Legislative Council Panel on Transport Subcommittee on Matters Relating to Railways

Review of the Light Rail Transit System

Purpose

The Administration has completed the review on the role and service level of the Light Rail Transit ("LRT") system in the overall public transport services provided in the North-west Transit Service Area ("TSA"). This paper informs Members of the outcome of the review.

Background

- 2. During the resumption debate for the Second Reading of the Rail Merger Bill in June 2007, some Members raised concerns over the service level of LRT, including the congestion in train compartments and at platforms, as well as service frequency. In the light of this, the Administration undertook to request the railway corporations and the Transport Department ("TD") to conduct a comprehensive and forward-looking review on the role and service level of the LRT system in the overall public transport services provided in the TSA, including whether more Light Rail Vehicles ("LRV") are required in order to better meet the demand of residents in Tuen Mun and Yuen Long. At the time, the Administration committed to complete the review before the end of March 2008 and report the outcome to the Legislative Council within the second quarter of 2008.
- 3. Through conducting the review, the Administration aims at facilitating the enhancement of public transport services provided by the LRT system, so as to cater for the present and future passenger demand. Taking into account that the opening of the Kowloon-Canton Railway Kolwoon Southern Link ("KSL") in late 2009 will lead to patronage increase in the TSA, and that the Kowloon-Canton Railway Corporation ("KCRC") has to plan early whether to purchase additional LRVs to meet

this increased passenger demand (about two years are required for the purchase of LRVs from open tender to the manufacturing, delivery, testing and commissioning of the vehicles), the Administration has therefore advanced the timetable for the LRT review such that any improvement measures arising from the review can be timely implemented.

The Review

4. In conducting the review, the Administration has assessed whether the service provided by the LRT system is adequate in meeting the existing passenger demand. A forward-looking analysis has also been carried out to study how the LRT service should be improved to cope with the future route development and patronage growth. The outcome of the review is set out in the ensuing paragraphs.

Existing LR services

- 5. Since its commissioning in September 1988, the LR has always been the major mode of transport for the residents of the North-west New Territories. The LR network started off as approximately 23 km in length with a daily average patronage of 151 000. With the opening of the new Tin Shui Wai Extension in December 2003, the LR network has already extended by 57% to 36.15 km to cater for the development of the Yuen Long, Tuen Mun and Tin Shui Wai new towns.
- 6. KCRC is empowered under the Kowloon-Canton Railway Corporation Ordinance ("the Ordinance") to provide comprehensive transport services for the residents of NWNT, with railway as the backbone. Before the commissioning of the West Rail ("WR"), the LR was the key public transport in the area with LR feeder buses providing short-haul feeder services. Following the commissioning of the WR, many passengers have switched to using WR for travelling between Tuen Mun, Yuen Long and Tin Shui Wai. Demand for long-haul travel by LR has dropped significantly while demand for short-haul travel within Tin

Shui Wai and Tuen Mun has increased. Since then, LR performs the role of providing major feeder service to WR, while LR feeder buses remain as a supplementary service for connecting the relatively remote rural areas to LR stops, to facilitate the residents concerned to interchange with WR or LR.

- 7. At present, KCRC operates 12 LR routes and 15 feeder bus routes in the TSA. LR has a fleet of 119 LRVs which provides services 20 hours a day operating more than 2 700 train trips. During peak hours, LR service is as frequent as every 1.3 minutes. There are 107 LR feeder buses providing free feeder services for WR and LR passengers. As at May 2007, the average daily patronage of LR and feeder bus was 463 000.
- 8. When LRT came into service in 1988, KCRC took over the operation of bus services within the TSA. At the time, the then Governor-in-Council restricted the alighting and boarding of passengers by franchised bus operators within the TSA pursuant to the authority empowered under the Ordinance. After considering the views of the public and having jointly reviewed the above arrangement with KCRC, the Government decided to lift all the restrictions imposed on franchised buses in 1993. Since then, franchised buses are allowed to pick up or set passengers in the TSA. The power of the Executive-in-Council to impose restrictions on franchised buses also lapsed on 31 October 2006. Since the lifting of the restrictions on the boarding and alighting of passengers by franchised buses in the TSA in 1993, there are currently 64 franchised bus routes and 37 GMB routes providing services in the area.

Outcome of the Review

9. TD has carried out an overall assessment on the adequacy of the existing LR services in the TSA. By conducting surveys to observe passenger waiting time and cases of left-behind at platforms, TD considers that the current daily carrying capacity of LR can generally meet the daily passenger transport demand. For example, in the half-hour

peak-of-the-peak period in the morning (from 7:30 am to 8:30 am), the average waiting time for passengers for various routes is about 1.5 to 9 minutes. Although passenger left-behinds are observed at certain major stops of some major LR routes, most of the left-behinds manage to take the next LRV. Notwithstanding this, TD considers that there is still room for improvement of these highly patronized LR routes both in terms of relieving the congestion in train compartments and enhancing the frequency of services, such as those operating in the Tin Shui Wai area.

10. Although LR, being an environmental-friendly, efficient and reliable mass transit carrier, is the backbone of TSA's transport system, the Administration is of the view that other transport modes, including franchised buses and GMBs, also have an important role to play in providing services to areas not conveniently served by LR and where passenger demand exists. TD will closely monitor the demand for public transport services in the area and in considering whether other public transport modes should be introduced, the department will co-ordinate and optimize the use of existing resources to minimise wasteful competition and duplication of services.

Future Passenger Demand

- 11. Apart from considering how to enhance the existing service level, the Administration's review also covered the assessment on future passenger demand in the TSA, so as to explore how the LRT system should be improved. These include examining the future population growth in the area and the expected increase in LR patronage after the commissioning of KSL.
- 12. Based on the current work progress, KSL is forecast to commence operation by the end of 2009. At that time, KSL will connect the existing East Rail and WR thus enabling residents of the NWNT to travel directly by rail to and from urban Kowloon, as well as the New Territories East. KCRC forecasts that the convenience brought about by the operation of KSL will generate a significant increase of around 90% in the daily

patronage of WR in 2011 as compared with now.

13. Since LR provides feeder services for WR, the patronage of LR will increase due to WR patronage growth. In addition, the population in TSA is expected to increase by about 3.5% by 2011 as compared with now. Overall speaking, based on the above two factors, KCRC forecasts that there will an increase of around 20% in LR daily patronage.

Way forward in Meeting Future Passenger Demand

- 14. We need to formulate the most appropriate and suitable means to cater for future passenger demand. Given that the expected increase in patronage is relatively big, LR would be a suitable choice in meeting this transport demand. When comparing with buses, the carrying capacity of LR is relatively larger (the carrying capacity of a LRV doubles that of a double-decker bus) and is more environmentally friendly. We therefore consider that LR should continue to be the backbone of the transport system in NWNT. On the contrary, if buses were to be introduced to replace LR, it is envisaged that this would generate negative impact on the traffic flow and the environment in the area. Based on the above considerations, we believe that to purchase LRVs to meet the future increase in passenger demand is the most appropriate way forward.
- 15. KCRC accepts the outcome of our review and has agreed, after analyzing data including forecast patronage growth and usage of existing LR routes, that there is a need to purchase 22 LRVs to cater for the patronage increase mentioned in paragraph 13 above. The additional LRVs will be used to meet the overall increase in patronage after the opening of the KSL (in particular to strengthen the services of LR routes which act as feeders to WR stations), and also to enhance the services of certain existing busy routes, in order to address concerns about the congestion in train compartments and service frequency. As mentioned above, counting from the open tender stage, there will be a lead time of around two years before the LRVs can come into service. To tie in with the timing of the KSL opening, KCRC will conduct an open tender

exercise within September this year to purchase these LRVs. It is expected that the new LRVs will come into operation by phases before the end of 2009. KCRC will fund the purchase of these LRVs through more efficient use of its existing resources.

- 16. According to TD's assessment, after the purchase of additional LRVs, LRT service will be further strengthened to cater for the transport demand in the TSA up to 2011. As such, there is no need to proactively introduce more supplementary transport services on a large scale to TSA. Notwithstanding this, if operators of franchised buses and GMBs submit proposals to TD to enhance their services with regard to the changes in transport services in the area, TD will consider such proposals in an open-minded manner.
- 17. Apart from the purchase of LRVs, we understand that as users of the LRT system, residents in the TSA would have views and concerns over the operational details of the LRT services, such as the routing and service arrangements of individual LR or feeder bus routes. After the rail merger, the post-merger corporation will continue to operate the LR system, and will from time to time review LRT services, taking into account views of the passengers and changes in transport demand in the area, with a view to optimize the use of resources and to provide a more efficient service for passengers.

Transport and Housing Bureau Transport Department September 2007