn the public transport multimodal.



However, some important system weaknesses must also be mentioned, such as the very poor condition of the rolling stock, the existing metro and tram networks that do not correspond to high demand, the lack of coordination between metro and surface transport leading to operational flaws, the poor quality of stations and stops, and the overall capacity which cannot cope with demand.

2 CENTRALIZE TO DECENTRALISE

Coordination of all operators' activity shall be made by an independent authority.



The aim is the development of a decision for the transfer management in mixed multimodal transport systems, including the planning of optimal synchronisation of vehicles at transfer points. The results will be used in the optimisation of transfer buffer timing and traveller guidance optimisation techniques. An optimal planning in combination with supervision and operational control is necessary to improve and maintain the quality of transfer oppor-

tunities, both at transfer points in one transport mode and between different modes.

By making use of a modern information system capabilities a significant higher level of service regarding dynamic passenger information as well as traffic control can be achieved. The future multimodal personal travel system will offer the following values:

- synchronised multimodal transport services;
- omnipresent information about travel times, costs and actual traffic conditions;
- advanced traffic and operation control systems;
- integrated fare collection ticketing system;

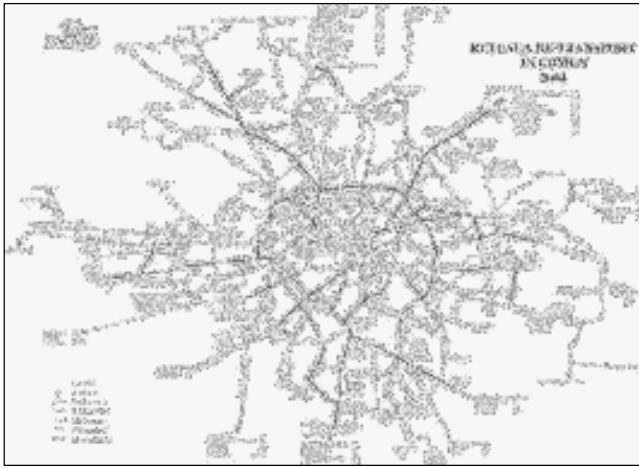
The role of the authority is not to limit each operator's decisions. The operators must dimension their own strategy in the transport sectors and areas that they service.

The main role of this authority will be to ensure a right balance between the interests of service providers and the general public interest, which would result in increased efficiency and effectiveness of public transport services. Without adequate associated policy the effectiveness of improvements in public transport will be reduced.

The most common approach of the authority must focus on user preferences in modal choice (frequency, travel time, comfort) and measures of external impacts (environment) and less common consideration of quality for pedestrians, non-motorised modes, passenger cars and freight vehicles. Also, the indicators of transport system success (access to opportunities, link to urban economy) must be considered.

The current situation in Bucharest, where two state-owned units subordinated to different administrative structures (Ministry of Transport and the Municipality) provide public transport services is not unprecedented, however this is not a common situation. In most major cities, surface public transport and the metro system are run by the same organisation. However, in numerous cases other operators (railway, ferry or bus private companies) contribute and are integrated within a system that appears to be a single system to its users.

While public transport in Bucharest is good there are still major weaknesses in the system. Amongst these is the institutional separation of the two main urban operators (RATB and METROREX), one dependent on the municipality of Bucharest, the other on the Ministry of Transport. Several attempts have been made to integrate urban transport, including the creation of a common working group and the installation of a harmonised ticketing system for urban transport.



The measures that are currently underway are primarily aimed at restructuring the two major state-owned units RATB and METROREX and create a metropolitan transport authority responsible with coordinating and decentralising public transport operations in Bucharest. The benefits will be:

- increased responsibility of the operators involved in multimodal transport;
- lower administration transport costs;
- substantial decrease in transfer-buffer times for passengers and planned arrival times of the transport vehicles

3 OTHER EXPERIENCES AND COOPERATION

In order to achieve the above key institutional measures, studies have been conducted in order to assess the organisational methods and performance in European cities more or less similar to Bucharest in terms of size, such as: Budapest, Warsaw, Berlin, Prague, Vienna and Barcelona, using benchmarking as well.



Short evaluation of actual Bucharest transport situation can be made: a highly developed, extensive public transport system dominance of a supply-oriented (engineering) approach to public transport development no visible move to evolve from a public sector-owned, vertically integrated, traditional way of pro-

viding public transport services proposals for accommodating traffic growth in the central area Bucharest's urban structure offers excellent conditions for public transport development. It is highly compact, with high densities, a relatively low level of suburbanisation and wide road cross-sections, permitting segregation of public and private transport in large parts of the public network. Recently, a package of physical measures giving priority to public transport were put into operation in Bucharest, such as improvements to bus corridors, priority at traffic lights, pedestrian areas, one-way systems in the city centre.

For the above reasons, a great deal of sharing of experience has been made with the metropolitan transport authorities of the cities of Barcelona, Paris and Berlin, with the purpose of comparing their characteristics to the public transport in Bucharest in order to ensure that ATM Bucharest is planned and designed properly.

4 PAST AND FUTURE STEPS

The sharing of experience with authorities that apply best practice methods in the organisation of public transport is also planned.

Main steps achieved so far in the implementation of European concepts in Bucharest public transport system are :

- identified and contracted the financial assistance for the creation of a Metropolitan Transport Authority in the Bucharest area;
 - integrated fare collection system for integrated transport ticketing, which are under implementation, a foreign-funded project as well;
 - rehabilitation of the whole rolling stocks, for surface and underground transport; the quality of public transport vehicles within urban and regional transport (buses, tramways, trolley buses and metro) was improved through a joint venture between Romanian and foreign firms;
 - creation of a legal framework for the development of public-private partnerships (PPP) projects;
- Other aspects that must be included in the future policy for public transport development in Bucharest are the following:
- an expanded and comprehensive diagnosis of public transport issues;
 - parking policy measures and their effects upon worktrips and public transport smooth traffic flows;
 - acceptability of marginal costs based pricing in public transports for users instead of costs for worktrips using personal cars;
 - last but not least, the implementation of the new concept "tourism tour visits" in the general approach of public transport;

5 CONCLUSIONS

In the approach future, after the Bucharest Transport Authority will become operational, expended and comprehensive diagnosis of public transport issues will be done. In consequence, a global strategy for the public transport will be adopted, linked with the future develop of the area and which will optimize the public transport for the Bucharest's conditions, with the goal to increase the satisfaction of all process transport actors (operators, public administrators, companies, passengers , financial institutions).

The decentralisation of units that coordinate the public transport in Bucharest, currently run by the Ministry of Transport, Constructions and Tourism and Bucharest Municipality respectively, the development of comprehensive opportunities as regards the privatisation of transport services are key factors as far as the operation of Bucharest Metropolitan Transport Authority is concerned.

Starting with the establishment of functionality objectives and the establishment of an organisation method for Bucharest Metropolitan Transport Authority and including the establishment of relations with various operators, a broad international cooperation is planned based on European "best practice".

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