

## CONCESSIONS IN TRANSPORT

### DESCRIPTIONS OF CONCESSIONS, BY MODE

1. This document is a supplement to the TWUTD publication “Concessions in Transport” (TWU 27, October 1996, L. Nicola Shaw, Kenneth M. Gwilliam, and Louis S. Thompson). It provides information about a number of concessions and concessioning programs worldwide. Copies of agreements marked with an \* are available for copying for Bank operational purposes.
2. The document is organized modally, with separate sections for each mode. It has a table of contents, listing the countries whose experience with concessioning is documented, followed by the information on each concessioning program.
3. The information provided is divided into the following categories:
  - ◆ Fares / Tariffs — information on the procedures and authority for setting tariffs.
  - ◆ Costs — information on the sharing of costs and investment between the concessionaire and government.
  - ◆ Term — information on the length of the concession and renewal agreements.
  - ◆ Ownership — details of the ownership of infrastructure and equipment.
  - ◆ Specifications — details of the central requirements of the concession agreement.
  - ◆ Selection — information about the selection mechanism and the extent of competition.Not every entry is completed for each country in all modes.
4. The tables below give a quick overview of the information presented in the document. Information on concessioning programs in a few other countries is also included, but these countries are not included in the summary tables since the information is sketchy. Where individual entries in the tables are not completed, the implication is that this information is not currently available to The World Bank.
5. A list of some relevant materials is given at the end of the document, following the descriptions of agreements. This is also organized by mode and starts with a table of contents.
6. If you have more up to date information, or information about other concessions please let us know. The information here will be updated regularly.

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## Buses

	<i>Fares</i>	<i>Costs</i>	<i>Term</i>	<i>Ownership</i>	<i>Specifications</i>	<i>Selection</i>
<i>London</i>	Set by LT	Gross Cost Moving to net cost 1997/8	3 years Moving to 5-6 years	Vehicles owned by private companies	Detailed by LT	Value for money
<i>Rest of UK</i>	Set by local authorities	Typically gross cost				
<i>France</i>	Set by decree	Payment to operator based on productivity	5-10 years		Centrally specified	
<i>Denmark</i>	Set by transport authority	Minimum cost	Typically 4-5 years		By transport authority	Price only one of the criteria
<i>Sweden</i>	Set by local authorities	Gross cost	3 years		Minimum service levels	Stability of service critical
<i>Australia</i>	Set by state	Gross cost (Some are gross cost with incentives)	5 years	Vehicles owned by the state	Maximum tender size is 12 buses.	Quality adjusted price
<i>New Zealand</i>		Net cost	3-5 years		Detailed by local authority	In Wellington weighted public benefits
<i>USA</i>	Set by local authority	Fixed fees per unit of service typical	Typically 3 years	Vehicles and depots owned by the local authority		Price
<i>Ukraine (Lviv)</i>	Set by city council	Payments for services provided. (Net Cost)	No fixed term	Vehicles owned by the state	Route level contracts	No competition
<i>Morocco</i>	Set in concession contract				Designed to complement public sector	Pre-qualification Opaque selection process
<i>India (Delhi)</i>	Set by government	Carried by concessionaire	5 years	Owned by operators	Route level contracts	Ballot and by route preference
<i>Chile (Santiago)</i>	Set in contract, with adjustment mechanism		3 years up to 7 depending on performance and fleet condition	Owned by operators	Routes proposed by operators. Strict vehicle standards.	Weighted appraisal including fare and fleet information
<i>Colombia (Bogota)</i>	Flat fare must be charged. Set by concessionaire	Carried by concessionaire	23 years	Owned by operators	Performance standards Investment levels DBOT of road infrastructure	Competitive bid for relieving congestion

## Passenger Rail

	<i>Fares</i>	<i>Costs</i>	<i>Term</i>	<i>Ownership</i>	<i>Specifications</i>	<i>Selection</i>
<i>UK - Croydon Tramlink</i>	Set by London Transport		99 years	Land owned by London Transport	DFBOT Performance specifications	
<i>France - Toulouse VAL</i>	Set by transport authority	Carried by public-private company Fares and lump sum from transport authority	30 years		FBOT Includes operation of Toulouse bus system	
<i>Argentina - Buenos Aires Commuter Rail and Metro</i>	Set by authority	Subsidies from or cannot to the transport authority	10 years (20 for metro)	Rolling stock & inventory passed to concessionaire for duration of concession	Service specifications Investment program specified	Weighted appraisal
<i>India - Bangalore</i>		Government equity partner and carry some debt	30 years, possible 20 year extension		BOT	
<i>Australia - Pyrmont light rail</i>		Grant from Commonwealth plus private investment	25 years		BOT	
<i>Thailand - Bangkok Transit System</i>	Maximum and effective established in contract, and revised with inflation.	Concessionaire carries	30 years, from start of commercial operation	Land provided by Metropolitan authority	BOT Performance specifications	
<i>Guatemala</i>		Concessionaire carries	25 years, possible 25 year extension	Municipality has reserved some rights of way		

## Freight Rail

	<i>Tariffs</i>	<i>Costs</i>	<i>Term</i>	<i>Ownership</i>	<i>Specifications</i>	<i>Selection</i>
Cote d'Ivoire / Burkina Faso	Concessionaire sets tariffs	Concessionaire carries operating costs and pays a percentage of revenues annually.	15 years, on a rolling five year horizon	National societies lease equipment to the concessionaire	The concessionaire has seven years of exclusivity. Concessionaire agreed to take on 1815 employees.	Only two bidders emerged. They joined forces.
Chile	Concessionaire sets tariffs	Concessionaire bought shares in FEPASA and pays a track access fee to EFE.	10 years, possible 10 year extension	EFE retains ownership.	EFE retains the right to offer passenger services Concessionaire must offer Class 1 services.	
Argentina	Cost plus rate regulation	Annual stream of payments from concessionaire.	30 years, possible 10 year extensions		Operation, marketing, rehabilitation and maintenance. The concessionaire could retain employees as it required.	Weighted evaluation
Mexico	Concessionaire sets tariffs, given effective competition		50 years, possible 50 year extension	Government retains ownership	All dispatching and train control must originate in Mexico. Passenger train access must be granted.	Technical and financial envelopes. Highest qualified bidder selected.
Brazil	Concessionaire sets tariffs.	Up-front canon and annual stream of payments from concessionaire	30 years, possible extensions for another 30 years.	Government owns and leases equipment to concessionaires	Certain number of employees must be retained. Accident reduction and service quantity targets. Passenger trains must be granted access.	Open auction.

## Roads

	<i>Tolls</i>	<i>Costs</i>	<i>Term</i>	<i>Ownership</i>	<i>Specifications</i>	<i>Selection</i>
Portugal - Tagus Bridge	Set by government	EU grant and guarantee, plus concessionaire contribution			BOT	
Argentina - Ricchieri Tollway	Set and indexed to inflation and exchange rate in contract.		22 years and 8 months		R/BOT If traffic reaches a certain level further lanes must be built.	Highest payment by concessionaire.
Mexico	Set to ensure full cost recovery. Linked to inflation	40% return on investment allowed. Government guaranteed profitability.	Varied	Government provided the right of way	BOT Free alternatives available.	Technical pre-qualification. Shortest period to return road to government
Thailand - Second Stage Expressway and Din Daeng-Don Muang Section	Tolls set in contract. Revenue shared between government and concessionaire	DD-DM: Concessionaire pays 20% of gross monthly revenue to government after 20th year. Lump sum land rental payment.	SSE: 30 years. Two possible 10 year extensions. DD-DM: 25 years, extensions possible.	Government provided land.	BOT SSE: New lane if traffic reaches a certain level. No competing facilities from Government	
Malaysia - North-South Expressway	Set in contract but controversial	Government equity in and loans to concessionaire.	30 years of operation		BOT Concessionaire collected tolls on existing road	
Hungary - M1-M15	Tolls set and indexed in contract.	Public-Private consortium with EBRD loans. 15% of revenues to road fund and other concession and control fees.	35 years, with possible 17.5 year extension	Government purchased land.	BOT	Technical pre-qualifications.
Australia - Sydney Harbor Tunnel	Tolls set and indexed in contract	State government grant and inflation-indexed bonds.	30 years of operation	Government purchased portal land.	BOT	Proposed to government
Puerto Rico - San Jose Lagoon Bridge	Tolls set and indexed in contract.	Concessionaire's debt guaranteed.	35 years	Government provided land and right of way and owns bridge.	BOT Termination clause based on traffic levels.	
Canada - Northumberland Strait Crossing	Tolls set and indexed in contract	Inflation indexed subsidy Late completion penalties	35 years following completion.		BOT	Basic pre-qualification Designs presented. Finally financial bids
Colombia - Bogota - Villavicencio	Tolls set and indexed in the contract.	Concessionaire is guaranteed a minimum toll revenue. Over specified level income is shared by concessionaire and government.	16 years	Government acquires land for concessionaire.	R/BOT	Lowest tariff levels were one of the assessment criteria.
India - Jaisinghpur	Tolls set in contract but refused by users	Concessionaire financed, but government assumed debt after toll revolt.	Was to have been 10 years, or until debts were paid		BOT	One bidder only

**Ports**

	<i>Tariffs</i>	<i>Costs</i>	<i>Term</i>	<i>Ownership</i>	<i>Specifications</i>	<i>Selection</i>
Argentina - Buenos Aires Terminal 3	Concessionaire sets.	Annual fixed rental fee as well as variable fee on cargo handled.	25 years		Exclusivity in terminal.	Technical qualifications & business plan. One terminal per operator.
Panama - Manzanillo	Concessionaire sets	Fees to government on basis of cargo handled and vessels serviced.	20 years		R/BOT Development details.	
Pakistan - Karachi	Concessionaire sets in consultation with port authority		20 years		BOT	
France - Le Havre	Concessionaire sets tariffs	Rent for land set and indexed in contract.	50 years, from start of service, with possible extension.	Port retains land ownership. Concessionaire owns works.	BOT	
Mozambique - Maputo		Rents to authority, related to throughput.	15 and 10 years. 5 year extensions possible.		ROT Provisions for staff	

## Airports

	<i>Tariffs</i>	<i>Costs</i>	<i>Term</i>	<i>Ownership</i>	<i>Specifications</i>	<i>Selection</i>
Uruguay - Laguna del Sauce	Set & indexed in agreement. Concessionaire can determine commercial lease prices.		20 years		R/BOT Specified investment plan	
Colombia - Second runway El Dorado		Concessionaire guaranteed income from landing fees.	20 years	Concessionaire has 20% equity stake.		
Venezuela - Maracaibo	Terminal fees regulated	5% fee to be paid to airports authority	20 years but terminated from contractual defaults by concessionaire.		LDO Investment program specified	
Cameroon	Concessionaire sets charges	ASCENA paid 2% all fees.	15 years		Investment of percentage of profits required.	
Canada - Terminal 3 Toronto		Not-for-profit cost recovery basis	20 year lease, possible 20 year extensions	Transport Canada retains land ownership	BOOT	
Gabon - Libreville	Concessionaire sets tariffs and rents		15 years possible 10 year extensions	Government retains ownership.	Expansion	

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## URUGUAY

7. Since December 1993 the airport at Laguna del Sauce International Airport in Punta del Este has been operated under concession by Concorcio Aeropuertos Internacionales SA. The concessionaire has been brought on to expand and upgrade the existing airport, which was built 50 years ago, and is inadequate to meet the requirements of the present tourist arrivals. This was the first concession to be let in Uruguay.
8. **TARIFFS** — The concessionaire will collect all airport revenues. Tariffs are set in US dollars and adjusted quarterly for change in the Uruguayan and UN consumer prices indices. Passenger tax will be increased once, when the project is complete from US \$8 to US \$12. The concessionaire has the right to determine the price of the commercial leases. Revenues are expected to come from airline fees (37%), passenger fees (24%) and commercial leases (39%).
9. **COSTS** — The IFC have organized the financing. Two companies have 40% stakes and a third 15%, in the company. The first is a subsidiary of a major Argentinean supermarket chain, with interests in transport and tourism, the second has duty free shops in Argentina and Uruguay, on cruise ships etc. It also operates the Rio Grande airport in Tierra del Fuego. The third company is a Uruguayan investment house. A fourth holder is a subsidiary of an Canadian company which operates airports.
10. **TERM** — The concession is for twenty years.
11. **SPECIFICATIONS** — The existing passenger terminal will be replaced, a new control tower built, the runway repaved and a new runway and taxiway built, the existing commercial aviation apron will be extended and a general aviation apron built, a fire station will be built, extra lighting installed on the airfield, new navigational and communications equipment installed and ramp equipment will be purchased.
12. The smaller local airport which currently serves the smaller private planes, will be closed once this project is completed. The growth rate for passengers is expected to be 4.5% p.a. to 2008, though flight growth will be less, with larger planes. General aviation is expected to show more substantial growth (12.5% p.a.)
13. There is a specified investment plan which must be complete by the end of 1997. Immigration, Customs, Police and traffic control are not responsibilities of the concessionaire.

**COLOMBIA \***

- 14. In 1994 the Civil Aviation Authority launched an international public bidding process for the development and maintenance of a second runway at El Dorado Airport, Bogota.**
- 15. TARIFFS — The private sector operator will collect revenues through landing fees. A minimum income will be guaranteed.**
- 16. COSTS — This is expected to cost \$100 million.**
- 17. TERM — The concession will last twenty years.**
- 18. OWNERSHIP — The private operator will take a 20% equity stake in the facility.**
- 19. SELECTION — The selection process began in January 1995.**

## VENEZUELA

20. The airport at Maracaibo (La Chinita) was been operated under a Lease - Develop-Operate (LDO) scheme from May 1993 to February 1994. (The bidding took place in the early part of 1993.) Concorcio Aeropuertos del Zulia is the consortium with the contract and consists of a local civil engineering firm, a US based consulting firm, and an international airport equipment supplier.
21. TARIFFS — Passenger terminal fees are regulated.
22. COSTS — A 5% fee must be paid to the Zulia Airports Authority. There is also a charge of 15% of gross revenues which is to be placed in a local government trust funds for investment purposes.
23. TERM — There is a 20 year concession for the exploitation of all landside and selected airside services. The concession was however terminated as a result of the concessionaire defaulting on a series of contractual obligations and changes in the political climate.
24. SPECIFICATIONS — An investment program has been stipulated.

## **CAMEROON \***

- 25. Seven of the fourteen airports in Cameroon were transferred to Aéroports du Cameroon (ADC) in 1993. Aéroports du Paris has 34% of the shares, the Government of Cameroon 29%, ASCENA (Agence pour la Sécurité de la Navigation Aérienne en Afrique et à Madagascar) 20%, three domestic carriers CAMAIR (8%), UNITAIR (3%) and Air Affaires Afrique (3%) and BICIC (a bank, 3%).**
- 26. TARIFFS — ADC will establish both land and air side charges, having consulted with both the government and the airport users.**
- 27. COSTS — ASCENA also receives 2% of all fees at selected airports.**
- 28. TERM — The concession is granted for fifteen years.**
- 29. SPECIFICATIONS — The concessionaire is required to invest a percentage of profits in the system. The investment responsibilities are low and largely associated with remodeling and re- design of the commercial space with some minor airside repairs. ASCENA retains responsibility for air traffic control, fuel concession services for military facilities and the acquisition of safety equipment.**

## **HONG KONG**

**30. There are plans for a new airport on Lantau Island, to provide modernized facilities and responds to the fast growing regional market needs. The existing airport Kai Tak, is profitable (HK\$1 billion p.a.), with most services subcontracted.**

**31. COSTS — The total cost of the project is expected to be US\$21 billion. The government is contributing 50% of the capital in the form of equity investments and public works, whilst the rest is from the private sector with equity, commercial lending and project finance, under a BOOT contract.**

## **CANADA**

- 32. In 1987 a consortium (Claridge Properties 73% and Lockheed Air 27%) was brought in to finance, construct, own, and operate a third terminal at Toronto airport. The government has also been trying to turn over the other terminals for lease, develop, operate contracts, but legal obstacles have been preventing this.**
- 33. TARIFFS — Airline rents and charges provide 50% of the revenue from terminal 3, commercial concessions 30% and parking 20%. Terminal 3 is operated on a not-for-profit cost recovery basis and excess revenues from carriers are used to offset future charges.**
- 34. COSTS — Lockheed air receives a 6% management fee for its services.**
- 35. TERM — Lockheed Air has a 60 year lease agreement with Transport Canada (20 year lease with two 20 year extension options) for the administration and maintenance of terminal 3 facilities, property and adjacent roadways.**
- 36. OWNERSHIP — Transport Canada has retained the land ownership and operates the other two terminals.**

## **GABON \***

**37. In May 1988 a Cahier des Charges was drawn up for the concession of the airport at Libreville in Gabon.**

**38. TARIFFS — The concessionaire was to be responsible for setting tariffs and rents. None of the landing fees would go to the concessionaire, rather they would go to ASCENA under the Dakar agreement of 1974. The tariffs could be set to ensure economic equilibrium for the concessionaire, as long as they were related to costs. State aircraft would not be required to pay the tariffs.**

**39. COSTS — The concessionaire would bear the costs of necessary works and operations.**

**40. TERM — The contract was to last for 15 years with 10 year extensions possible.**

**41. OWNERSHIP — The government would continue to own the airport, but it would be transferred to the concessionaire for the duration of the concession.**

**42. SPECIFICATIONS — The concessionaire is assured that financial equilibrium can be retained. Hence they are allowed to break the concession if this cannot be achieved even with tariff adjustments.**

**43. The concessionaire would be required to expand the airport, and to maintain it in a condition suitable for service. The concessionaire is required to provide space for the customs and taxation institutions within the concessioned area, as requested. The concessionaire may enter into sub-contracts as necessary.**

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## UK \*

### London

44. Since the London Transport Act of 1984 private sector bus operators have been introduced gradually through competitive tendering. Initially public operation continued, through subsidiary “arm's length” companies, though in 1994 these were also privatized. All routes (including service levels) are now planned publicly and operated privately. Those routes which had not been placed for competitive tender before last year's privatization, are now operated under negotiated contracts. It is planned that all services will be operated under competitively bid contracts from 1998.

45. **FARES** — Fares are set centrally, and tickets and ticket machines are owned (and should be maintained) centrally. Revenue has been retained by London Transport, though from 1998 operators will retain revenue.

46. **COSTS** — Most contracts are currently gross cost, with London Transport retaining fare revenue. Those contracts which have been negotiated with the ex-public operators are net cost and the operators retain the fare revenues. From 1998 it is planned that all contracts should be on a net cost basis.

47. **TERM** — Initially contracts lasted three years, and could be extended for a further two, though this depended on the performance over the last 52 and last 12 weeks of the contract. In addition London Transport was able to re-tender if it believed that the package price could be reduced substantially. An EC Utilities Directive of July 1994 however brought changes in the contract extension policy. The new contracts last five or six years, with an opportunity for either side to withdraw from the contract after three years (with nine months advanced notice of intention to do so.) If the option is not exercised then, the contract remains in force until the full term is complete.

48. **OWNERSHIP** — Vehicles are owned and operated by private companies.

49. **SPECIFICATIONS** — Service specifications include the routing, first and last journey times, frequency by time of day and day of week, size and type of vehicle to be used. Bidders may propose variations but must also make one tender for the basic service. The operators are required to reach specified safety, emissions, and insurance standards. Performance measurement is used to ensure that service quality is maintained.

50. **SELECTION** — The lowest cost bidder is not necessarily selected for all contracts. In fact the lowest bid is checked for viability. Also considered are the adequacy of the level of resources proposed, the competitiveness of the wage and conditions proposals (deemed important for staff recruitment and retention), operational feasibility, i.e., how close the depot is, control and supervision proposals, suitability of the proposed vehicles, the firms recent operational and safety performance, and their general track record and experience. The various options proposed by the company are also considered. The system is so structured to ensure that “the operator chosen provides a consistently reliable and quality service which offers best value for money.”

## **Outside London**

**51. Most bus operations outside the capital are operated and planned by privately owned bus companies. These profitable routes are supplemented by services contracted to the local authority, either to extend operating hours on the core network, or to supplement those services with other routes.**

**52. FARES — Fares on these routes are specified by the local authority.**

**53. COSTS — Most of these contracts have been let competitively on a lowest gross cost basis, though some areas have also used the minimum subsidy approach. The gross cost contracts have tended to produce lower bids than the minimum subsidy contracts, because of the elimination of any revenue risk and ensuing increased competition, which may result from the fact that smaller operators feel more able to compete.**

**54. One minimum costs with incentives scheme is used in Kent where the operators are given local authority estimates of the revenues which they will derive from the routes. The contractor keeps half the revenues and subtracts 50% of the authority estimate from its costs. The cost to the authority therefore also depends on the accuracy of their forecasts.**

## **FRANCE \***

**55.** From 1913 to 1979 public transport services in France were operated by private companies under net cost contracts. The organizing authority owned the equipment, infrastructure, and rolling stock. Between 1979 and 1981 new legislation established four model contracts using different remuneration structures — net cost, revenue guarantees, fixed price, and management contracts. Contracts lasted five years if investment took less than 50% of the operational expenditure. With more investment the contract could last up to 30 years.

**56.** By 1984, these generalized contracts were viewed as too restrictive and a new approach which set the minimum requirements for any operations contracts, was established. Each contract must now include certain elements, including the legal right to termination by the authority if a company is struck off the transport registers.

**57.** **FARES** — Generally fares are established by decree and are determined annually depending on the cost of equipment, maintenance, energy, salaries and a maximum rate of annual increase. Systems expansion or service enhancement can allow the cap to be overruled. (If the contractor takes any revenue risks then they have the right to set fares.

**58.** **TERM** — Contracts must be of fixed duration. The recommended duration is five to ten years. The contracts should also provide for the conditions of interruption of service before contract expiry and reasons for re-negotiation before the end of the contract.

**59.** **SPECIFICATIONS** — The general quality and quantity content of services are specified including conditions applicable to the operation (i.e., timetables, frequency, etc.), financing conditions (i.e., financing of capital investments etc.), obligations of both parties to the users (i.e., information and conditions of use), and methods for monitoring the use of funds committed or guaranteed by the licensing authority. The new structure means that there is a greater degree of service specification in the contract and that remuneration is linked to productivity and the achievement of certain net cost/km targets. There has also been an increase in the use of penalties and incentives.

## DENMARK

### Copenhagen

60. A 1989 law stipulated that 45% of the Copenhagen bus network should be provided by the private sector through a tendering process. The law also divided the Copenhagen public transport authority into two parts — policy and operations — changed its governing system and pared down the Board of Directors. By April 1992, 30% of the system had been tendered and by January 1995, 46% of service was provided by eight private operations through competitive tender.

61. **FARES** — Fares are specified by the transport authority.

62. **COSTS** — The contracts are on a minimum cost basis.

63. **TERM** — The contracts typically last for four or five years, though on occasion for eight.

64. **SPECIFICATIONS** — The authority specifies fares, service standards, schedules and routes, and applies penalties (monetary and contract termination) and incentives (bonuses based on passenger satisfaction). Private sector operators were required to adopt labor contracts as negotiated by the public transport operators.

65. **SELECTION** — Price was only one of the criteria used to evaluate the bids, and on average 20 bids were received for each package. The public operator was not able to compete for contracts. The contract packages have been kept small (ranging from 3 to 28 buses) to allow new companies to enter the system.

### Outside Copenhagen

66. In 1994 the parliament passed an amendment to the 1989 Act and required all bus services to be competitively bid by July 1, 2002. The public bus company was also converted into an independent company and this new corporation is allowed to compete for contracts. Whilst the conversion is in progress, the corporation will be required to provide services at unit costs limited to the average unit costs of the private contractors.

## SWEDEN

67. In 1989 parliament passed legislation to encourage public-private competition and in some areas bus services are now operated under contracts. By 1995, 50% of the Stockholm bus network was tendered, with the winning bidder being a French firm. Outside Stockholm most counties have tendered three rounds (1989, 1992, and 1995.)
68. In northern Sweden the successful bidders have negotiated with the municipal companies to take over employees, buses, and plants. Where the two organizations could not reach an agreement on these takeovers, the municipal company continued to operate the services, at the price bid by the winner.
69. **FARES** — The local authorities set fares.
70. **COSTS** — Gross cost contracts are used.
71. **TERM** — The contracts last for three years.
72. **SELECTION** — Stability of services has had a high priority and therefore lowest price was not the only decision criterion for the contract award. Initially authorities undertook multiple simultaneous negotiations, but there has been a gradual evolution towards stricter specification in the tender documents and single party negotiations.

## NORWAY

**73. A 1991 law made bus service tendering possible. The contracts must last for at least five years. Oslo introduced a trial system in 1991 with three routes (these are services to replace metro and light rail services during a period of construction).**

**74. Private companies are required to pay their staff according to the public company wage rates. Negotiations are underway to sell the operating division of the public transport authority, which would separate policy from operations.**

## **FINLAND**

**75. A 1991 law allows tendering for transport services. Helsinki planned to introduced tendered service on regional routes in 1994. Four packages were tendered in 1995. Policy and operations are separated and YTV, the regional coordinating council, handles the tendering.**

## **POLAND**

**76. Approximately 70 buses are operating under competitively tendered contracts in Warsaw and there is a full program for conversion to tendered only services. The municipal authority has failed to win any tenders thus far, as a result of the high costs of its operations.**

## AUSTRALIA

77. Responsibility for urban passenger transport is primarily a state matter, with the federal government having a very limited direct influence. The states have been undertaking regulatory and institutional reforms in the urban bus sector in the last few years. Some of these changes are described here.

78. Both Sydney and Melbourne have opted for area service franchises and Melbourne tendered the entire bus network in 1993. In Victoria, South Australia, and Western Australia there are plans to make a pool of vehicles available for operators to lease. The authorities will allow alternative vehicles to be used if necessary. In South and Western Australia some contracts range up to 80-90 buses and are attracting larger inter-state and overseas operators. Both states have four year standard contracts, as against Victoria's seven.

### South Australia

79. The policy here has been to maintain an integrated system and subsidized fare structure. In 1994, a Passenger Transport Board (PTB) was created to fund, plan, commission, and regulate passenger transport in the state. The state transport authority was transferred to a new operating body, TransAdelaide, with no policy functions. The legislation prevented PTB from tendering before March 1995, to give TransAdelaide time to reduce its costs to competitive levels, guaranteed TransAdelaide the right to control at least 50% of services until 1 March 1997, and set a maximum contract size of 100 buses.

80. Adelaide developed a two and a half year schedule for conversion to tendered bus service, dividing the city into ten areas each requiring tender packages of 50 to 80 buses. (There are also a few specific route services operating between areas.) The first portions of service were tendered in March 1995. Five groups bid for one set of services, four for the other. Tender evaluation was completed by September 1995, and the services were to be in operation from January 1996.

81. **FARES** — Fares are centrally specified.

82. **COSTS** — These are gross cost contracts. Additional payments are made per passenger and per passenger kilometer.

83. **TERM** — The contracts last for five years.

84. **OWNERSHIP** — The state has retained bus ownership and these may be leased from the DOT, which also took on ownership of bus depots, central workshops, and the Adelaide O-Bahn system.

85. **SPECIFICATIONS** — Minimum service levels are specified but there is also flexibility to vary actual services within the specifications. Service connections are specified where they are needed to maintain integration with other contract parcels. Vehicle specifications have also been set and are applied to operators not leasing DOT vehicles.

86. **SELECTION** — TransAdelaide is subject to specific requirements in its bids including a set of pricing rules with full cost allocation and a taxation equivalent regime, as well as return on assets targets, and exclusion of certain costs, which are separately funded. These requirements and funding sources will be phased out over two years.

87. The tenders are evaluated with a trade off between price and non price (service plan proposals, customer service quality aspects, planning and consultation, support facilities, implementation and disengagement aspects, management practice, previous experience, and financial capacity) attributes. Each has a weight, for evaluation. There is a pass/fail criteria

on some attributes. The relative scores on these weights are then used to adjust the bid price and the selected bidders is the offering the lowest “quality adjusted price”.

#### **Western Australia**

**88. Competition** has also been introduced in bus services through competitive tendering. Government operators will not be privatized. Contracts are awarded in 15 areas, either on an area or a route basis.

**89. COSTS** — They are gross cost contracts with incentives. Tenderers are invited to bid on the fee they require to cover the total cost of providing services in the contract area, after allowing for anticipated income from a patronage related and a service related payment. Coverage of a certain percentage of costs by the service charge is guaranteed. The service charge is the difference between the total operator cost and the estimated income from the two elements above. It too is made up of two elements—the fixed cost (comprising management and leasing charges) and a variable charge (based on variable operating costs less the sum of the patronage and the service related elements.) This will be expressed as a rate per revenue kilometer. The service related payment will be a fixed rate per actual revenue kilometer based on the marginal operating costs, including a wages element. Total patronage and the associated revenue is guaranteed for the first year of the contract. Thereafter payment is based on passengers carried.

**90. OWNERSHIP** — The government will retain ownership of the bus fleet, with operators responsible for maintenance and safety.

**91. SELECTION** — The tenders are awarded to those offering the best balance between service quality, innovation, and cost.

**92. In Perth** too the public transport services are now competitively tendered and privately operated on a route basis. Integration is being maintained however, with the outward form of service remaining the same — livery, ticketing, marketing, and planning remaining under the same umbrella name of Transperth.

#### **Queensland**

**93. There are 200 licensed operators, with approximately 70 urban bus providers. The operators are operating subsidized services under exclusive geographic area licenses from the 1930s. Quality and availability of service is therefore inconsistent across the state. New legislation was introduced in November 1994, following a review in 1992, to allow for minimum performance based contracts. The legislation specifies what must be taken into account when any market entry restrictions are applied:**

- ◆ level of service would be greater than that which would be provided in an unrestricted market
- ◆ access to public passenger transport would be greater than would otherwise be the case
- ◆ service innovation would be greater than otherwise
- ◆ particular public passenger services would better meet the Government’s social justice objectives at lower costs to the Government than otherwise

**94. Ten areas have thus far had contracts offered and the “lodgment period” has expired. In these ten areas, there has been at least one bid for each contract. Six contracts for service were awarded in the spring of 1995, specifying higher levels of service than had previously existed, and in all cases the operator has pledged to exceed the required levels.**

**95. TERM** — Contracts are for five years.

**96. SPECIFICATIONS** — The contracts specify minimum service levels (time of operation, frequency and extent of service, percentage of residents within a certain distance

from the bus stop) as well as a range of other conditions (including the cross-subsidy of routes.)

**97. SELECTION — Existing bus operators are given the first opportunity to submit an offer, with a business plan on how they will meet the minimum services and on the progress they will make by the end of the contract. Progress against the business plan is monitored, with a mandatory mid-point review where operators must conduct a market based needs assessment for the public passenger service. If the minimum service levels are met by the end of the contract then the operator will be offered a new contract. If not, the contract will be competitively bid.**

## **NEW ZEALAND \***

**98.** Competition for New Zealand bus services was introduced in July 1991, following a 1989 act of Parliament which required all public transit services to be provided commercially or through a “competitive pricing procedure.” There is a clear separation of policy from operations. Regional councils are not permitted to own any passenger transport operations, except indirectly through Local Authority Trading Enterprises.

**99.** About 20-30% of the New Zealand bus services are provided commercially, the remainder being subsidized through the competitive tendering process. Local authorities have the power to contract over commercial services, for example if the commercially established fares are deemed too high. Tendering regimes differ by region, though the procedure for tendering is set down by Transit New Zealand.

**100.** In Auckland the first round of contract renewals is taking place between 1994 and 1996. The average contract prices have been reduced but there has been a reduction in competition with few services having more than one bidder. In two cases the awards have gone to new entrants, though in one of these the operator pulled out within six months, citing the difficulties of the competitive regime as a major reason for this move. Where there has been competition it tends to have been at the expense of vehicle quality. There also seems to have been some user confusion from the different operators on one route at different times of the day.

**101. COSTS** — Most contracts are issued net of revenues.

**102. TERM** — Most contracts last three to five years.

**103. SPECIFICATIONS** — The maximum size of individual tenders has been limited to 12 buses, although “group” tenders are often permitted. Wellington has vehicle quality standards for individual vehicles and for the overall fleet. These apply throughout the life of the contract, not merely at the award date.

**104. SELECTION** — In Wellington, price is not the only choice criterion. All factors affecting public benefits from the service are weighted and the winning bid is that for which the sum of these weighted benefits is greatest. The Wellington experience has been that, on occasion, operators who lose concessions on price grounds, subsequently register a commercial service on the route, and later de-register it, forcing further tendering in the hope of making a successful bid on the next round.

## USA \*

**105. Contracting for bus services has been encouraged by the Federal Transit Administration since 1983. There are certain restrictions on the introduction of tendering, which result from the labor employment and federal transit financing regulations, hence there has not been extensive concessioning of public bus services in the US.**

**106. In San Diego, tendering has been undertaken gradually from 1980, initially through the local jurisdictions and then through the Metropolitan Transit Development Board (MTDB) from 1985 (when it was designated as the policy board). Policy and operations are separated. MTDB supervises metropolitan transit, sets a unified fare, transfer policy, route structure, and logo for public and private carriers. Tenders are generally from three to five years and bid packages range from 10 to 50 vehicles. The public transport operator has won a small number of bids, though generally the bid prices range from 30-60% of the fully allocated public transport operator costs.**

**107. FARES — Fares are set by the local transport authority.**

**108. COSTS — Fixed fees per unit of service are the most common since para transit services are those most typically concessioned. It also appears that competition is stronger for cost plus than for fixed fee contracts.**

**109. TERM — Where concessioning has been introduced, the typical contract lasts three years.**

**110. OWNERSHIP — The public authorities tend to retain vehicle and depot ownership.**

**111. SPECIFICATIONS — Typically include:**

- ◆ Ridership — total or by some unit of service
- ◆ On time performance — there is also often a required rate of trip completion.
- ◆ Service Quality — various different elements, e.g., cleanliness of vehicles.
- ◆ Record Keeping and Reporting
- ◆ Safety — in operation and maintenance

**112. Penalty and incentive clauses are often included relating to direct changes in the revenue for the operator, effects on the firms reputation, and reductions to the length of the contract.**

## **UKRAINE \***

- 113. There is no competitive tendering for bus services in Lviv, but to comply with city council resolutions in 1993 and 1995, the council now contracts with “State Motor Transport Enterprise MTE” for service.**
- 114. FARES — Fares are set by the city council.**
- 115. COSTS — Payments are made for services provided, with the MTE submitting accounting information on fares, prices of fuel and lubricants, spare parts and materials, and management expenses. A 10% profit margin is also included in the MTE payment. Five payments for service are made during each month. Payments are still made (using traffic projections) if the service is suspended for any of the following reasons: calamities, municipal arrangements, road repairs, changes in climate conditions, or accidents and other events beyond the Contractor’s control.**
- 116. Penalties are levied for missed trips, late and early running and for trips canceled as a result of technical problems.**
- 117. TERM — The contract began on April 1,1994, and had no fixed term.**
- 118. OWNERSHIP — The buses are owned by the MTE, and the city provides grants for bus and fixed asset purchase.**
- 119. SPECIFICATIONS — The contracts relate to specified routes. Bus types are specified, as are the number of buses and trips, and cost. The city and MTE must agree time tables, based on expected passenger numbers, and with coefficients of bus loading as specified in the contract. The contract does not define vehicle specifications but states that the buses must meet technical fitness standards negotiated separately by the city and the MTE. Governmental regulations define fleet environmental standards. The City controls the route operation, manages traffic, controls revenue collection, approves timetables and bus types, and helps with accounts where necessary.**
- 120. SELECTION — There was no competition for the contract.**

## MOROCCO

121. In July 1984 the Moroccan King announced his intention to open urban transport services to private companies. The regulation in the past had kept fares low, though costs were rising and demand continued to grow.

122. The Directorate of Regulations in the Ministry of the Interior plans new routes, allows terms of reference to be altered, and concludes the contents of each concession contract. In 1987, 42 more routes were contracted out and eight new operators were authorized to operate (each on 4 routes.) The private fleet had expanded to 492 vehicles. In Casablanca contracts are let on a route basis, in Rabat on an area basis.

123. FARES — Fares are set in the contract. Fares on the private services are twice those on the public however the private services must guarantee seats for all passengers. Where demand is strong, the concessionaires have carried standing passengers and where it is weak, the operators are lowering frequencies and pressing for the right to charge lower fares. However since the contract does not link the private operators' fares to inflation, there is no guarantee that the two-tier fare structures will remain over time.

124. SPECIFICATIONS — The services are designed to complement those of the public sector. The contracts contain regulations on service areas and routes, frequencies, state of the vehicle, and the basic maintenance requirements. Contractors buses run on the same routes and on the same frequencies as the state buses but the private services are of superior quality. Monitors on the streets are rotated frequently to reduce the risk of corruption, and are paid a high salary to reduce the attraction of bribes.

125. SELECTION — Only four companies responded to the first call for bids, and only two of these met the pre-qualification requirements i.e., they had insurance and the support of a bus manufacturer. This seems to have resulted from the reluctance of banks to take on new enterprises. Concessions did not go to the highest bidder and corruption has been alleged.

## SOUTH AFRICA

126. 42% of buses are operated by private bus operators, some with central government subsidy, and mostly from townships to economic and commercial centers in white areas. Municipally owned bus services operate in white areas, and occasionally the townships, with subsidy, accounting for 22% of the buses. Parastatal bus services (i.e., from former self governing states) provided with central government subsidies and account for 35% of the buses. The minibus-taxi market assessed as carrying 40-50% of the black commuter population in 120-140,000 taxis (only c. 70,000 of which are operating legally.)

127. In a 1987 White Paper on National Transport Policy, recommendations were made to enhance effective competition and reduce regulation, ease entry into the market, and promote private enterprise. However for buses, competitive tendering (a policy which emerged from this white paper) was only allowed until 1995, in areas where bus operators threatened to withdraw services due to financial hardship and where the government was not prepared to increase subsidies. Any further introduction of competitive tendering has been limited by the current legislation on public transport which protects operators from competition, concerns of unions on job security, allegations that the level playing field for public and private operators is not level, and the complicated nature of the documents used in the call for tenders.

## **INDIA**

**128. In Delhi the state owned enterprise, the Delhi Transport Company (DTC), subcontracts with other companies to provide some bus services in the urban area. Single owner buses are also permitted to compete on DTC routes but with an imposed maximum fare. These private operators do not offer any reduced fares and carry no students. Gradually they are therefore carrying the full fare passengers leaving the DTC (with union labor, strict observation of the Motor Transport Workers Act (1961) and therefore higher costs) to carry the concessionary and student fares.**

**129. FARES — Fares are set by the government and apply to both the contracted and the DTC routes.**

**130. TERM — The concessions were awarded for 5 years, following an initial four month probationary period.**

**131. OWNERSHIP — The buses are owned by the private operators.**

**132. SELECTION — In 1992, 209 new routes were tendered to private operators. 10000 applications were received and these were reduced to 2000 through a ballot. These were further allocated to routes by ballot according to route preferences (up to 5 had been allowed.) The tenders were required to be operated with new buses.**

## **CHILE \***

**133. Urban bus systems in Chile were deregulated in 1979. However, since 1991/2, to reduce congestion in the center of Santiago, bus access to the central area has been restricted through a competitive tendering system.**

**134. The concessionaire may end the concession contract early, with the authorization of the regional secretary, for financial reasons, such as low profitability. The operator is required to provide financial guarantees for its services, which are held by the authority, and used in the event of contract termination. If a concessionaire abandons service, they will be prevented from re-bidding for any service for four years.**

**135. FARES — The fares are set by the contract which also contains a fare adjustment mechanism, for use once every three years. The concessionaire may offer lower fares for certain sections of the route or at particular times of the day, or may introduce fare pre payment systems with a lower value for bulk purchase as approved by the regional secretary. The fare may also be revised if the cost structure changes, altering one or more factors of production by more than 30% or if the contractor can demonstrate technical or economic conditions which mean that new factors should be incorporated in the adjustment mechanism.**

**136. In exceptional cases the operator may charge a fare higher than the highest specified :**

- ◆ if at least half the fleet runs on clean fuel
- ◆ if the average weight of the fleet is 6% less than those with traditional motors
- ◆ if the fleet contains no vehicle more than 12 years old.

**137. The ministry has retained the right to establish special fares for integrated or combined services between distinct concessions, or between concessionaire and other public transport services.**

**138. TERM — Concessions last 36 months, though they may last up to 84 months if the operators comply with various conditions. The contract is automatically extended after three years, if certain fleet conditions are met. These conditions are related to each of the bid evaluation criteria. For a further 2 year extension, the levels which have to be attained on each of the criteria are still higher. If performance is poor, the ministry reserves the right to terminate the contract.**

**139. SPECIFICATIONS — Possible origins and destinations (OD) are defined in the bidding documents and each bidder can propose a maximum of three routes, based on these OD points, with the same fleet, or part of the same fleet. The route between the OD pair chosen by the bidder should depend on demand projections and shouldn't be longer than 80 km for the round trip.**

**140. Either the concessionaire or the ministry can change (with justification) the route, as long as it is less than 12km or 20% of the length of the route. Acceptable justifications include: better service, closure of roads for construction, change of direction of roads, and a ban on vehicles.**

**141. Technical, mechanical, and emission standards for vehicles are established in the contract. The age of the vehicles is also regulated, as is vehicle cleanliness.**

**142. Penalties can be levied for any infringement of the regulations with respect to vehicles, service, workers, terminals, or administration.**

**143. SELECTION — There are certain restrictions on the percentage of each route which will be covered by other operators. Even if this percentage is not met at the start of the**

concession period, the ministry may grant further concessions which do overlap up to this percentage at any time during the contract life. Bidders must be Chilean nationals (owning a sufficiently large fleet) or a company. Companies must own at least 10% (20% from the start of the second year of the contract) of the fleets vehicles, or possess equivalent capital.

**144.** The proposals are evaluated on technical and economic bases. Each bid receives points following the guide to technical requirements, as presented in the bidding documents. The points considered are noted below, together with the maximum number of points achievable on each requirement.

	<i>Maximum Points</i>
<i>Fare to be charged</i>	10
<i>Average capacity of the fleet</i>	30
<i>Average age of the fleet</i>	30
<i>% of basic salary in the drivers remuneration</i>	10
<i>% of vehicles which are environmentally friendly</i>	15
<i>Technical representatives</i>	5

**145.** There is no linear progression in the point allocation and there are caps on certain aspects, e.g., the maximum average fleet age is 13 years. In the case of a draw between proposals, preference is given to the younger fleet. If there is still no decisive winner, then the average capacity of the fleet is considered, and finally the weight of the fleet (lightest being preferred.)

## COLOMBIA \*

146. In 1993, Bogota advertised for a tender for a mass transit system, stating that the concessionaire must propose a system to help combat the congestion in the city.

147. **FARES** — A flat fare must be charged, and must cover the feeder-distribution system, as well as principal lines. The driver must not collect fares. Fares are to be set for a minimum of six months and must be approved by the Capital District. The concessionaire is required to present financial evidence to support any request for fare changes.

148. **COSTS** — The concessionaire carried all financing risks of the program and is responsible for acquiring all the necessary permits and licenses. The basic structure of the financing package is detailed in the contract, including the debt/equity ratios. The concessionaire may request that it be exonerated from industry and commercial tax and from property taxes, directly related to the concession, for 10 years. The concessionaire must grant performance bonds to the Capital District for contract compliance, for quality of service, for payment of salaries, and for stability of the facilities.

149. **TERM** — The concession period is for 23 years.

150. **OWNERSHIP** — The vehicles are owned by the concessionaire, and have an estimated useful life of ten years, (though this may be extended to twelve years if they are in acceptable condition after eight) and the concessionaire must replace them at the end of this time with new vehicles of similar characteristics (doors, seats etc.) as the old ones but with technology which is state of the art at the time of replacement.

151. **SPECIFICATIONS** — Bus only roads are to be built on disused rail rights of way, and on median strips on highways. The system also relies on special bus priority measures in the heart of Bogota, with dedicated high quality terminals. Up to 90 buses per hour will be run in the key corridors. Minimum commercial operating speeds are specified in the contract and are guaranteed by the concessionaire. 24 hour service is required.

152. The concessionaire must operate under “true and loyal competition” where there are already authorized bus operators. The four major routes are defined in the contract but the feeder lines are to be decided in the detailed design stage, prior to capital district authorization. The feeder services are part of the contract, and it is stated that these should be provided with traditional vehicles, however there has been dispute between the local operators and their representatives. The representatives entered into the agreement with Stagecoach and Volvo, but have no power to enforce the required operating changes on the operators.

153. The concessionaire will propose their own performance indicators before starting operations and may propose adjustments which are related to actual operating conditions. These must be approved by the Capital District. The indicators must cover the following areas: operational speed, peak and non-peak hour frequencies, on time performance, bus, terminal, station and stop maintenance and cleanliness, maintenance of exclusive ways and lanes, and compliance with the environmental conditions.

154. The investment levels for each aspect of the work are defined in the contract. Landscaping is required around the concession stations, exclusive ways and terminals. The concessionaire may undertake commercial residential and industrial developments in areas adjacent to the program stations and terminals during the concession period. The Capital District will assist by altering any urban planning laws if necessary.

**155. At the end of the contract life the concessionaire is required to deliver a facility which is in good operational and functional condition. The concessionaire is required to train employees and develop educational programs and campaigns for the users and others involved with the program.**

**156. The capital district agreed in the contract to maintain the shared road infrastructure “properly”, to furnish the required institutional support to guarantee the exclusive use of the lanes constructed by the concessionaire, to coordinate the integrated mass transit program at all levels, and to use its prerogatives as a public agency for the purchase of premises required for the program on account of the concessionaire. Currently however this maintenance of road infrastructure does not seem to be forthcoming.**

**157. Penalties can be exacted for delays in the construction and technical stages or in equipment supply.**

**158. An arbitration panel is established if the parties cannot reach an agreement on any aspects of the contract. One year before the end of the concession the two parties will establish a committee to determine the handover process.**

**159. SELECTION — Nine bids were made and Stagecoach, Volvo, and a local group of minibus operators were the winning consortium. All of the others (bar one, which was an unrealistic local bus bid) proposed some form of rail solution. Negotiations between the selected consortium and the City Council began in October 1994. The contract, which leaves the possibility of a Metro in one corridor, was signed in December 1994, and the design work continues. Infrastructure construction should start in 1996. The total budget is \$400m for infrastructure and 400 bi-articulated buses.**

## **JAMAICA \***

**160.** The Kingston Transport Authority was established in 1987, under the transport authority act, as an autonomous agency with the primary responsibility of regulating public transport services. This body is empowered to regulate service standards and levels of service to assure that franchised operators abide by the terms of their contracts. It has been considering a transport rationalization program to remedy the problems of a bus system in which service was declining. The rationalization program is being introduced to “provide the necessary incentives for investment and continuing development of high quality, reliable, dependable, affordable, and comfortable public transport service for the people of Kingston. Through the improvement of public transport service in Kingston, the government of Jamaica intends to enhance mobility, conserve energy resources, mitigate traffic congestion, and improve air quality in the KMTR.”

**161.** The system has evolved from the ten area franchises granted in the mid 1980s, under five year contracts. The system for selecting the franchise holders was not transparent, and the franchise holders were allowed to sub-contract for service. These franchises specified fares, routes and frequencies, and were designed to be self financing. However, fares were not adjusted during the 1980s and high rates of inflation destroyed the operators’ financial equilibrium. In the same period government subsidies were terminated. The quality of service deteriorated as the operators of the services were unable to break even, hence worked longer hours, failed to pick up those paying reduced fares, overloaded buses and so on. Two of the ten franchises failed within the first year of the contract and were merged with others in the region. Sub-contracting meant that the franchise holder was protected from penalties for poor performance. When these franchises expired each route operator was granted a license to operate the particular route, again with fares and frequencies specified. These licenses were granted as a temporary measure in the expectation that a new franchise system would be established. Enforcement of service is still difficult, since the fares remain low.

**162.** The proposed franchising system has not yet been adopted, but is described below.

**163. FARES** — The first table of fares was established in the contract, to last until May 31, 1995, but it was accepted that these were not sufficient to cover operators costs and hence a new fare table was to be introduced, adjusting fares on the basis of a 15% rate of return to capital, with an adjustment for inflation during 1994, and recognizing all operating and administrative costs. Clearly since the contracts have not yet been awarded these dates will have to be changed. Franchise holders will be obliged to carry any passengers, even those paying reduced fares. The transport authority will ensure that revenues are distributed fairly between operators based on an average rate of carriage of these reduced fare passengers.

**164. COSTS** — Each firm submitting a franchise bid is required to submit a bid bond, covering an amount equal to the total estimated amount of the franchise fees. Those who are awarded a franchise must also present a performance bond (for JA\$20 million) within 100 days of the start of service. This bond will be forfeit if the franchise holder ceases to operate without the approval of the transport authority.

**165.** The successful companies will pay franchise fees per bus.

**166. TERM** — The franchises will be granted for ten years, though may be extended for a further ten years, on public interest grounds, as approved by the transport authority.

**167. SPECIFICATIONS —** The city has been divided into five exclusive zones for bus service. There is a designated common area where all operators will be allowed to stop (pick-up and put-down). Other operators will be allowed to set down only in the exclusive and common area those passengers who they have picked up outside those areas, and similarly to pick up only those wishing to travel outside the common and exclusive areas.

**168.** Detailed performance standards and service specifications are set down in the franchise agreements and failure to comply with these could lead to penalties being imposed. The franchise holder will be encouraged to develop adjustments to the route structure to improve service, given freedom to develop additional express and premium services, and permitted to operate new routes within the franchise zone or to reduce services (as approved by the transport authority.)

**169.** Service adjustments must be in the public interest, there must be adequate public notice, and public hearings must be held. If the transport authority were to find that any reduction in service is not in the public interest then the franchise holder will be required to abide by that decision.

**170.** Bidders will be required to provide detailed operating plans, which must comply with recommended practices and required standards. The bids will also have to include proposed operating schedules, complying with the service specifications. A potential franchise holder must own or control an adequate fleet of buses and illustrate its fleet replacement plans. The bidders are required to demonstrate sufficient depot capacity.

**171.** The applicant is required to provide a schedule for mobilizing its organization, painting its buses, and starting each service component. Similarly the bidders must develop financial plans and consolidated operating budgets for the first five years, as well as a capital improvement budget.

**172. SELECTION —** The concessioning process requires that the operators met certain pre-qualification standards which include an outline of the firm's general capabilities to manage, operate, and finance public transport services. Franchises will be awarded to those bidders who submit the bid "which conforms to the invitation and is determined to be the most advantageous to the ministry and in the public's best interest." The firm must have demonstrated experience in public transport service, financial responsibility, organizational integrity, and capability to supply and to maintain the required number of buses from the first day of operation.

**173.** The evaluations committee will consist of public transport consultants in the Ministry of Water and Transport, public officials from the Island Traffic authority, the transport authority, the ministry of water and transport, and a private individual (the chairman) appointed by the minister. Each member of the committee will evaluate each proposal, assigning point scores. The bidders will have an opportunity to make oral presentations and then the committee will assess the aggregate scores and discuss the implications. Members of the committee may then amend their point scores and the bidders with the highest aggregate scores will be recommended.

**174.** The scores are to be given in different categories: statements of qualification (15%), understanding of requirements and operating philosophy (5%), approach to providing public transport services (60%) and the financial plan (20%). Each category is further subdivided. Bonus points may be added for levels of service above the minimum requirements, for achieving the quality standards in advance of other applicants, having a younger vehicle fleet,

**being able to start service before other bidders, removing all the buses with fewer than 19 seats quickly, and installing two way radios in the vehicles. Points will however be deducted for poor presentation or failure to comply with the instructions on bid format.**

## **FREIGHT RAILWAYS**

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## COTE D'IVOIRE AND BURKINA FASO

175. Between 1960 and 1989, the Abidjan/Ouagadougou railway was managed and operated by a bi-national public enterprise, jointly owned by Côte d'Ivoire and Burkina (then Upper Volta), the *Régie des chemins de fer Abidjan/Niger* (RAN). From the mid 1970s operational and financial performance declined while the road network in the region improved and as the port of Lomé emerged as a competitor to Abidjan for Burkina traffic. Inadequate development policy in passenger traffic, over-investment, lax management and over-staffing led to serious financial difficulties in the 1980s. In 1989, the RAN was split — essentially for political reasons — into two separate State-owned companies, the *Société ivoirienne des chemins de fer* (SICF) and the *Société des chemins de fer du Burkina* (SCFB). The financial situation of SICF and SCFB deteriorated rapidly and in July 1992, the Governments of Côte d'Ivoire and Burkina decided to reunify and privatize railway operations under a concession/affermage arrangement.

176. The concession agreement is jointly awarded by the Governments of Côte d'Ivoire and Burkina to SITARAIL, a joint-stock company (*Société anonyme*) incorporated in Côte d'Ivoire. The equity of SITARAIL will eventually be held by a private strategic shareholder (51%) led by SAGA and SDV, the two main international freightforwarders active in the region, with Maersk (a shipping line), an Ivorian investment group, and SOFRERAIL and TRANSURBCONSULT (railway engineering consultants); by the Governments of Côte d'Ivoire and Burkina (15% each) or by public entities thereof; by SITARAIL staff (3%); and by small local private investors (16%) who will buy shares offered through the Abidjan stock exchange.

177. Two State-owned “patrimony corporations”, *Société ivoirienne de patrimoine ferroviaire* (SIPF) and *Société de gestion du patrimoine ferroviaire du Burkina* (SOPAFER-B) were created to hold the ownership of railway infrastructure (on behalf of the States) and railway equipment (as “full” owners). SICF and SCFB were liquidated.

178. TARIFFS — For commercial freight and passenger services, SITARAIL enjoys complete freedom to set service configuration and tariffs, in reference to their own profitability criteria; SITARAIL is simply required to keep the Governments informed of the criteria used for the selection of services operated as commercial services. Tariffs freely set and revised by SITARAIL are applicable one month after their communication, for information, to the Governments, and fifteen days after they are publicized. Special contract rates may be negotiated with shippers; these rates are not made public.

179. COSTS — Infrastructure investment programs are prepared by SITARAIL and submitted to the technical and financial evaluation of the patrimony corporations. Investment debt financing is mobilized by the Government(s), but SITARAIL pays to the Government(s) a “supplementary” fee equal to the service of the corresponding debt. Contracts are prepared, signed and monitored by the patrimony corporations, except for the initial rehabilitation program, for which contracts are prepared, signed and monitored by SITARAIL. This was a condition set by donors to finance the program. Under exceptional circumstances, SITARAIL can also directly implement and fund infrastructure investment.

180. SITARAIL pays the patrimony corporations a concession fee in three parts:

- ♦ a “usage fee”: The “usage fee” is negotiated between SITARAIL and the Governments every three years. The first agreement is: no fee in the first year, 2% of revenues in the second year (paid in two equal parts in the second and third years) and 4% of revenues for the third year.

- ◆ the debt service on credits and loans subscribed by the States or the patrimony corporations for investment financing; and
- ◆ a motive power and equipment lease fee, which is kept in an “Investment and Renewal Fund”.

181. SITARAIL is, by-and-large, subject to the tax regime applicable to private enterprises. It is however exempt (for those petroleum products used in locomotives) from the fraction of the petroleum tax levied by the Governments in compensation for road infrastructure charges.

182. TERM — The concession is a “rolling concession”, with an initial duration of 15 years. Every five years, the concession can be extended by mutual agreement for another period of five years. The concessionaire agrees to hand everything back in good working order at the end of the contract. The concessioning authority has the right to buy back the contract with one months notice, though not in the first seven years.

183. OWNERSHIP — While ownership of rail infrastructure is kept by the Governments (through the patrimony corporations), SITARAIL is technically and financially responsible for operation (including train despatch) and maintenance of infrastructure (track, buildings, signaling and telecommunication equipment). At the beginning of the concession, motive power and rolling stock was selected by SITARAIL from the existing SICF and SCFB fleets. This equipment is leased by SITARAIL from the two patrimony corporations. It is being rehabilitated by SITARAIL, under debt financing mobilized by the patrimony corporations. The debt service is being paid by SITARAIL. New equipment can either be bought and financed or leased directly by SITARAIL or, at SITARAIL’s request, bought by — and leased by SITARAIL from — the patrimony corporations. SITARAIL bought four locomotives in 1996. The Governments enjoy a preemptive right on the sale of SITARAIL equipment. Maintenance standards and methods are freely determined by SITARAIL, provided the standards guarantee rail safety at the level generally accepted in the industry for the type of traffic carried.

184. SPECIFICATIONS — SITARAIL is technically and financially responsible for (a) the operation of freight and passenger railway services; (b) the maintenance of permanent way and other infrastructure and, in part, for renewal and remodeling of infrastructure; and (c) the management of railway real estate.

185. While rail transport is by-and-large qualified in the concession agreement as a “public service activity”, the agreement makes a clear distinction between commercial services and services operated under a specific Public Service Obligation (PSO) scheme. Services operated under a specific PSO scheme are run at Government (national or local) request under special contracts to be signed between the authority requesting the service and SITARAIL. Contracts specify the characteristics of the service and the modalities of the financial compensation to be paid to SITARAIL in order to cover costs attributable to the service and participate to common costs. Presently, no service is operated under a PSO scheme.<sup>1</sup>

186. The concession agreement reserves the right for the Governments(s) to impose access to rail infrastructure by “third party” operators after a seven-year exclusivity period granted to SITARAIL. Third-party operators would then pay an infrastructure access fee to be negotiated between SITARAIL and the operator (or to be decided through arbitration if the parties cannot agree on the fee).

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<sup>1</sup> SITARAIL has canceled all non-profitable local passenger services when it took over the operation of the railway.

**187. SITARAIL employees are covered by the common labor law applicable to private sector enterprises in Côte d'Ivoire and Burkina and affiliated to the pension system applicable to private sector employees. The total number of SICF and SCFB staff to be rehired by SITARAIL (1815 out of a total work force of 3470) was negotiated during the preparation of the concession agreement; individual staff were freely selected by SITARAIL. The Governments have provided severance payments to redundant staff.**

**188. The concession is controlled and monitored by the patrimony corporations. The concession agreement indicates that this control should not harm SITARAIL management autonomy. SITARAIL must report on its activity using the documents identified in the concession agreement (e.g., annual accounts, annual report on services operated under a PSO scheme, annual report on rail safety, environmental protection, and application of the labor law). A monitoring committee comprised of representatives from the two Governments, the patrimony corporations and SITARAIL examines all questions related to the execution of the concession agreement.**

**189. Disputes related to the concession agreement between the Governments and SITARAIL are subject to "amicable" arbitration. If the arbitration is not successful, disputes are settled by the Ivorian courts.**

**190. SELECTION — Following a bidding process, the concession was awarded in July 1993 to the SITARAIL consortium. A long negotiation was necessary to agree on the concession agreement, which was eventually signed in December 1994 and became effective in August 1995.**

## CHILE \*

191. In 1993, legislation was passed allowing privatisation of rail activities, and the public national rail company, Empresa de Ferrocarriles del Estado (EFE), was established as an autonomous public company. It was charged to develop, maintain and exploit passenger and freight transport on the railways of Chile or complementary transport services on whatever mode. EFE was also given power to contract with other bodies for any of its activities.

192. EFE and the Chilean treasury established an autonomous company, FEPASA, with the same objectives as EFE, but required to act in a commercial manner. In September 1994 a contract was drawn up between EFE and FEPASA determining their respective roles and obligations. 51% of the stock in FEPASA has been sold to Transportes del Pacifico (TdP), a consortium of Anacostia and Pacific Company, a New York based rail operations consortium, Cruz Blanca, a large Chilean financial services company, and Fondo de Inversiones Estrella Americana S.A., a Chilean venture capital firm. TdP took operational control between January and July 1995.

193. EFE has since been divided into five sections: the northern Arica-La Paz rail line, the suburban network around Santiago, the southern medium and long distance network between Santiago and Puerto Montt, Valparaiso's regional metro, and a real estate firm. Privatisation and concessioning of these services is planned for the 1995/6.

194. **TARIFFS** — FEPASA must establish and publish a tariff schedule for the transport services it offers and accept any requests for service at these prices. FEPASA may also agree specific rates (with volume or frequency discounts or as a result of market conditions etc.) with its clients.

195. **COSTS** — FEPASA is obliged to pay a annual canon to EFE for use of the lines, and this is established in the contract, together with an adjustment formula, and conditions for payment. All users of the infrastructure contribute to its maintenance and to the administration through the payment of tolls. The tolls are paid in two parts — a fixed charge and variable toll. The fixed charge is applied to freight carriers and must be paid by each rail carrier as a function of the length of track used by their trains. The variable toll is paid by all users of the line and is determined monthly as a function of the ton kilometers operated in that month. This variable fee is paid by all users to the group maintaining the track. Hence EFE pay the variable toll to FEPASA for Class 2 lines, and vice-versa for Class 1 lines.

196. FEPASA must pay the fixed and variable costs for use of the line, conservation of the infrastructure, traffic management, telecommunication equipment use etc. as established in the contract.

197. **TERM** — The contract lasts twenty years and may be renewed, at the request of FEPASA, for a further ten years.

198. **OWNERSHIP** — The rail network remains the property of EFE who will manage the relationship between passenger and freight services. There are no track access restrictions for other parties, though EFE must contract with them in such a way that FEPASA is not discriminated against and must inform FEPASA of any contracts before they take effect.

199. **SPECIFICATIONS** — EFE retains the right to operate passenger service, whether itself or through a contract or concession. EFE is obliged to maintain the Class 1 rail lines and infrastructure, such that FEPASA can operate to the level of service specified in the contract. FEPASA is required to maintain the Class 2 lines. If it proposes to modify any

**traffic regulations EFE must consult with FEPASA. EFE must apply all regulations, standards and procedures equally to any operator.**

**200. FEPASA was given the right to determine their own work force and reduced it from 2000 at takeover to 650 by early 1995. Those not retained were either re-absorbed by EFE, or had the option to retire. Retirement payments were made by EFE.**

**201. FEPASA may not operate commercial passenger services however.**

**202. EFE must prepare a timetable (with the slots assigned for each passenger and freight services) at least twice a year. The timetable will be designed using the operators requests for slots. Passenger trains will have priority, followed by FEPASA trains on certain lines (as specified in the contract) and then those of other operators. EFE guarantees FEPASA a minimum, in all sectors and on branches of the network, of two regular trains, during the day in both directions, and two regular trains during the night, in both directions. If there are conflicts between the requests of different users of the line, EFE will consult with the interested parties to reconcile their requests, where possible.**

**203. A bilateral administrative commission has also been set up. It consists of the administrators of the contract and the managing directors of EFE and FEPASA. The commission is charged with the analysis and extra judicial reconciliation any disputes. If no agreements can be reached the parties agree to go to arbitration under the Arbitration rules of Santiago.**

## **ARGENTINA**

- 204.** The freight railway network of Argentina was divided into six separate networks for concessioning. The first (Bahia Blanca-Rosario) to be concessioned has been operated by the concessionaires since November 1991. The concessioning continued until the end of 1993.
- 205.** **TARIFF** — There is a cost plus rate regulation scheme.
- 206.** **COSTS** — The concessionaire makes an annual payment, which was one of the bidding criteria. The annual sum changes over the life of the concession as specified in the bid.
- 207.** **TERM** — The concessions are for 30 years with optional 10 year extensions.
- 208.** **SPECIFICATIONS** — The concessionaires were required to undertake freight-train marketing and operations as well as rolling stock and track maintenance and rehabilitation. Concessionaires were required to hire only existing employees at the start of the concessions, though they could hire the number of employees required given the working practices and operational needs. These conditions were negotiated directly between the concessionaire and the unions. Personnel not hired by the concessionaires received severance payments from the government.
- 209.** **SELECTION** — Bids were received (including for the passenger concessions) from 8 Argentinean companies and 12 from other countries in Europe, America, Asia, and Australia. This followed extensive international publicity for the concessioning process.
- 210.** The bids were received in two envelopes. The first contained technical and financial qualification documents. The bidders had received information in advance about the minimum requirements set by the government and about the selection mechanism. However where bidders had failed to satisfy any of the minimum requirements (in part or whole) they were given an opportunity to make the necessary changes to their offers. The second envelope included information on various selection criteria (experience, staff, business and investment plans (including the net present value of investment to be made during the first fifteen years), the net present value of fees and rolling stock rent to be paid, the level of “toll” which would be charged for the operation of intercity passenger trains over the tracks, the number of former staff to be retained, and the share of Argentinean interest in the consortium.) Bidders were graded on a scale of 1 to 10 for each of the seven criteria with the bid with the highest grade, accounting for the weights, being accepted. The weights were 30 points for the basic investment program, with a possible 5 further points for additional investment, 25 points for the organizational plan, 8 for maintenance, 12 for the cannon to be paid, 5 for the payment required by passenger trains and 15 for the number of personnel to be retained.

## MEXICO

211. The Mexican Constitution was amended in February 1995, to reclassify railways as a priority activity for the nation, and to open opportunities for private sector investment. In May 1995 the law for regulation of railway services was passed, which provided the framework for concessioning. Before concessioning could begin, the railway was restructured into three major networks — the Pacific North (with 6,200km of track), the Northeast (with 3960km of track), and the Southeast (with 2200km of track). There are also around 20 shortlines and a central Mexico City terminal, which will provide switching services for the other concessions. The concessioning process is due to begin in April 1996, with the first of the short line concessions. Twelve companies have registered their interest in the concessioning.

212. There has been some concern about the appropriate mechanism for dealing with existing contracts between the government and the private sector for specific activities such as maintenance and the operation of intermodal terminals.

213. **TARIFFS** — The concessionaires will be free to set tariffs, as long as effective competition is deemed to exist. Where there is no such competition, the Ministry of Communications and Transport may request permission to regulate tariffs from the Federal Competition Commission.

214. **TERM** — The concessions may last up to 50 years, with provision for 50 year extensions.

215. **OWNERSHIP** — The government will retain ownership of the railway.

216. Foreign involvement in the bidding consortium is restricted to 49% at most, unless the approval of the National Commission for Foreign Investment is given. The concessions may be granted to states, municipalities or state owned enterprises as well as to the private sector. No concessionaire will be awarded more than one of the three major railway networks.

217. **SPECIFICATIONS** — All dispatching and traffic control must originate within Mexico. The concessionaires will be required to allow track access for passenger trains, to the level, and with the remuneration as specified in the concession contract. The concessionaires will be required to maintain and upgrade the system. Investments can be made as they see fit.

218. **SELECTION** — For the short line concessions, the bid appraisal will take into account criteria relating to quality of service, the proposed timetable and plan for investment, the projected volume of operation, and the formulas for determining prices.

219. The award of the concessions for the three major networks, will depend on two envelopes. The first will contain the technical proposals of the bidder and the second the economic. The appraisal for the first, technical envelope will determine whether or not the second envelope is opened. The selected bid will be that which maximizes economic value to the state.

## **BRAZIL**

220. The concessioning of Rede Ferroviaria Federal S.A. (RFFSA) began in March 1996, when the first of the six separate concessions was awarded. The next section will be brought to the market in April 1996.
221. Only approximately 7% of freight traffic in Brazil goes by rail. Significant investment in track and rolling stock modernization is required.
222. **TARIFFS** — The concessionaire is free to set tariffs, which may be distance related and may include payments for extra services such as loading and unloading. The minimum charge is the variable cost of operation.
223. **TERM** — The concessions will last thirty years. If the concessionaire expresses interest in extension 60 months before the end of the first contract, it may be extended at the discretion of RFFSA, for another thirty years.
224. **OWNERSHIP** — The government will retain ownership of the railway and existing equipment. The equipment will be leased to the concessionaires.
225. No shareholder may have more than 20% of the voting capital in the bidding consortium.
226. **SPECIFICATIONS** — The concessionaires are required to take on a certain number of employees. In the case of the Centre - West network concessioned in March 1996, this was 1800 employees. If the concessionaire enters into activities which are not directly related to the provision of freight rail services, including telecommunications or technical consulting for example, a portion of the revenues (between three and ten percent) will be paid to the state.
227. The concessionaire is required to meet certain annual targets for lower accident rates in the first five years. Targets are also set for annual quantity of service which must be provided in the first five years. These targets will be revised every five years.
228. The concessionaire is required to allow two passenger trains to operate over its tracks each day. There will be no remuneration for the passage of these trains. There are specified penalties for infractions of the contract.
229. **SELECTION** — The concessions are awarded in an open auction. The bidding documents specify a stream of annual payments, as well as a minimum up-front payment. Bidding is on the level of the up-front payment, with the highest bid accepted.
230. Bidders must pre-qualify by meeting the restrictions on concentration of share ownership and by demonstrating financial stability as well as the capacity to make the first payment.

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## UK \*

### British Rail

231. **FARES** — Comprehensive information and through ticketing is required. Season ticket and standard “leisure fares” are regulated, rising at or below inflation over the first seven years of the contracts.

232. **TERM** — Though the typical franchise lasts seven years, some are longer and subsidies have been included in the first three contracts to be signed (for up to fifteen years.) The contracts range from two million train miles per annum to over twenty million.

233. **OWNERSHIP** — Track ownership and management have been separated from train operations. The track is currently owned by a public company, Railtrack, for which there are privatization plans. Operations are competitively bid for by private operators. The rolling stock will be leased (for five to seven years) from the Rolling Stock Leasing Companies (ROSCOs) which are currently publicly owned. The government has also plans to privatize the ROSCOs.

234. **SPECIFICATIONS** — The Franchise Director specifies minimum requirements for levels of service, typically 70-90% of existing services in terms of frequency. Other aspects of service quality are also controlled (e.g., journey time and times of first and last trains) and performance indicators are laid down for speed, reliability, punctuality, and overcrowding.

### Croydon Tramlink

235. The Croydon Tramlink (a modern tram system in the southern suburbs of London) has been planned and designed by London Transport, who also guided the appropriate legislation through parliament in 1994. They have been assisted in this by a consulting firm, who will be able to recoup their costs if they are not party to the selected consortium.

236. **FARES** — London Transport will set the fares and the concessionaire must accept London Transport tickets, as negotiated in a separate “Off-Tram Revenue Agreement.”

237. **COSTS** — The cost allocation will depend on the bids received, but it is likely that some government funding will be required.

238. **TERM** — The concession contract will last for 99 years.

239. **OWNERSHIP** — London Transport will acquire the required land using its statutory powers, and allow the concessionaire to have access to the land for construction and operation of the Tramlink system. The concessionaire must obtain the necessary licenses and permits.

240. **SPECIFICATIONS** — The concessionaire will have the right and be obliged to develop, finance, construct, operate, and maintain the Tramlink system according to the concession agreement.

241. The system must meet certain performance specifications which will be tested before the opening date.

242. Shares in the concessionaire’s company may only be transferred without London Transport’s agreement two years after the line has opened. London Transport may refuse any share transfer before this only if it is likely to affect the financial robustness of the system adversely, breaches the project agreements, or imposes a greater potential liability on London Transport.

243. **SELECTION** — Eight bidders sought to pre-qualify and three of these were then shortlisted. Each of the shortlisted candidates had at this stage secured financial backing but

had not developed full financing plans (as would be expected, not least because the extent of state support for the system had not been determined.)

244. Formal tenders were due in January 1996 and the winning bidder is expected to be announced in March, with construction to start in the summer. Among the decision criteria will be the terms of compensation for London Transport if the concessionaire fails to open the system on the specified opening date.

## FRANCE

### Toulouse VAL

**245.** The franchise for the Toulouse VAL was signed on 21st July 1988, following preliminary and detailed design work in 1986 and 1987. The aim was for the system to open for service in 1993.

**246. FARES** — Fares will be set by the transport authority.

**247. COSTS** — A private limited company was formed, comprised of a number of different organizations, with a capital input of 30 million francs. The existing public transport operator, SEMVAT, is a semi-public company and has a 25% stake in the franchise company.

**248. The franchise profit will depend on :**

- ◆ total investment cost (excluding site acquisition and unforeseen or exceptional costs)
- ◆ date of commissioning of the first line (there are penalties for late commissioning)
- ◆ the level of traffic on the entire public transport system (at the time of commissioning and then in five year intervals with objectives related to the increase in the number of passengers carried)
- ◆ operating costs

**249.** The franchise derives income from fare revenues as well as a lump sum contribution paid by the public transport authority.

**250. TERM** — The franchise is granted to the company for 30 years from the beginning of the operation of the first line.

**251. SPECIFICATIONS** — The company is responsible for financing of the operation, for construction work, for implementation of the VAL system and the operation of both the VAL and buses in Toulouse.

**252.** During the operating period the public transport authority will establish the level and quality of service. The authority is also entitled to buy back the franchise at any stage.

## **ARGENTINA \***

### **Buenos Aires — Commuter Rail and Metro**

**253.** Concessions were granted in November 1993 for the operation and rehabilitation of the Buenos Aires metro and commuter rail systems. These were put out for competitive tender in 1991 and there was expression of interest from five consortia. Three packages were awarded.

**254. FARES/TARIFFS** — The concessionaire will be remunerated, on a per kilometer basis for other operators use of their lines. The rates for this are fixed in the contract, though may be varied with the real cost to the concessionaire.

**255.** The basic fares are set by the authority, though they accept that the concessionaire has a right to change fares when the quality of service changes. Quality indicators are established and must be met for fare changes to be approved. The underground tariff is a flat system, whilst the commuter rail fares are based on distance traveled. Concessionaires may agreed integrated tariffs between themselves.

**256. COSTS** — The concessionaires will be granted subsidies in some years of the contract, and in others will pay a cannon for the right to operate the service. The precise levels in each year are a result of the bidding process. The level of equity which the company is required to hold is determined in the contract. In order to ensure that the investment programs are delivered as promised, the concessionaires are required to provided financial guarantees.

**257.** The concessionaire may make investments over and above those agreed in the concession contract, if it judges they improve productivity, reduce cost, or increase income. These investments will however be left in place at the end of the concession.

**258. TERM** — The concessions last 10 years (20 years for the metro), though extensions to the contract are possible. The concessionaire's company must exist for at least four years after the termination of the contract.

**259. OWNERSHIP** — The rolling stock was transferred to the concessionaires, similarly all spare parts and maintenance equipment, depots etc. An inventory of this equipment must be taken each year during the contract's life. At the end of the concession, the concessionaire must return to the authority equal quality and quantity of each good as well as sufficient spares for the concessionaire's successor to operate a normal service for at least six months. If there is evidence of faulty or deferred maintenance, the authority may charge the concessionaire with the cost of necessary repairs.

**260. SPECIFICATIONS** — The quantity of service, the minimum frequency and the travel time are all specified in the contract. However the concessionaire must provide their own timetable and may change the operating procedures, where it can justify this to the authority. Other contract specifications include the cleanliness of stations, infrastructure and rolling stock and the level of information for the passengers and the general public.

**261.** The concessionaires may undertake commercial activities in the station (or sell advertising space anywhere within the concession area) as long as they are stimulated by travel on the services and offer convenient services to passengers. Anything which harms the station's ambiance (or which restricts the vision of the operators) will not be allowed, nor will any activities which impede safe movement around the station.

**262. Penalties can be charged for any breaches of contract. These will start with warning and may graduate from 5% of the total amount guaranteed in the contract to 30%. If within five years of the fine being applied it has risen to 30% the authority may terminate the contract. The penalty regime is specified in the contract.**

**263. The concessionaires are obliged to maintain the infrastructure and goods during the last 2 years of the concession to the standards achieved after five years of the concession. The authority (or next operator) will take on personnel who were employed 18 months before the end of the concession, but not those who were taken into service within the last 18 months.**

**264. The contract also states that the rail passenger services included in the concession constitute a public service, and that the concessionaire is required to recognize the character of the service and to resume responsibilities which derive from that. Service must be offered throughout the concession.**

**265. SELECTION — The concessions are awarded on the basis that the services must be on time, reliable and trustworthy and that service will be of greater quality and higher frequency than previously, with a fare level in accordance with the level of income of the population. At the same time the concessionaires are required to make new investments in infrastructure, but keep the jobs of an appropriate number of employees secure.**

**266. The bids were awarded following analysis of the investment program proposed by the concessionaire, the level of employment which they would guarantee for existing employees, and the amount of subsidy they would require (or payment which they would make to the government) in each year of the concession agreement. The ultimate criterion was the highest net present value of the first ten years of annual subsidy net of the annual flow of fees to the government. This analysis was however contingent on the consortium having the requisite technical and operational expertise and financial backing.**

## **INDIA \***

### **Bangalore**

**267. In Bangalore a contract for a BOT elevated light rail system has been drawn up. The request for proposals, issued in 1995, suggests a contract period of 30 years, with a possible extension of another twenty years. The government will be an equity partner and carry some of the debt.**

## SWEDEN

**268.** In 1988 the rail network was restructured and divided into two elements — the state owned rail track authority (Banverket) and the state owned operator (Järnvägar). Banverket is required to maximize social welfare, and therefore investment decisions are taken following cost-benefit analyses. Järnvägar is required to maximize operating profit, and has monopoly rights on freight and trunk passenger lines. From 1995 further deregulation allowed more than one operator to run on state tracks.

**269.** The Country Transport Administrations were also given power to determine service on local lines. Service was discontinued on three of the twenty four lines. A private company (BK) outbid SJ on three of the remaining twenty one lines and are operating rolling stock owned by the country transport administrations on these lines.

**270.** FARES / TARIFFS — Tariffs are set in a two part scheme at short run social marginal cost. The social component covers emission charges and some accident risk costs. There is also a fixed charge per unit of rolling stock for additional revenue. Track capacity will be allocated by Banverket on willingness to pay, within priority groups:

- ◆ High speed passenger trains and priority freight trains
- ◆ Freight trains on tight timetables, and inter-regional low frequency trains in off peak hours.
- ◆ Other passenger and freight trains
- ◆ Track maintenance

**271.** Fares are set by regulatory authorities.

## **AUSTRALIA**

**272. Sydney has let a Build—Own—Operate—Transfer contract for a 3.6km light rail route.**

**273. COSTS — The cost of the system will be AUS\$65million. The Commonwealth Building Better Cities Program has made a AUS\$21million grant.**

**274. TERM —PLRC (Pymont Light Rail Consortium) were awarded the twenty five year concession. PLRC comprises AIDC Ltd., an AAA rated financial institution majority owned by the Commonwealth government, ABB, TNT (the operators) and GHD—Transmark (the bid management team.)**

**275. SPECIFICATIONS — The tram will run both on and off the street, using right of way previously serving the Darling Harbour Goods Yards. The vehicles are an adaptation of ABB's Vario-Tram. Construction started in the first half of 1995 and the system will be running during 1996.**

## NEW ZEALAND

276. In Auckland, the passenger rail contract is for 10 years and specified to allow upgrades in rolling stock. There is no provision for potential competitors to access the track, which is owned by the private sector operating company.

277. In Wellington, rail services were contracted on a yearly basis from 1991 to 1993. The contract was awarded on a sole supplier basis with competitive pricing negotiations. Among the considerations in pricing were the cost of providing equivalent bus services, the need for a reasonable return on investment and new investments, the scope for further efficiency gains, and the increasing the attractiveness of the rail system, therefore opening up the possibility that car travel would be reduced.

## THAILAND \*

### Bangkok

**278.** A concession contract for the Bangkok Metropolitan Area Transit System was signed in April 1992, following a request for proposals in April 1991. The Bangkok Metropolitan Authority (BMA) contracted with Bangkok Transit System Corporation Ltd., consortium of Tanayong and AEG Westinghouse Transport System GmbH. The concessionaire is to construct and operate the system in accordance with the contract, whilst the BMA has the power to control and supervise the project. There are two lines in the system, one 16.9km long (the Sukhumvit) and the other 6.8km long (the Silom.)

**279. FARES** — The effective fare is that which the concessionaire will charge for a single entry to the system (transfers are to be free.) The authorized fare is set in the contract and will be revised annually based on the consumer prices index and the local interest rate. The effective fare may be adjusted at most every eighteen months provided that it never rises higher than the authorized fare and that the concessionaire gives the BMA and the public 20 days notice.

**280.** There are some special situations in which either party may change the authorized fare outside the annual revision. These include high rates of inflation in any month, 10% deviations in the exchange rate or interest rates, and substantial changes in electricity costs. The advisory committee will resolve fare disputes between the parties. If government policy requires remains unaltered, the government must provide damages to the concessionaire for the period in which it was entitled (by the advisory committee) to adjust the fare but was prevented from so doing.

**281. COSTS** — The company is required to provide a performance bond, the value of which may be reduced as certain portions of the work are completed. The final portion will be returned to the concessionaire once the commercial operation of the system has begun.

**282. TERM** — The contract is for 30 years, from the start of commercial operations. A schedule for the construction works is established in the contract. The system will be complete within 3 years and 6 months of the effective date of the contract. At the end of the contract, the system must be transferred to the BMA with sufficient spare parts for operation of the system for a further two years after the transfer.

**283.** If the concessionaire wants to extend the contract it will notify the BMA not more than five years and not less than three years before the end of the contract. If the BMA wishes to extend the lines or expand the system during the contract, the concessionaire will have the first right of refusal to negotiate, providing that it accepts the best terms and conditions offered by a third party, and that the minister approves of the extensions.

**284. OWNERSHIP** — The required land (free of encumbrances) is to be provided by the BMA without charge (at specified dates.) The BMA has been having difficulties in transferring the land to the concessionaire on the dates specified in the contract, which created financing and other contract completion problems. If the company constructs anything on land other than that provided by the BMA it will not be required to transfer that land or the structures to the BMA at the end of the contract period. However BMA permission will be needed for the company to install any control mechanisms outside the BMA provided land.

**285. SPECIFICATIONS —** The Concessionaire is responsible for the design of the project. It must meet the standards in the contract and have the approval of the BMA. The contract contains agreements on the testing procedures to be adopted. If the BMA issues ordinances and regulations relating to the safety and environment of the system e.g., more space on trains for disabled seating, it must first consult with the concessionaire.

**286.** The operating standards for the first year of service are fixed in the contract and during the second year the concessionaire will experiment with services after midnight. Adjustments can be made to these service levels to meet the needs of riders, the BMA or the concessionaire, if there is agreement between the parties.

**287.** The advisory committee is made up of seven members, two from the BMA, two from the concessionaire, and these four then mutually agree on three more. Its functions include monitoring and commenting on the operation of the system, and determining adjustments of the authorized fare. The contract also established a coordinating committee which is made up of a representative from the ministry of finance, a representative from another Governmental agency, a representative from any other agency as the minister of the interior deems appropriate, and a representative of the company. This committee supervises and controls the construction and reports periodically (at least every 6 months) with remedial solutions where necessary, to the minister.

**288.** The BMA takes over all employment agreements when the system is transferred, though the company will consult with the BMA before hiring new employees or adjusting benefits during the last three years of the contract. The concessionaire shall arrange for training of the BMA officers. In the last five years the BMA may place its technical officers in vacant positions of the company, where they have the required expertise.

**289. SELECTION —** Bidders were required to propose technology as well as operating structures.

## **GUATEMALA \***

### **Guatemala City**

**290.** In July 1995 the City of Guatemala conferred a city grant for the construction and operation of an elevated railway on Metro Guatemala S.A. The consortium will be supplied with trains and power systems, as well as the rails and physical infrastructure by AEG-CKD.

**291.** The City Grant allows the company to provide a mass transport service, on an elevated railway.

**292. COSTS** — The company is required to pay salaries and benefits to all employees, preferably Guatemalan, as established in the country's labour code.

**293. TERM** — The grant lasts for 25 years, though it may be renewed for a second period of 25 years, if the company has met all the grant conditions. The company must undertake proper maintenance to provide continuous service and transfer any construction or facilities to the city at the end of the concession period. There is no guarantee that the company will be compensated for this transfer. The company must pay 4% of the fare revenues to City Hall.

**294. SPECIFICATIONS** — Some service descriptions were given with the grant and the municipality has reserved some rights of way for the system.

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## **ARGENTINA**

**295.** The privatization of Buenos Aires port system (and several other smaller ports around the country) was undertaken through a consortium bidding procedure. Each consortium has 3 industrial entities involved (i.e., port and maritime operators), 1 ocean carrier, 1 union, 1 federal government enterprise, 1 provincial/local government and had 2 shipping interests (e.g. grain producers). The government hoped thereby to ensure that performance interests were considered by the concessionaire.

**296.** Terminales Portuarias Argentinas (terminal 3 in Buenos Aires, which primarily handles general, both containers and break-bulk cargo) is being developed and operated under a concession with some IFC investment. There are 15 hectares of land, a total berth length of 1.340m and there is an annual capacity of around 1.8m tons of cargo.

**297. TARIFFS** — The concession establishes maximum tariffs for certain services (generally those which are paid for by the cargo owners) whilst leaving others (those which are paid for by the shipping line) unregulated. TPA is required to implement an infrastructure rehabilitation program, for which it will be partially reimbursed by the government, and hire or pay severance to 210 employees, who were working in the port prior to privatization. During the first year of the concession the company had hired 90 of these former employees and paid severance to another 90.

**298. COSTS** — The total project costs are estimated at around \$50.3m. The consortium has shareholders from Argentina, the US and Germany. Over 50% is owned by ATA a major Argentinean trucking and transport company and Lanco a US crane manufacturer and intermodal facility operator will have over 16% of the company. The IFC will have a \$2 million equity investment representing 16.67% of the total equity investment. The employees will hold a 4% equity stake.

**299.** TPA will pay an annual fixed rental fee of \$1.95 million, as well as a variable rental payment based on cargo handled. The first year's fixed rental payment had to be prepaid on taking control of the terminal.

**300. TERM** — The concession is for 25 years. (Concessions for the other terminals range from 18 to 25 years.)

**301. SPECIFICATIONS** — Each concessionaire has exclusivity over all loading and unloading services in their terminal during the concession. The concessionaire will repair and improve existing infrastructure and cargo storage facilities and purchase cargo handling equipment. Terminal 3 will also maintain a passenger terminal for approximately the first two years of the contract until the government establishes a permanent passenger terminal elsewhere in the port. The concessionaire is required to provide services in connection with the reception, handling, loading and unloading, and storage of cargoes in the terminal.

**302. SELECTION** — The public tender was launched in 1993 and bid were entertained from pre-qualified consortia who bid on the basis of how much cargo handling revenue they would guarantee to collect for the government at a fixed price per ton. Technical qualifications and the proposed business plans were assessed first before selection on the basis of the fee to government. No bidder was awarded more than one terminal, and each had to express their preferences across terminals. The terminal 3 contract was awarded in June 1994 to TPA.

## PANAMA

303. The Manzanillo international terminal was concessioned in 1993, with the aim of developing a container and roll on/ roll off transshipment port in Manzanillo Bay near the Atlantic Coast, at the entrance to the Panama canal.

304. The Government of Panama has also launched a request for invitations of interest to construct a port facility on Telfers Island, near Manzanillo. The project is part of the Colon Free Trade Zone and therefore will come under the favorable labour laws of that area.

305. **TARIFFS** — The company is free to set the tariffs which it charges users in line with market conditions and is responsible for the payment of fees to the government based on the cargo handled and vessels services.

306. **COSTS** — The project is jointly owned (50-50) by a Panamanian vehicle importer and a subsidiary (Panamanian) of Stevedoring services of America. They have a \$30 million equity stake in total financing of \$102.7 million. The IFC been involved in the financing of the project.

307. **TERM** — A 20 year concession contract was signed in December 1993.

308. **SPECIFICATIONS** — The project will cost \$102.7 million, and the terminal will have a capacity of 400,000 TEU. A 600m container berth, a 225m of roll-on/ roll-off berth, a container stacking area, a vehicle storage area, administrative offices, a maintenance and repair facility, and a vehicle gate will all be developed. In addition two electric generators will be purchased, an access channel will be dredged, and four new container cranes and other handling equipment will be purchased.

309. The project company has the exclusive right to build, operate, and administer the facility under the concession. It must also generate at least 500 jobs.

## **PAKISTAN**

**310.** The Pakistan government adopted a privatization strategy in late 1991, and the Karachi Container Terminal was the first to be offered under a BOT concession, with the contract being let in 1993.

**311. TARIFFS—** Containers at the port have been handled by private stevedores, who set their own handling charges. Under the IA the project company's tariffs will be determined in consultation with the port but not subject to their approval.

**312. COSTS —** The total project cost was estimated at \$ 87 million, of which \$55 million are in phase 1, with which IFC is assisting. Equity will also come from the IFC, who have negotiated an income participation clause.

**313. TERM —** The concession is for 20 years.

**314. SPECIFICATIONS —** The terminal is a dedicated common user container terminal with a design capacity of 300,000 twenty feet equivalent units per year. Phase 1 will include upgrading the existing berths, procuring and putting into operation two quay gantry cranes and a computerized traffic data processing system and related equipment to handle 200,000 TEUs a year. Phase II is to procure and put into operate additional gantry cranes and other facilities to provide the total design capacity of 300,000 TEUs per year.

**315.** The project company is responsible for construction, operation and financing of the project, all of which must be completed to a given time schedule. The port takes responsibility for guarantees of passage, movement, berthing etc., for maintenance dredging of the access channel, and for handling of hazardous cargo in the port, outside the concession.

**316. SELECTION —** The IFC assisted the sponsor in structuring and negotiating the implementation agreement and the concession contract with the terminal authority.

## **FRANCE \***

**317.** A container terminal concession was signed (through the Cahier des Charges) in 1994, with the aim of increasing container traffic in the port of Le Havre.

**318. TARIFFS** — The concessionaire must establish standards tariffs, though these can be reduced for specific or regular services which they provides for their clients. The authority must be aware of these reductions.

**319. COSTS** — From the start of the authorization, the operators will pay rent for the land, fixed on the 1st January 1987 as a function of the economic conditions of 1986. It will be revised each January from the 1st January 1988, in line with the construction cost index. If the port or state takes any action which disrupts the financial equilibrium of the concessionaire, they may claim compensation. If this cannot be determined amicable a contract judge will be brought in to settle the dispute.

**320. TERM** — The concessionaire is authorized to occupy the land within the port, for 50 years, from the first day of service on the quay side. The agreement may be extended at the request of the concessionaire.

**321. OWNERSHIP** — The port retains the land ownership, as well as that of the existing quays, roads and networks. The operators will own the construction, works, and installations built during the concession. They may cede or rent this to a third party. At the end of the period, the port will be able to require that the operators leave anything vital to the operation of the port in place.

**322. SPECIFICATIONS** — The operators will manage a terminal on the land, for diverse merchandise, the majority of which will be containerized. The port will also put the quays, and open land adjacent to them, the road system, and diverse networks at the operator's disposal. The operators must install and operate those service installations and necessary equipment to assure optimal management of the terminal and respond to the needs of traffic with necessary and economic technical investments. The investments to be made are specified in the contract, as is a timetable for their completion.

**323.** The concessionaire must have five year plans for the development of the terminal, which must be presented to the port authority with the annual budget. When significant development is being considered (that which has an amortization period of longer than five years) the port authority requires full designs and the costs and schemes for control. The concessionaire is required to take any necessary steps to avoid pollution and ensure the proper cleanliness of both the land and water. The extent of the concessionaires liability for any shipment passing through the terminal is established in the contract.

**324.** Further conventions, agreed every five years, will determine the extent of the concessionaire's financial contribution to construction, renovation, and major maintenance works on the infrastructure and signaling as well as for the maintenance of access, depth and protections in the port.

## **MOZAMBIQUE \***

**325.** The terminals at the port of Maputo are owned by CFM, the country's combined port and railway company. The port authority functions are carried out separately by a Port Authority. Leases for two of the terminals have been concluded : For the Matola coal terminal (May 1993) and the sugar terminal (February 1994).

**326. COSTS** — Both contracts establish rental rates for the terminals, and in both cases these are related to the throughput. The sugar terminal's rates rise with throughput and will be adjusted yearly (for the first eight years) with the change in the US consumer prices index. During the eighth year the rent payments will be re-negotiated. Railway rates are also established, on a per ton basis for each line and are subject to the same re-negotiation conditions. The coal terminal rental is also based on the throughput, but a minimum level is established. The railway rates per ton are established for the first two years of the contract and will be renegotiated every two years, on the basis of operating costs and economic changes.

**327.** Wagon and demurrage charges on the railway were also agreed.

**328. TERM** — The coal terminal lease is for 15 years, with the possibility of subsequent five year extensions. The sugar terminal is leased for 10 years, again with five year extensions possible.

**329. SPECIFICATIONS** — In both cases the leasees are required to rehabilitate the terminals in order to allow them to handle a fixed volume of cargo each year, and also to increase the capacity if demand requires it. They are also responsible for maintenance of the terminal. Minimum investment obligations are specified in the case of the coal terminal.

**330.** Both contracts make special provision for staff. In the case of the sugar terminal the leasee was required to take on at least 90% of the non-managerial staff, as well as to give first consideration to the existing managerial staff. Employment conditions had to be retained. All employees of the coal terminal had to be retained.

**331.** CFM are obliged to provide the necessary services (with appropriate compensation) and to ensure that the channels are dredged, that security is maintained, and that the railway is in working order.

## ROADS

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## **PORTUGAL**

**332.** The second Tagus (Vasco de Gama) bridge project is expected to be complete by the time of the world exposition in 1998. The construction work comprises 18km of bridge and access roads.

**333.** The government also had plans to privately finance a rail crossing over the April 25 bridge, costing around Esc 100 million. The government had selected a BOT structure with the concessionaire operating the project. Some EU financing would top up the concessionaires contributions. However preliminary modeling suggested that tariff incomes would not have been sufficient to cover the operating costs and hence if the project does continue it will need to be funded through government and EU funds alone.

**334. TOLLS —** Tolls on the first (April 25) bridge were increased by 50% to help to service the debt on the Vasco de Gama project. However protesters blocked the bridge, forcing the government to back down and tolls will now reach their maximum level, on both bridges, only after the second is complete.

**335. COSTS —** There is EU funding for the project, in grant and guarantee forms and the total costs of the bridge is estimated at ESC.182 billion.

## **ARGENTINA \***

**336.** In Buenos Aires the Ministry of economy, and public works and services has concessioned three access routes into the city. There are also rehabilitation and operation concessions for about 9000km of the federal highway network. Tolls were set at high levels, in an effort to achieve full user cost recovery of the reconstruction costs. However complaints of double charging, since part of the fuel tax is earmarked for maintenance of the federal highway network, surfaced and the tolls were therefore reduced by about one third. Concessionaires were compensated for the reduction in toll revenue by transfers of part of the fuel tax revenue.

**337.** Among the access road concessions is that for the Acceso Ezeiza Canuelas (Ricchieri Tollway). This contract is for improvement of the existing 16km Ricchieri Highway, which runs between the city and the airport, construction of a new 31km road, at the end of the highway, and the maintenance and operation of the roads. The contract requires that 30% of the consortium's shares be publicly listed in Argentina within five years. There are six companies in the consortium, the largest of which went into receivership in March 1996 and hence the project is on hold. The information here was based on the concession agreement, which supposed a construction period of two years, starting in the summer of 1995.

**338.** **TOLLS** — Tolls may be charged from the end of the construction, and the tolls will be fixed, in US dollar terms, though collected in pesos. Larger vehicles will be charged a multiple of the basic toll, and the rate will be adjusted annually to reflect changes in US CPI from September 1993. The toll level in pesos will be recalculated monthly to reflect changes in the exchange rate levels.

**339.** **TERM** — The concession contract has a life of 22 years and 8 months and expires in 2017.

**340.** **SPECIFICATIONS** — The alignment was considered by the consortium and the government together. The route which was eventually selected represents a balance of economic and socioeconomic elements. The consortium is required to construct another lane of highway if the traffic build above a certain level.

**341.** The control agency (within the ministry) is responsible for monitoring the progress of construction, approving the construction works before toll collection begins and the operating procedures, determining termination in the event of negligence under certain conditions, and reviewing the proposed toll rates annually.

**342.** **SELECTION** — The bid parameter was the highest payment by the concessionaire, and some traffic guarantees were made. Bid evaluation was not transparent. For some BOTs the government has selected the bidder proposing the lowest toll.

## BRAZIL

343. The Brazilian government passed a law of concessions in February 1995. This law establishes the general rules by which the government authorizes third parties to perform public services. It requires specific rule and regulations to be set for each sector in which concessions are granted. The concessionaire must make investments, will take on risks for the state, and will be compensated by collecting tariff charges from the public. The concessioning process must also be used to introduce competition in the sector.

344. All concessions are to be granted for a specified period through a public bidding process and no government subsidy may be given to the concessionaire. The lowest price offer by a firm which meets the pre-qualification conditions will be accepted. The tariff to be charged by the concessionaire will be included in the contract, together with a process for reviewing and adjusting it.

345. The first phase of the highway concessioning program (PROCROFE) dealt with highway segments which were judged to be technically and economically feasible as toll roads. This encompassed approximately 840km and reached the final bidding stage in June 1995. The roads involved in that concessioning process are shown in the table below.

<i>Road</i>	<i>Length (km)</i>	<i>Term (years)</i>	<i>Tariff (R\$)</i>	<i>Investment (R\$million)</i>
<i>Ponte Rio-Niterói</i>	15	20	.78	55
<i>Osório/Porte Alegre</i>	120	20	.90	80
<i>Rio de Janeiro/Petrópolis/Juiz de Fora</i>	150	25	6.00	235
<i>Rio de Janeiro/Teresópolis/Além Paraíba</i>	150	25	3.75	150
<i>Rio de Janeiro/São Paulo</i>	406	25	10.00	600
<i>Total</i>	841			1120

346. The second stage will cover 15,000km (about 30% of the federal network) and will be for road repairs, construction, improvements, and equipment purchases.

## MEXICO

347. A historically low level of investment in roads, coupled with economic growth, the development of international trade, the emergence of a middle class willing to pay for fast commutes were all spurs to the development of a greater toll road network.

348. From the late 1970s the government had operated about 1000km of toll roads through the toll authority Capufe (Caminos y Puentes Federales de Ingreso y Servicios Conexos.) From 1989 the government the Ministry of communications and transport undertook to develop a network of toll financed (BOT) road concessions. These concessions were awarded competitively and would be inherited by Capufe when they reverted to the government. Private investment in toll roads in Mexico was US\$4billion from 1989 to 1992, or over 60% of the total public sector investment in transportation. By 1991 concessions granted for 3 international bridges, and 2800km highway.

349. TOLLS — The tolls were set to ensure full cost recovery during the concession period and therefore since the concession periods were short the tolls were high. The toll rates were also indexed to inflation.

350. Traffic projections produced by the government were based on simple 4% annual increases in traffic in the relevant corridors, and with 75% of that increase attracted to the new roads. In practice less than 15% of the traffic transferred to the new roads. This was combined with an overall growth of only 2% a year.

351. In the early operating stages, toll revenues were reduced on some roads because truck drivers had an incentive to retain the toll payments themselves, using un-tolled alternatives. In order to overcome this problem, the concessionaires entered into direct agreements with the trucking firms which removed the need for a cash transaction.

352. COSTS — A 40% return on overall investment was allowed. Some of the toll roads had construction cost overruns of almost 200% with the average of more than 60%. The government guaranteed the profitability of the project. If traffic volumes were lower or capital costs are higher than estimated, concessions could be extended to ensure the rate of return. Once the rate of return had been achieved, the government did have the right to terminate the concession.

353. Foreign investment was rare initially and limited to 40%. Mexican banks have substantial government ownership. Typically the financing structure was 30-35% equity, 60-65% debt, and 10% from the Capufe. In the first 26 toll roads the average financing structure was 49% debt, 28% contractor equity, and 23% government. By 1993, foreign funds had only been attracted to the Mexico-Toluca road as a result of IFC participation. In 1992, the IFC co-managed a \$207m bond issue for Mexico City - Toluca toll road. The proceeds of the 10 year maturity bonds helped to finance an extension of the toll road concession in the post-construction phase

354. Newly created companies in Mexico get tax advantages and the concessionaires might also request return of VAT and opt for accelerated depreciation of machinery. Bank securities issued for financing the highways were given same treatment as development bonds and other government instruments.

355. By 1991 the system was showing signs of strain since bankers and contractors were at the limits of their financial exposure and the SCT (Secretariat of Communications and Transportation) was swamped with work planning and designing new facilities, as well as

supervising existing concessions. This has meant that the designs are not far enough advanced or clear enough to allow firm prices for bidders. Similarly change orders and project cost accounting have become a problem. The government believed that overbilling was in the order of 20%. The largest construction firm in Mexico, ICA won the largest projects, and claimed cost over runs up to 200%.

356. One example of the extension of concession contracts in face of low traffic levels is the Mexico City-Toluca toll road, opened in 1990, under a four year concession contract. Traffic exceeded government predictions by 91%, though this was unusual. Traffic on most toll roads only reached 53% of the guaranteed level. Cost overruns on the construction of the toll road from Mexico City to Toluca meant that the concession had to be extended to thirteen years. This period will be extended further if traffic levels do not meet the guaranteed levels. (In 1993 the traffic levels were 19,000 per day, and the guaranteed level was 26,000. Capacity of the road was 50,000 trips per day.) The government was paid approximately \$103m to extend the term of the concession to 2002. In June 1992 the toll road was refinanced (\$208 million) using international securitization.

357. TERM — The term of the concession was one of the criteria used by the government to select a concessionaire. Initially this was limited to twenty years, and subsequently extended to thirty. Some of the contracts were awarded for as little as 4 years and the average duration of the concessions was less than 11 years.

358. Concessions for economic development around the road e.g., restaurants, are granted for two years longer than the toll road itself. The concessionaire was granted the right to secure a continuing operation contract after the end of the initial contract term.

359. OWNERSHIP — The government provided the right of way. These rights for economic development around the toll road (land and development) are owned by the government, though the concessionaires negotiated nominal cost subleases for development of the land and took 100% of the benefit from any business deals they arranged with the service providers or real estate developers.

360. SPECIFICATIONS — The government provided construction plans, though the concessionaire could specify the number, design, and location of interchanges. The BOT program was designed to provide 50% user saving over the alternative toll free route, but could only be implemented in corridors which were already served by tax supported roads.

361. Once the concessions were granted an independent trust was established, which oversaw the construction and maintenance of the road, paying the contractors where necessary. Ministry of finance officials were members of the trust, which carried the concession and toll revenue risk. The problems of the short term and high toll rates were also surfacing with low traffic volumes. More problems arose in 1989 when truck weights and this was said to be exacting a toll on the new roads, which their designs were not coping with.

362. SELECTION — Prospective concessionaires had to pass a pre-qualification stage assessing their technical and financial capability to implement the project and at the second stage the government's decision criterion was the shortest time proposed for returning the road to the nation. If the bids were equal after this stage the shorter the period of construction and then the reliability of the financing package were assessed.

## THAILAND \*

363. The second stage expressway is being constructed by Bangkok Expressway Company Limited (BECL) under the first BOT structure in Thailand.

364. TOLLS — The first and second stages will have uniform tolls and ETA and BECL will share the revenues from the date of completion of the first phase of the second expressway. The division of revenue will be 60:40 in favour of BECL in the first 9 years, and 40:60 during the last nine. In the middle years the revenues will be shared equally. Tolls on the first stage had been 10 Baht since it opened. With the opening of Phase I of the second expressway the tolls for the entire system were to be raised to 30 Baht (\$1.20). These could then be adjusted (in line with inflation) every five years, though by 10 Baht at most during the first fifteen years. Higher adjustments at more frequent intervals are allowable in periods of unusually high inflation. Despite the contractual agreements however the Government of Thailand faced public opposition to increased tolls and by October 1993 these had not been increased. This was one of three of disputes which led to an increasingly acrimonious battle over the project. The other issues were land delivery and toll collection. ETA had failed to meet the delivery dates for key sections of land. BECL were therefore entitled, under the contract, to complete work on any section of the land, to collect toll revenues on that section. However ETA was not willing to grant that section of the toll revenue to BECL. The last issue was that though the contract stipulated BECL was to pay for the toll collection, Thai law stipulates that only ETA can charge tolls and the two sides were disputing the collection procedures. BECL was refusing to open the completed portions of the road and ETA sued to force them open in September 1993.

365. COSTS — The construction will be managed and guaranteed by a project management company, limiting BECL exposure therefore to 95-105% of the estimated costs, though the management company has a 46% stake in BECL. The project manager also guaranteed the completion dates and early and late penalties of 4% per annum were stipulated.

366. TERM — A 30 year (from the start of construction) concession contract was signed in December 1988, following requests for proposals in the summer of 1987. Two possible ten year extensions to the contract are possible. The road is to be linked to the first stage expressway, which is owned by the government and operated by the Rapid Transit Authority (ETA). The contract provides for two phases of construction, the first for 20.4km was to be finished by March 1993, but by October 1993 was still unfinished. Phase II, for 9.6km, was to be completed by August 1995.

367. OWNERSHIP — ETA purchased the land, for which it was granted the right of expropriation. BECL is to make 16 annual lease payments beginning in 2005. ETA is required to deliver the land according to a schedule, with the first tranche to be delivered by March 1, 1990. Site packages not delivered by then were to be covered in the second phase, by September 1990 and BECL could elect not to build on land delivered after that date. BECL obligations under the contract do not begin until the land is transferred. Similarly BECL obligations do not start until all the necessary permits for the work have been granted.

368. SPECIFICATIONS — A coordination committee was established under the chairmanship of the ETA representative and vice chair of BECL and comprising a senior representative from each of the relevant authorities and the project manager and any other

as BECL or ETA may from time to time invite. The committee was to meet at least once a month during the construction period to assist in resolving any problems related to works.

369. BECL has the right to install extra ramps from time to time as it sees fit, though in this case they would need to acquire the requisite land themselves. If ETA determines that future traffic flows on a particular portion of the road will be greater than 110,000 vehicles at any time, BECL will be required to expand the road to a three lane dual carriageway, at least three years before the projected traffic volumes will be met. The traffic forecasts will be made for ETA, at BECL expense, after the opening of the relevant portion of the road.

370. If during the concession period ETA or the government were to improve (substantially) any road or highway of an expressway standard in the primary catchment area of the second stage expressway, and this were to reduce actual traffic volumes (or revenues) on the expressway, SES or the system, ETA will agree compensation for lost revenues with BECL.

371. Another concession contract was signed in August 1989, following a call for bids in December 1987, and award of the contract in March 1988, for the Don Muang tollway (to the airport). The six lane elevated road, to be constructed over the top of the existing highway, is just over 15km long.

372. TOLLS — The company is given the right to collect tolls and the initial toll rates are established in the contract, with two vehicle type categories. These rates fixed are for the first 8 years of the contract and for the next four years will be increased by 5 Baht. In the 14th year the rates will be increased by another 5 Baht. The company may request changes in the toll rates if the economic situation changes and the economic factors to be taken into account are defined in the contract. Any changes to the toll rates would be made with the express purpose of restoring the financial position of the company.

373. COSTS — The company will pay the government 20% of gross monthly revenue after the 22nd year of the concession.

374. The company must provide a performance guarantee for the construction of the Tollway in the form of a security bond for 5% of project costs. The company is required to retain an equity base of at least 20% of the total initial investment throughout the concession period.

375. The government is required to reimburse the concessionaire for any changes in revenues as a result of the addition of additional lanes running parallel to the tollway, or the relocation or removal of feeder roads to the tollway and any restrictions on vehicle use which effect demand for the tollway over a prolonged period of time. The government is also required to reimburse the concessionaire for any negative impacts from changes to the taxation laws.

376. TERM — The concession will last 25 years, and extensions are possible. The construction period will be 3 years from the effective date, though it may be extended for a maximum of nine months to give the company time to obtain the necessary permits.

377. OWNERSHIP — The land will be acquired by the government, for which the company will pay a one time lump sum rental fee of 200,000 Baht.

378. SPECIFICATIONS — The concessionaire is granted the right to replace certain flyovers. The new structures will be maintained by the government. This clause was the cause of a dispute between the concessionaire and the government, when the government did not meet its obligations to reimburse the concessionaire for the removal of the flyovers. The

**tollway will be transferred to the government free of charge at the end of the concession, and the two parties will meet at least one year before the end to discuss a turn over program. An arbitration panel of three (one chosen by the two arbitrators selected by each party) will act under the Thai arbitration act to resolve disputes under the contract.**

## **HONG KONG \***

**379.** The first BOT contract in Hong Kong was for the Cross Harbour Tunnel and was granted in 1961. This was granted without competition to the group which made the proposal. In 1986, the concession for the Eastern Harbour Tunnel, was the second BOT. It opened for combined road and rail (tunnel) traffic in Summer 1989, ahead of the schedule by around 6 months. This was a competitively bid road, though some had tried to submit preemptive bids.

**380. SELECTION** — The government made a formal request for proposals in October 1984, and on April 1, 1985 nine international bids were submitted. In June 1985, a short list of three were selected. The group which had made the preemptive bid were ultimately accepted, following extensive negotiations, in December 1985. The Eastern Harbour Crossing Ordinance (the legislation granting the franchise) was passed and construction was started in August 1986, completion coming in September 1989, four months ahead of schedule.

**381. COSTS** — The crossing cost \$435m and included 8.6km of roads and a 5km extension to the MTR. A \$565m multi-source debt and equity financing package was arranged. \$429 debt and \$135 in equity. The financing structure integrated bank credit facilities provided by a syndicate of local and international banks, and installment sales credit facilities, provided by Japanese and Chinese leasing companies, within a common security package. The repayment provisions last until 2007 and repayment will be made solely from road tolls and rail operating payments.

**382.** The main contractor is Kumagai Gumi, who entered into a fixed price, lump sum, turnkey contract with NHKTC, and then in turn contracted with the Eastern Harbour Crossing Company LTD for design, construction, and management. EHCC is owned by Kumagai Gumi and China Investment Trust and Investment Corp.

**383. TERM** — The concession is 30 years for the road and 22 years for the rail.

**384.** Tate's Cairn tunnel, the third BOT project links East Kowloon and the North East territories, and should have opened in 1991.

**385. TOLLS** — Toll increases must be agreed between the Governor in Council and the company, failing which the company may seek arbitration. The arbitrator shall see that the company is "reasonably but not excessively remunerated" and shall have regard to, inter alia, material changes in the economic conditions of Hong Kong and introduction and alteration of any tax or levy on the use of the tunnel.

**386. SPECIFICATIONS** — The conditions of the concession are contained in an ordinance and include restrictions on :

- ◆ assignment and mortgages
- ◆ company structure and level of paid up capital
- ◆ government royalty and equity provisions
- ◆ construction period
- ◆ broad terms of the project
- ◆ defects and repair responsibilities
- ◆ power to collect the toll
- ◆ default and expiration of franchise and powers of government over the franchisee.

**387. SELECTION** — In assessing the proposals for the Tates Cairn Tunnel project the government considered:

- ◆ level and stability of the proposed toll regime

- ◆ benefits to government and the community
- ◆ speed of completion of the project
- ◆ term of the franchise period
- ◆ financial strength of the interested parties and the degree of financial support for the project
- ◆ proposed corporate and financial structure of the company esp. the debt: equity ratio.
- ◆ quality of the engineering design, construction methods and works programming for the road tunnel and approach roads, including all traffic control, surveillance, tunnel E & M, ventilation, and lighting systems.
- ◆ proposed tunnel operation and maintenance and inspection requirements
- ◆ ability to manage and operate the tunnel efficiently

**388. Three evaluation panels were set up to assess financial (a merchant bank), engineering, and transport operations aspects. Evaluation was based on a set of detailed criteria and weighting system (the first three points in this list with the heaviest weight) agreed by a steering group from all concerned departments and policy branches.**

**389. Six bids were received, from international consortia. Three then short listed, following two months of evaluation. The negotiation with the short listed groups took the form of meetings, where the government laid down further requirements and clarified engineering issues. The objectives of this were to press for the lowest possible starting toll whilst maintaining financial viability, to press for the best possible protection against unanticipated toll increases thus achieving toll stability, and to obtain a technically satisfying engineering package which would, at the same time, lead to the shortest possible construction period.**

**390. A maximum toll level was set at the start of the negotiation and the bidders worked under this guideline. To obtain a low and stable toll structure the Hong Kong government tested the consortia's patronage forecasts against the Government's own projections. The consortia were also asked to provide acceptable guarantees in respect of cost over run and interest cost variations. The Tates Cairn tunnel was proposed to offer relief to the only existing link between the North East territories and Kowloon (the Lion Rock tunnel). One benefit therefore of having construction companies as the lynchpins of the concessionaires was that it was in their interests to ensure that the tunnel was open in as short a time as possible.**

## MALAYSIA

**391.** In 1978 the government decided to build the N-S expressway (785km) and side links (143km) over a five year period. Sections had already been built near Kuala Lumpur and tolls were then charged there to raise capital. Some construction contracts were awarded, though with no systematic thought about the practicality of the sections being constructed since everything was to be complete in a short period. In 1980, the government decided to seek external financing for the project, against future toll revenues, to be guaranteed by the federal treasury. In July 1987 a contract was signed, with a quasi-private company, UEM.

**392. TOLLS** — The company collected tolls on the existing section of the road, immediately the contract was signed. The toll rates sparked considerable controversy and delayed the project by about a year, and resulted in a doubling (not the proposed trebling of rates) over the 30 year operation contract (rather than the 25 years which had been proposed). The tolls at their initial low rates had already caused substantial diversion from the tolled sections (around 15%.)

**393. COSTS** — Government officials were major shareholders in the company. UEM obtained government equity as well as the 424km already built (M\$ 3.1 billion cost) and took virtually no risk. The government granted the company loans both pre and post completion, with an 8% interest rate and with a 15 year grace period.

**394.** Traffic volumes, exchange rates, interest rates, changes in taxation, and costs incurred as a result of change in other government policies were all insured against. The company had no equity of its own.

**395. TERM** — The contract is for construction of the remaining 504km over seven years, and for operation of the road for 30 years.

## HUNGARY

396. In April 1989 the Hungarian government attempted to introduce a “Swiss Tolling System” but abandoned it following public outcry. Two laws passed in 1991 and 1992 on concessions and transport related concessions respectively opened the way for concessions in transport. The first concession granted by the government was for sections of the M1 and M15 motorways. The EBRD made loans for motorway development. The M1 is a 42.4km road from Vienna to Budapest. The M15 is a 14.5km road from the M1 to the Slovak border.

397. TOLLS — The government is prevented from tolling the final section from Győr to Budapest within 10 years of the start of the M1 tolls and then only with permission of the concessionaire, who currently will charge once along the route only and thus for what appears to be its full length to Budapest.

398. Separate toll rates for light and heavy vehicles and for July and August were considered. The peak pricing in the summer would mean a rate approximately 25% higher than the basic. The concessionaire also plans some sort of lower frequent user package.

399. The tolls are indexed as set down in the contract to ensure that any depreciation of the currency is protected.

400. COSTS — The loan period was from 1993 to 2008 and to be paid back in 20 semi annual installments, in two parts one beginning 6 months after completion and the other 18 months. The loan would be made directly to the consortium which had been accepted by the Hungarian government as the concessionaire. The consortium includes some government owned institutions (national bank and fund) and the government has one representative on the 11 member Board of Directors. The EBRD loan is being paid directly to the consortium in order to shield the commercial lenders from the foreign currency availability and transfer risks, by assuming the lender of record position, is mitigating the political risk of investing in a sensitive service sector project, is enabling the company to raise funds in the local currency, and finally, provides in house expertise on transport projects providing additional comfort to the commercial lenders.

401. The financial covenants required by the EBRD were that cash flow projections be satisfactory to it and that the pre-defined debt service cover ratios were met, that before the M15 project began, the traffic surveys should be repeated and the debt service cover ratio tests be met, and that the debt service reserve account was established.

402. In exchange for the right to use the land the concessionaire is required to pay 15% of any dividends into a dedicated account for the Road Fund. The concessionaire will also pay concession and control fees to the government of 1.6% p.a. of Capital and Construction Costs, 1.12% p.a. of Gross Toll Revenue until the end of 2002, 1.3% p.a. of gross toll revenues from 2003-5 and 2% of Gross Toll Revenue from 2006.

403. The tax to be paid on revenues (VAT) and level of corporate tax on net income is also set down in the contract.

404. The construction contract is a fixed price, lump sum contract, with civil engineering and procurement and installation of tolling equipment. Major risks (delays, cost overruns, devaluation, subsoil etc.) are carried by the contractor, Strabag Osterreich AG, which is also a major shareholder in the concession company. The construction contract was negotiated between Strabag and the banks arranging the debt finance.

**405. TERM** — The concession agreement was signed for 35 years, with a possible one time extension of 17.5 years. Construction was to start in spring 1994, to put the M1 into operation by the end of 1995.

**406. OWNERSHIP** — The government had purchased the land and passed the right of way over (with vacant possession) to the concessionaire for construction.

**407. SPECIFICATIONS** — The concessionaires expected that truck restrictions would be put in place by local authorities to channel truck traffic onto the motorway (thus reducing the environmental impacts.)

**408. SELECTION** — 10 submissions were received following an invitation for pre-qualification in September 1991. The preliminary designs in this documentation had already been approved by the local population and appropriate authorities. The pre-qualification criteria were the capacity of the bidders to finance, design, build, maintain, and operate the toll road, without state aid. An expert assessment committee undertook the evaluation and in January 1992, five consortia were placed on the shortlist. In March 1992 the final tender documentation was released (following assistance from a merchant bank and a legal adviser) and four bids were made in August. The two preferred bidders were announced in November and simultaneous negotiations were started. The concession agreement was signed with the selected consortium, TRANSROUTE (a French, Austrian and Hungarian group) in April 1993.

**409.** The final negotiations during financing led to an amendment to the concession contract, at financial closing. The latest traffic figures had shown a decline in traffic and banks decided that the construction of the second two lanes of the M15 had to be made conditional upon certain financial tests being met.

## **NEW SOUTH WALES, AUSTRALIA**

**410.** In 1987 a BOT agreement was signed for the Sydney Harbour tunnel. The government has awarded other concession contracts, and in no other case have the details of the contract been made public. There have been few bidders for these contracts. The concession periods range between 17 and 45 years. Some revenues risks are transferred to the concessionaire.

**411.** The consortium awarded the tunnel concession had proposed its scheme without government solicitation, but in the wake of others which had been rejected for their adverse environmental effects or their prohibitive costs. The consortium proposed substantial private sector involvement, with the joint venture bearing the construction and financial risks of a fixed price contract and arranging the majority of the project financing. Construction began in 1988.

**412. TOLLS** — The tolls from both the existing bridge and the tunnel will go the concessionaire. Tolls will be the same for both facilities. The toll was capped at Australian \$1 in 1986 prices, but is indexed to inflation.

**413. COSTS** — The state government made a grant of much of the financing required and in particular a Australian \$223m loan, based on projected bridge toll revenue during construction and repayable in 2022. Balance of project costs are financed through inflation-indexed bonds repayable from the tolls over the 30 year period.

**414.** The joint venture took the risks of time and cost overruns. In the operating phase the government has guaranteed a certain revenue stream, to ensure that bond holders are paid, and to meet operating charges and maintenance costs.

**415. TERM** — The concession is for thirty years of operation, from 1992-2022.

**416. OWNERSHIP** — The state government purchased the city center space for the tunnel portals.

## CALIFORNIA, USA \*

417. During December 1990 and January 1991, The California Department of Transportation (CALTRANS) signed development franchise agreements for four privatized BOT transportation projects. This was possible following the passage of state transportation legislation in July 1989. The franchise agreements each give the exclusive option, subject to obtaining Environmental Clearance, to develop and operate a privately constructed transportation project and charge tolls to retire private investment, including a reasonable return on investment, and sufficient to manage, operate, police, and maintain the transportation project.

418. The authorizing legislation specifies that four projects will be tested for feasibility — one in northern California, one in southern California, and two at large.

419. One of these projects (Express Lanes in the median on Route 91 in Orange County) opened in December 1995. They were built by a consortium of American and French firms (including Kiewit and Cofiroute) and were completed under budget and on time. A variable toll is charged electronically for use of the Express Lanes. Cars carrying three or more people are given free passage. The total project cost was \$126 million (\$100 million in taxable private debt, \$19 million in sponsor equity, and \$7 million in subordinated debt from Orange County.) Traffic on the Express Lanes grew from about 30,000 per week to over 90,000 in the first three months of operation.

420. TOLLS — The concessionaire will be free to set and charge tolls, which should cover the costs of operation, maintenance, policing, collection of tolls, and administration over the period of the lease. They are also entitled to a reasonable return on investment.

421. Excess toll revenue to be used to reduce the debt incurred by the private entity or paid into the state highway account or both. The franchise agreements include some incentives for performance (relating to the number of people using the facility, the number of accidents on it, and the operating and maintenance costs) which are paid yearly in the form of a higher allowed return on investment.

422. COSTS — A franchise fee is \$10 per month to be paid annually in advance, once a specific project franchise has been granted.

423. If the concessionaire enters into an agreement for the use of airspace they will pay \$1 as an annual rent for the first thirty five years. After that they will pay a market rent “fair market lease rate.”

424. TERM — The operating period will last up to 35 years. Tolls may be collected during this time and the concessionaire is expected to recover its investment, plus a reasonable return. There are a variety of internal, project specific requirements for development milestones (e.g., environmental clearance by a certain date, construction commenced before another date etc.)

425. OWNERSHIP — The title to those facilities constructed on private land will be transferred to CALTRANS once construction is complete. All facilities will be leased to the concessionaires during operation. CALTRANS recognizes that the developer incurs substantial costs in developing a project and therefore the agreements grant the concessionaires several rights, including that CALTRANS will not issue competing franchises in the franchise zones, nor will it recommend, with certain exceptions, development of a competitive transport facility in the franchise zones (and similarly will use its best efforts to

persuade other agencies not to develop such facilities. Exceptions are made for facilities already specified in the State Transportation Improvement Program.) CALTRANS will also advise the concessionaires of other plans for transportation facilities in their franchise zone which could possibly be considered competitive.

426. SPECIFICATIONS — Any direct project assistance which CALTRANS provides must be paid for by the concessionaire. Both CALTRANS and the concessionaire accept in the contract that a no-build alternative may be the outcome of the environmental impact studies.

427. Design, construction, operation and maintenance are all performed according to Californian State standards.

428. SELECTION — 10 groups passed the pre-qualification round (where they were required to illustrate financial strength, and development and operating experience with similar infrastructure projects) and 8 presented bids. The four best proposals, given the geographical constraints, were accepted. An independent evaluation team, monitored by the former head of the California's Chamber of Commerce, was established to select the projects, using a weighted evaluation scheme which considered the environmental effects, the transport service which would be provided as well as the ancillary development potential of the proposed projects. The evaluation took place during August and September 1990, before the four projects were selected.

## **PUERTO RICO**

**429.** The contract for the San Jose Lagoon bridge in San Juan was awarded in 1990. The financial package was completed in 1992 and the bridge was opened, ahead of schedule in February 1994. Puerto Rico has an extensive system of publicly operated toll highways.

**430. TOLLS** — The toll level is established in the contract and is more than three times the average toll on other Puerto Rican highways. Increases are allowed each year, based on the inflation index, at the option of the concessionaire. In addition the concessionaire has covenanted to meet its debt service requirements and therefore may alter the tolls (in either direction) to honor that covenant.

**431. COSTS** — The concessionaire is to cover all investment costs from toll revenues. The government provided all real property and rights of way as necessary. In addition the government dealt with the permitting and approval processes. The bridge was transferred to the government as it was completed thereby giving the concessionaire tax benefits and leaving legal liability with the government. A tax exemption on the bonds used to finance the bridge was also granted by the government.

**432.** The construction contract was let on a fixed cost basis, with penalties for late delivery of the facility. In fact the bridge opened two months ahead of schedule.

**433. TERM** — The concession is for thirty five years.

**434. SPECIFICATIONS** — The concessionaire has been granted a termination option by the government. Under this agreement the concessionaire may return the project to the government (without loss to itself) if traffic does falls more than 20% short of projections in the first five years, more than 50% short in the next 5-10 years and 100% short thereafter.

**435.** The government committed to make some access road improvements by the beginning of 1994. By the end of 1995 they still had not been made.

## CANADA

436. A request for proposals to build and operate a fixed link to Prince Edward Island was issued by the Department of Supply and Services and Public Works in the mid 1980s. Subsidies for the system were authorized following the passage of the Northumberland Strait Crossing Act in September 1993.

437. **TOLLS** — The concessionaire may charge tolls for the use of the facility. Toll levels are regulated under the bridge operating agreement. In the year of completion the tolls are based on the ferry rates in 1992 increased for changes in consumer prices before the completion date. After that the developer will be entitled to increase toll rates annually by 75% of the increase in consumer prices and to cover any increased costs from additional insurance requirements.

438. **COSTS** — Given the low population in this area the project will not be self financing through user fees. The notion of the concession was therefore to minimize the public costs of continuing to discharge the constitutional obligation of the federal government to provide a link to Prince Edward Island. The concessionaire was granted an inflation indexed subsidy to be paid annually through the 35 years. The subsidy will rise with consumer prices from May 1992.

439. The primary financing came from the securitization of the federal government subsidy commitment, which was to start unconditionally on May 31, 1997. Inflation indexed fully amortized bonds were issued for c\$640m in October 1993.)

440. The government required the concessionaire to establish trust funds equal to the fixed price for the construction contract. These can be drawn down following completion of each stage of the work. A 10% funded contingency was also required in a letter of credit.

441. **TERM** — The contract was for operation of a tolled facility for 35 years following its completion.

442. **OWNERSHIP** — The concessionaire will own the facility during the concession period and it will be transferred to the government at the end of this period, at a nominal cost.

443. **SPECIFICATIONS** — The construction was to have a design life of 100 years. The chosen project is a bridge 4 miles long and 2 lanes wide. The contract stipulates that the government will not build a competing facility.

444. The bridge is required to be open on May 31, 1997, but if it is not then the consortium is required to reimburse the government for the costs of operating the ferry service until the bridge is ready.

445. **SELECTION** — The procurement process was divided into three stages. In the pre-qualification stages the bidders were required to demonstrate competence and other qualifications and to outline their proposed approach. Qualified bidders then submitted specific designs. Seven consortia reached this stage all but one of which proposed bridges. The last proposed a tunnel. There were three finalists, all with bridge proposals, who were then required to submit financial plans.

446. However in 1989 before going into the third stage the government realized that detailed environmental assessment was necessary and the project was suspended for the assessment. A referendum was also held and there was a 60% approval rate for the fixed link.

**447. The three finalists submitted financial plans in May 1992. These were reviewed by a government project team which identified deficiencies and required those to be addressed for the final submission.. The financial plans included the annual subsidy required from the government and specified the date when this would commence (irrespective of construction delays.) The government had announced that no bid with a subsidy requirement of more than \$42million a year (in 1992 dollars) would be accepted. That represented the federal estimate of the cost of existing ferry service on a net basis, including operating and recurring capital expenses.**

**448. None of the three complied with all the requirements and only one came in under the \$42m subsidy level. The government entered into substantial negotiations with this group (Straight Crossing Consortium) and after 16 months a contract was agreed in October 1993. Much of this delay resulted from further environmental challenges in federal Canadian courts.**

## **COLOMBIA \***

**449.** The Colombian highway authority has operated a system of toll roads for many years. In 1993 two laws on contracting and on transport were passed which made transport concessions possible. Since then the government has developed a program of toll roads in three categories: expansion of existing roads, new construction, and road maintenance. The projects were particularly pointed towards those areas which could not realize the projected economic growth without some development of the road network. The concessions are all granted under a standard basic contract, though the contract for a new road, as well as operation and maintenance of the existing section, (the Bogota to Villavicencio road) is described here. The contract was signed in August 1994.

**450. TOLLS —** The toll schedule is specified for the construction phase (by vehicle type), as well as for different sections during the operating phase. They are expressed in Colombian pesos, as at June 1994. However the tolls charged at the start of the operating phase will be these inflated by the consumer prices index from June 1994 until it starts. The tolls will be adjusted for inflation every time the index rises 20% from the last adjustment, and at least every year. The concessionaire is required to request permission for any increase from the National Roads Institute. If this is not granted then a compensation formula is established in the contract.

**451.** The volume of traffic (by vehicle type) which will guarantee the minimum income of the concessionaire for each year of project operation is indicated in the contract. If the total toll revenue in any calendar year is less than this guaranteed level, the national roads institute will compensate the concessionaire for the difference.

**452.** The maximum volume of traffic (by vehicle type) to be carried by the project in each year of operation is also indicated in the contract. If the revenues are greater than this in any given year then the concessionaire place 50% of the excess in a special account. The account will serve firstly to cover any deficits guaranteed by the national roads institute and secondly, to finance additional works. The 50% not transferred to the special account will go to the concessionaire for increased maintenance costs.

**453.** In the case of one of the concessioned toll roads, the mayor of a local community objected to the imposition of tolls (in November 1995) and has required the concessionaire to stop collecting them. Thus far the dispute has not been settled, and there has been no compensation for the concessionaire.

**454. COSTS —** The value of the contract is that which was agreed by the two parties in June 1994 and the costs of the different stages specified. The value of the contract, as well as the operating and maintenance costs will be covered by the toll revenues. The concessionaire must hold various insurances for the costs of the project during its lifetime.

**455.** The concessionaire is required to establish a trust fund within the first fortnight of the contract, with its own equity. The trust fund is the basis for later financing and guarantees, and will provide the resources for studies and designs, for land acquisition, for supervision and inspection of the contract, for construction, maintenance and operation. The fund will also be used to distribute the earnings from operations and to pay interest on loan capital. The amount to be contained in the trust fund is specified in the contract.

**456. TERM —** The concessionaire is required to start the works within 15 days of finalizing the contract. The three stages of the contract are to be completed within 192

months (16 years). The design and programming stage was not to extend beyond October 1994. The construction stage was required to be completed in 22 months. The operational stage of the contract will last 178 months.

**457. OWNERSHIP** — The existing 55km section to Villavicencio will be turned over to the concessionaire once the national roads institute has completed its works. This section will then be operated and maintained by the concessionaire to the level of service at which it was transferred. The whole project reverts to the government, at no charge and in good order, at the end of the operational period which will be at most 192 months (16 years) from the start of the contract.

**458.** The national roads institute acquire the land for the concessionaire (who will bear the costs), though the sums which it may pay are specified in the contract. The concessionaire is required to establish a trust fund for the purchase of the land the value of which is set out in the contract. If the cost of the land rises above this value, then the national roads institute is required to compensate the concessionaire.

**459. SPECIFICATIONS** — The concessionaire will repair the section from Bogota to Villavicencio, 13.5km, construct a new road from Bogota to Caqueza (34km) including two tunnels, rehabilitate the Caqueza to Puente Tellez section (7.5km), construct two underpasses, and undertake the auxiliary works. The government is rehabilitating the section from Caqueza to Villavicencio, including the construction of a 4km tunnel.

**460.** If the environmental permitting process is delayed, and the concessionaire is not at fault, the contract will be suspended until the end of the delay. Where this disturbs the economic equilibrium of the concessionaire, compensation mechanisms are established in the contract.

**461.** Though the final engineering designs were produced within the first six months of the contract as required, they involved substantial cost increases over the preliminary designs. This has meant that the government and concessionaire are having to seek a second agreement. The government too is facing difficulties (delays and cost overruns) with its construction work, which started in June 1994.

**462. SELECTION** — For each of the highway concession contracts the government allows the bidders to determine the tariff levels which will be required for them to cover the costs of investing in the road and to take a rate of return equivalent to that which would be taken from other projects of similar risk. If this would lead to tariff levels which would not be acceptable to the country then the bidders must consider altering the construction plans, the design of the construction or calling for government investments. However the lowest proposed tariff was one of the assessment criteria.

## **INDIA \***

**463.** Indian law has allowed the collection of tolls on highways since 1977, and several bridges in the country have been constructed using the toll revenue facility. In 1995 the act was amended further to allow the central government to delegate construction and operation of portions of the national highway system, and the collection of tolls thereon, to the private sector. Toll rates would be based on construction and operating costs, a “reasonable return”, volume of traffic and duration of the concession. Individual state governments have also passed laws which allow them (and in some cases the private sector) to levy tolls. The first BOT road project in India was the 11.5km road from the industrial estate of Pithampur to the city of Indore, in Madhya Pradesh. This is known as the Rau-Pithampur Road. The contract (described below) was signed in June 1990 and the road opened in 1993.

**464. TOLLS** — Tolls were paid by each vehicle using the road, with the aim of achieving a minimum return on investment and to cover both land and repair costs. The construction and management body was allowed to retain toll revenues to cover administrative and maintenance costs. The remaining toll revenues were transferred to IL&FS. Once IL&FS has been paid sufficient amounts to offset the total costs and minimum return then it has no claim on the toll revenue. This was supposed to take 15 years. If tolls cannot be levied for any reason then the government is required to repay the balance due to IL&FS for the financing of the project and minimum return.

**465.** The tolls were originally set at 10 rupees per automobile, but reduced to 3-4 rupees per auto after an initial trial period. Toll revenue increased 150% from November 1993-1994 and to mid 1995 was continuing to grow at 15% per month.

**466. COSTS** — The project is funded with a 100% equity contribution from Infrastructure Leasing & Financial Services (IL&FS) which is a majority government owned financial institution financing infrastructure projects. IL&FS were paid a management fee of 1% of the aggregate cost of the project.

**467. OWNERSHIP** — The state government acquired the necessary land, which was leased to IL&FS at a nominal lease rent of 1 rupee per year. IL&FS are also entitled to earn interest on all loans to the government companies at 16% p.a.

**468. SPECIFICATIONS** — The Madhya Pradesh public works department undertook the initial design and project execution (including the earthwork) and the IL&FS managed the final design and construction (including a major bridge and culverts.)

**469. SELECTION** — Competitive tenders were received for three construction contracts let by IL&FS.

**470.** Tender documents for five transport projects in the State of Maharashtra were issued in May 1990. (The public works department has also begun to develop BOT plans for other roads in the state.) Only one proposal was received for one of these projects — a by-pass for Jaisinghpur. Construction took approximately two years and the project opened in June 1992.

**471. TOLLS** — The Bombay motor vehicle tax act does not permit any private sector entity to collect tolls to make a return on their investment, only to recover costs. The tolls were set to 1 rupee for 2 wheelers, 3 rupees for cars and 3 wheelers, and 5 rupees for heavy trucks, buses, trailers etc. After a few months however, the users refused to pay tolls.

**472. COSTS** — The concessionaire financed the project at 18%. After the toll revolt (see below) the government assumed the cost of construction and repayment of the construction loan.

**473. TERM** — The concessionaire was to collect tolls for ten years, or until its costs were recovered, whichever was the shorter.

**474. SPECIFICATIONS** — The projects were not far advanced when the government released the tender documents. Information in the documents included a conceptual alignment and design criteria, work specifications for construction, operating and maintenance specifications, and general contract conditions for the BOT.

**475. SELECTION** — Since only one bidder was received for one project, there was no competition for the contract. The government and bidder negotiated for around four months to determine the structure of the contract itself, which was not highly specified in the bidding documents.

**476.** Other states are also experimenting with BOT projects, though the largest experiment currently underway is that for the Super National Highway System, operated by the central government. In 1995 the National Highways Authority called for bids for the preparation of feasibility studies of the identified super national highways for future development on a BOT basis. The government does not envisage that the system must be put into place immediately, rather that a 10-15 year horizon is more appropriate. There are similarly no decisions on toll levels or land acquisition, though the central government itself may be in the most appropriate position to acquire land. The structure of the feasibility study process is described below.

**477. COSTS** — All expenses of the studies were to be carried by those undertaking the feasibility study, however if any of the roads are deemed attractive for BOTs and subsequently the government offers contracts, those who undertook the feasibility study will be entitled for the award of 30% of the route length, provided that they agree to accept the conditions and rates of the bidder to whom the government awards the concession. If these conditions are not acceptable to the group which undertook the feasibility study, then the concessionaire would be required to reimburse the costs of the feasibility study for that section.

**478. TERM** — The feasibility studies are planned to last six months.

**479. SPECIFICATIONS** — The feasibility study provider must gather sufficient engineering, traffic and financial data on the 11 segments of the network to determine which, if any, could be financed on a limited recourse basis. This will include further defining an alignment, interchange locations, pavement options and economic and financial considerations such as toll rates.

**480. SELECTION** — The authority was looking for details of the financial and managerial capabilities of the bidders, their past experience, the source of funding which they proposed, and the approach which they would follow in undertaking the study. A committee was established to short list bidders

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