

# How to run transport companies

In Central America, private companies have not always had a public competitor. They have been managed without reference to public management methods whose rules have often been distorted in urban transport corporations. Examples show that sound management aimed at reducing the main ratios (particularly maintenance and administrative staff) and involving productivity objectives, greater employee accountability and a commercial policy, can enable operating equilibrium to be achieved and sometimes exceeded.

However a number of conditions must be met if these management methods are to be efficient:

## ▼ Companies must be of sufficient size

**The increase in the number of operators gives rise to heavy operating costs.** Calculations made in 1997 in Libreville showed that the general administration expenses of the network would double if operators acting independently from one another managed each of the five network lines.

The number of operators must therefore be limited, with precisely-allocated lines or geographical areas, except where the sector is highly organized and self-regulated. This is the exceptional case of cities in Brazil.

•• **Companies must organize their management on the basis of simple ratios** that enable productivity to be improved while controlling costs. However, small companies have difficulty in managing trend charts.

•• **The increase in the number of operators on routes** operated by bus or minibus services poses a number of problems for the regulatory authority:

- It makes it difficult to check that the service complies with specifications and complicates dialogue in a sector where there are no trade unions or representative operators;
- It makes the implementation of an integrated fare more difficult by multiplying the compensations between operators;

- The networking effect is more complex to operate if there are many operators.

It is consequently not easy to develop the same operating method for operators of regular services as for taxis, which are an ultra-fragmented sector.

## ▼ What corporate status?

The privatization of public corporations/boards is now considered as the way to increase their efficiency and reduce subsidies from the public authorities. This privatization process is accompanied by an urban transport deregulation policy that consists in eliminating the monopoly, placing a number of operators in a competitive situation and deregulating fares.

The ratios most commonly used are those of the World Bank which are as follows:

Number of passenger per standard bus per day	1,000 to 1,200
Number of passengers per articulated bus per day	1,500 to 1,800
Number of vehicle-km per day	230 to 260
Total staff per vehicle	3 to 8
Administrative staff per vehicle	0.3 to 0.4
Maintenance staff per vehicle	0.5 to 1.5
Standby vehicles in relation to vehicles in operation	8 to 10%
Coverage rate of expenditure by revenue (write-offs included)	105 to 108%

### Ongoing privatization: Sotra in Abidjan

Reforms to liberalize the urban transport sector in Ivory Coast are benchmarks when, in Dakar, Senegal, for instance, they concern the passage from the monopoly situation of a public corporation towards a multiplicity of private operators selected by tendering, and towards the transformed status of the main company through the opening up of capital to national and international operators. All the building blocks are present to organize a network and make it efficient: a strong regulatory authority and coordination between the transport modes, competition between operators, a fare structure, links between densely populated fringe areas and the city centre. The example of Abidjan will be a test in terms of the interest it generates in the economic and financial sectors.

The reforms are conducted under the auspices of the World Bank. Their aim is to reduce

government contributions to this sector. They are set to create a momentum due to the arrival of new carriers throughout the Abidjan urban area.

The methods for liberalizing and privatizing the sector, which is at present entirely the task of Sotra, consist in dividing up the network. This results in more than one transfer for users, who are heavily penalized by long distances and insecure social conditions and by the introduction of a double fare system for the same trip operated by Sotra. In addition, the choice of lines put out to tender covers the city's busiest roads. New operators must consequently offer sufficient technical and financial capacities to provide a transport service currently covered by 180 standard and articulated buses. This traffic mainly concerns users entitled to reduced fares (70% of customers), which is bound to pose the problem of fare compensations. The current specifications for operating the routes under con-

cession (10-year permits) do not ensure a monopoly on these routes. Competition with *gbakas* is maintained, which jeopardizes the viability of these operations. And concessioning of these services to private operators comes at the same time as a feasibility study for the Abidjan urban railway line which has a layout parallel to one of the routes under concession. The privatization of Sotra is also difficult because, although it is the most efficient company on this continent, it is now completely devitalized and its fleet must be entirely replaced (old vehicles with 40% of the fleet having covered more than 800,000 km). This will require a contribution of capital from the buyers or the transport board, estimated in 1996 at nearly CFAF 8 billion, for the purchase of 25 articulated buses and 45 standard buses for an operating area reduced by 30%.

#### •• The result of privatizing the urban transport sector

Privatization is definitely a measure to improve a situation in which public corporations had position advantages that gave rise to poor management and inefficiency. Relations with the supervisory authority often led to distortion because these corporations were used for purposes other than transport

itself. Among professionals in this sector, there is no longer any debate between advocates of public management versus private management. The French example, among others, is typical of a partnership in which the public authority determines the tasks it wishes to assign to the carrier, whatever its status - private operator (2/3 of cases) or public operator (1/3 of cases). The privatization of urban transport

services has now been tried and tested, particularly through operating concessions or general concessions (urban or interurban railway services in GB, transit railway or tramway concessions in France or Latin America). In all successful cases, the organizing authority remains involved in the financing and planning of services.

The problem is more one of determining the conditions of

privatization and its regulatory framework - i.e. a regulated or deregulated framework for the sector.

Privatization methods in this sector have assumed many different forms in the past, depending on the country. In some cases, the single municipal/national corporation has been wound up and replaced by a number of operators (this is the most common case in Africa, it is case of a national urban transport corporation in GB and a municipal corporation in Lima). In other situations, privatization has entailed the opening up of the urban transport sector to private operators side by side with the public corporation/transport board. There has been no regulation (just permits) and the competitive conditions have been uneven because the public sector is obliged to continue its public service missions (school bus service, transport of specific user categories, without integral compensation for the imposed reduced fares). This situation has been generalized in Algerian cities, resulting in the virtual disappearance of the urban transport boards.

Morocco has introduced similar conditions of privatization which, ten years after it began in 1986, has led to an all-out crisis in the system. Routes already covered by transport boards have been opened to private operators in charge of providing a first-class service but with no obligation of a public service mission and with greater freedom in their fare system than that of the public sector. In practice, these two levels of service on the same routes have led to uneven competition and

near bankruptcy of the transport boards. The private sector now has a bigger fleet than that of the transport boards but it is nonetheless having difficulty in replacing this fleet despite a tendency towards concentration in this sector.

- **Partition between an assets company and an operating company**

The reorganization of transport systems requires major investments. This may be an argument for a partition between an assets company and/or a leasing company and an operating company. This system would enable the operating company to concentrate on management, and the public authorities would assume their investment responsibilities.

- ▼ **The need for a GIE or cooperative type of structure**

As this sector is highly fragmented, it would be more easily structured and productivity would be increased by setting up a GIE or a cooperative. This type of management already exists in Central America where it gives worthwhile results.

- **Collective management of some activities will reduce costs**

This management is particularly cost-effective for general administration, purchases of material and spare parts, and maintenance:

- General administration expenses, such as rentals or

the purchase of a minimum of computer and office equipment, soon become heavy for small operators.

Some administrative management activities require skills that small operators do not always have - bookkeeping, taxation, and personnel management including payroll calculations and social charges. A collective structure with competent personnel should enable operators to handle management matters better. The organization of transport services by the collective structure will also overcome the operators' deficiencies as the personnel are assigned to specific lines. If the collective structure takes charge of the ticket system, this can be the first step towards fare integration. Fixed costs are written off better when they are defrayed collectively.

- Purchases of materials, fuel, lubricants and spare parts are heavy costs for operators. A collective structure can act as a purchasing pool able to obtain discounts. The specialized skills of the personnel in charge of these purchases, together with the discounts they obtain, enable operators to work with genuine parts which are often better quality than the parts available on the market (i.e. spare parts manufactured in Nigeria for Africa). In Libreville, the Coopération Gabonaise des Transporteurs negotiates discounts on vehicles with the dealers. The discounts are 8% on spare parts and 35% on some new vehicles. A 25% discount is also obtained on insurance.

- The maintenance and management of vehicle storage should also be the task of a collective structure. Vehicle maintenance, which is often neglected, must be improved because the recommended fiscal write-off period will be 5 to 7 years. The technical and fiscal lifetime should at least be the same. Sheltered vehicle storage areas guarded and equipped with petrol points, vehicle washstands and washout pits will prevent rapid deterioration of equipment despite often adverse climatic conditions. Efficient maintenance requires monitoring of equipment that is not always consistent with general-purpose garage services. It is therefore essential to have facilities with adequate equipment and trained personnel able to perform maintenance work on vehicles with special requirements such as buses. Heavy investment is necessary to acquire such facilities which can only be made to pay if the fleet requiring maintenance is large enough.

When vehicle storage and minor servicing activities cannot be provided by an operator, they are activities in their own right for which management can be managed separately by a GIE, a subcontractor or a concessionaire.

**•• Collective management of write-offs strengthens operators' capacity to renew their equipment**

In return for tax exemptions, which are primarily customs duty

exemptions on rolling stock, mechanisms must be set up that require companies to write off their vehicles in order to renew the fleet under good conditions. Because of the uncertainties inherent in the private operating status, a GIE-managed sinking fund or any other collective structure will remedy any ad hoc deficiencies of the operators. This system works well in Central America and is standard practice in Africa (c.f. tontine)

**•• GIE and/or cooperative organizations facilitate the structuring of the sector**

This is a system that strengthens the weight of trade unions in wage, fare or bank negotiations with the sector's partners. For the public authority, the representativeness of the negotiators is important as it

enables the sector to be regulated more easily, this being essential to the social policy.

**▼ Subcontracting**

Subcontracting is becoming increasingly common in all the urban transport networks.

It is justified in the following cases:

**•• when an activity can be performed for less by a specialized company**

Subcontracting enables quality of service and costs to be monitored because the service providers work in a competitive context. Maintenance of vehicles, plant and machinery is often subcontracted. Where no specific

**Cooperative-type organization: the case of San Salvador**

In Salvador, there are 5.5 million inhabitants, one million of whom live in the capital. 4,000 standard buses (50 seats), 2,000 minibuses (12 to 30 seats) and 30 taxis provide the mass transport system. The Ministry of Transport allocates the urban transport lines. Several companies may operate one line. One of the network lines is thus operated by 29 companies with 70 vehicles on the road. The companies operating a line designate an executive board in charge of organizing the service, which can attain a 3-minute frequency at peak hours. Fuel and spare parts purchases are made collectively. Revenue is also centralized. But the companies have not set up a maintenance facility, which is provided by local garages. The fleet is now being renewed. 1,000 vehicles have been purchased in the past few years. However, the operators are experiencing financial difficulties owing to the rigidity of fares, which are still fixed by the State, and competition from clandestine operators. Taxes on equipment account for about 20% of the price, including 5% customs duties.

facility exists, the subcontractor can perform all or any of the maintenance. The most commonly subcontracted operations are maintenance of tyres and repairs to bodywork. At Santo Domingo, where the operators are unable to maintain their vehicles satisfactorily, the government plans to create a public corporation to provide vehicle maintenance and act as an adviser to the operators. The government is also considering opening up the corporate capital progressively to the private sector.

### •• when an activity cannot be performed by the company without dysfunctions

Subcontracting can be a solution to dysfunctions. By externalizing some functions, it limits fraud by the personnel. The sale of tickets by concessionaires, with a volume discount, prevents vehicle crews from handling takings. It is also preferable to subcontract ticket inspection to specialized companies to prevent collusion between the company employees and fare-dodgers. Other activities can also be subcontracted such as the commercial policy or advertising management.

### ▼ The revival of a transport company - the case of Beirut

In 1994, an appraisal was made of the urban transport situation in the greater Beirut area (Lebanon) which has about 1.3 million inhabitants. After ten years of war, the urban transport system is as debilitated as the city itself.

There only remain twenty "official" buses operated by the local Transport Board, which is itself in a state of bankruptcy because the pre-war workforce has been kept on, entailing financial and fixed costs out of all proportion. Small and medium-capacity private buses reconverted from the interurban transport system supplement the fleet of the Transport Board. These services are obliged to adjust their fares to those of the public service despite the fact that there have been no changes in fares since the beginning of the war. There are also shared taxis with obsolescent vehicles that carry 4 to 5 passengers (around 10,000 country-wide, 3/4 of which in Beirut). This inadequate service has caused illegal taxis to flourish.

This appraisal has caused the country's policy-makers to realize that the urban transport system must be rehabilitated, thereby helping to rebuild the capital city and remove the partition imposed by the war. Lebanon still has the benefit of an efficient post-war banking system and consequently substantial financial resources. France has provided aid for the measures undertaken and is involved in the country's reconstruction phase.

Despite the safety-deficient image of the bus service, the government has decided the following measures:

- An initial stage consisting of an immediate action plan to rehabilitate a bus network. This work is in progress. 200 Karossa buses have been placed in operation by the

Transport Board and a traffic and parking plan is being introduced to relieve congestion in the city centre;

- A second stage including a longer-term transport plan with tramway services.

The promotion of the public transport network has come up against some difficulties that are slowing down its development (400 additional buses are planned):

- the lack of a regulatory authority and the imprecise definition of the private sector's role in the system;
- obsolete regulations that complicate decision-making procedures;
- the failure to integrate maintenance into the project, which is liable to pose problems for new vehicles over the longer term;
- the disappearance of knowhow, which has required a large-scale training plan to be set up, particularly for drivers. ■

1. World Bank report on world-wide development, 1997.
2. The data from national accounts underestimate the real contribution of cities because they do not take account of the informal sector.
3. Urban transport rehabilitation and development study in 6 large Algerian cities (Algiers, Annaba, Blida, Constantine, Oran, Setif) made by the Dar Al Handasah Systra Betur Group in 1995, financed by the World Bank. A second \$400 million loan was planned by the World Bank for investments in urban transport.
4. The proportion of household expenditure on urban transport is low compared with other countries, amounting to about 4% of their budget.
5. Many reports have made an appraisal of urban transport in the cities of Sub-Saharan Africa, including those of INRETS, SYSTRA and BCEOM. For this reason an extensive study of this issue has not been included.
6. Urban transport systems in the cities of Abidjan and Dakar are the subject of pilot projects funded by the World Bank, for the reorganization of urban transport based on the privatization of these corporations. Note a recent Systra report on Sotra "Financial and operational review of Sotra, 1996" which makes an appraisal of the company's financial situation.
7. See box "Urban transport in Dakar".
8. In Dakar, more than 200 rapid buses belong to a single owner, Mr Ndiaga Ndiaye.
9. After an accident involving a Rapid Bus and the people's reaction against the drivers, this sector went on strike for several days in June 1997. Taxis go on strike regularly to obtain fare increases or to protest against fuel price rises.
10. It is difficult to quantify the negative effects. However, a methodological approach has been suggested for the city of Dakar. The study should be funded by the World Bank under the urban transport sector-based programme for Dakar and may be extended to other cities if it is shown to be feasible.
11. 1997 prices.
12. Import taxes vary according to the country.
13. Calculations made in 1993 in Dakar showed that the remuneration of a Rapid Bus owner amounted to about 8% of his turnover. Providing a minimum 30% contribution is made at market credit terms, an owner of 3 vehicles desirous to replace them by recent vehicles must divide his revenue by 3 during the repayment period, i.e. 3 years, which is a considerable effort. Calculations made in 1997 in Libreville show that on the basis of 312 days operation by 2 employees, the owner of a taxi must write off a secondhand vehicle at CFAF 3,000 per day over 3 years. The same calculation gives CFAF 6,000 per day over 5 years for a new vehicle. These amounts account for 15 and 30% of the owner's daily revenue. Calculations in Yaoundé show that if equipment write-off is included in the expenses, the vehicle-kilometre takings of a taxi do not cover the expenses (they account for around 75% of the expenses).
14. except for national urban roads.
15. As a guide, FRF 300,000 and 3 months for a city with 500,000 inhabitants.
16. Based on the ratio of the World Bank, which is one standard bus for 1,000 inhabitants, it can be considered that for a city of 1 million inhabitants, the fleet should contain 1,000 standard vehicles. For a ranked road network where the busy routes account for 50% of the traffic, the secondary network operated by small vehicles (feeder and local district network) would provide the equivalent of half the transport supply, i.e. 1,000 vehicles). This amounts to 1,000 small vehicles and 500 standard vehicles.
17. In San José in Costa Rica, where the vehicles are serviced, the cost of maintenance accounts for about a quarter of the operating expenses.
18. For instance, the rail transit construction project in Casablanca requires an organizing authority to be set up, which would consist of representatives of the State and the Casablanca Urban Community.
19. These exclusive rights-of-way also enable enormous productivity gains to be made (particularly in commercial speed and in vehicle-kilometres).
20. These management methods do not depend on the status of the company.
21. The Islamic Development Bank for Dakar and the World Bank for Algeria.
22. Study on urban transport in Sub-Saharan Africa – AFD 1994.
23. The field of AFD: Overseas territories, 80% of the countries in Africa, the Maghreb, the Pacific, the Indochina peninsula, the Caribbean and the Indian Ocean. In 1996, the AFD group engaged an overall financial aid volume of F 10.6 billion, 5 billion of which for project aid.
24. Joint AFD and DREE area of jurisdiction.
25. The Department of the Secretary of State for Cooperation has been included under the Ministry of Foreign Affairs.
26. SSATP-TU, transport policy programme for Sub-Saharan Africa, urban transport component.

