OPERATING PUBLIC BUSES: Lessons from London

Getting the public bus system right is no easy road. Private operators need to make money, commuters want affordable fares and good service. Singapore is now looking to the London solution of contracted routes. Is this the ticket to a better ride?

By ROYSTON SIM

LONDON resident Peter Smith may be 78, but he happily takes the bus at least twice a week. The tracting model.

"The buses are much better than they used to be. There are to keep service quality high. more of them, and they travel faster because of the bus lanes."

record high. But it did not arrive at this

state without several wrong turns along the way.

for Singapore, where a gradual change to contract-based routes awarded under a tender system London were run under a nationalwas announced last month, to ised model. raise the quality of service.

run public buses according to cost of providing bus services. standards set by the Public Transport Council.

complaints about overcrowding done "slowly" and "quite cauand long waits have increased. bus network mean it is timely for careful approach (see side story). a rethink of the relationship between the Government and opera- subsidiary was split into 13 smalltors, says Mr Richard Smith from er, publicly owned companies to consultancy CH2M Hill, which re- compete with private operators. cently did a study on bus contract-

ing here. (TfL) – the equivalent of the Land notes that an expanding MRT net- fares and bear revenue risk. work will mean major changes to

the bus network. rectly the routes, frequencies and ly," Mr Thomas says.

capacities required," he says. works, and how that might trans-

The road to improvement

late here.

IN SINGAPORE, customer satisfaction with buses has long been

transport found that 82.3 per cent of commuters were satisfied with per cent for the MRT. However, more passengers they got, the satisfaction with buses increased to 88.3 per cent last year.

es, via the Bus Service Enhance- quality incentive contracts in ment Programme (BSEP) intro- 2001. duced in September 2012. This The incentive-penalty scheme puts 550 state-funded buses on has helped improve service reliathe road to increase capacity.

ment that private, profit-driven down from two minutes in 2001. operators could not improve bus services at the scale or speed that the Government desired.

luctant to increase their fleets too for flexibility to change routes or quickly, as they were making loss- schedules. es on their bus operations, and with rising costs. But commuters en major bus operators and severresisted fare hikes, as both opera- al smaller ones. tors remained profitable overall.

mainly to London and Perth for role models.

In London, a combination of for those owned by the operators. better service and greater capacilevels 12 years ago.

Bus operators compete in ten- entry barriers.

ders to operate routes for a duration of five years, with a two-year

extension for good performance. The contracts are termed quality incentive contracts. Under retiree says the bus system has im- these gross cost contracts, TfL proved since the switch from a sin- keeps the fares (as the LTA plans gle, nationalised operator to a con- to do here) and pays operators a sum to run services, but an incentive-penalty scheme is worked in

Operators are paid about £4 million (S\$8.4 million) to £5 mil-London's bus system is a suc- lion a year. An amount (£5 a mile, cess - ridership has grown, ser- for example) is deducted for milevice reliability has improved and age not operated for reasons such customer satisfaction is at a as bus breakdowns or staff showing up late. Operators are not penalised for traffic disruptions. Routes are typically tendered

in tranches of five to six, with The experience holds lessons 15-20 per cent of the network tendered each year.

However, until 1985, buses in That year, London Transport

Currently, licensed private op- (now known as TfL) started comerators SBS Transit and SMRT petitive tendering to reduce the Mr Simon Thomas, contracts

tendering manager for TfL's bus But in recent years, commuter division, tells Insight this was tiously" - something Singapore Continuing pressures on the seems to have learnt from with its In 1989, London Transport's

These were privatised by Janu-

ary 1995, and London Transport The former director of plan- then began experimenting with ning at Transport for London net cost contracts on new routes. For net cost contracts, unlike Transport Authority (LTA) – gross cost, operators keep the

"The theory is that operators would have the incentive to pro-"A contracting model will en- vide better quality of service if able the LTA to specify more di- they had some benefit financial-

However, service quality took Insight went along for a ride in a hit, and London Transport faced London to see how its system opposition when it tried to make tors would argue that their revegotiate contracts.

Says Mr Jaspal Singh, chief executive of London bus operator Metroline, a subsidiary of SBS below levels seen with the MRT. Transit's parent company Com-An annual survey on public fortDelGro: "With net cost. it was

chaos on the road. "The operators would not want buses in 2007 compared with 94.2 to leave the bus stop because the

more they benefited." London abandoned the net cost That was thanks to more bus- model after 1998, introducing

bility, with buses now late by no

The BSEP was an acknowledg- more than a minute on average, CH2M Hill's Mr Smith says the gross cost model is suitable for Singapore as the bidding process SBS Transit and SMRT were re- is straightforward, and it allows

The London network regulated fare increases had not kept pace by TfL has 700 routes run by sev-

Buses and depots are bought With the BSEP under way, the and owned by the operators – one LTA focused on finding a more facet of London's system that Sinsustainable system, and it looked gapore will not adopt. Here, the Government will buy new buses, and it is still deciding how to pay **Issues for Singapore**



How London does it: Pro-active intervention key to beating gridlock

IT IS Wednesday, June 4 – the eight to 10 minutes but is now date of the annual State Opening arriving every 25 minutes or of Parliament in central London. worse. Mr Suarez starts Roads around the Houses of Parliament are closed, and traffic has slowed to a crawl. The gridlock is wreaking

havoc on bus schedules. Mr Jorge Perea Suarez, 49, a bus controller with operator Go-Ahead London, tells Insight: "All my services are affected."

One service he is monitoring from Go-Ahead's Stockwell Garage control centre is No. 68. which usually has an interval of placed under "Quality Incentive

instructing drivers to cut short their trips. He sends these buses around the congested area to serve passengers at stops farther down the route so they do not have to wait too long.

"There's no point sending every bus through," he says. Such pro-active intervention is the key to buses running at regular intervals.

Bus operators in London are

Contracts", which reward or penalise them based on excess waiting time (EWT) – the average time commuters spend waiting at a bus stop when a bus is late.

Operators get a bonus of 1.5 per cent of the annual contract price for every 0.1 minute improvement in EWT above a set baseline standard, up to 15 per cent.

Conversely, they can be penalised up to 10 per cent of the annual contract price for falling below the prescribed

changes to the network, as opera-tors would draw the their the transformation of the network of

nue was affected and ask to rene- In adopting a new model, Singapore drew extensively from the experience of other cities, especially London and Perth.

	Singapore	London	Perth
Operating structure	Government will own depots and buses, lease them to operators. Operators run services, manage and maintain bus infrastructure and assets	Operators provide depots and buses, manage and maintain them	Government owns depots and buses, leases them to operators. Operators run services, manage and maintain bus infrastructure and assets
Model	Gross cost contract, with incentives worked in to ensure reliability	Quality Incentive Contract (gross cost contract + incentive provisions): the operator is paid to provide services while fare revenue is kept by the Government. Operators are rewarded or penalised based on how reliable their bus services are	Gross cost contract where operator is paid to provide services and Government keeps fare revenue.
Tender package	12 packages of routes with 300 to 500 buses per package	Individually tendered in tranches of about 5 to 6 routes	Packages of about 20 to 40 routes, with about 120 to 140 buses each
Contract period	5 years + 2 years extension	5 years + 2 years extension	10 years
Implementation date	Progressively from 2H2016	Since 1985	Since 1995
Population	5.4 million	8.4 million	2 million
Area	716.1 sq km	1,583 sq km	6,417.9 sq km
Population density (person per sq km)	7,540	4,542	310
Standard bus routes	270	700	290
Fleet size	5,400 (by 2017)	8,600	1,300
Number of bus operators	Three to five (targeted)	Seven major operators and a few smaller ones	Three

ty saw bus ridership surge to 2.4 ple instead, where Transperth still in the process of sorting out ty, depot proposal and previous Another aspect that cost-conbillion passengers a year in owns a fleet of 1,300 public buses from the London experience is experience, among other things. scious Singapore will have to says. "Take Woodlands Transport 2012/2013, up 69 per cent from and leases them to the operators. how the latter subjects operators The LTA has said this helps lower that want to bid for routes to a form of vetting process as well for is based on the most economically some time and have run premium pre-qualification system.

checks are done on a firm's finan- dered later this year, but details rience, but does not rule out a The LTA follows Perth's exam- SOMETHING that Singapore is cial status, management capabili- are still being worked out. Singapore will feature some weigh up: "The tender evaluation – they've been in the business for

parties interested in bidding for advantageous tender," Mr Tho- bus services."

SATURDAY, JUNE 14, 2014

THE STRAITS TIMES



"There were only two players (SBS Transit and SMRT), each operating bus services for different parts of Singapore," he said "There was no competition, and I believe effective competition will The Government took heed in its 2008 Masterplan, it outlined

plans to have operators compete for packages of bus services. Oth- es would be in August 2016, when er major changes included making the Land Transport Authority (LTA) the master bus route plan-

opened the market up to competition, operators would be com- ironed out as well, Mr Yeo said. pelled to provide better service and become more efficient which in turn could lower costs. Yet, it wasn't until last month

that the Government announced it was ready to make the shift. Why did it take six years?

group director for public trans-

London's bus system has seen ridership grow, service reliability improve and customer satisfaction

for a similar centralised fleet

management system. SBS and

SMRT currently use separate

systems. Singapore is also trying

out an incentive-penalty scheme

Another aspect Singapore has

interests are taken care of when they are affected by contracting.

on 22 bus routes with reliability

studied is how bus drivers'

In London, bus driver

transfers are governed through

Employment) Regulations 2006,

legislation called Transfer of

Undertakings (Protection of

problems.

THE idea of a bus contracting sys- port, told Insight that several fac- was ready to run services, Mr Yeo sites in developed areas. This

First, the LTA introduced dis- ternatives quickly." tance-based fares in 2010 to elimi-It engaged international con- nate transfer penalties and ally sped up" while the \$1.1 billion from 2009 to 2011.

It had expected demand for cer- mented, he said. As part of the bus system, which in the 1960s tain bus services to change as a re- BSEP, the LTA started contract- had 11 unregulated private bus sult, and wanted to wait for de- ing out bus routes to private opera- companies that controlled differ-The consultant was not the on- mand patterns to stabilise before tors last year, in a prelude to the ent territories. calling any tenders, he said. Then, when grouses about over-

breakdowns happened in 2011, the testable bus model work in Singa-Mr Cedric Foo, current and authorities' priority quickly shift- pore. then chairman of the Government ed to solving those problems, which they tried to do by pump- the LTA adopt a gross cost con-

> Various experts told the LTA there would be greater competition if barriers to entry were lowered... The LTA settled on owning the buses, so potential operators would not have to make that substantial investment.

buses on the roads. to introduce the sweeping chang- operator keeps the fares. bus operators, SBS Transit and SMRT, expire.

Finally, issues such as ownership of bus assets and type of contract for the new model had to be out the length of the contract," he said. "If you have uncertainty,

you're not going to get a cost-effective proposal. Mr Yeo Teck Guan, LTA's When the overcrowding on ered, Mr Yeo said. trains surfaced as a hot-button is-

> depots under the new model. And even if tenders were called

tion, it would have taken a new op- land scarcity, as new operators be a thing of the past.' erator two to three years before it could have difficulty finding new **ROYSTON SIM**

ing in \$1.1 billion to put 550 more tract, where it keeps fare revenue routes into tranches for handover, and absorbs revenue risk, instead so a new operator does not as-Planners also felt a logical time of a net cost contract, where the sume control of more than 20 Mr Richard Smith, transportaoperating licences held by the two tion director with CH2M Hill, said: "Gross cost is a useful model to start where there is a need to bring about reform."

bidding process is straightforward, he said. The model also al- may be hiccups along the way, but "You must have a set of specifi- lows the regulator the flexibility cations that can tell very clearly to change routes based on dewhat is going to happen through- mand, and better integrate bus ser- tive of London bus operator vices with train services.

stantial investment.

standard. Since the incentive-penalty contracts were introduced, EWT has gone down from two minutes to one over 10 years. Go-Ahead has about 130 controllers managing its buses. It is vital to have the right schedule and good control strategies, says Go-Ahead managing director John Trayner. "We maintain 'headway' almost like a religion. We're looking at every vehicle, when it's going to be held up, what do we need to do – communicating to the

mas says. "That doesn't mean to say lowest cost always wins." Factors taken into consideration include driver recruitment plans, having enough buses, schedules, service control and the abili-

ty to start on time. Metroline chief operating officer Sean O'Shea estimates that TfL awards about 75 per cent of tenders to the lowest bidders. With nearly 19 per cent of the London bus market, Metroline is the third-largest player there.

Mr John Trayner, managing director of Go-Ahead London - the largest of the city's operators – notes that staff costs, including those for drivers, account for 60-65 per cent of its bids.

Fuel costs take up about 10 per cent; other costs include those for engineering and vehicles. Go-Ahead generally prices for

a profit margin of 10 per cent in its contracts. Mr Travner notes. At Metroline, Mr O'Shea says labour costs account for 65-70 per cent of its bids.

In Singapore, various parties have expressed interest - including incumbents SBS Transit and SMRT, Australia's Tower Transit and local private bus operators such as Woodlands Transport, which is one of the largest. Nanyang Technological Univer-ST GRAPHICS sity adjunct associate professor Gopinath Menon says the incum-Under London's system, the first route packaged to be ten- bents have the advantage of expenew party winning the tender. "It depends on the price," he

people and making sure that it works." Operator Metroline, a subsidiary of Singapore's ComfortDelGro, has about 180

service controllers. They undergo intense training, and a significant part of their daily job is cutting routes short to keep service at regular intervals, says Metroline chief operating officer Sean O'Shea. Metroline chief executive Jaspal Singh notes that controllers have to check with

bus authority TfL's own awarded a \$68 million contract Under the contracting regime,

London has seen customer satisfaction with buses rise from 75.3 per cent in 2001/2002 to a high of 82 per cent now.

A kev factor that Singapore must consider is that an extensive bus service does not come cheap - TfL pumps in a subsidy of several hundred million pounds a year. Still, TfL has managed to re-

duce that from £563 million in 2008/2009 to £377 million in 2012/2013. Mr Thomas says this was done by tightening standards on its con-

tracts, so it does not pay out as much in bonuses. In addition, each route is now contested by an average of three operators, he says. "Because the good quality competition is there, prices have been coming down.

The cost of running the bus network has been reduced." With Singapore moving to a similar model, observers expect that the LTA will have to fork out more money to subsidise the network, in return for better service. "It's inevitable," says Assoc

Prof Menon. A big question mark remains over fares under the new model, however.

With SBS Transit and SMRT to buses, the LTA has said they will continue to apply to the Public Transport Council for fare increases. What this means for bus **Following suit** fares is unclear.

hardened to the reality of annual es, the London example demon- to earn profits, provided costs are provements. fare increases, based on a formula strates how a well-regulated bus well-managed. of the Retail Price Index plus one system run by private operators per cent.



still running the MRT in addition Commuters at a bus stop next to the Clementi MRT station. Customer satisfaction with buses increased to 88.3 per cent last year, following the introduction of the Bus Service Enhancement Programme (BSEP) in September 2012. ST PHOTO: KUA CHEE SIONG

can work.

controllers before curtailing

bus network.

routes, as they oversee the entire

Since 2012, TfL has begun

using a system named iBus that

allows it to track the location of

every bus in London in

relatively short to help

real-time. Bus routes are

reliability, says TfL contracts

Thomas, adding that there are

long routes but the majority do

Singapore in April this year

tendering manager Simon

not exceed 11km to 13km.

Londoners, meanwhile, appear WHILE not without its challeng- centive contracts still allow them

tors on their toes, while quality in- mains cost-effective. And commuters like the im-Says financial analyst Sean The competitive tendering Donahoe, 29, who has lived in Lon- This trip to London was sponsored by means TfL is able to get a don for $2^{1}/_{2}$ years and takes the **the LTA**.

Competition keeps bus opera- high-quality bus service that re- bus regularly: "It's great. The buses are efficient, and I can usually board the first one." 🖂 roysim@sph.com.sg

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Discussions on competition "re- get on their routes. contracting model.

Last November, it engaged con-

The firm recommended that Transit).

tem came up as early as 2006, tors held back the implementation said. "Because of the rail capacity move is to ensure depots would issue, we needed to introduce al- not be located in areas where buses had to ply long distances just to

> This major shift in adopting a opened the Circle Line in stages Bus Service Enhancement Pro- part-nationalised model marks gramme (BSEP) was being imple- the latest evolution in Singapore's

> Those companies merged into three firms in 1970 under a direccrowding on trains and a spate of sultant CH2M Hill to make a con- tive from the Government, and combined again in 1973 to form Singapore Bus Services (now SBS

In 1982, Trans-Island Bus Services (now SMRT Buses) became the second public bus operator the arrangement in place today.

The Government had received complaints about the SBS monopoly back then, and allowed a second player into the market to introduce some competition.

As for the new model, the biggest challenge would be how to transition smoothly from one operator to another, said Mr Yeo. One option the LTA is exploring is to further divide each package of routes in a single day.

This could minimise disruptions to commuters, and also give a new operator more time to hire drivers if needed, he said.

"We don't underestimate the With a gross cost model, the scale of the challenges, and the complexity of the issues. There we'll do our very best." Mr Jaspal Singh, chief execu-

Metroline which is a subsidiary of Various experts told the LTA SBS Transit's parent group Comthere would be greater competi- fortDelGro, calls this latest move tion if barriers to entry were low- "revolutionary".

"The Government is formally The LTA settled on owning the taking over responsibility and acsue in 2011, the LTA had yet to de- buses, so potential operators countability for the provision of cide if it should own the buses and would not have to make that sub- public transport," he said. "If it is implemented the way London has It also decided to own the bus implemented it... issues of reliabilat that time to introduce competi- depots, to overcome the issue of ity and inadequate capacity will



A service controller with London bus operator Metroline. a subsidiary of Singapore-based ComfortDelGro. Metroline has about 180 service controllers. ST PHOTO: JERMYN CHOW

or TUPE.

This gives drivers on a route that changes hands the right to move to the new operator, on equal or better contract terms. For instance, 1,000 out of Go-Ahead's 6,000 bus drivers moved over through TUPE. ROYSTON SIM

The route to a new system

2006/2007: Consultant Booz Allen Hamilton engaged to conduct a review of land transport **2008:** Government reveals intention to introduce competitive tendering to the bus industry in its Land Transport Masterplan

2009: LTA takes over as master bus route planner **2012:** \$1.1 billion Bus Service Enhancement Programme announced **2013:** LTA engages

consultant CH2M Hill to study bus contracting in Singapore **2014:** Government

announces move to a bus contracting model, routes to be split into 12 packages for tendering **Second half of 2014:** First

package of routes to be tendered out **2016:** SBS Transit and

SMRT's operating licences expire, will run nine of 12 route packages under new model for about five years **2022:** More bus services to be tendered out after

contracts expire **Beyond 2022:** Three to five operators to run the 12 packages of bus routes