

Improving the Structure and Work of Public Transport Services in Bucharest

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ABSTRACT: The public transport for passengers represents one of the essential factors for social and economic development of the city of Bucharest, responding to the demands for mobility in both urban and sub-urban areas in conditions of easy accessibility, promptness, comfort, and safety. The measures taken in order to increase the attractiveness of urban public transport modes also aim to improve their co-ordination and integration into a system.

RÉSUMÉ: Le transport en commun pour passagers représente un des facteurs essentiels pour le développement économique et social de la ville de Bucarest, tout en répondant aux besoins de mobilité de la demande entière du transport urbain et suburbain en états de confort, sécurité et promptness. Les mesures rentrées afin de faire le transport public urbain plus attractif visent aussi à une meilleure co-ordination et intégration de systèmes présents de transport actuellement en fonction.

I. GENERAL PRESENTATION

In the present, as a result of the stages of reorganization that were traversed during the past 14 years, Romania is passing through a consolidation process of the functional market economy.

Because of the simultaneous existence of an economy of transition and the structural transformations that took place in economy, urban expansion was stopped, but it can be visualized again in the context of economical recovery and consolidation.

The differences in incomes from the period of economical transition and the tendencies to evolve toward new forms in consumption, as the acquisition of cars for example, have led during the past five years to a doubling of the number of privately owned cars in Bucharest.

This tendency seems to be continuing in step with the economic growth. For the next 15-20 years, it is estimated that the number of cars in private ownership to increase from the current 160 cars for 1000 inhabitants to a figure of 350 cars for 1000 inhabitants.

Bucharest, the capital of Romania, has a population of more than 2 millions inhabitants, to

them being added another 250,000 people that live in the suburbs.

The large density of population (91 inhabitants/ha approximately) offers excellent conditions for public transport.

The demands for public transport are served by surface modes of transportation (buses, trolleybuses, tramways), and an important metro network.

Public transport provides currently for over 80% of all motorized travel.

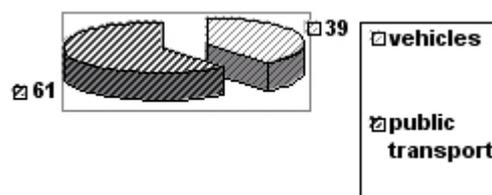


Figure 1.

Importance of this component of town's life must be also associated with the providing for environmental conditions at a superior level, in order to reduce pollution that is kept up by the alarming growth of the motor vehicle traffic. This last is

happening mostly because of the quantitative and qualitative insufficiency of public transport supply.

II. CURRENT SITUATION OF PUBLIC TRANSPORT IN THE CITY OF BUCHAREST

The main public transport operators Bucharest are:

- S.C.T.M.B. METROREX S.A.— responsible for operating the metro network. METROREX is directly subordinated to Ministry of Transport, Construction and Tourism.
- Autonomous Agency of Transports Bucharest—R.A.T.B., responsible for running the surface transport system. RATB is subordinated to General Council of City of Bucharest.
- Private operators of urban maxi-taxi and of sub-urban and regional buses.

In 2002, the modal split of total public transport trips was as follows:

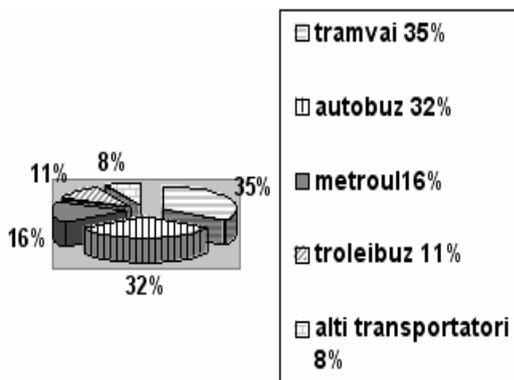


Figure 2. Modal split

The urban transport by tramway uses a network of 296 km length, covering the territory of the city by a radial system with a semi-central ring.

A major part of the tramway network (110km) is currently being modernized.

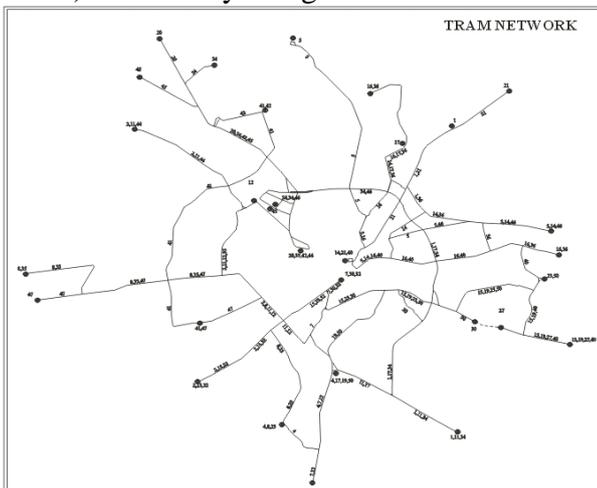


Figure 3. Tramway network

A modernization program for the rolling stock has also been drawn up, aiming to increase the effectiveness and the safety conditions of tramways, as well as to reduce the electric power consumption. Implementation of modernization programs for infrastructure and rolling stock requires important financial resources, in excess of what the RATB and/or government can provide from normal investment budgets. International financial institutions and other private financing institutions from abroad have been approached for co-financing. The tram track modernization project is co-financed by the European Investment Bank, whereas arrangements for the rolling stock program are still under preparation.

Urban transport by bus has a network of 860km length and covers the entire surface of the city.



Figure 4. Bus Network

Buses represent one of the most important modes of transport, carrying 32% of all urban and sub-urban public transport trips. From the total amount of 1200 buses in circulation (from which 241 are DAF type, manufactured in Holland and 339 are ROCAR type, manufactured in Romania), about 30% have exhausted their span of life, being kept in operation through high maintenance costs.

It is therefore intended to acquire new modern buses, equipped with EURO 3 motors and with low floor, providing for an easier access of persons with locomotors deficiencies.

At the same time, considering the fact that the deficit of public transport is presently estimated to be approximately 20%, it is intended to increase the total number of operating buses.

The 65 km d.t.^{*)} metro network, built since 1979, provides for high-capacity, rapid travel. It consists of two lines traversing the city from East to West and from North to South, and a central ring.

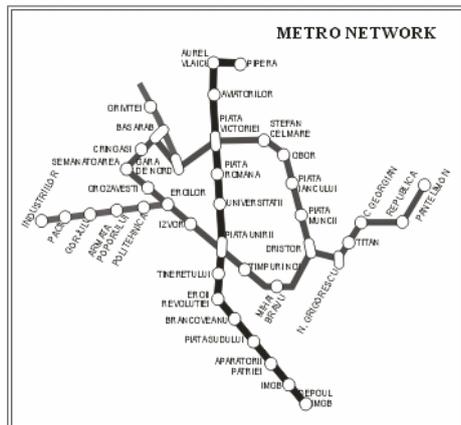


Figure 5 Metro Network

The development and modernization program for Bucharest metro network includes projects that have to be implemented over the medium and long term. The following represent the main features from that program:

- Completing and launching of the two couplings for existent lines, with a length of 7km and 8 stations on the routes 1 Mai-Laromet and Nicolae Grigorescu -Belt line (Linia de Centura) respectively.
- Execution of a new metro line (Main line 5) with a length of 9km and 13 stations that will connect the residential district Drumul Taberei, that is situated on the South-West zone of the capital, with the center of the town, in a future stage being estimated the extension on this main line toward Pantelimon residential district, located in the Eastern side of the capital.
- Modernization of the fixed equipments from the operating lines in order to increase their efficiency and attractiveness.
- New metro trains acquisition (in progress) for the 18 new trains. These will be delivered by the end of the year 2003, so that the entire old generation of rolling stock will be replaced until the end of the year 2011.

The importance of the metro as a mode of ecologic and rapid mass transport is increasing. Urban transport by trolleybus, using a network of 72km d. t. generally disposed on the zones of West, North-West, South-Vest and East of the city provides the connection with the center of town.

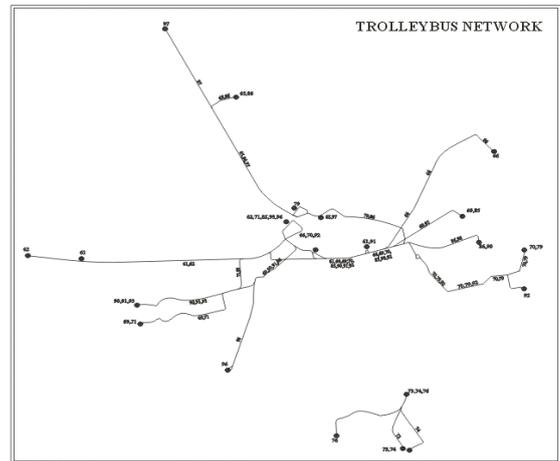


Figure 6. Trolleybus Network

Although the trolleybuses cover only 11% from the public urban transport, they have an advantage over buses as an ecologic and silent technology.

During the modernization program, 200 new trolleybuses were acquired from ASTRA-IKARUS, equipped with chopper for power consumption reduction. Another 60 trolleybuses of the same type will be acquired, providing this way the replacement of approximately 80% of the existing park.

III. FINANCIAL ASPECTS

Public transport in the City of Bucharest is subsidized by local and state budget, in accordance with state policy regarding social protection and correspondingly with people average incomes levels.

Considering the subordination of the two main operators, S.C.T.M.B.METROREX S.A. is subsidized by state budget and R.A.T.B. by local budget of Bucharest Municipality.

For the past year, level of stipend is settled between 60% and 65%.

For the year 2002, situation of revenues and operating costs for the two operators was as follows:

	R.A.T.B.	Millions of EURO S.C.T.M.B. METROREX S.A.
Revenues	43,6	14,4
Operations cost	105,0	40,0
Stipend	61,4	25,6

Fare policies of the two operators are not fully integrated. The changes in fares are decided by

^{*)}double track

approval from a governmental agency specialized in consumer's protection field.

For the period 2002-2003, the actual average fares were as follows:

R.A.T.B.

One trip ticket	0,17 EURO
Monthly subscription for all the lines	6,87 EURO
Monthly subscription for one line	4,30 EURO
Monthly subscription for two lines	5,15 EURO
One trip ticket for express buses	0,43 EURO
One trip ticket for suburban buses	
-less than 20 km	0,43 EURO
-between 20-30 km	0,57 EURO
-over 30 km	0,72 EURO

S.C.T.M.B.METROREX S.A.

Two trip magnetic card	0,46 EURO
One day validity magnetic card	0,57 EURO
Ten trips magnetic card	1,43 EURO
One month validity magnetic card	4,57 EURO

Metro cards are utilizable for all the lines in function. For both networks, in accordance with the current laws, certain categories of passengers benefit by a 50% reduction (e.g. pupils and students) and even by free transport (retired persons, persons with disabilities and other categories of passengers). Simultaneously with the implementation of an automatic taxation system for RATB, which is envisioned to become functional during the year 2005, it is expected that a higher level of fare integration between the surface and underground transport systems will be achieved, which in turn is expected to attract more passengers.

IV. PROBLEM OF INTEGRATION

For the present, the two main operators in Bucharest --RATB for surface transport and METROREX for metro-- act independently of each other in operational and policy decisions, such as service standards and fares, as well as in the development programs, i.e. extension and modernization of infrastructure and the fleet. The coordination is made even more difficult by the fact

that the two operators are responsible to different levels of the government.

Such a situation often leads to duplications and cost inefficiencies. It tends to prevent each transport mode from finding its best niche in the system from the dual points of view of service provision and operating costs.

In the Western Europe, the problem of coordinating urban public transport (and/or all urban transport) by setting up transport authorities with a broad scope of responsibilities as regards organization, regulation, funding and developing transport systems.

This system of institutional organization provides for an unitary co-ordination and for a hierarchical differentiation of the developmental projects. It is based on the principle of integration for the urban public transport system, achieved by implementing necessary inter-modal connections and by using each mode of transportation accordingly to its capacity and to its ability to extend coverage to all the areas that must be served. Examples of such organizations are those in the Paris region (S.T.I.F.—Sindicat de Transport Ile de France) and those from Barcelona (A.T.M.—Autoritat Del Transport Metropolita).

The main aspects regarding such metropolitan transport authorities can be synthesized as follows:

1. They are autonomous organs constituted by agreement between representatives of municipalities, the regional government and/or the state; their role is regulatory and strategic, whereas the actual public transport services are provided through various public-owned or private operators.
2. They are governed by a Council of Administration consisting of representatives of the regional and local authorities involved, as well as representatives of the business community and generally from the civil society in various agreed proportions (17 representatives of the state from 34, in Paris and 8 representatives of the state from 16, in Barcelona).
3. The distribution of responsibilities between various levels is as follows:
 - The state retains the legislative power, and elaborates systemic urban transport regulation; importantly, the state may define the funding arrangements, e.g. by providing for local dedicated taxes and/or financial resources passed by the state as a complement to the resources of local governments, to subsidize operating costs

and to finance major investments in an agreed way.

- Local governments are responsible for roads and traffic operations, and the link between these and the functioning of public transport modes. Directly or indirectly, local and regional governments will tailor the systemic regulations and funding arrangements to suit their local conditions, especially regarding the subsidies of operating and capital costs.
- Metropolitan Transport Authority is responsible for the passage from the state and local/regional policy framework to its implementation on the ground. Its major function is to establish service standards, manage contractual relations with transport operators, monitor the operators' performance, follow demand trends, and communicate with the public. In some cities, the Authority is responsible for all revenue aspects, leaving transport operators to focus solely on the performance and cost side.
- Operators provide transport services in conformity with the contracts that were concluded between them and Metropolitan Transport Authority; they may also be responsible for executing the agreed investment programs that would lead to a growth in quality and effectiveness of transport services.

V. MEASURES TO IMPROVE THE INSTITUTIONAL ORGANISATION OF PUBLIC TRANSPORT IN METROPOLITAN AREA OF BUCHAREST

Analysis of current situation of public transport in Bucharest and its metropolitan area indicates that improving the governing institutions holds the key to achieving growth in service attractiveness and cost efficiency.

Setting up a unified Transport Authority in this city would pave the way to a much better integration between the diverse operators, in terms of removing overlaps and facilitating inter-line and inter-modal transfers.

High on the agenda of such an authority would be to resolve issues which have so far prevented the setting up of a fare union in Bucharest, all of them linked to the fare setting and subsidy

allocation, and generally to the funding of the public transport system.

Another issue of high interest is to harmonize the long and medium distance passenger transport with that of city and regional services. This would have a physical dimension, e.g. the prolonging of the metro lines outside the city, in the shape of surface routes, as a regional metro, but also a service and fare dimension.

Apart from the benefits of coordination, a major main potential advantage of having a Metropolitan Transport Authority in Bucharest would be the impact of the contractual approach on the performance of the public-sector operators. By exposing them to competition, while at the same time giving managers more freedom to run their operations is an effective way of getting rid of some inherited obsolete practices, while retaining the technical expertise accumulated over years.

Founding a Metropolitan Transport Authority in Bucharest represents a solid guarantee for the achievement of the quality objectives and demand growth for public transport services, and the expansion of these benefits beyond the City of Bucharest into its region.

This body which will provide for the connections between governmental and local organisms that are involved in the field of public transport and its finance, on one hand, and for the connections with transport operators involved in public transport operations, on the other hand, is a necessary measure whose implementation deserves to be accelerated.

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