

***Bus Franchising in Developing Countries:
Some Recent World Bank Experience¹***

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I. INTRODUCTION

In late 2002 the World Bank published its review of its experience and policy advice on urban transport in developing and transitional economies.² It observed the increasing difficulty of most former socialist economies and many mixed post-colonial economies in maintaining the provision of a basic bus network as a social service with extensive fare reductions or exemptions.³ In many transition economies⁴, the parastatal companies have declined disastrously as the original sources of finance have disappeared. Even the private monopolies operating in post-colonial Africa either under a management contract or some form of system concession had largely collapsed because of the absence of an adequate fiscal basis for support.⁵

In view of this evidence the World Bank recommended treating transport supply more as a commercial business and targeting subsidies explicitly at disadvantaged groups on a personal basis as in many European countries. At the same time it recommended that responsibility for “social” subsidies should be transferred from the accounts of the transport operators to those of the relevant line agencies. That approach was seen as having the advantage of imposing a lower fiscal burden as well as giving clear signals and incentives to operators to adjust services and fares in such a way as to maintain equipment in operation. The report also argued the merits of integrated bus rapid transit systems, and saw no difficulty in incorporating “competition for the market” in such

¹ All judgments and interpretations in this paper are those of the author and do not necessarily represent the views of the World Bank, its Executive Directors, or the countries they represent. I am grateful to Richard Meakin for provision of information for this review, particularly on the current situation in Bangkok

² World Bank. *Cities on the Move: A World Bank Urban Transport Strategy Review*. World Bank, Washington DC. 2002

³ Halcrow Fox. 2000. *Review of Urban Public Transport Competition*. Topic Review Paper prepared for the World Bank Urban Transport Strategy Review, <http://wbln0018.worldbank.org/transport/utsr.nsf/Topic+Review+Papers?OpenView>

⁴ Economies in the process of changing from politically administered to market forms.

⁵ Teumier, P. and B. Mandon-Adolehoume. 1994. *L'Integration du Transport Artisanal dans un Service Public de Transport Urbain: Le Cas de Dakar*. Paris: TTD.

systems. The success of incorporating franchising in the establishment of Bogota Transmilenio is now being copied in several other cities, such as Recife, where the basic infrastructure is less well developed

It was recognized that such an approach may involve the loss of internal cross-subsidy, the abandonment of some social services, and increase in fares. But where the alternative was the complete disappearance of traditional public transport service that was viewed as the lesser of the evils. It was argued that, given limitation of resources available, the best possible service can be achieved, and problems of a commercial public transport sector minimized, by good design and administration of a competitive regime. Two issues were addressed particularly.

First, there was the problem of getting the right system – selecting a form of competition appropriate to the particular circumstances of the country. The paper observed that in practice a very large proportion of bus service in the developing world was already satisfactorily supplied by the private sector with free entry and a minimum of regulation. But it also observed that in very large cities, such as Lima, Peru, an inadequately regulated free market, while increasing supply, usually failed to produce disciplined, safe, and environmentally acceptable operation. For such large cities it recommended the introduction of competition for the market, rather than on the road.⁶

The second issue was that of getting the system right – ensuring that the chosen regime is effectively implemented. For free entry systems it was argued that efficient enforcement of strict quality controls is crucial. For competitive franchising systems the emphasis was put on the importance of restructuring public sector institutions and developing skills to perform the new tasks of design, procurement, monitoring and enforcement.

In real life, nothing is quite as easy as it appears in the policy manuals. Systems which work well in industrialized countries with a firm institutional basis and strong administrative traditions may not be so easy to implement in less mature developing countries. It is the aim of this paper to identify the main types of problem in implementing franchising systems in developing and transitional economies and to describe some recent experience in trying to handle them.

II A TAXONOMY OF DEVELOPMENTS

During the last few years a large number of developing countries have taken steps to adopt or improve franchising arrangements for urban bus services. These reforms usually start from one of two contrasting starting points, namely;

- ?? The patent failure of a high cost, financially unsustainable public sector monopoly (BMTA in Bangkok, CTB in Sri Lanka, many FSU cities). The first step here may be to break up the monopoly internally as a precursor for a competitive regime (as in London).

⁶ Gwilliam, K. M. 2001. "Competition in Passenger Transport in the Developing World." *Journal of Transport Economics and Policy*. Vol. 35 (1).

?? In many cases however, the monopoly operator has begun to be replaced or supplemented by the informal sector even before a managed break up can be implemented resulting in a chaotic mass of individually owned small paratransit vehicles operating in sharp on the road competition (Indonesia, Bangladesh, Pakistan, etc). The first step here is often to encourage the formation of associations, which may then become so powerful that it becomes difficult to introduce controlled competition between them.

Table 1 lists and classifies those cases involving either privatization or competitive tendering referred to in this paper.

Table 1. Privatization and franchising of urban bus services in developing countries

	Studies undertaken	Planning to adopt	Modifying existing schemes	Adopted or modified
System not specified	Russian cities			
Net cost area or system based	Bangkok, Thailand Mauritius	Lahore Kuwait		Kingston, Jamaica Bahrain Kuala Lumpur, Malaysia
Net cost route based	Hanoi, Vietnam Dhaka, Bangladesh Surabaya, Indonesia Denpasar, Indonesia Bandung, Indonesia Lagos, Nigeria		Sao Paulo Belo Horizonte Sri Lanka	Bishkek, Kyrgyz Uzbekistan Kazakhstan Rostov, Russia Santiago, Chile (1993) South African cities
Gross cost route based		Recife Hanoi	Budapest, Hungary	Bogota, Colombia Curitiba, Brazil
Gross cost area or system based			Santiago, Chile (2005)	
Privatization	Bahrain	Mauritius Kuwait		

The concentration on net cost route based systems is notable. This can be explained both in terms of being perceived as the closest to the unrestricted private operation which it frequently replaces, and also as needing the least amount of public sector administration and management. Gross cost systems generally only appear when:

- (i) there are strongly administered bus rapid transit infrastructure systems, as in Bogota and Curitiba;
- (ii) the objective is to integrate different modes of transport, as currently proposed for Santiago and Recife; or
- (iii) revenue clearing systems already exist to deal with allocation of off-bus revenues, as in many Brazilian cities⁷.

⁷ These systems are difficult to classify simply. While operators retain the farebox revenues they collect (making them look like net cost systems) the revenues from the val transporte flow through a clearing house (camera de compensacao) which adjusts the allocation of total revenues largely on a vehicle mileage basis, making the system nearer to a gross cost system.

Several traditional systems have been adjusted recently to meet changing circumstances. In South Africa an area based net cost system has been changed into a route based system to permit the incorporation of indigenous informal sector operators into the competitive tendered franchising regime. In Santiago, Chile a net cost route based system is being converted into a gross cost area based system to improve intermodal co-ordination and to stimulate the development of larger companies.

A host of problems of implementation problems have emerged. For the purpose of this paper they are classified according to three fundamental root causes – lack of commitment to fully fledged reform, protection of vested interests, and inadequate or inappropriate attention to detail. This section summarizes the issues in each category. But real life is often immensely complicated and many situations exhibit characteristics from more than one category. To show this the following sections present four complex case studies. Finally, in section VII, an attempt is made to synthesis the experience discussed in a checklist of considerations for the design of public transport market reforms in developing countries.

The uncommitted reformer

In many cases, countries adopt more market based transport systems not because they are yet convinced of the merits of the market based approach but because their traditional systems have failed. In many former socialist countries there is a gulf dividing those committed to reform at the central, and often macroeconomic, level and more conservative, unreformed administrators responsible for transport at the local level.

This gulf is accentuated by two institutional factors. First, in many of these countries, such as Russia, responsibility for public transport has been formally delegated to lower level jurisdictions which have generally been less involved in formulating reform policies. Second, in most of the transition economies no distinction has historically been made between policy and operational responsibilities, and where the failure of the traditional public transport system has been triggered by the loss of external sources of fiscal support, local operator/administrators often still do not see the failure of public transport as being in any way their fault, or within their scope of remedial action. The best they think that they can do is to turn a blind eye to the developing private sector, or accept it as a temporary expedient until the good times return. Even at quite high levels, Ministries of Transport may choose to see the problem as that of securing the former levels of financial support for public transport from the Ministry of Finance rather than as one requiring any fundamental reform. In these circumstances, commitment to make the market work may be partial or half hearted.

Among the symptoms of this attitude are:

- ?? Continuing to reserve the role of providing “social” services for the public sector, despite allowing the private sector to supplement those services on a commercial basis;

- ?? Reservation of subsidies – whether directed to particular services or to carriage of particular categories of passenger – only for public enterprises
- ?? Arbitrariness and inconsistency in the regulation of the private sector;
- ?? Failure to create a secure basis for private sector operations arising from the belief that they are only a temporary solution;
- ?? Limiting competition only to the provision of services by the private sector with small vehicles.

To some extent the adoption of these attitudes are self-justifying. With short term franchises subject to arbitrary adjustment, private entrepreneurs are only willing to invest their own resources in assets which are highly versatile and marketable. Hence there is an unwillingness to invest in large buses. Furthermore, with short franchises on a net cost basis, neither vehicle manufacturers nor banks will lend or lease for the operation of large vehicles. This has been the experience throughout the former Soviet Union – even in those republics such as Uzbekistan and Kyrgyzstan, which have adopted formal franchising systems.⁸ So the belief that private operators cannot provide “real” bus services is perpetuated.

The protection of vested interests

A second group of problems is found where countries make commitment to reform but still find it politically convenient to protect the vested interests of incumbent operators. There are a number of variants of this syndrome.

The first and most obvious vested interest is that of the traditional publicly owned operator. In the Socialist economies, the concentration of strategic planning and operational responsibility within a single organization creates a strong institutional basis for this protection, described below in the case study of Kyrgyzstan. But it can also occur in less obvious ways in cities which have a weak metropolitan government structure like Bangkok, Thailand (also discussed in a case study below). In these circumstances it is often too easy to accept the assertion by existing suppliers that transport is a social service which can only be responsibly be provided directly by the public sector, or at the very least be subject to detailed control by the public sector.

Even where the public sector operator is relatively weak it may still be institutionally protected. An interesting example of this situation is arising currently in Hanoi, Vietnam. In that city motorcycle ownership had risen to about one per household, while bus transport modal share had diminished to about 2% of trips by 2000. At the time the local peoples committee recognized that while this public/private transport split might be manageable so long as the private transport was by motorcycle, it was not sustainable as car ownership increased. It therefore began a program of rehabilitation of the publicly owned public transport sector by the consolidation of the previous three separate operators and a program of bus purchase. By 2003 the bus mode share had tripled, but at

⁸ Gwilliam K.M., A.J. Kumar and R.T. Meakin. 2000. “Designing Competition in Urban Bus Transport: Lessons from Uzbekistan.” Discussion Paper TWU-41. World Bank, Transport, Water and Urban Development Department, Washington, D.C.

the expense of a rapidly mounting, and ultimately unsustainable subsidy. It therefore decided to explore the possibilities of extensive bus priorities and bringing new, private sector operators into the market. At the same time, however, it associated the recovery of public transport with the public sector operator and has so far limited the attempts to introduce the private sector to services supplementary to those which the public sector operator finds provides. Retaining this view will almost certainly severely limit the role which the private sector is able to play.

Other vested interests may also be able to thwart reform. In Kuala Lumpur, Malaysia, the two main concessionaires are politically well connected and able to resist open competitive tendering. In Brazil, several major cities have begun to attempt to introduce competitive tendering to replace the traditional “grandfathers rights” franchises. An initial effort in Belo Horizonte failed partly because the design process itself has been captured by operators who have effectively closed the competition to one between existing operators for very long term franchises closely replicating their current structure of operations. A similar process is now playing out in Sao Paulo.

The focus of protection of the vested interests, particularly in Latin America, often falls on the suppression of competition from the informal sector. But even the informal sector may sometimes develop politically strong vested interests which inhibit effective reform, either through their direct political influence, as in Rio de Janeiro, Brazil, or by disruptive actions as in some other Brazilian cities.

Political expediency thus often plays a critical role in shaping the reform. In Brazil, the process is complicated by frequent conflicts of political interest between overlapping state and municipal jurisdictions both with relatively short, but non-coincident terms of office. Similarly in Santiago, Chile, the pace of the reforms presently proposed is largely dictated by the timing of the next presidential election. Similarly, in Pakistan, where the World Bank recommended to the Government of Punjab that area franchises should be adopted in Lahore, the government granted route based rights under an expedient “first come, first served” implementation process. Although the government has stated that it intends to consolidate the operators later into area based franchises, this may be very difficult as early entrants choose the best trunk routes from different areas of the city.

Among the symptoms of a protective attitude are:

- ?? Over specification of regulation, in which fare and service level requirements are imposed which are inconsistent with profitable operation of an unsubsidized service;
- ?? Heavy suppression of the informal sector;
- ?? Continuation of preferential treatment to public sector operators in competitive regimes;
- ?? Unwillingness to offer any form of subsidy to private sector operators;
- ?? Maintenance of a public sector operator as the formal franchise holder, using private operators as sub-franchisees;
- ?? Exemption of state owned enterprises from regulation;

- ?? Reservation of favored, scarce, depot and terminal locations for public sector operators.

In these circumstances the criticisms of reform may also be self-justifying as private operators can only make a livelihood by adopting aggressive forms of competitive behavior on the road and by operating poor quality, poorly maintained vehicles. At the same time the public sector operators may concentrate on the operation of the more profitable services (for example premium air conditioned or express services as in Bangkok, see later) in order to give the impression that they are making an efficient contribution to total service supply. Alternatively the public sector may foster the belief that they are the only possible suppliers of “social” services – as in many Russian cities.

Unrealistic expectations of market processes

Even in countries where franchising and private sector operation are accepted in principle, governments may have completely unrealistic or inappropriate expectations of what the market can achieve, and how it can be exploited. That lack of realism may take a number of forms.

- ?? Unrealistic fare restrictions may make it impossible for the private sector to finance anything other than small minibuses (as in Kingston, Jamaica).
- ?? Inadequate monitoring of franchises can result in unacceptable operational behavior by formal operators (as in Santiago, Chile).
- ?? Inadequate enforcement of restrictions on interloping on competitively tendered routes by informal operators (as in Kazakhstan).
- ?? Unrealistic vehicle or service requirements which can drive out fledgling operators (as in Dhaka, Bangladesh).
- ?? Franchising of individual vehicles rather than routes, encouraging proliferation of smaller operators (as in Sri Lanka);
- ?? Emphasis on privatization rather than competition as the core of a reform strategy (as in Sri Lanka and Kuwait).

The need to find a way of mobilizing and disciplining the organization of informal sector operators within a market based process spans these problems. For example, the average minibus route in Lagos, Nigeria, has 200 independently owned vehicles operating on it, and the largest routes have over 500. In Bandung, Indonesia the largest routes have over independently owned 1000 vehicles. Within franchised regimes, illegal interlopers have undermined the financial sustainability of the franchise system in systems as diverse as that of Almaty, Kazakhstan and that prevalent in many Brazilian cities. On the other hand, small operators, with insecure franchises, are usually unwilling to risk investment in anything other than very small and hence versatile vehicles (as in most central Asian countries). Only where the franchises are very stable, as historically has been the case in Mauritius, are small operators likely to operate full size buses.

Several strategies have been adopted to overcome these problems. “*Self regulation*” by the creation of associations is often associated with violent means of enforcement, as in

South Africa, and is likely to be implemented in the interests of the operators rather than the passengers. *Consolidation* of paratransit operators into companies occurred over time in Buenos Aires, Argentina. *Conversion* of the red (deregulated) public light buses (PLBs) in Hong Kong into green, regulated, PLBs might be viewed as a successful development. And positive action by the regulators to encourage the development of associations has worked reasonably well in Uzbekistan. The lesson, however, is that effective competition needs the will to liberalize entry to be complemented by a carefully considered and phased process of structural and institutional reform

III THE PROBLEMS OF A HALF-HEARTED REFORM: THE CASE OF BISHKEK, KYRGYZSTAN

The Kyrgyz Republic is a small republic in central Asia, formerly a part of the Soviet Union. The total population of the country is 5 million, of which about one million live in the capital city Bishkek. During the Soviet period transport services in the city were provided by state owned enterprises operating buses and trolleybuses respectively. Following independence the financial and physical situation of the enterprises collapsed. Numerous private minibuses appeared, operating largely on routes duplicating and supplementing the public sector routes. But the operators did not feel secure, did not invest in large buses, and did not carry exempt or reduced fare passengers.

In 1997, at the request of the government, the World Bank began to prepare an urban transport project which was intended to refurbish the fleet and to find a new and stable basis on which private companies could contribute in a more effective way to a sustainable urban transport system. International consultants were engaged to develop a franchising system. The Ministry of Transport was enthusiastic and supportive. But the Bishkek City administration was clearly less so, with the result that the World Bank concentrated its finance instead on refurbishing the road infrastructure on the major public transport routes. Nevertheless, the government went ahead with introducing the reform.

The basis of the new regulatory arrangements was decree 630 of January, 1999, which established Bishkek Passenger Transport Authority, largely in accord with the recommendations of the report of the consultants. This decree gives the PTA the right to define the urban public transport network in the city, and to secure service on those routes by the issuing of franchises on the basis of competitive tendering. Fares, both for the private sector services and for public sector services are determined by the Bishkek Mayor's Office and the City Parliament at 3soms and 5 soms respectively.

The public sector operators retain their traditional routes, uncontested. But the minibus services are franchised and regulated by a Public Transport Authority (PTA). One major round of tendering occurred, in 2000. Since then other routes have been franchised, though it is not clear that these have been competitively tendered. All vehicles carry route numbers and destination boards, and the service is very much more extensive than it was in 1999. Service is undoubtedly much improved.

At the beginning of 1999 the public trolleybus organization was still operating about 180 vehicles from a nominal fleet of just over 200 vehicles and the public bus undertaking (Avtokombinat) was running between 70 and 100 large and medium sized buses. The two public sector operators had a joint season ticket scheme and carried over twenty categories of exempt or reduced fare passengers for whose carriage they were in principle recompensed by government. The private sector did not carry either category of passenger. Since that time, and most notably in the last two years, the compensation actually paid for exempted passengers has fallen far below the calculated entitlements. With fares for the public operators controlled at 3 soms their finances have continued to deteriorate.

The trolleybus enterprise has managed to maintain its network of operations, still putting over 140 vehicles into service each peak period carrying 19% of total demand. But by May, 2003 the Avtokombinat had retrenched to only two routes on which only about 15 vehicles per day were in service carrying only 7% of total passengers. The private sector, operating over 3000 minibuses carried the remaining 74%.

Despite the growth of the private sector, all is not entirely well. The quality of the public sector vehicles has declined, and the operating behavior of some private operators is aggressive and dangerous as the result of a plethora of separate operators overlapping on major sectors of routes. Moreover, while the public companies still carry a disproportionate share of exempt and concessionary passengers on their vehicles, the limitations of their networks mean that they no longer offer a spatially comprehensive “safety net” service to the population of the city. This is already recognized by the fact that the private buses carry pensioners at a reduced fare of 3 soms during off peak periods.

At the heart of the problem is an institutional issue. In developing the new system, regulation of the private sector was effectively entrusted to the management of the public bus undertaking. At the outset, the Transport Co-ordinator (the original title of the new regulator) was the deputy general manager of the Avtokombinat. Very early on he was convicted and fined by the Anti-Monopoly Ministry for improperly attempting to force members of a developing private sector association to join an association run by the Avtokombinat. The head of the PTA is now the former general manager of the Avtokombinat (the Transport Co-ordinator having been transferred back to the unenviable job of managing the near defunct operating company).

Having taken over the new functions, the old regime is now able to exercise bureaucratic power without the inconvenience of having to operate a viable undertaking. The PTA maintains a comprehensive despatching service as well as a centralized medical inspection, licensing and vehicle inspection staff of 200, all funded either from the monthly franchise charge or from fees collected from drivers (for despatching).

The PTA has franchised a proliferation of new route and instigated frequent change of routes and threats of withdrawal of routes, which has made it difficult for private operators to forecast a secure future, however efficient their operation. In particular it is

impossible to secure financing for large vehicles which several operators claim that they would be willing to seek if the franchising system was less arbitrary and changeable. PTA management is suspected of being involved indirectly in operations under franchises awarded outside the tendering system. Given the absence of any clear obligations on the PTA in respect of the franchising system and the lack of an independent arbitrator, private operators feel very insecure and oppressed.

The PTA management also remains politically very active. In 2002/3 it proposed various pieces of new regulation, including regulation on the closing of routes, and on auctioning of franchises. In the original formulation of this proposal the revenues from these auctions were earmarked to be used to support the unremunerative public enterprises, a form of words only later changed to that of support of unremunerative routes. The private operators have no trust in the organization and argue that this is intended to, and will, make franchising even more arbitrary.

The conclusions are fairly clear. Franchising has been associated with a dramatic expansion and improvement of private sector services. But the association of the PTA with the public sector bus operator is the basis for a suspicion which has not been dispersed by its subsequent behavior, and which has inhibited the development of large vehicle services by the private sector. To overcome that suspicion the following changes are required:

- ?? *A single proper franchising law*, superceding all existing laws and regulations, setting out the rights and responsibilities both of the PTA and the franchisees in a form which can, if necessary, be subject to adjudication in the courts.
- ?? *An appropriate administrative structure* in which the PTA is the agent of the city to administer the franchising arrangements subject to the constraints and requirements of the franchising law, in a transparent way.
- ?? *A genuinely independent supervisory board* able to act as an ombudsman to protect private operators against improper administration by the PTA. (This should not be necessary if the franchising law is strong enough and can be enforced in the courts, but may help to remedy matters when trust is absent).
- ?? *A clear network definition*, made publicly available to all bidders, with any changes which adversely affects the commercial viability of an existing franchise being the subject of compensation. The procedure for applying for compensation, and the terms of compensation, should be set out in the contract documents.
- ?? *A revised policy on concessionary fares and compensation* which provides access of concessionary fare passengers to most services (possibly excepting the peak services) and which offers reliable compensation to all operators for the carriage of such passengers. The contracts should be enforced on both parties.

?? *Appropriate and transparent adjustments to fares or franchise payments to account for inflation during the period of the contract. The contract documents shall contain the details of such adjustment and compensatory provisions.*

IV THE PROBLEMS OF VESTED INTEREST: THE OPERATOR AS REGULATOR IN BANGKOK

The metropolitan region of Bangkok, the capital city of Thailand, had a population of 11.4 million in 2000. Although current car ownership of only 1 per 10 people, this is increasing rapidly, and there are also nearly two million motorcycles in operation in the metropolitan area. The city is renowned for its high level of traffic congestion and air pollution.

Despite the growth of private transport, public transport is still estimated to carry over 50% of trips. The recent development of the privately concessioned rail system, the Bangkok Transit System (BTS) orange line, has doubled the rail share of the market from 2% to 4%, and a further rail line, the Blue line, is due to be opened in 2004. Nevertheless public road passenger transport still accounts for nearly 95% of the public transport share.

There is a wide range of road public passenger transport modes, both legal and illegal. (see Table 2). Bus fares vary accordingly between 3.5 baht for the regular bus, to 12-20 baht for the newer air-conditioned buses. The air conditioned minibuses charge a flat fare of 20 baht. Van fares vary between 8 and 43 baht. BTS fares vary with distance between 8 and 40 baht.

Table 2 The road public passenger transport modes in Bangkok

Mode	Operator	Fleet size	Pass. Capacity
Regular bus	BMTA, public	1,674	50-80
	Private, formal	2,374	50-80
Air-conditioned bus	BMTA,public	1,980	50-80
	Private, formal	682	50-80
Minibus	Private,formal	4,600	23-35
Songtael (passenger trucks)	Private, informal	3,450	8-10
Licensed van	Private, informal	4,588	12
Illegal van	Private, informal	4,500	12
Motor cycle taxis	Private, informal	40,000	1-2
Taxis	Private, mixed	77,500	1-4
Tuk-tuks (3-wheel motor cycle)	Private, informal	7,400	1-4

The services offered by these modes vary substantially in quality. About 5,700 big buses vary from the very crowded and highly polluting regular bus services to clean, comfortable and relatively rapid air conditioned bus services. Minibuses include nearly

1200 green minibuses, offering non-air conditioned service of 58 routes; Bangkok Microbus, which offers air-conditioned service with 880 23-35 seater minibuses on 35 routes; and 3450 songtaels, or soi buses, which are converted trucks mainly offering feeder services in outer suburban area on 111 different routes. In addition, since their legalization in late 1999 the number of licensed light vans has risen to 4588 operating on 116 routes by August 2002, together with an estimated equal number operating illegally. The vans mainly offer longer distance air-conditioned direct commuting services using the expressways.

Modal share of trips is difficult to estimate accurately, though some educated guesses can be made. In 1995, the regular buses were still carrying over 62% of daily public transport trips (excluding taxi trips), with other bus services, including provincial buses, accounting for 33%, the state railway and ferry services carrying about 2% of trips each. But in the last ten years the proportion of air-conditioned buses has risen from 11% to 29% and the number of vans has increased substantially. There has also been an increase in rail services with the commissioning of the BTS system. So the regular buses may now be carrying only 40% or less of total trips. The private sector has also greatly increased its share of the total. BMTA share of regular bus services has fallen to 40% by 2003 although its share of the more profitable air-conditioned services has remained at 74%. Taking minibuses into account it is only responsible for about 30% of bus service trips, and probably little more than 20% of all public transport trips when the vans are included.

Despite the fact that the state owned operator, BMTA is now only a minority operator it retains a dominant role on account of its statutory position. It was established by Royal Decree in 1976, taking over 26 existing public and private companies. Although strictly conditioned route licenses are formally issued by the Land Transport Control Board, LTCB appears to follow the advice of the Department of Land Transport (DLT) in performing its functions. Neither DLT nor BMTA undertakes any route planning exercises. Routes are very long, with the consequence that in a congested city like Bangkok bus services are very irregular.

Within this system BMTA has a statutory monopoly right to licenses for large bus services. In practice, BMTA sub-licenses an increasing proportion of its basic fare services, to private operators (taking a fee from them for the privilege!). It therefore *de facto* performs a regulatory function with respect to other operators within what is known as the BMTA joint service scheme. That regulatory function has been recently extended. When some van services were legalized in 1999 they were formally included in the BMTA joint service scheme and now also pay a charge to BMTA.

The special conditions of BMTA are reflected in its operating performance. Although it does not have an excessive number of drivers per bus, it does operate all of its buses with conductors and wages are significantly higher in the strongly unionized public undertaking than in the private sector. In 1997 it estimated that its rate of cost recovery on ordinary buses was 71%. In contrast, the private sector could pay BMTA for the sub-franchises and operate such services without subsidy. A more recent study by Chula Unisearch has shown that the private sector has operating costs about half those of

BMTA, particularly in respect of management services and maintenance (which is contracted out by BMTA), and operate profitably on services where BMTA loses money.

The financial situation of BMTA is dire. In 2001 it only covered 67% of its costs from revenue and incurred a deficit of about US\$65 million. Its total accumulated deficit by that date amounted to about US\$0.5 billion. As part of a World Bank review of transport in Bangkok in 1998 a radical reform was recommended and a small loan offered to assist with the reform.⁹ But that recommendation was ignored at the time, ostensibly on the grounds that the operator, BMTA, could not afford it! However, the Prime Minister has recently asked for proposals for a turnaround in the situation, as part of which exercise a team financed by the German aid agency GTZ undertook a study which recommended radical structural reform.¹⁰

The most critical features of the situation in Bangkok appear to be the following;

- ?? In the absence of a metropolitan planning agency with responsibility for integration of public and private transport policies, public transport services are poorly planned and co-ordinated.
- ?? The management of service licensing is also very inefficient, with excessively long routes
- ?? The statutory monopoly position of BMTA, combined with the traditional unwillingness of the government to confront the issue, has allowed the development of highly inefficient operations.
- ?? The ability of BMTA to sub-license its regular services, while at the same time obtaining new licenses to operate more lucrative premium services, has enabled the true magnitude of the problem to be disguised.
- ?? Despite a long established franchising and sub-franchising arrangement, the absence of any competitive tendering of services, particularly for the newer premium services has permitted an inefficient allocation of services between operators.

The government has still not received the final reports in response to the Prime Ministers request for reform. But the interim report of the GTZ study suggests the need to reform BMTAs role and to introduce a new form of franchising of packages varying from an individual route to a multiple of routes. At the same time, the private sector would be restructured to create units of an appropriate size to compete for these franchises. The natural self interest of BMTA management and the totally unsurprising intransigence of the public sector trade union remain serious impediments to reform. Hence, while it is clear that only a very radical reform will be capable of overcoming decades of accumulated inefficiency in the regulation of the sector there remain some very strongly entrenched vested interests to thwart it.

⁹ *Bangkok Urban Transport: A Review* World Bank, Washington DC. 1998

¹⁰ *Bangkok Bus Industry* Report of GTZ support under project MOF/SEPO. June 2003.

V. PROBLEMS OF PRIVATIZING WITHOUT REGULATORY REFORM: THE CASE OF SRI LANKA.

Sri Lanka is an island at the southerly tip of the Indian sub-continent divided into 9 provinces. It has a population of 19.6 million, 650,000 of which live in the capital, Colombo. The country's bus industry has had a notoriously troubled history, with government policy for the sector going through two complete circles in a period of 45 years.

Bus services were privately provided until the creation of a state owned monopoly, the Ceylon Transport Board (CTB), in 1958. During the twenty years of its existence CTB was subject to stringent fares control without any formal subsidy arrangement. Management became increasingly politicized and ineffective. By 1977, the deficit on operating costs alone had reached 12% and the condition of the fleet was deteriorating rapidly. In 1977, CTB operations were divided into regional transport boards (RTBs) and CTB was allowed to issue permits to private operators to supplement the service of the troubled RTBs. In 1982, this power was transferred to a new created government Department of Private Omnibuses (DPO). In 1987 responsibility for intra-provincial bus services was transferred to the provinces. The state owned RTBs were then split into 94 "peopleized" companies with the majority of shares being transferred to the employees. Under increasing pressure from the separately licensed private buses the deficits of these units increased so that by 1991 their deficits reached 40% of operating costs plus depreciation. To deal with this situation, the government abolished the DPO and transferred its functions to a National Transport Commission (NTC), directing that no new permissions were to be granted to state or provincially owned companies.

Although the scale of deficit financing was reduced, the state was forced to continue to give support to the "peopleized" companies to maintain services. In order to better control those disbursements the "peopleized" companies were consolidated into 11 "cluster bus companies" in 1996. It was also determined at that time that after March 2003 no further permits would be issued to companies with less than 50 vehicles. In 1998 the Gunawaram Committee, appointed by the Minister of Transport, recommended subsidies for the cluster bus companies and a program of fleet replacement to increase their share of the market from 50% to 60%. In the event in 2004 bus services in Sri Lanka were provided by about 9000 private owners of 18,000 vehicles, which provided for 76% of passenger trips, and 13 publicly owned "cluster companies" which carry 24% with an active fleet of about 3,400 vehicles. In addition to the total current operational fleet size of approximately 22,500, there are a further 6,500 vehicles registered but not operational in the public sector.

The rise of the private sector occurred through the issue of permits for vehicles to operate on specific routes, often granted as political favors. As a consequence, the capacity licensed to operate on particular routes often far exceeded potential demand, so that a system of rationing supply had to be introduced. The number of licensed vehicles actually operating on a route on a particular day was limited and the despatching of vehicles in strict turns was controlled by a marshalling system

This has resulted in an average daily running distance of only 127 kilometers for the private buses compared with 200 for the unconstrained public sector buses. Once on the roads the private buses “linger” to increase the pickup of people in well patronized areas and then “race” to take passengers ahead of the public buses in outer areas. The Gunawaran committee observed that accident and pedestrian fatality rates were 50% higher for private than public sector buses.

By 2002 central government had stated its intention of moving to a system of competitively tendered franchises through which it could control both capacity and operating behavior. One or two of the provincial councils, which have responsibility for the intra-province services which form the majority of the network, have already begun to consider the amalgamation of public and private bus schedules, together with stricter enforcement.

With an election approaching and the fiscal burden increasing, the government announced in early 2002 that it intended to sell 39% of the shares in the operating companies, giving the buyers of those shares management contracts to manage the Companies’ activities. In its initial prospectus it required that there should be no reduction in the routes served or the quantity or terms of employment of labor, as well as no operating subsidy. The buyers were also required to engage in a crash program of fleet renewal.

These conditions appeared very unattractive to most potential buyers, and in the event, only one buyer remained in the competition. While it initialed the terms of invitation signifying its awareness of the conditions, it predictably began to seek a renegotiation of them soon after the award was announced. Proposals to grant subsidies (not in the original terms on which bids were called) raised serious political objections and after the intervention of the President the deal fell through.

The election in November, 2002 resulted in a change of government, with the new government having given a commitment not to privatize the cluster companies as attempted by its predecessor. Reformers with a commitment to the introduction of some form of competitive tendering were appointed by the President as Chairman of the National transport Commission and as Secretary to the Ministry of Transport, who commissioned a consultant study on reform possibilities. However, the new Minister of Transport appeared to be committed to reviving the SLCTB and making major new investments in the “public sector” fleets as a prerequisite for any reform. A committee was appointed by the President to seek means of improving the public sector companies in early 2005. The outcome is still unclear as the funds for the investment in the public sector were highly unlikely to be forthcoming.

The determination to privatize quickly at any cost will have delayed the introduction of more effective reforms and better use of the already excessive fleet in the private sector.

There appear to be several important lessons to learn from the most recent events in this story.

- ?? First, the treatment of the problems of the public sector separate from consideration of the reform process has the danger of generating significant overprovision of capacity and imposing significant contingent costs on the government.
- ?? Second, the decision to privatize before determining the nature of the new regulatory system will almost certainly complicate and constrain the reform process.
- ?? Third, the lack of reality in the conditions of sale, together with a highly politicized sale, limited the market excessively and has inevitably put the government in a very difficult position in taking the sale through to a satisfactory conclusion.

VI. PROBLEMS OF AN INEFFICIENT INDUSTRY STRUCTURE: THE CASE OF SANTIAGO, CHILE

Greater Santiago has about 5.3 million people, living in 36 municipalities, with no effective functional urban metropolitan government. As a consequence, responsibility for urban transport has been fragmented among four central government ministries and agencies. It has 387 separate bus routes, offering extensive point to point coverage, and three metro lines, with a fourth under construction. In a city where air pollution – particularly by particulate matter and ozone – is a serious concern, buses are responsible for about a quarter of PM₁₀ and nearly 40% of the ozone precursor NO_x. (see table 1)

Table 1. Santiago emissions inventory: October 2000
(tons per annum, and % of total)

	MP ₁₀	CO	NO _x	Sox
Buses	1208 (24.0)	6,020 (3.1)	20,428 (37.3)	1,507 (16.5)
Private cars	134 (2.7)	107,554 (56.1)	9,836 (17.9)	324 (3.6)
Total transport	2425 (48.3)	174,196 (90.9)	46,180 (84.3)	3,135 (34.4)
Stationary sources	2597 (51.7)	16,014 (9.1)	8,149 (15.7)	5,991 (65.6)
Total	5022	191,600	54,799	9,126

Deregulation of public transport in 1988 resulted in massive over-provision of capacity, increased urban congestion and environmental degradation as old and unsuitable vehicles were introduced into service, and fares were greatly increased as operators responded to declining load factors.

This was fairly rapidly addressed in 1992 when the decision was made that all services which crossed the center would be subject to competitive tendering. Total capacity would be controlled and the conditions for selection of successful bids would include the quality of the vehicles offered as well as the fare required. Under that system, 77% of bus services – those which cross the central areas of the city - are presently provided under competitively tendered franchises. The rest are provided under conditions of free entry subject only to qualitative standards. Inevitably, routes overlap substantially so that many passengers have a choice between competing routes.

The franchises are granted on a net cost basis for over 300 individual routes, calling for between 22 and 40 vehicles per route. The criteria for selection of successful bidders is formula based, with fares (flat fares being required) being the most significant component, but quality of vehicle and other factors entering the equation. Each franchise is awarded to an “empresa administrativo” which may then subcontract them to operating units. At present there are four types of operating units accounting for the 7,700 buses in operation. Single bus owners account for 30% of the fleet; and operators with 2 to 4 buses accounting for a further 36%. 18% of the buses are in fleets of between 5 and 20 vehicles and only 14% in fleets of more than 20. Most of the operators are members of one of the four trade associations which look after the members interests.

The drivers typically are paid a fixed minimum salary of US\$160 per month plus 18% and a percentage of the collected revenues. In addition, because of the lack of secure ticketing and revenue recording arrangements many drivers further supplement their incomes substantially by not turning in the full revenue collected, to take their monthly income to \$400 to \$550 per month. But to achieve these earnings many drivers work for between 12 and 15 hours per day.

The combination of the fragmentation of ownership, overlapping franchises, the form of labor contracts and the lack of effective supervision of performance under the franchises has some striking effects on operational behavior. Drivers are induced to race for passengers, and to keep their vehicles on the road for the whole day, even where the license stipulates lower off-peak than peak frequencies. As a consequence there is over-provision of capacity off-peak.

In order to overcome these problems a new, non-statutory body, Transantiago, has been created recently to take overall responsibility for urban transport planning in Santiago. Transantiago has developed, and is currently implementing, a plan involving the creation of a network of privately financed segregated busways, a restructuring of routes to establish a trunk and feeder network, with only 15 contracts requiring larger bus operating units. Bus and metro fares will be integrated in a single system facilitating easy and costless transfer. The initial contracts have now been let.

The system is planned to be financially self sufficient. All contracts between Santiago and the trunk system operators (bus and metro) are to be on a gross cost basis. Payment will be per vehicle kilometer. Both fares and contract payments are to be subject to revision according to sub-sector specific cost indicators. For the metro the rate will be

calculated on the basis of the initial costs per car kilometer. For trunk buses the decision criterion for selection of successful bidders is a combination of the environmental quality of the capacity offered and the required payment rate per vehicle kilometer. Price will be the primary criterion. But a set of different quality offers is to be defined, with an upper target price set for each. The difference between the “caps” will reflect the valuation of their different environmental performance and will be determined on the advice of the environmental agency, CONAMA.

Feeder service provision will be bid on an area basis, contracted on the cost per passenger for the provision of minimum standards of service. All will be subject to regular review to deal with inflation. Revenue collection is to be concessioned to a special purpose agency which would be responsible for the provision and maintenance of the smartcard system and its hardware. This would be compatible with the existing metro-only Multivia card system. On-vehicle readers would be on the account of the bus franchisees. Initial responsibility for the system, before the letting of the concession would rest with Metro. A commercial contract would also be let to a banking organization to handle cash management.

The government has now decided that most of the infrastructure for the segregated system will be sought through private concessions, a process which will take considerable time to complete. The reform of the route structures and the introduction of the new franchise contracts is planned to occur before the completion of the term of President Lagos. This courts the risk that, until the segregated infrastructure is fully in operation, there will almost certainly be some users of the system for whom the increase in trunk speed will be more than offset by increases in waiting and transfer time.

The aims of the reform program in Santiago – first to introduce competition for the market and now to integrate all modes – are exemplary. Much of the preparation has been technically sophisticated. But some important lessons can be learned nevertheless.

- ?? Permitting sub-contracting to very small operators is bound to be difficult to supervise and likely to generate undesirable structures and operating practices;
- ?? Inattention to monitoring and enforcement can accentuate such undesirable outcomes.
- ?? The creation of an improved image for bus transit is much more difficult to achieve from the relatively high level of network density and service frequency already existing in Santiago;
- ?? Good timing is essential. Rushing a reform for electoral purposes may put a potentially good reform in serious jeopardy;
- ?? The reliance on private sector investment in the infrastructure makes segregated busway transit development a less secure development than the systems in Bogota and Curitiba where the infrastructure was on public account.

VII TEN COMMANDMENTS FOR REGULATORY REFORM

IN DEVELOPING COUNTRIES

Some important lessons can be derived from the halting experience of the developing countries in developing franchising systems. The following are those that emerge most clearly from the experience considered in this review.

- (i) *Political commitment to the reform is essential.* Without clear political commitment any system is likely to be vulnerable. In particular, the financing of vehicles by private operators will depend critically on the credibility of the franchise contracts which are awarded. If it is felt that these will not be honored by government, or may be subject to capricious changes, the risks of investment will be too great, and only small versatile vehicles will be affordable by operators.(Kyrgyzstan)
- (ii) *A proper legal foundation is necessary.* Poorly drafted regulatory instruments, or out-of-date legislation, which contains provisions which are unenforceable (Russia), or which are enforced selectively (Kyrgyzstan) enables 'harassment' of operators by enforcement agencies.
- (iii) *A strong local institutional foundation is required.* The franchising function should be controlled by a city or conurbation level agency, preferably responsible to a local government jurisdiction at the same level. Without this, bus transport provision is likely to be uncoordinated, either internally or with other public transport modes (Bangkok). The creation of metropolitan level agencies is particularly important where responsibilities have traditionally been fragmented among jurisdictions either spatially, as in many Asian and Latin American cities or hierarchically, as in Brazil.
- (iv) *Design of the franchising system must realistically reflect social objectives.* While increased operating efficiency in competitive systems can allow more to be achieved with finite resources than conventional parastatal monopoly operation, there are still some fundamental economic constraints to recognize. For example, requiring private operators to provide new vehicles, without adequate fares may drive them out of the market (Dhaka).
- (v) *Fares control must be consistent with financial viability of franchisees.* The fares to be charged, and the payments to be made to franchisees must be clearly set out in the invitations to tender, as should the procedures and formulae for adjusting those amounts (Jamaica).
- (vi) *The administrative agency must be expert and trustworthy.* While it has been possible in some countries, such as the U.K., to convert what was part of a parastatal operating agency into an effective regulator, that is not everywhere the case (Kyrgyz). It is therefore preferable to establish a new independent procurement and regulatory agency, and forbid that agency to have any proprietorial links with any operator, public or private.

- (vii) *Industry restructuring must be provided for.* Systems based on one license for each vehicle (as opposed to one license per route or per zone) are very difficult to regulate effectively, because the large number of clients is beyond the administrative capability of the authority (Sri Lanka), that individual operators are very vulnerable to mafia control (South Africa) and that skills are difficult to develop (Santiago). Providing for consolidation of the industry may be the first step towards development of an effective competitively tendered franchising system (Uzbekistan, Santiago).
- (viii) *Sub-contracting should be strictly limited.* The holder of the franchise must be able to be held to account for the performance of the franchise as a whole. Without this requirement the industry may remain very fragmented, and adopt payment mechanisms giving high inducement to undisciplined or dangerous operation (Santiago). The main beneficial example of sub-contracting appears to be the efforts in South Africa to incorporate the informal sector as sub-contractors of up to 10% of franchise requirements.
- (ix) *Vested interest of public enterprises must be confronted.* The protection of the incumbent parastatal has been a major impediment to effective reform. This may take the form of allowing the parastatal to sub-franchise (Bangkok), giving the parastatal preference in competition (some Russian cities), or allowing the parastatal to take advantage as the incumbent owner of all the available garage sites (Dhaka). Without confronting these various incumbent advantages private entrepreneurs may be unwilling to compete.
- (x) *Good monitoring and enforcement is essential.* This is necessary both to ensure that the conditions of franchises are being observed by operators (Santiago) and to curb illicit or unlicensed operations which undermine the franchised operators (Kazakhstan, Brazil).

Even where reform designs are technically convincing the successful implementation of a reform is a delicate process. Getting the combination and phasing of measures precisely right (for example matching restrictions on the informal sector with tangible improvements in the formal network) may be critical. Maintaining the accord between jurisdictions can be very difficult. And timing the reforms to prevent them being curtailed, uncompleted, by the political cycle is very important. Regulatory reform in developing countries is thus as much art as science.