

Legislative Council Panel on Transport

Review of Fare Adjustment Arrangement For Franchised Buses

PURPOSE

This paper informs Members of the outcome of the review of the fare adjustment arrangement for franchised buses, and seeks Members' views on the way forward.

BACKGROUND

Existing Fare Adjustment Arrangement for Franchised Buses

2. Under Section 13(1) of the Public Bus Services Ordinance ("PBSO") (Chapter 230), fares of franchised bus services are to be charged according to a scale of fares determined by the Chief Executive-in-Council ("CE-in-Council"). The current Fare Adjustment Arrangement ("FAA") was put in place in January 2006. In assessing franchised bus fare adjustment for the purpose of making recommendations to the CE-in-Council, the Administration would take into account a basket of factors in the revised Modified Basket of Factors ("MBOF") approach which include –

- (i) changes in operating costs and revenue since the last fare adjustment;
- (ii) forecasts of future costs, revenue and return;
- (iii) the need to provide the operator with a reasonable rate of return;
- (iv) public acceptability and affordability¹;
- (v) quality and quantity of service provided; and
- (vi) outcome of the fare adjustment formula (supportable fare adjustment rate = $0.5 \times \text{Change in Wage Index} + 0.5 \times \text{Change in Composite Consumer Price Index ("CCPI")} - 0.5 \times \text{Productivity}$)

¹ In considering public acceptability and affordability of bus fare adjustment, reference is made to the magnitude of change in median household income, in addition to change in the Composite Consumer Price Index.

Gain). The formula does not operate as an automatic determinant of the fare adjustment outcome. The Administration uses the outcome of the formula as a reference indicator in considering whether the fare adjustment rate is supportable and justifiable at a given juncture.

3. The FAA serves to balance the interest of bus operators and passengers in the bus fare adjustment process. While the first three factors take account of the financial capability of individual bus operators, factors (iv) and (v) address the needs and expectations of passengers. In January 2006, reference to the median monthly household income (“MMHI”) for consideration of public affordability and factor (vi) – outcome of the fare adjustment formula to reflect changes in the macro-economic situation were introduced. These changes were aimed at enhancing the objectivity of the FAA and enabling upward and downward fare adjustments in accordance with economic conditions. The Administration applies on a quarterly basis the fare adjustment formula and would proactively initiate a comprehensive fare review if the formula outcome reaches –2%. The CE-in-Council continues to retain the ultimate control in determining bus fares to ensure all relevant factors under the revised MBOF approach are considered.

4. As regards the triggering point for 50/50 sharing of return between bus operators and passengers, it has been set at 9.7% rate of return on average net fixed asset (“ANFA”)² with reference to the Weighted Average Cost of Capital (“WACC”) calculated for the bus industry³.

5. The Administration undertook to review the FAA in three years’ time, as it was a new approach which warrants monitoring of its effectiveness.

Fare Adjustments in 2008

6. In late 2007, on the basis that operating costs had increased considerably due to rising fuel and staff costs as well as tunnel tolls, and that operating costs were forecast to continue to rise, all the franchised bus

² Both the net profits to shareholders (i.e. profit after taxation) and the borrowing costs incurred by the operator are included in calculating an operator’s return. ANFA is the average value of fixed assets at historical cost net of depreciation, except for land where no depreciation is charged. Under Section 12A of the PBSO, a franchisee is required to provide a Forward Planning Programme (FPP) each year, covering amongst others, its plan to acquire additional assets. The FPP has to be agreed by the Commissioner for Transport. This could safeguard against any unwarranted inflation of operators’ asset.

³ It is the average cost of debt and equity weighted by their respective proportion in the bus industry as a whole. The WACC can be regarded as the expected rate of return of the investors in general for the bus industry under the prevailing economic conditions. It is derived based on an established and widely used formula which takes into account financial data of the market reflecting the cost of debt and cost of equity.

operators had submitted applications for fare increase. This was the only time when the new FAA approach was used.

7. Unlike the situations before 2006, the fare adjustment formula provided an objective starting point for considering the fare adjustment applications in 2008. Based on the nominal wage index for the transport sector for the period from the first quarter of 2006 to the fourth quarter of 2007 and the CCPI for the period from January 2006 to March 2008, the outcome of the fare adjustment formula was +4.67%. This reference figure broadly indicated a case for bus fare increase at the time. During the period, general inflation was 6.8%, while MMHI, as a reference indicator of public affordability, rose by 5.7%.

8. Having considered all relevant factors under the FAA, including the formula outcome, public affordability and the financial position of the bus operators, the CE-in-Council approved the fare increase applications of five of the six franchised bus operators in May 2008. The fare increase rates applied for by the bus companies and the rates approved by the CE-in-Council were as follows:

Bus Company	Proposed Fare Increase Rate in the Application	Approved Average Fare Increase Rate
The Kowloon Motor Bus Company (1933) Limited ("KMB")	9.0%	4.5%
Long Win Bus Company Limited ("LW")	5.9%	4.5%
Citybus Limited (Franchise for Hong Kong Island and Cross-harbour Routes) ("CTB(F1)")	5.8%	2.0%
Citybus Limited (Franchise for North Lantau and Chek Lap Kok Airport Routes) ("CTB(F2)")	5.8%	Nil
New World First Bus Services Limited ("NWFB")	5.8%	5.0%
New Lantao Bus Company (1973) Limited ("NLB")	7.24%	7.24%

THE REVIEW

9. In assessing the overall effectiveness of the FAA, we have studied four key aspects, namely the components and their weightings in the fare adjustment formula, other factors in the revised MBOF approach, passenger reward arrangement, and the procedure for bus fare adjustment. Based on our experience, particularly in processing the fare increase applications in 2008, we believe that the FAA has by and large worked well and should continue to be adopted. Our considerations and proposed way forward are set out in the ensuing paragraphs.

(A) Fare Adjustment Formula

10. An important feature of the FAA is a formula to assess the level of supportable fare adjustment. The formula was introduced in 2006 as one of the factors for approving fare adjustments under the revised MBOF approach to facilitate more responsive upward and downward bus fare adjustments in line with prevailing economic conditions, and to improve objectivity of the fare adjustment process. The formula, which includes a cost component and a productivity component, is as follows –

Supportable Fare	=	0.5 x Change in Wage Index	Cost Component
Adjustment Rate		+ 0.5 x Change in CCPI	
		– 0.5 x Productivity Gain	Productivity Component

Cost Component

11. The cost component is represented by two indices, one relating to staff cost and the other to other operating costs, with a weighting of 50:50.

12. Staff cost is reflected by the nominal wage index for the transport services sector published by the Census and Statistics Department (“C&SD”). Using the wage index to measure the change in staff cost has the merit of improving transparency and objectivity, and minimising the reliance on information provided by the bus operators. As for other operating costs of the franchised bus industry, they are reflected by the CCPI. The CCPI is an easily understood and publicly available indicator to reflect the overall price level change of goods and services, and can broadly indicate the underlying trends in non-staff operating costs of the bus industry. These two indices (i.e. the wage index and CCPI) provide a transparent and objective basis which facilitates public understanding of the case for bus fare adjustment and

are considered relevant in reflecting the changes in operating conditions of the local franchised bus industry. We therefore recommend that these two components be kept in the formula.

13. Regarding the weighting of the two indices in the formula, we have compared them with the cost structure of the bus industry. Staff cost, as reflected by the nominal wage index for the transport services sector, continues to constitute about 50% of the total operating costs of franchised bus industry over the past 5 years (from 2004 to 2008). The other operating costs, which are reflected by the CCPI, continue to represent about 50% of the total operating costs. This demonstrates that the weighting of 50:50 for the wage index and CCPI in the formula remains appropriate.

Productivity Component

14. Other than the cost component, the productivity gain element, which measures the percentage change in output relative to the percentage change in input⁴, has been included in the formula with a view to encouraging bus operators to improve efficiency and productivity. In the fare adjustment formula, half of the annual productivity gain has been shared with passengers. For the travelling public, the productivity gain element allows passengers to share the benefit arising from productivity improvement of bus operators through moderating fare increase or increasing the magnitude of fare reduction when one is required. For the franchised bus operators, they enjoy the benefits of their efforts in improving productivity. We consider the productivity gain element beneficial to both the passengers and the franchised bus operators and therefore should be maintained in the formula.

15. We have updated the productivity gain value for the franchised bus industry using the current methodology. The outcome is –1.05% p.a., which represents productivity loss, compared with +0.51% p.a. in the last review in 2006. The drop in this value is mainly due to the drastic upsurge of fuel costs during the recent years, increasingly keen competition from other transport modes – particularly railway with an expanding network. Besides, while we continue to pursue further bus service rationalisations in consultation with the District Councils where practicable, we have to balance the public demand for bus services and the need to improve road traffic and the environment.

⁴ Our approach is to measure the output of the bus industry by total fare and non-fare revenue and the input by total operating cost. The industry-wide productivity gain is derived by comparing the ratio of total fare and non-fare revenue to total operating costs in the last five years with the corresponding value in the preceding five years (i.e. 2004 – 2008 over 1999 – 2003 for the current review).

16. Given that the productivity gain calculated in the last review in 2006 was +0.51% p.a., and that the formula has catered for the net-off effect in respect of the sharing of productivity gain, -0.3% p.a. (i.e. $-0.5 \times (+0.51\% \text{ p.a.})$) has been built into the formula since 2006. For the updated figure, if the productivity gain value at -1.05% p.a. is taken as calculated, its effect on the formula outcome will be +0.53% (i.e. $-0.5 \times (-1.05\% \text{ p.a.})$), implying that passengers would have to shoulder the burden of the productivity loss of the bus industry. In the interest of passengers, we propose that the passengers' share of productivity gain in the formula should be set at zero, instead of taking the negative productivity gain value, until the next review.

A separate fuel cost component?

17. While the existing fare adjustment formula is considered appropriate in terms of both the components and their weightings, we have also considered whether a fuel price change element should be added to the formula. Under the existing formula, fuel costs have been partly reflected by the CCPI with a weighting of 0.69%. However, to the bus operators, fuel cost is an important cost component, representing 10% to 21% of their total operating costs.

18. Oil prices started to climb from 2007 with 2008 being a particularly difficult year for bus operators because of the unprecedented oil price hike. The price of Singapore 0.5% Sulphur Gasoil⁵ soared from about US\$70 per barrel in early 2007 to about US\$170 in mid 2008, representing an increase of about 140%. After the bus operators' fare increase applications were approved in mid 2008, oil prices continued to rise sharply. The bus companies had to cope with immense pressure of escalating operating costs. On the other hand, the oil prices have started to drop since the third quarter of 2008 and remained at relatively moderate levels. This has alleviated the pressure on the bus operators.

19. We do not consider a fuel cost element should be added to the formula. First, doing so would allow bus operators to pass their fuel cost fully and directly to bus passengers through the formula which serves as the reference indicator in fare adjustment. Second, this would mean that passengers would have to bear frequent and drastic fare adjustments due to short-term changes in individual cost items, e.g., fuel costs. The simulation results indicate that the addition of a fuel price change element to the formula would lead to very drastic upward and downward movements of the formula

⁵ The price of the ultra-low sulphur diesel used by franchised buses is based on the price of Singapore 0.5% Sulphur Gasoil, which is higher than that of crude oil. The corresponding crude oil price was about US\$60 in early 2007 and about US\$140 in mid 2008.

outcome. For instance, a formula with a fuel price change element could have resulted in a formula outcome of +9% to +14% when the CE-in-Council considered the bus companies' fare adjustment applications in May 2008, depending on the methodology for working out the fuel price change. Conversely, the opposite dramatic effect would have occurred as fuel prices dropped significantly in the latter half of 2009 when the global financial tsunami took its toll.

(B) Other Factors in the Revised MBOF Approach

Financial Viability and Performance of Bus Operators

20. Under the FAA, we do not set any guaranteed minimum level nor ceiling of rate of return for the bus industry. In assessing the reasonable rate of return to bus operators, we make reference to the WACC of the bus industry. When the FAA was promulgated in 2006, the WACC calculated for the bus industry was 9.7%.

21. We recommend that reference should continue to be made to this 9.7% rate of return on ANFA in considering the reasonable rate of return for the bus industry. This percentage was adopted only three years ago. The current market situation remains highly turbulent in the aftermath of the global financial tsunami. On the other hand, the bus companies need considerable certainty to make long-term investment in the franchised bus business over the ten-year franchise term to ensure provision of sustainable and quality bus service.

Public Acceptability and Affordability

22. Under the FAA, we make reference to changes in CCPI and MMHI in considering public acceptability and affordability. We consider that these are suitable reference indicators which should continue to be used in processing future bus fare adjustments.

Quality and Quantity of Bus Services

23. Under the FAA, we take into account objective indicators including the findings of passenger satisfaction surveys and site surveys, complaint figures and accident rates, to see whether the quality and quantity of service have affected the patronage and in turn the rate of return on ANFA of bus operators. We consider that we should continue to make reference to these indicators as well as any other relevant information in monitoring the quality

and quantity of bus services and take these into account in considering future bus fare adjustments.

(C) Passenger Reward Arrangement

24. In January 2006, we modified the passenger reward arrangement under which any return achieved by a franchised bus operator exceeding the rate of return on ANFA of 9.7% would be shared equally on a 50/50 basis between the operator and passengers. The passengers' share maintained as "passenger reward balance" serves to relieve the pressure for future bus fare increase and to facilitate the offer of bus fare concessions.

25. To enhance transparency, we have introduced measures to enable the public to monitor the use of passenger reward balance. The franchised bus operators are required to publish their passenger reward balance accumulated and their plan to utilise the amount in their booklet of "Fuller Disclosure" on an annual basis⁶. For the amount up to the equivalent of 1% of its annual revenue for the last accounting period in the passenger reward balance, operators have been given the flexibility to decide, in consultation with the Administration, when to use it for reducing the magnitude of fare increase required in future, or for providing fare concessions. Operators are required to use any amount in the passenger reward balance exceeding the equivalent of 1% of the annual revenue for provision of fare concessions within 12 months since the disclosure of the passenger reward balance accumulated.

26. Since January 2006, LW, CTB(F1) and CTB(F2) have accumulated \$5.4 million, \$38.5 million and \$16.8 million passenger reward balance respectively. All the \$60.7 million passenger reward balance has been fully utilised to provide fare concessions. The other bus operators, namely KMB, NWFB and NLB, did not have passenger reward balance as their returns on ANFA have not reached 9.7% since 2006.

27. The passenger reward arrangement has benefited passengers and its operation has been smooth. In particular, the triggering point of 1% of annual revenue has on the one hand offered bus operators certain flexibility in deciding whether to use the passenger reward balance in the near future taking into account prevailing economic conditions, and on the other hand, prevented operators from accumulating a sizable balance without a definite timing on its utilisation. We consider that the existing passenger reward arrangement should be maintained.

⁶ This booklet is published within five months after the end of an accounting year of the respective bus operators.

(D) Procedure for Bus Fare Adjustment

28. Under the FAA, the Administration monitors the formula outcome on a quarterly basis. To avoid frequent fluctuation in bus fares which will cause confusion and inconvenience to passengers, fare change, be it upward or downward adjustment, will only be implemented if it amounts to 10 cents or more per bus trip on average, which is equivalent to about 2% of average fare per trip. Accordingly, if the formula outcome reaches -2%, the Administration will proactively initiate a comprehensive fare review and consider initiating a downward fare adjustment, taking into account the outcome of the formula and all other relevant factors under the revised MBOF approach. As regards fare increase, it will be up to the bus operators to apply if they see a need for upward adjustment of bus fares.

29. Upon commencement of a fare reduction review or receipt of a fare increase application, the Administration will obtain relevant data and forecast from the bus operator for assessment. We would consult the LegCo Panel on Transport and Transport Advisory Committee ("TAC") before making a recommendation to the CE-in-Council. The CE-in-Council retains the ultimate power in determining bus fares as provided in the PBSO, having regard to all relevant factors.

30. We consider the existing arrangement appropriate. In particular, we shall continue to monitor the formula outcome on a quarterly basis having regard to the fact that C&SD publishes the CCPI on a monthly basis and the wage index on a quarterly basis, and keep the triggering point for a comprehensive fare review at -2%, which broadly corresponds to about 10 cents of the average bus fare.

OVERALL ASSESSMENT

31. Overall, the FAA has performed its functions, and met its stated objectives to –

- (a) improve transparency, clarity and objectivity of the fare adjustment arrangement;
- (b) allow fares to go upward and downward to provide greater responsiveness to the prevailing economic conditions;
- (c) provide incentives for franchised bus operators to improve efficiency and productivity; and
- (d) strike a balance between keeping bus fares affordable and maintaining long-term commercial viability of franchised bus operators.

32. As illustrated in the bus fare adjustment process in 2008, the inclusion of the formula has provided a more objective and responsive starting point for considering bus fare adjustment. We have used the outcome of the formula as the reference indicator in considering whether a fare adjustment rate was supportable and justifiable. Notwithstanding the unprecedented oil price hike in 2008, the design of the fare adjustment formula has avoided passengers having to bear directly the impact of short-term and extreme changes in operating costs. Taking into account the formula outcome and having balanced all relevant factors in the FAA, we have contained the magnitude of bus fare increases in 2008, and hence taken care of passengers' interests.

33. In the process of the FAA review, we have engaged the bus operators whose main concern is the perceived inability of the FAA to cater for the risk of fuel price volatility. They are of the view that since it takes time for the Administration to process a fare increase application, the FAA alone fails to address the immense financial pressure faced by the bus operators during oil price hikes and that the FAA is unable to provide bus operators with a financially viable business model. The bus operators have repeatedly urged that the issue of fuel price volatility should be dealt with separately. The Administration appreciates the challenges faced by the bus operators since fuel cost accounts for a significant portion of bus operators' daily operating costs. The ten-year bus franchise should however embody room for weathering short-term volatility of this business risk factor. Over time, cost escalation will eventually be reflected in the basic fare.

34. Besides, although the fare adjustment formula has not triggered any comprehensive fare review so far, it has enhanced the responsiveness and objectivity of the fare adjustment process which is to the benefit of the bus operators, passengers, and the general public. Under the FAA, the Administration takes a proactive approach to monitor the fare adjustment formula outcome on a quarterly basis and will initiate a comprehensive fare review should the outcome reach -2% .

WAY FORWARD

35. Based on the outcome of the current review mentioned above, we propose to –

- (i) maintain all factors in the revised MBOF approach set out in paragraph 2(i) to (vi);

- (ii) maintain the components and their weightings in the fare adjustment formula, without a separate fuel cost element, but set the value of passengers' share of productivity gain at zero until the next review;
- (iii) maintain the existing passenger reward arrangement, including the 9.7% triggering point for 50/50 sharing of return between bus operators and passengers;
- (iv) maintain the procedure of fare adjustment whereby the Administration monitors the formula outcome on a quarterly basis and will proactively initiate a comprehensive fare review if the formula outcome reaches -2% ; and
- (v) review the fare adjustment arrangement for franchised buses again in three years' time.

36. We shall report our findings to the TAC in late October, and seek the CE-in-Council's endorsement of the way forward as soon as possible.

ADVICE SOUGHT

37. Members are invited to note the outcome of the review of the FAA for franchised buses and offer views on the way forward set out in paragraph 35.

Transport and Housing Bureau
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