

## editorial

### About public money and public transport services

All across Europe, local and Regional Governments and Transport Authorities are allocating very important amounts of public money to promote public transport: building new infrastructures, improving the quality, safety and accessibility of public transport and maintaining a fare system that incentives the use of public transport.

This bet on public transport, sustained through several years, will, in most cases, produce a fruitful result: a substantial increase in the demand for public transport. More and more people find new incentives for restricting the use of their private cars.

These good news bring with them some new problems:

- If you have built new metro lines, users of the old ones will demand the same level of quality.
- New buses and rolling stock start a growing demand for the replacement of the old ones.
- In general, if you improve part of a transport system, you have to be prepared to face a demand that this improvement is extended to all public transport in the metropolitan area.

If you add this quality improvement demands to the financial consequences of the increase in the number of users of public transport, the consequence is that Local and Regional Governments and Transport Authorities have to face new and demanding challenges to finance the public transport system. This is not easy nowadays when the expansion of public expending is subject to severe restrictions in many European countries, in the common goal to maintain and improve fiscal and monetary stability.

Maybe the time has arrived for National Governments to increase their contribution to the financing of public transport in great metropolitan areas and also to consider the allocation of European Union structural funds to a goal so important for the quality of life of the citizens of Europe, a continent where 80% of the people live in the urban areas.



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## News from Europe

### ● CIVITAS Initiative: 14 cities rewarded by the European Commission

The European Commission revealed last July the names of the fourteen cities which will benefit from a grant of € 50 m under the CIVITAS Initiative to help them implement innovative and integrated actions for radical improvements of their urban transport. The following projects were highlighted by the Commission: company mobility plans and travel awareness campaigns (Bristol, Rome, Nantes), integration between public transport and car-sharing, and multi-modal passenger information and booking (Bremen), large-scale introduction of clean buses (Rotterdam, Graz, Nantes, Berlin, Barcelona, Lille). The Commission intends to launch a second CIVITAS initiative in 2003.

[http://europa.eu.int/comm/dgs/energy\\_transport/index\\_en.html](http://europa.eu.int/comm/dgs/energy_transport/index_en.html)

### ● Revision of the European transport policy: decoupling of transport and economic growth, and rebalancing between the modes

The European Commission adopted last July the policy guidelines of the White Paper on transport policy, which will be formally adopted in September. The aim of the future common transport policy will be to decouple transport growth and economic growth, and to rebalance the modal shares towards more sustainability. The approach recommended is to support rail, maritime transport and inland waterways to allow the market shares of each of them to return, by 2010, to the level of 1998. This will be achieved through more market opening, harmonisation of interoperability and safety standards for railways, creation of rail routes dedicated to freight transport, a new financial support programme for intermodality of freight transport ("Marco Polo"), removal of bottlenecks on the trans-European networks, setting up of a new charging policy (integration of external costs and harmonisation of infrastructure charging and fuel taxation policies) and putting users at the heart of the transport policy (charter of rights of passengers, improvement of the quality of transport services and reduction of the number of victims of car accidents).

[http://europa.eu.int/comm/dgs/energy\\_transport/index\\_en.html](http://europa.eu.int/comm/dgs/energy_transport/index_en.html)

### ● Opinion of the European Economic and Social Committee on the project of European Regulation on public service requirements in passenger transport

The Committee released last May its opinion on the project of new Regulation prepared by the Commission. The Committee welcomes the Commission's intention of introducing a market regime for public passenger transport based on controlled rather than full competition. It also approves the most important regulatory instruments proposed, such as the obligation for the competent authorities to provide adequate public passenger services, the establishment of quality criteria, the principle of financial compensation covering expenditure incurred in meeting the public service requirements, the granting of exclusive rights for a specified period, and the organisation of competition through tendering, with appropriate derogations. However, the Committee is sceptical on some aspects of the draft Regulation. First and foremost, it thinks that the project doesn't respect the principle of subsidiarity and the fundamental rights of local authorities. It also insists on the fact that the derogations from the obligation of tendering and the quality criteria are imprecise and unwieldy.

<http://www.esc.eu.int>

### ● EMTA Workshop on Public Transport Authorities (Barcelona, 8 November)

EMTA will hold a workshop on the topic "What public transport authorities for the European metropolitan areas?" in Barcelona on 8 November 2001. This seminar will present a broad overview of the organisation, the missions and the funding of PTAs in the European large cities.

For any information : E-mail : [emta@emta.com](mailto:emta@emta.com)

# News from the cities

## ● Shared taxi services introduced in Manchester city

The Arranged Passenger Transport (APT) shared taxi service has already been introduced in several districts of Greater Manchester and is proving to be an innovative and economical way of expanding the public transport network in areas unserved by regular public transport. The Greater Manchester Passenger Transport Authority (GMPTA) decided last May to extend this Phone-Book-Ride APT service to the residents of North Manchester, some of which are no longer served since changes occurred in the itineraries of some regular bus routes. To use the APT service, available 9am-5pm, Monday to Saturday, passengers simply need to phone the appointed taxi company at least one hour before they wish to travel.

<http://www.gmpte.gov.uk>

## ● Paris: 5th "Barometer of image and satisfaction of Ile-de-France public transport"

The 5th issue of the survey of satisfaction of Ile-de-France public transport users, which is conducted every two years by STIF, Paris public transport authority, was released last June. It shows that:

- satisfaction with public transport is slightly increasing (average mark of 11.1/20), but still very inferior to that with private car (15.2/20) or walking (15.3/20),
- the satisfaction rate is very different from one public transport mode to the other. Metro and bus services in inner Paris get the best results (90% of people satisfied) whereas regional rail services get the lowest satisfaction rate (80.6%),
- punctuality and security are the main concerns of public transport users (respectively 43% and 33% of people quote them as their top priority),
- there is still a strong gap between the overall perception of public transport by the population and the satisfaction of the people who use them. It is especially true with bus services in inner Paris, which have an average image among people in general but a good rate of satisfaction among their users.

<http://www.stif-idf.fr>

## ● Tax deductions for public transport users in Germany

Since January 2001, a new German federal law has introduced a possibility of tax allowance linked to the distance of trips to work ("Entfernungspauschale"). With this new fiscal system, it is possible to deduce of one's taxable income, among other professional costs, 0.36 € by kilometre for the first 10 kilometres of trip and 0.41 € as of the 11th kilometre, whether one uses one's private car or public transport (before this law, only private car users could benefit such tax deductions). The distance taken into account is based

on the shortest trip between home and office.

Thanks to this measure, a person who uses public transport daily for a 15km trip to work spares an average of 110 € every year in tax allowances (person married with two children and average income). This tax reduction comes in addition to the other savings of people using public transport for their daily trips, who can have access to attractive fares such as "Company tickets" (tickets sold at cheap prices to organisations buying them in great numbers for their employees).

## ● Frankfurt: more services on the RMV regional networks

### • extension of rail services and purchase of new rolling stock

The construction of a final segment of a new suburban train line started in March 2001. It is the prolongation of the Suburban train S2 between Frankfurt south and Rodgau (20km southeast of Frankfurt). In June, new modern trains were put into service on the RMV-line 61 between Frankfurt and Dieburg. These trains are Diesel-Electric powered, air-conditioned and in low-floor construction, allowing an easy access.

### • RMV replaces services suppressed by German Railways

In June 2001, German railways DB AG stopped their service with the train product InterRegion (IR) between Frankfurt/Hessen and Siegen/Nordrhein-Westfalen.

From June 10, on RMV-line 30, RMV provided and funded a replacement product RegionalExpress (RE) guaranteeing the number of trains on that track and providing more direct connections for more passengers.

### • new regular passenger river services

In April 2001, RMV started a new co-operation with a ship line on the river Main between Frankfurt and the bavarian border. The tickets for the ship ride are valid for travelling on the whole networks of RMV as well.

<http://www.rmv.de>

## ● Leeds Supertram gets government go-ahead

The project of Supertram in Leeds (2 million inhabitants in the metropolitan area) received the approval of the British government last March. The Supertram will consist in a network of three routes (total distance of 28km, of which 75% will be segregated from other traffic) for a cost of £ 500 m (€ 820 m). 75% of this cost will be met by funding from the British government, and the rest will be brought by local authorities and the tram operator.

The three routes will have 50 stations, of which 4 will be served by large Park & Ride sites totalling 4,500 spaces. All stations and vehicles (40 trams carrying up to 270 people each) will be fully accessible.

The outcome of the tendering procedure, launched by Metro, the West Yorkshire Passenger Transport Executive, will be announced by mid-2003. The organisation chosen to design, build, operate and maintain the scheme, will be granted a 30 year concession. It will keep the revenues and will have a guarantee of resources from the British government through a PFI/PPP (Private Finance Initiative / Public Private Partnership).

Works will start in 2004 and start of operations is due in 2006. 22 million people are expected to use Supertram every year, of which 25% would be former car users.

<http://www.metro-wyorks.co.uk>

## ● Extension of metro and tram networks in Prague

With 520 cars per 1,000 inhabitants (vs 250 in 1981), Prague has one of the highest car ownership rates of all European cities. This has led to a boom in car traffic (+150% since 1989) and a decline in the use of public transport (modal share fell from 75% in 1990 to 58% in 2000). So as to stop this trend, which brings lots of damage to the urban environment and the quality of life of city-dwellers, the Prague authorities are committed to improving the supply of public transport through extensions of the networks.

Thus, metro line C, which serves the city centre, will be extended to the northern suburbs of Prague so as to provide a direct and fast access to the centre for the 90,000 inhabitants of the North Town area and the commercial area of Letnany. The extension will consist in a tunnel of 9.8 km with 5 stations, for a total cost of about € 500m. Works will be conducted in two phases. Opening of the first phase of 3.9 km is expected in 2003 (2006 for the whole extension).

Another project consists in extending the tramway network from Hlubočepy to Barrandov, so as to provide fast and high quality service between the centre and the Barrandov suburban area (24,000 inhabitants), which is currently only served by buses. This new section of 3.6 km will have its own dedicated infrastructures (bridges) and 6 stations with a special design. The cost of the project amounts to € 100 m, and operations are expected to start in 2004.

<http://www.dp-praha.cz>

## ● London : major cuts in bus fares

The Mayor of London announced last May the launch of a cheaper and simpler ticketing package resulting in savings of £ 7m (€ 11.5m) to bus passengers as of 2001. Single journey bus fares have been cut from £1 (€ 1.64) to 65p (€ 1.07) with the introduction of a new pack of six Saver tickets, and a one day bus pass now offers travel across the whole of London for £2 (€ 3.28).

<http://www.transportforlondon.gov.uk>

# Analysis

## Psychology, marketing and passenger satisfaction in Vienna

In EMTA News n°4, we presented the objectives and the methodology used by the Zürcher Verkehrsverbund, Zurich PTA, to measure the satisfaction of passengers. We now have a look at the approach of VOR, the PTA of Vienna and Eastern Austria, which refers to psychology and marketing theory.

### • Theory of passenger satisfaction

Passenger satisfaction has become an indicator of success in public transport, although passengers' emotions are not immediately reflected in sales figures as in any other market sector. However, passenger satisfaction or dissatisfaction with the services determine the modal split between public transport and private motorized traffic as well as the degree of political support of individual routes on a long-term basis.

In this field, VOR, the Public Transport Authority of Vienna and Eastern Austria, plays a pioneer role. It has introduced its own state-of-the-art system of measuring passenger satisfaction, which combines the latest findings of modern theory and practical market research techniques.

Customer satisfaction is optimised to serve the three following objectives:

- Continuous short-term customer maintenance and solicitation of new customers (customer care).
- Long-term customer acquisition by advocating the attractiveness of transport services vis-à-vis the marketplace and those who provide the subsidies (customer gain).
- Creation of an image of public benefit with a focus on the economy, the environmental impact and the settlement structure (image building).

These three objectives can be measured by the number of passengers, the level of profit, the amount of subsidies, and the image response.

The passengers' attitude and opinion about the transport services, i.e. their satisfaction, is determined by the following factors:

- Objective transport services: routes, reduced fares, quality of vehicles, punctuality, etc.
- Atmosphere: driver, passengers, place, cleanliness
- Public image: image of the public transport mode as a result of talks, media coverage, advertisement, information campaigns.

A passenger who is waiting for a bus for a long time, is aggravated. If, however, he

is welcomed by the bus driver upon entering, or if he finds a seat beside a friend, his dissatisfaction disappears in part.

All relevant theories subdivide the inner psychological condition of an individual into three forms of response:

- Positive affects: pleasure, well-being, good temper
- Negative affects: sadness, fear, anger, bad temper
- Cognitive assessment: thinking, estimating, calculating

A passenger is experiencing negative affects while waiting for a delayed bus. Only gradually can these be compensated for in the bus by positive emotions through pleasant social contacts and physical comfort. A short journey hardly gives an opportunity for cognitive evaluation. This happens later (conversations, etc.).

But what is really passenger satisfaction? Is it his relatively stable long-term attitude towards taking the bus, or is it the way he feels while riding on the bus?

Drawing an analogy from the field of financial accounting, it is possible to refer to the long-term level of satisfaction as a "stock", and the spontaneous profit and loss as a "flow". This implies that the capital stock of satisfaction and dissatisfaction, the affective long-term level of a particular area of life can be influenced significantly by the many little emotions and traumata.

This model enables to deduce the following axioms in the case of public transport:

- Public transport has an effect primarily on the flow-element of passenger satisfaction. Only gradually, however, do they add up to the reinforced "stock" element of passenger satisfaction.
- In public transport, the sustained impression is created and changed by the sum of experience and social impacts. This requires enduring public relations work.
- Customer care and image building are as important as passenger satisfaction for the long-term endeavour of canvassing new customers.

### • Satisfaction and Frustration on the Bus

In Vienna, passenger satisfaction is studied on all bus lines. The "good" lines are recognized and in the future are to be recompensed with awards, while the "weaker" lines and their operators are urged to increase their efforts.

The possibility of bringing an element of the free market economy into the collective property of the bus lines lies in the scientifically objective collection of passenger satisfaction data, connected with a reward for above average passenger satisfaction.

The collection of passenger satisfaction data is done with the proven methods of passenger questioning via interviewers with written questionnaires in the vehicles themselves.

The total satisfaction of the passenger is ascertained during the ride and set in relation to the satisfaction before the ride in a "contrast value" ("Gain Score"). The immediate change of opinion as a result of the bus ride (flow value of satisfaction) can thus be measured.

Furthermore, a clear distinction is made between those areas of the satisfaction which depend on circumstances, those which the operator can influence (such as comfort, cleanliness, and friendliness of the personnel), and those on which he has no substantial influence (like the commercial speed).

The satisfaction surveys executed so far show that the public transport in the VOR Region come off well on travel satisfaction with a mark value around 2 ("stock" values), with 1 = very content and 5 = not at all content. Between the individual lines there are substantial differences which range in value from 1.2 to 3.3.

It is to be considered that passenger satisfaction has a quite different weight in different groups. Occasional passengers are much more sensitive than, for instance, regular commuters who have no other possibility of arriving at their destinations. The survey of passenger satisfaction gives consideration to target groups and specific conditions and can thereby give appropriate targets to the operators.

<http://www.vor.at>

*(This text is based on a paper written by E. Gehmacher, a consultant at BOAS, working for VOR).*

# Focus

## Rome: ambitious programme of upgrading of rail services

The Municipality of Rome launched in 1994 a programme of upgrading of its rail infrastructures called "the cure of railways" (*la cura del ferro*). This comprehensive project is based on the fact that, if the Italian capital city lags behind most of the other European metropolitan areas concerning the supply of public transport, this is mostly due to the absence of an efficient railway network. Railways provide indeed a quick, secure, convenient and clean way to reach the city centre from the suburban areas. A first agreement, signed in 1994 between the City of Rome, the Rome Province, the Lazio Region and the FS Italian railways, was renewed in 2000.

### Objectives of the programme

The "cure of railways" consists in creating new infrastructures, but also in modernising the existing ones. This plan lies at the core of the strategy of improvement of the urban mobility in Rome, which comprises other measures such as the setting of a new institutional framework for public transport operations, the renewal of the fleet of buses (with the purchase of electric and methane vehicles), the limitation of car traffic in the historic centre, and incentives for the purchase of electric motorbikes. Concerning public transport, the Municipality approved in 1995 the concept of network called *Metrebus 3 x 3*, which consists in the integration of all transport modes in the metropolitan area (railways, underground, tramways and buses) and the creation of a network of three underground routes (the existing two lines A and B, extended, plus a new line C) and three metropolitan railways crossing the city (FM1, FM2 and FM3).

### • Extensions of the underground network

The Metro network shall become the backbone of public transport systems in Rome. It will be enlarged thanks to the creation of a new route C (32km long, see EMTA News n°5) and extensions brought to the existing two lines A and B by 36.5km.

### • Creation of metropolitan railways FM (*Ferrovie Metropolitane*)

This new service was created in 1994 and uses railways which were initially only devoted to national or inter-regional services. It consists in more than 170 km of railways operated by the national railways FS on the territory of Rome. Passengers can travel on these routes with the *Metrebus* season pass. After the FM3 (see below), it will soon be the turn of FM1 and FM2 to undergo works of modernisation. Besides, a project of railway ring using existing infrastructures around the city centre has been devised. Though the priority was first laid on radial routes, this new orbital FM

route shall be completed in 2004. € 82.63 m have already been earmarked.

### • Improvement of the railways under concession

The three railways operated under concession contracts (Roma-Lido, Roma Nord and Roma Pantano) will be modernised. These routes, which were built a long time ago, have been neglected for decades but they have a great potential of increase of their patronage. € 309.87 m will be spent in the near future to reshape the stations, build P&R facilities and improve the security of operations.

### • Extension of the tramway network

This network shall play two different roles: dense service of the historic centre, and feeder service towards Metro stations outside the city centre. Two new routes are planned.

### • Renewal of the rolling stock

The whole rolling stock for underground and suburban railways will be renewed, as already show the modern and accessible "Jumbo Tram" (78 of them already purchased from Fiat), used on the tramway route n°8, and the modern TAF trains used on FM routes.

### Results achieved

#### • Investments

Since 1994, more than € 5.18 bn have been voted to fund projects aiming to improve the railways in Rome, among which € 1.71 bn correspond to works already completed. 52% of the investments will have been devoted to the underground, 36% to the metropolitan railways, 6% to the metropolitan railways operated under concession contracts, and 5% to tramways.

#### • Works completed

No other Italian city has inaugurated so many new infrastructures of public transport during the 1990's.

- New suburban route FM3 (23 km between Cesano and San Pietro): this route has been doubled and electrified and now provides a service of quality to the people living in the Northern part of the city. This new route is regarded as one of the best suburban rail routes in Europe.

- New tramway route n°8: 70 years after they were banned from the historic centre, tramways are back in the streets of Rome. The debates which arose when the project was launched have now vanished and the route n°8 is the symbol of the successful come back of tramways.

- Extension of the underground route A. The route was extended by 5 km and all the stations are being modernised. A new P&R facility has been built in Anagnina (end station). Besides, 30 new trains will soon be purchased for a total investment of € 258.23m.

- Creation of express bus routes: so as to

improve as of now the supply of public transport, five express bus routes have been launched, which will be replaced in the future by underground extensions. These routes have fewer stops than normal bus lines and their commercial speed reaches 20km/h.

- Lastly, several new P&R facilities were built in the periphery of Rome over the past years (Ponte Mammolo, Magliana, Laurentina) and a total of 36 P&R facilities now give access to about 12,500 parking lots (8 more P&R are under construction with a total of 3,000 lots).

### • Impact on patronage and pollution

The first results achieved are very encouraging. The number of travellers on railways has more than doubled since 1993 (+116%), and at the same time, the quality of air has improved noticeably. In two years, the concentration of benzene in the air has been halved and the number of days when the concentration of the other polluting gases in the air is over the threshold fell from 84 in 1993 down to 12 in 1998.

<http://www.comune.roma.it/dipVII>

## Agenda

● **8th World Congress on Intelligent Transport Systems**  
30 Sept. - 4 Oct. 2001 - Sydney, Australia.  
<http://www.itsworldcongress.org>

● **1st Annual European Energy and Transport Summit Conference of the European Commission**  
18-19 October 2001 - Barcelona, Spain.  
E-mail: [christine.cordie@cec.eu.int](mailto:christine.cordie@cec.eu.int)

● **18th Electric Vehicle Symposium**  
21-24 October 2001 - Berlin, Germany.  
E-mail: [kongresse@wtb.tu-berlin.de](mailto:kongresse@wtb.tu-berlin.de)

● **Moving On Conference**  
25-26 October 2001 - Bristol, U.K.  
<http://www.moving-on-conference.co.uk>

● **UITP Conference on Marketing in Public Transport**  
29-31 October 2001 - Barcelona, Spain.  
E-mail: [events@uitp.com](mailto:events@uitp.com)

● **EMTA Workshop: What public transport authorities for the European metropolitan areas ?**  
8 November 2001 - Barcelona, Spain.  
E-mail: [emta@emta.com](mailto:emta@emta.com)

● **POLIS Conference: Integrated Transport Management - the Way Ahead for Europe's Local Authorities**  
29-30 November 2001 - Rome, Italy.  
<http://www.polis-online.org>

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