

Government Proposals for Urban Transport

Comments and Recommendations

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Government Proposals for Urban Transport

COMMENTS AND RECOMMENDATIONS

FEMATRO agrees that problems in urban transport require immediate action and that the Government must create conditions that enable improvements in service capacity, safety, quality, and affordability. FEMATRO also agrees with most of the Government's proposals—as presented in *Reorganizacao e Gestao do Sistema de Transportes Publicos Urbanos* (Reorganization and Management of the Urban Public Transport System)—for bringing about improvements, and wishes to cooperate fully in implementing them. FEMATRO believes, however, that some of the proposals may not be practical, while others, which are realistic for the long term, cannot be implemented in the immediate future. This document identifies those proposals and suggest how they could be improved for the benefit of all parties concerned, in particular service users and providers.

Operating Companies

Government Proposal. The Government proposes dividing TPM into two separate operating companies and a maintenance company. The operating companies would be based in Maputo and Matola and be owned by the respective municipalities. They may be managed by the municipalities or by the private sector under concession arrangements. This would be the decision of the municipality concerned. Each company would operate only within its own municipal area. Chapa owners will be encouraged to combine and form companies, preferably operating large buses. These companies would be eligible to bid for concessions to operate routes within the municipalities, provided that they have buses with 60 seats or more.

Comment. We have no objection to splitting up TPM into smaller units but do not see any advantage in having municipalities rather than the Government owning public sector companies. The cost of setting up a new company with new infrastructure and management may not be justifiable. We feel that eventually all bus operators should be in the private sector and should compete on equal terms. With regard to public transport, municipalities should have more of a planning and regulatory role, not an operating role, which should be for the private sector. In addition, it will be difficult to persuade chapa owners to form companies so that they no longer own their vehicles directly, although it could be achieved in the long term.

Recommendation. We recommend that TPM remain a single company and bid for route concessions on equal terms with the private sector. It should charge the same fares as private sector operators, and any subsidies paid by the government should be on the same basis for all

operators, whether publicly or privately owned. Government assistance in the purchase of new buses should be available equally to public and private sector operators.

We propose that chapas initially be managed by the associations that are currently responsible for each route. These should be reconstituted as cooperatives, with formal management structures to manage each route, and should be eligible to bid for route concessions. In time, chapa owners will see the benefits of operating as larger units and will tend to combine, perhaps first as cooperatives in which members still own their vehicles, and later as formal companies in which members hold shares instead of owning the vehicles directly. This should be a natural process and should proceed at its own pace.

FEMATRO can assist the process of consolidation by providing advice to members, and arranging for training in general business management and in bus service management.

Maintenance Company

Government Proposal. The TPM maintenance function would become a separate government-owned company that may be run by the private sector under a concession arrangement. Its main function would be to maintain public transport vehicles operated within the Maputo and Matola municipalities: vehicle owners would not have the option of having vehicles maintained elsewhere. The company would also be responsible for training and enforcement (but it is not clear which personnel would be trained or what regulations it would be responsible for enforcing), for planning an integrated transport system, and for organizing and implementing the tariff system and internal compensation between operators. It will also specify the vehicles to be purchased by all operators.

Comment. We agree that the TPM maintenance facilities are a valuable resource that should be put to good use. But it will be very difficult, if not impossible, for a single company to adequately meet the maintenance requirements of all public service vehicles in Maputo and Matola. At present TPM is unable to maintain its own small fleet to a satisfactory standard. Moreover, if all operators must use only one maintenance company the lack of competition will lead to serious problems. Motor dealers specializing in particular marques, and carrying stocks of spares for those marques, are more likely to provide faster service than a workshop dealing with all marques and that will not be able to carry stocks of spares for all marques. Requiring all bus operators to standardize to one marque to overcome this problem would create other problems, and restrict the ability of operators to select the most suitable vehicles for particular circumstances.

A maintenance company should be involved only in maintenance, not in planning, enforcement, or tariffs, which are the concerns of the regulatory authority. Nor should the maintenance company specify which vehicles operators should purchase. We agree that there are too many different vehicle marques in the public sector and that some are unsuitable for local conditions, but believe that bus owners must be the ones to make choices in this regard.

Recommendation. We agree that the proposed maintenance company should be set up, but in competition with private sector workshops. All operators, including TPM, should be able to choose to use the new company or private workshops. Large operators may choose to have their own workshops. The ability to choose would provide the new company an incentive to operate efficiently. It would be able to exploit its economies of scale, but would also have to deal with diseconomies of scale.

All bus service planning and regulatory functions should be the responsibility of the proposed urban transport authority (discussed below). Bus operators should be permitted to select their own vehicles. Provided that buses comply with construction and use regulations and with the requirements of concession agreement stipulations of capacity and general configuration, operators should decide the makes and models to be purchased based on their professional experience. An operator who purchases unsuitable vehicles will soon go out of business. If necessary, FEMATRO can advise its members on which vehicles are suitable for various types of service and operating conditions. It can also advise on effective preventive maintenance procedures.

Bus/Chapa Route Network

Government Proposal. Routes running outside the municipality will be separate from those within the municipality. No TPM buses will operate between Maputo and Matola, but will be confined to their own municipal areas. Passengers traveling between the two cities will have to transfer at an interchange point near the boundary between the cities. Chapas will provide service from Maputo and Matola to Boane, and from Maputo to Maracuene. No routes will cross municipal boundaries. Out-of-town passengers traveling into the cities will have to transfer from one bus to another at interchange points on the boundaries. Inside the municipality, routes on main corridors will be supplemented by subsidiary routes that connect with them, again requiring passengers to transfer vehicles. As acknowledged, this will be inconvenient and require more buses, but will also facilitate distance-based fares.

Comment. We accept that it is not possible to provide direct services between all points, and that some passengers will have to transfer to other buses during their trips. But to make the service as convenient as possible for users, transferring should be kept to a minimum within the constraints of operating conditions and cost. Requiring passengers to transfer from one bus to another at municipal boundaries for purely administrative reasons will detract significantly from the convenience of the service. Passengers' travel times will increase and most will object to having to transfer for no apparent reason, especially if at present they are not required to do so.

In addition, the total cost of providing the service will increase. For example, it will be necessary to provide terminals where passengers transfer. Absent the requirement for transferring, terminals would be much smaller or not even necessary. In addition, the buses themselves would spend a greater proportion of time idling at terminals, which will also raise operating costs. The overall effect of this proposal will be to make services less convenient and to increase service costs.

Recommendation. Since the area comprising Maputo, Matola, and adjacent municipalities has the characteristics of a single large city, with many people traveling between one municipality and another, bus services for the entire area should be planned as a network that caters to passengers in the best possible way from the passengers' viewpoint. This will require services that cross municipal boundaries: passengers should not be inconvenienced by having to transfer between buses simply because they cross a boundary. For strictly operational reasons, some passengers will have to transfer buses between routes (i.e., on outlying sections of route where demand is low, or where road conditions are unsuitable for large buses).

Such a network must be planned and regulated by a single authority if it is to be fully coordinated. The main municipalities in the Maputo and Matola conurbation have already proposed to set up a

joint committee to carry out this function. We recommend that this be taken a step further in the form of a Transport Authority for the conurbation. The authority would comprise representatives of all municipalities and other stakeholders, such as FEMATRO, employers' associations, users' representatives, etc. The authority would plan the bus route network, grant concessions, and regulate services to ensure that operators meet all their obligations.

Concessions

Government Proposal. Services outside the municipality would be run by the private sector. Private sector operators with buses with 60 seats would be eligible to bid for concessions for routes wholly within the municipality and the municipality would award the concessions. It is not clear whether one operator would operate each route exclusively.

Comment. We believe that in the long term all bus services should be operated by the private sector. In the meantime, all public or private sector companies, cooperatives, or associations should be eligible to bid for concessions for any route on equal terms. We provide detailed comments on bus size below, but in the immediate term when there are few large buses but many smaller ones, most routes in the municipalities must be operated with small vehicles. Initial concessions should take this into account.

Recommendation. The recommended Transport Authority should be made responsible for planning all bus/chapa routes in the Maputo/Matola conurbation, and for awarding concessions on a competitive basis. All routes should be subject to concessions, whether or not they are wholly inside a municipal area. Concessions should be for approximately five years, similar to the economic life of the vehicles used.

Eligible operators should include not only formal companies but also operating units such as associations, cartels, and cooperatives that have the necessary management capability. Existing operators should be eligible to bid for the first concessions, even if their vehicles are smaller than is ideal for the services concerned. When the buses become due for replacement, they can be replaced with vehicles of the required size.

Before the Transport Authority is established, we suggest first awarding concessions for a small number of routes (say three or four) to fully test and demonstrate the concept and to deal with any problems before all routes are put up for bid. One concession could be awarded to TPM to enable comparison of the performance of private and public sector operators. These pilot concessions should be relatively brief, say two years.

It would be appropriate for the Maputo Municipality to award initial concessions, and it may be appropriate for the officers involved to be transferred to the new Authority when it is formed. Inviting competitive bids for pilot concessions would not be realistic at this point as no private operators currently have the necessary resources. We recommend that FEMATRO select associations it considers capable of operating concessions and assist them in setting up and managing the operation.

Only vehicles managed by the concession-holder should be permitted to operate on a route. Unauthorized vehicles on the route must be removed by the authority, and there must be appropriate penalties to deter unauthorized operation. This is particularly important to ensure the success of the pilot projects.

Tariffs and Ticket System

Government Proposal. Tariffs will be charged according to distance traveled. Prepaid tickets, purchasable at bus stops and other outlets, will be available at discounted rates (it is not clear whether tickets may still be purchased on the bus). Tickets will be useable on more than one vehicle, so that a passenger having to transfer from one bus to another will not have to purchase another ticket. This will compensate somewhat for the inconvenience of having to transfer. Public sector operators must implement the system first, followed by the private sector. Vulnerable groups would have preferential fares. Students are to be provided with cards to enable them to travel more cheaply; eventually dedicated transport will be introduced for students, with priority for primary school students.

Comment. Distance-based tariffs are equitable but difficult to apply without complex ticketing systems. Similarly, prepaid tickets and tickets for transfers and multiple journeys require complex systems and expensive equipment. While this system might be appropriate for Maputo in the long term, we do not believe that it is practical in the short term. In particular, prepaid and transfer ticketing must ensure appropriate and timely payments to operators through a very efficient and well-organized administrative system. The interval between passengers paying for tickets in advance and the disbursement of funds to operators must be minimal to prevent cash flow problems among operators. The only way such a system can work is with some form of “smart-card.” This requires expensive equipment that will be very costly for chapa owners unless municipalities pay for equipment provision, installation, and maintenance.

Recommendation. For the short term, we recommend introducing a simple zonal fare system with a basic ticketing and accounting system. Prepaid and transfer tickets should not be introduced until all buses have suitable equipment, which the Transport Authority should pay for in full. When this system comes into force, the authority should advance bus operators payment for prepaid tickets to compensate for the delay in receipt of payment for those tickets.

Provision for Vulnerable Groups

Government Proposal. Vulnerable groups, such as disabled people or pregnant women, will be provided for by having buses with ease of access and reserved places.

Comment. This is a desirable long-term objective. Meeting the objective will require buses with special features and replacing all existing buses. Such buses will be more expensive than standard buses, and reserving places for vulnerable groups will reduce capacity and, therefore, earnings.

Recommendation. Before making a firm commitment in this area, we recommend conducting detailed surveys to determine the exact requirements of vulnerable groups for on- and off-bus facilities and the capacity required on the buses. The survey should be carried out jointly by representatives of the transport authority, bus operators, and the vulnerable groups themselves. Operators must be compensated for higher costs and reduced revenue resulting from this requirement.

Types of Bus

Government Proposal. The number of marques of vehicle will be reduced to mitigate maintenance problems, especially problems obtaining spare parts. Buses must be suitable for local

conditions. Only buses with 60 or more seats will be permitted on routes wholly within each municipality. Smaller buses will be permitted to run outside the municipalities but would not be permitted to enter.

Comment. Operators should be permitted to select the type of vehicle they operate, not the maintenance company. The authority awarding the concessions should specify broad requirements (such as seating and standing capacity) and operators should be allowed to purchase vehicles of their own choice, provided that they meet the requirements of the concession, and comply with all legal requirements. FEMATRO can advise its members on vehicle specifications if required.

While we agree that large buses are more efficient on most busy city routes, smaller buses are more appropriate on routes with low demand or different road conditions. And on short routes with very high demand buses with few seats but capacity for a large number of standing passengers may be most suitable. Specifying that all buses have 60 seats is too inflexible. It is also not consistent with the government assisting operators by facilitating credit for the purchase of 29-seaters.

Recommendation. The proposed Transport Authority, in consultation with FEMATRO as the operators' representative, should decide the size of bus to be used on any route; that decision should take into account demand and the road conditions. Government should facilitate credit facilities for small operators to purchase large buses. Larger buses should be introduced in phases so that existing small buses and chapas can continue to provide city services until they can be replaced by large buses.

Operating Systems

Government Proposal. The government's document states that timetables must be enforced, and that operators must have buses standing by to replace buses that break down.

Comment. We agree that bus services should be operated according to timetables designed in accordance with demand patterns and traffic conditions. Traffic conditions, however, vary from day to day so it is not always possible to adhere to timetables, and bus operators should not be penalized for failures that are due to circumstances beyond their control.

The number of stand-by buses required will depend on (1) the degree of schedule compliance required and (2) the mechanical reliability of the buses, which in turn depends on the operator's maintenance standards. In a well-organized operation with realistic timetables, most maintenance is conducted during off-peak times when only a part of the fleet is running to minimize the number of extra vehicles required. The objective should be to raise maintenance standards to minimize the number of breakdowns.

Recommendation. Schedules should be realistic and operators must demonstrate that they make every reasonable effort to comply with them. The authority and FEMATRO should agree on penalties for deviation and the amount of deviation permitted from a schedule before a penalty is incurred. The terms of concessions should specify a minimum percentage of scheduled kilometers that operators must run, but allow operators to make whatever arrangements they consider necessary to meet the specification—whether by providing spare buses or by having a preventive maintenance program with buses serviced during low-demand periods, thus ensuring reliability

and requiring fewer stand-by buses. The authority should not specify the number of stand-by buses.

Drivers' Hours

Government Proposal. Chapa drivers are said to be working for more than 16 hours per day, and the government rightly says that this is too long and needs to be reduced, although there is no specific proposal as to what the maximum hours of driving should be.

Comment. We agree that 16 hours of driving per day is excessive and can lead to fatigue that jeopardizes safety. At present, most chapa drivers do not drive for such long periods, since they spend several hours waiting at the terminals between trips. But if and when chapas are used efficiently and intensively less time will be spent at terminals, and it will be necessary to limit the number of hours worked for safety reasons. This will mean changing how chapas are organized. At present, each chapa has one driver who pays a daily charge to the chapa owner. If the driver works fewer hours, providing the same level of service will require (1) using more chapas or (2) having two drivers working in shifts. The second alternative is preferable for reasons of efficiency but will complicate arrangements between owners and drivers.

Recommendation. Drivers should be restricted to a daily maximum of eight hours of actual driving (i.e., time at the controls of the vehicle with the engine running). Time at terminals would not be regarded as driving time (even though it is working time), so that the total length of the driver's working day (i.e., the time between starting and finishing work regardless of the amount of non-driving time) may be longer than eight hours but should not exceed the maximum permitted by law. This will mean that some chapas have to be driven by more than one driver during the day. The operators must make the necessary arrangements for remuneration of drivers and conductors, and responsibility for maintenance, purchase of fuel, etc. This will require a more formal organization than at present, and the associations will play an important role in this.

Subsidy

Government Proposal. Responsibility for administering the fuel subsidy for chapa operators will be transferred from FEMATRO to the municipalities.

Comment. This would involve duplication of the administrative system and may lead to inefficiency in the disbursement of subsidies. We believe that it would be preferable for the administration of the subsidy to remain under a single institution.

Recommendation. If the proposed Transport Authority comes into being, it could assume responsibility for administering the subsidy

Alternative Transport Modes

Government Proposal. The government's document mentions the possibility of providing bicycles as a cheaper alternative to public transport.

Comment. This may be appropriate in rural areas and small towns (and this in fact is already government policy) but where traffic is heavy, as in Maputo, bicycles will obstruct other traffic

and endanger cyclists. Bicycles may have a limited role in some outer suburban areas as feeders to the bus service, with passengers being carried to and from points on the main bus route.

Recommendation. Nonmotorized public transport vehicles should be licensed by the proposed transport authority. The licenses should specify where the vehicles may operate, and prohibit them from main roads except to gain access to bus stops. Licenses should be issued only if the authority is satisfied that the vehicles can operate safely in the area concerned, and will not obstruct other traffic.