

**Legislative Council Panel on Transport
Government Policy on the Provision and Operation of Tunnels**

PURPOSE

This paper briefs Members on the Government policy on the provision and operation of tunnels and provides the Administration's comments on Members' suggestions made on various occasions.

GOVERNMENT POLICY ON PROVISION AND OPERATION OF TUNNELS

2. The Government policy on the provision and operation of tunnels is guided by the following principles :-

- (a) Government should, as far as practicable, encourage participation of the private sector through the Build-Operate-Transfer (BOT) mode;
- (b) while the BOT operators should be afforded the opportunity to make a reasonable return on their investments, they are also expected to bear the commercial risk;
- (c) the Government does not provide any guarantee that a BOT operator would, at the end of the franchise, achieve its own target rate of return; and
- (d) the users-pay principle, i.e. the Government will not use public funds to subsidise BOT operators or motorists.

Characteristics of Tunnel Industry

3. The franchisee of a BOT tunnel is required to make substantial upfront capital investment. Within two to three years after the tunnel is operational, the franchisee starts to repay the loans. Together with the annual depreciation and operating cost which are generally at a level close to full capacity operation irrespective of the traffic throughput, the franchisee has to bear a significant financial burden in the first few years of operation.

4. On the other hand, traffic volume plying through a new tunnel needs time to build up. The bulk of the traffic in the first few years of operation is diverted and induced traffic i.e. traffic which is diverted from or suppressed by the congestion of existing tunnels or roads. As the areas served by the new tunnel develop, new traffic demand will be generated. An important characteristic of the tunnel industry is hence that expenditure and cash outflow always exceed the

revenue and cash inflow in the first few years of operation. In Hong Kong, it is observed that it normally takes four to five years of operation (i.e. the seventh or eighth years of the franchise taking into account the construction period) for a tunnel franchisee to start making profit.

Traffic Distribution of the Road Harbour Crossings

5. Some Members had, at previous meetings, raised concern at the uneven distribution of traffic amongst the three road harbour crossings, namely the Cross Harbour Tunnel (CHT), Eastern Harbour Crossing (EHC) and Western Harbour Crossing (WHC). The daily traffic throughput of CHT, EHC and WHC in the past five years were as follows :-

Year	CHT	EHC	WHC
1997	123,158	85,812	22,348
1998	120,010	70,999	33,100
1999	117,801	68,813	39,215
2000	120,350	72,228	42,797
2001	120,444	74,596	39,702

6. It is noted that :-

- (a) CHT's throughput dropped from the 123,000 in 1997 to 120,000 in 1998 and has since been maintained at that level;
- (b) throughput of EHC, partly owing to the relocation of the airport, dropped from 86,000 in 1997 to 75,000 in 2001;
- (c) patronage of WHC grew from 22,000 in 1997 to 40,000 in 2001.

7. It is believed that WHC has served to divert traffic from CHT and EHC. The patronage of WHC is also expected to grow steadily with population build-up at Lantau and West Kowloon. On the other hand, the throughput at CHT is expected to be maintained at a relatively high level as it is the most conveniently located tunnel and provides a strategic connection between the Hong Kong Island and urban Kowloon.

Measures that the Government Has Been Taking

8. The Government has been implementing various measures to further enhance access to as well as the utilisation of the tunnels.

9. Clear traffic signs are erected to direct traffic to all tunnels. Particular attention is devoted to recently opened tunnels where we have been erecting additional and modified traffic signs and road markings, in consultation with the tunnel operators, to familiarise road users with the routings. We would also consider adjustments to the traffic signals at critical road junctions to smoothen traffic flow in the vicinity of the tunnels. Local traffic improvement schemes have been introduced where appropriate to improve the traffic conditions of the feeder roads. For instance, bus only lanes have been introduced on tunnel approaches to give priority to mass carriers in accessing the tunnels.

10. In addition, road improvement schemes such as road widening works and provision of direct road links between tunnel approaches and major road corridors would be considered to increase the capacity and accessibility of the tunnels. In some cases, we would consider building new roads or grade-separated interchanges to separate local traffic from the main traffic approaching the tunnels thereby improving accessibility.

11. We are also pushing ahead with the development of a comprehensive Intelligent Transport System (ITS) in Hong Kong to enable road users to make better and more informed choices on their routings through access to real-time road traffic information. One of the projects under the ITS, the Journey Time Indicator System (JTIS), will provide real-time information on the time required to cross the harbour using the three different cross harbour tunnels. The electronic display panels to be located at strategic points on the approaches to tunnels will enable road users to make an informed choice on the optimal routing. The system will be in place around the end of 2002.

12. We also encourage tunnel companies to devise marketing strategy and promotional campaigns to boost patronage. Lucky draws, fuel coupons and discount for bulk purchase of tunnel coupons are but a few examples. We will continue to maintain close liaison with the tunnel operators to explore ways to optimise utilisation.

SUGGESTIONS BY THE PANEL

13. Members have made the following suggestions on various occasions to improve utilisation of the BOT tunnels :-

- (a) establishing a fund to stabilise tunnel tolls;
- (b) extending the franchise period of the BOT franchises;

- (c) establishment of a Tunnels and Bridges Authority (TBA); and
- (d) redistribution of tunnel traffic by way of toll alignment.

14. We have to assess the implications of Members' suggestion in the light of the principles set out in paragraph 2 above. In addition, it should be borne in mind that both the Government and the BOT operators are contractually bound by the terms of the franchises. Any variation of the scope of the franchises should be handled according to the laws of Hong Kong.

Establishing a Fund to Stabilise the Tunnel Tolls

15. Members have suggested the possibility of setting up a Toll Stability Fund (TSF) to pay off BOT operators such that they would defer toll increases which they would otherwise be entitled to.

16. According to the Western Harbour Crossing Ordinance (Cap. 436) and the Tai Lam Tunnel and Yuen Long Approach Road Ordinance (Cap. 474), provisions have been made for the establishment of a TSF for the respective tunnels. Under the two Ordinances, any actual net revenue exceeding the specified limit for the year will be paid into a TSF. The money in the TSF will be paid to the franchisee to defer toll increases which the franchisee would otherwise be entitled under the governing legislation.

17. It should be noted that the TSFs to be set up under the two Ordinances can only be used to pay the specific BOT operator of the relevant franchise. Pooling of TSFs is not provided for because :-

- (a) it involves major variations of the contractual rights of BOT operators; and
- (b) it will lead to cross subsidy of motorists plying through loss making tunnels by motorists using tunnels which are generating profits. This will lead to more frequent toll increases for the latter than otherwise would be the case.

18. The other alternative would be to set up the TSF by public funds. This involves substantial recurrent expenditure from public coffers and is tantamount to direct subsidy of BOT operators and motorists by the taxpayers. This goes against the principles set out in paragraph 2.

Extending the Franchise Period in Return for a Lower Rate of Toll Increase

19. The franchise period was one of the key terms of the franchise agreement between the Government and the BOT operator. Any change to the franchise terms, including the franchise period, requires consent from both the Government and the BOT operator. To re-open a done deal is a decision which we cannot take lightly. Such a course of action will inevitably create uncertainty as the franchisee could and would make use of this opportunity to make new demands.

20. In addition, toll revenue accrued after the expiry of BOT franchise becomes part of the General Revenue under normal circumstances. To extend the BOT franchise will divert such income to BOT operators. This will in effect be a form of direct subsidy to BOT operators, as well as motorists, by way of General Revenue foregone.

Establishment of a Tunnels and Bridges Authority

21. This is a suggestion for the Government to buy back the ownership of all BOT tunnels and bridges. A public authority i.e. the Tunnels and Bridges Authority (TBA) will then be entrusted with the ownership and management of these facilities. It is also suggested that TBA may issue bonds or have its shares listed on the stock market to fund its operations and development of new facilities.

22. Buying back BOT tunnels and bridges will involve enormous capital spending. Whether this is an area of priority in terms of resources allocation is an area we will need to look at carefully. Also, the investment community will expect the TBA to have the autonomy to set tolls if it were to issue bonds or get listed, the implications of which will also require careful consideration.

Redistribution of Tunnel Traffic by Toll Alignment

23. It has been suggested that traffic throughput of the three cross harbour tunnels would be more evenly distributed if tolls charged by these tunnels are aligned. In considering this suggestion, we need to address a number of complex issues :-

- (a) some of the tunnels are in private hands. The Government has no effective control on their toll levels which are determined by toll adjustment mechanisms stipulated in their respective governing legislation;

- (b) the private tunnels are different in terms of franchise period, shareholding interest, construction cost, operating cost and profit and loss situation etc;
- (c) as toll receipts from Government tunnels are part of the General Revenue, the revenue implications of any proposal to divert traffic from the Cross Harbour Tunnel must be carefully considered; and
- (d) BOT operators have certain expectations on the return on their investments. They would expect a toll adjustment mechanism which could provide some certainty on their expected return under the redistribution scheme.

ADVICE SOUGHT

24. Members are requested to note the content of this paper.

Transport Bureau
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