For discussion
on 17 January 2002

Legislative Council Panel on Transport

Response to Points raised by Deputations

PURPOSE

This note provides our response to key points raised by deputations in their submissions for the special panel meeting on 17 January 2002.

SIR GORDON WU'S SUBMISSION

2. As we pointed out previously, it is untrue and over simplistic to assume that we base our decisions strictly in accordance with the Third Comprehensive Transport Study (CTS-3) report. While CTS-3 provides a blueprint, we have instituted an annual Strategic Highway Project Review to ensure that any changes in the input assumptions could be taken into account in a timely manner when deciding on the actual infrastructure requirements.

3. It is also inappropriate to quote only the high demand scenario in CTS-3. In our latest review exercise, we have adopted Planning Department's Scenario II land use planning data issued in September 2001 and the effect of West Rail has already been fully taken into account. Our latest traffic forecasts for Route 10 and other related roads at the **Annex** are based on the most updated assumptions and realistic scenarios available as explained in paragraph 7 of our paper issued for this meeting.

4. We pointed out at the last meeting that our low range traffic forecast for Route 3 Country Park Section (Route 3) given in 1993 was 40,558 for 2001, which is not far from the actual situation. This serves to illustrate that our forecasts are not unreliable. However, we also agree that all traffic forecasts are affected by various factors and need to be regularly updated as we are doing now.

5. In planning transport infrastructure, we need to take the average peak hour traffic flow on annual average weekday (Monday - Friday) peak hour traffic. The morning south bound flow is 3,300 vehicles which represents a v/c ratio of 0.8. It is not appropriate to use the annual average all day peak hour flow as suggested by Sir Gordon, which includes lower flows on Saturdays and Sundays. As regards costs, it is important to consider economic benefits to the community and not only cost recovery.

6. Access into Lantau via the North Lantau Highway will be tolled at one level, whether access is through Tsing Lung Bridge or the Lantau Link. Hence, there is no question of traffic being jamming onto one bridge and by passing the other and therefore the Tsing Lung Bridge, given its proximity to Lantau Link, would serve as an effective relief when the latter becomes saturated.

7. As regards the annual average daily cross boundary traffic as quoted, our panel paper of 23 November 2001 mentioned about 52,000 as the total capacity of the three existing crossings in 2006 after improvement works. The 65,000 figure as mentioned in our panel paper of 11 January 2002 is the forecast traffic demand in 2006. This illustrates that a fourth land boundary crossing is required in 2006 to cater for the forecast demand.

8. There is not sufficient justification on transport ground to adopt Sir Gordon Wu's toll balancing proposal as diversion of traffic from Tuen Mun Road to Route 3 has happened over the past few years. The key consideration is to provide a choice to motorists. There are many instances elsewhere where quicker tolled roads and slower less direct untolled roads co-exist.

9. We do not dispute a Tuen Mun to Chek Lap Kok Link, whether the alignment is as proposed by Government or Sir Gordon, cannot be built. What we have illustrated is that more study on this link has to be done and it cannot provide a quicker alternative access to Lantau.

10. Timing for the Tuen Mun to Chek Lap Kok Link has to be considered in the light of, among other things, logistics development on Chek Lap Kok. If there is a need to bring forward the project for that reason, we will of course review the programme.

11. Regarding the cost estimates, Sir Gordon is not comparing like with like. The $16.3 billion refers to the cost of the section of immersed tube between Tuen Mun and Chek Lap Kok as proposed in CTS-3. There is an additional cost for the Tuen Mun Western Bypass which will provide the connection from Yuen Long Highway to Tuen Mun in Government's scheme. Our cost estimate of over $20 billion includes the viaduct and interchanges etc. for the Tuen Mun Western Bypass.

ROUTE 3 (COUNTRY PARK SECTION)'S SUBMISSION

12. We have already agreed to include an additional easterly link between DBL and the road network to the east, including Route 3. In designing this link, we will take into account traffic needs, planning, environmental and timing constraints, with a view to identifying a suitable and practical alignment.

13. There is no lack of intention on the Government's part to discuss with Route 3 Company. We have indicated in our letter of 11 December 2001 to the Company that we are prepared to consider the above link in response to their suggestion.

14. According to our latest traffic forecasts over 90,000 vehicles will be using Route 3 CPS in 2011, which is two fold of the existing traffic flow. Of course the actual traffic flow ten years down the road will be subject to the prevailing economic conditions and planning parameters.

15. There is no provision in both the Project Agreement with the Route 3 Company and the Tai Lam Tunnel and Yuen Long Approach Road Ordinance regarding a guaranteed rate of return for the Route 3 project. Indeed, in the project brief issued to bidders, it was stipulated that the Toll Adjustment Mechanism for Route 3 did not guarantee the Franchisee a rate of return. Moreover, it is incorrect to say that profit of the Company has to be returned to the Government. The actual situation is that a Toll Stability Fund will be established. If the Actual Net Revenue of the Company exceeds the Maximum Estimated Net Revenue, the difference would go into the Fund. The Fund would be used to pay the Company so as to defer a toll increase.

WILBUR SMITH ASSOCIATES'S SUBMISSION

16. Wilbur Smith Associates (WSA) is the consultant who undertook the CTS-3 Study for Government. We are surprised that they now question the use of a capacity 1,800 passenger car units (pcus) per lane per hour as a reasonable basis for determining the volume/capacity (v/c) ratios in the Government's analysis. We are well aware of the various standards quoted in WSA's paper and we have taken full account of international practice in determining the appropriate capacity to use. We stand by our use of 1,800 pcus per lane per hour as being appropriate. In fact in carrying out the CTS-3, WSA also used this same capacity figure.

17. Rather than entering into a theoretical argument on the pros and cons of different capacity assumptions, we would request Members to consider the actual result of applying different capacities in the Hong Kong situation. The average peak hourly flow through the Cross Harbour Tunnel is 4,200 pcus. Comparing this with a capacity of 3,600 pcus (i.e. 1,800 pcus per lane), the v/c ratio is 1.17. Such a v/c ratio is indicative of the congested conditions which Members are familiar with in the Cross Harbour Tunnel. If WSA's suggested capacity figure of 2,300 pcus per lane per hour were to be used, this would result in a v/c ratio of 0.91, i.e. no congestion problem. Such a figure is hardly representative of the actual situation.

18. WSA also claims that because the 2001 forecasts made in 1997 were high, our present forecasts for 2011 would also be high. As we have explained previously, the period between 1997 and 2001 was one of significant and unexpected economic changes which could not have been accurately predicted. According to the recommendations of WSA in the CTS-3 consultancy, we have instituted a Strategic Project Highway Review mechanism. Hence our more recent forecasts are based on the most up to date realistic planning parameters which have already taken into account the existing and anticipated effects of the changes which have occurred over the last few years.

19. WSA also questions our assessment of a 20% per annum economic rate of return for Route 10. They make some totally over-simplistic assumption to suggest that such a rate of return would require a saving of $370 per trip for all users of Route 10. It is well recognised that travel time and cost savings, resulting from the introduction of a new road, accrue to all traffic on the affected road network, not just the users of the particular new road. For example, in the present case, very large travel

time and cost savings would accrue to the users of Tuen Mun Road, the traffic conditions of which will much improve with the provision of Route 10.

20. In their "Comments on Government papers", WSA raises some other issues, to which we would respond as follows –

(a) we quoted AM peak hour v/c ratio of 0.8 for the Route 3 is based on an average daily weekday peak hour flow. It is not based on only one day's records as suggested by WSA;

(b) we are using the most up to date realistic planning assumptions. It is totally incorrect and quite unprofessional for WSA to claim that the forecasts are vigorous and assume rapid economic, population and cross boundary traffic growth;

(c) we have provided our forecast v/c ratios for Ting Kau bridge which are 0.84 and 0.93 in the pm and am peaks for 2011 and 0.97 and 1.06 in the pm and am peaks for 2016. These flows are close to or slightly above capacity and are manageable; and

(d) The provision of a link connecting Deep Bay Link to Route 3 would not remove the necessity for Route 10. Route 3 will be over-saturated by 2010/11.

SO KWUN WAT VILLAGE AND LO TSING SHAN VILLAGE

21. Both villages are located in the So Kwun Wat area through which the So Kwun Wat Link Road of the Route 10 Southern Section will pass.

22. The villagers are concerned about the alignment of So Kwun Wat Link Road. They propose to shift the alignment to reduce the environmental impact or to replace the viaduct by a tunnel. We have already shifted the alignment northwards when we gazetted the Route 10 Southern Section scheme. As we have explained to them, there are a number of constraints at So Kwun Wat which dictate the alignment of the link road. While we believe that the gazetted alignment represents a compromised solution in view of the constraints involved, we will continue to explore the possibility of further minimising the impact of the link road on the villages and further shifting the alignment. The villagers also requested for the resite of Tsing Uk Tsuen in the area because of the

environmental impact of the link road. We would deal with the requests according to statutory procedures.

THE CHARTERED INSTITUTE OF LOGISTICS & TRANSPORT

23. We note that the Institute supports the construction of Shenzhen Western Corridor, Deep Bay Link and Route 10. They agree that there is an imminent need to proceed with Route 10 to relieve congestion of Tuen Mun Road, Lantau Link and access to urban areas and container ports. We welcome their support. The Institute also agree that Tuen Mun – Chek Lap Kok Link is a longer term plan and does not serve as an effective alternative for Route 10.

Transport Bureau
January 2002

(c:\data\panel\response-17Jan02.doc)

Traffic Forecasts for R10, Sham Tseng Tunnel (STT), R3, Tuen Mun Road, Ting Kau Bridge, Lantau Link, Yuen Long Highway (YLH) and Tolo Highway

Year	Scenarios	Route 10		STT	R3	Tuen Mun Road		Ting Kau Bridge	Lantau Link	YLH	Tolo Highway
		S/S	N/S			TM Town	Sham Tseng				
	Capacity per hour in passenger car unit	*5400*	*5400*	*3600*	*5400*	*3600*	*5400*	*5400 / 7200*	*5400*	*3600 / 5400*	*5400 / 7200*
2001	Existing	-	-	-	0.56	0.87	1.09	0.90	0.39	0.97	1.26
		-	-	-	(0.84)	(0.96)	(1.07)	(1.12)	(0.34)	(1.09)	(1.34)
2006	without SWC	-	-	-	0.76	0.89	1.11	0.71	0.79	0.76	0.97
		-	-	-	(0.94)	(1.00)	(1.10)	(0.84)	(0.74)	(0.85)	(1.02)
2006	with SWC	-	-	-	0.85	0.92	1.20	0.79	0.83	0.94	0.90
		-	-	-	(1.04)	(1.03)	(1.19)	(0.94)	(0.78)	(1.04)	(0.95)
2008	with R10	0.31	0.32	0.95	0.71	0.97	0.85	0.79	0.63	0.77	0.90
		(0.29)	(0.34)	(1.05)	(0.86)	(1.00)	(0.87)	(0.91)	(0.61)	(0.86)	(0.95)
2011	without R10	-	-	-	1.00	1.03	1.27	0.88	1.01	1.04	0.97
		-	-	-	(1.15)	(1.08)	(1.31)	(0.98)	(0.97)	(1.14)	(1.02)
2011	with R10	0.36	0.35	0.99	0.81	0.98	0.92	0.84	0.70	0.96	0.94
		(0.34)	(0.37)	(1.08)	(0.94)	(1.01)	(0.94)	(0.93)	(0.69)	(1.07)	(0.99)
2016	without R10	-	-	-	1.19	1.14	1.35	0.97	1.18	1.34	1.06
		-	-	-	(1.26)	(1.13)	(1.43)	(1.06)	(1.16)	(1.42)	(1.12)
2016	with R10	0.43	0.60	1.04	0.96	0.99	0.95	0.92	0.81	1.28	1.03
		(0.43)	(0.61)	(1.11)	(1.06)	(1.03)	(0.97)	(1.04)	(0.81)	(1.36)	(1.09)

Remark : 0.66 - PM Peak v/c ratio

(0.66) - AM Peak v/c ratio

Ting Kau Bridge and Tolo Highway are assumed to be widened from dual 3-lane to dual 4-lane before 2006.

Yuen Long Highway is assumed to be widened from dual 2-lane to dual 3-lane before 2006.

The toll level of R10 N/S is assumed to be the same as charged for R3.