



Submission to the Consultation on the Renewal of the Franchises of New World First Bus Services Limited, Long Win Bus Company Limited and Citybus Limited (Franchise 2)

I: INTRODUCTION

Civic Exchange notes that three public bus franchises for Long Win, New World First Bus and Citybus (Franchise 2) are nearing their completion date and that the Commissioner for Transport (C for T) has expressed his intention to renew the franchises owing to his satisfaction with their current operations.¹ Public opinion on the performance of the three franchisees has been canvassed through three identical public opinion surveys, and further views have been invited through this consultation.

It is understood that the principal considerations of the C for T in managing franchised buses have been to ensure that buses are plentiful, affordable to the general public and roadworthy. Controls to ensure these considerations are met have been included in the franchise agreements for many years.

The requirement for buses to operate in an environmentally friendly manner has a much shorter history in the franchise agreements. This review provides an important opportunity to bridge the disconnection that has seen transport policy develop with only a very limited regard for environmental considerations.

- ***Connect environment and health to transport policymaking***

In our view, tight policymaking and implementation connection needs to be urgently made so that the Transport & Housing Bureau, Transport Department and the office of C for T work hand-in-glove with the Environment Bureau and Environmental Protection Department ensure transport-led policies include ambitious environmental goals. Moreover, the public health impacts of road-side pollution must be included in policymaking and the Department of Health must be involved in policymaking to ensure public health is properly protected

- ***Process of Consultation should be extended***

This consultation would have been much more valuable if the current franchise agreements had been made available for public scrutiny. This would have created a better basis for understanding the conditions under which the franchise holders are required to operate.

In the absence of this essential reference and the subsequent reduction in transparency any views expressed by the public must necessarily be constrained, and ultimately of less value to the C for T.

Civic Exchange requests that the consultation period be extended for a further 30 days to allow the public to review the information included in the franchise document and for the public's observations of the respective fleets in the light of the current franchise agreements.

¹ Transport and Housing Bureau & Transport Department (July 2011) *Franchises of New World First Bus Services Limited, Long Win Bus Company Limited and Citybus Limited (Franchise for Airport and North Lantau Bus Network)*.

II: MAKING BEST USE OF THIS REVIEW

Ageing diesel commercial vehicles, including franchised buses are well-known to be one of the greatest contributors to roadside air pollution, which is harmful to public health.^{2,3} When considered in the context of rising concentrations of toxic nitrogen oxides at the roadside monitoring stations and the size of the contribution of diesel buses to this problem, the urgency to reduce emissions from this source is acute, and it is incumbent on C for T to take appropriate action.

It is notable that the environmental performance of all three companies was a step lower (48%-59% satisfaction) than all but one other surveyed performance metrics (68%-90%). This is not surprising given the low standard for satisfactory performance set by C for T. It is reasonable to conclude that the expectations of C for T do not reflect the expectations of the public and must be revised accordingly.

There are a number of ways in which the environmental performance of buses can be improved, but there is no question that the most important of these is to accelerate the replacement of buses with engines that do not meet the current Euro V standard. This is because the older the bus and the earlier the engine class, the more polluting the bus is. The maximum performance of even a well-maintained Euro I bus will never achieve the same emissions performance of a higher Euro standard.

III: BROADER CONSIDERATIONS

It is recognized that under the current franchise structure tightening environmental standards will require franchise holders to make additional investment in their fleets, and this in turn is likely to have an impact on fares.

Rising fuel costs are already increasing pressure for franchised bus operators to raise fares. In order to create greater fare stability in the face of the rising trend and increasing volatility in fossil fuel prices, this review of current franchises present an opportunity for the C for T to review the suitability of the franchise to encourage alternative technologies with different financing requirements.

For example the introduction of electric buses, trolley buses and other technologies may require different divisions of capital and operating costs that cannot comfortably be covered under the terms of the current franchise. Given the broader environmental benefits that such technologies can deliver through reduction of toxic and greenhouse gas emissions, such measures should be afforded greater weight.

IV: PROPOSED SOLUTIONS

- ***Improving the performance of existing diesel-powered technology***

1. Accelerating the replacement of ageing diesel buses

The older the bus and the lower the Euro classification, the higher the emissions factor. This means that the oldest buses are responsible for disproportionately high component of the emissions of all franchise operators. As a result the single most effective way to reduce toxic emissions from the

² Heimark, E., Lalogianni, H., Kilburn M., & Loh, C. Civic Exchange November 2009 *Paying for a Cleaner Bus Fleet. How Government can Break the Log Jam.* <<http://www.civic-exchange.org/eng/upload/files/091127Bus.pdf>>.

³ Kilburn M. (Civic Exchange July 2010) *Response to Environment Bureau/ Environmental Protection Department Proposal Document: "A Proposal to Control Emissions of Non-road Mobile Sources"*, <http://www.civic-exchange.org/wp/response-to-environment-bureau-environmental-protection-department-proposal-document-a-proposal-to-control-emissions-of-non-road-mobile-sources>>.

existing fleets is to accelerate the replacement of the oldest buses in the fleets. It is recognized that considerable additional costs would be incurred. Solutions to address this are discussed later.

2. Retrofitting of all buses with Euro III engines or older that will not be immediately replaced.

It is also possible to reduce emissions of existing vehicles through installation of catalytic converters and diesel particulate filters. While this is a less expensive solution that accelerated replacement of buses it is also less effective, and it should be noted that poorly maintained retrofit devices have been shown to be substantially more polluting than vehicles that have not been retrofitted⁴.

3. Enhancing inspection and maintenance of franchised buses

In order to ensure that all buses operate to their optimum designed performance the introduction of more rigorous and explicit requirements for inspection and maintenance should be incorporated into the franchise agreements. These requirements should include a regime for monitoring and publishing emissions profiles (both according to the design specification and empirical data on operational performance) for both toxic pollutants and greenhouse gases.

- **Organizational solutions**

1. Review of franchise finance and depreciation structure to facilitate introduction of alternative technologies

The current franchise model serves the investment profile of diesel-powered buses, for which the capital costs are largely confined to the acquisition of new buses. A number of new and alternative technologies with lower toxic and/or greenhouse gas emissions have different financing structures with higher capital costs. These include trolley buses, hybrid and fully electric buses, super-capacitor buses LNG and CNG –powered buses. While it may be difficult to introduce a wholesale change in the design of the financing model, the option to allow aspiring franchisees to propose alternative models could serve to stimulate the exploration of alternative technologies.

2. Progressively tightening caps on toxic and greenhouse gas emissions

The successful introduction of progressively tightening fuel standards in Hong Kong over past decades points the way to driving emissions reductions through the introduction of emissions caps that will be progressively tightened according to a clearly articulated timetable. This serves the important function of allowing polluters to incorporate future tightening of standards into their capital expenditure planning strategies. Such a tool can serve to stimulate the retirement or retrofitting of the most polluting vehicles, while allowing franchise holders the flexibility to select the option that best meets their needs.

This would require the development of specification-based and operations-based inventories, and new methodologies for monitoring, verification and publication of data, along with schemes for rewarding the virtuous and penalizing those that do not meet acceptable standards.

3. Rationalization of bus services

Where duplication of routes and low occupancy occur simultaneously, economic efficiencies and environmental gains can be achieved by reducing the number of services. Given the current political

⁴ Edesess, M. *Roadside air pollution in Hong Kong: why is it still so bad?* Pp 6-7. <http://www.civic-exchange.org/wp/110720roadsidepollution_en/> accessed 30 September, 2011.

difficulties in securing route rationalizations, it is proposed that C for T works with franchise holders and local communities to establish service frequency standards that could be used to assist the process of reviewing marginal services.

4. Introduce an element of competition into the franchise process

Extending the existing franchise to current franchise holders places the majority of the onus on driving environmental changes on the C for T. If a competitive element were added, which invited potential competitors to propose alternative strategies to improve environmental performance, with the applicant with the best performance winning the right to operate the franchise, then the onus would shift, and favour those seeking to operate to the highest environmental standard.

5. Mandatory emissions labeling to increase transparency

There are several potential benefits from requiring all buses to prominently display a label identifying their engine class. It would assist with enforcement of low emission zones, help to educate the public about the emissions profile of the fleet, and may help to persuade communities to agree to rationalizations where older buses run on less productive routes.

6. Supporting the cost of retirement of the oldest and most polluting buses

The Chartered Institute of Logistics has developed a proposal for making a step change in the age of diesel bus fleets⁵. This proposal recognizes the concern that a meaningful improvement in environmental standards is likely to exert upward pressure on fares unless these costs are somehow offset.

V: CONCLUSION

Public attitudes towards air pollution are changing fast. It is no longer acceptable for public bus franchise operators to run a service which so directly threatens public health and which plays a significant role in increasing the difficulties in approving new infrastructure projects.

The C for T should use this franchise renewal to address the externalized environmental costs imposed by the older and more polluting vehicles in the franchised bus fleet, and to strengthen environmental considerations in developing and implementing Hong Kong's transport policy.

Civic Exchange
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⁵ Chartered Institute of Logistics & Transport (April 2011) *A Euro V franchised bus fleet by 2016: Public cost of about HK\$7.7 billion, at most about HK\$1.0 billion in any one year.* <http://member.cilt.org.hk/webadmin/img/news/231_1.pdf> Accessed 30 September 2011.