Environmentally Friendly Linkage System for Kowloon East

In his 2011 – 2012 Policy Address, the Chief Executive laid down development strategies for Kowloon East including building an environmentally friendly linkage system through the entire district (including the new Kai Tak Development Area, Kwun Tong and Kowloon Bay).

Overview

We strongly support the Government to develop an environmentally friendly public transport system to serve Kowloon East. To implement a very environmentally friendly and adaptable system in this new zone is a real opportunity to set the path for future modern transport development in Hong Kong.

However, we have very strong reservations about the proposed monorail system, and urge the Government to conduct a comprehensive evaluation on other options (including LRT, tram, trolley and Bus rapid transit (BRT) with green buses) before making a decision. To this end, Government may invite transport system proposals from transport operators in Hong Kong, whose knowledge and expertise would be invaluable in devising the best solution. In addition, we urge the Government to expedite implementation to meet phased population intakes in a timely manner.

For the short term we urge Government to work with the transport operators on trolley bus trials in addition to super-capacitor and hybrid buses to allow all these technologies which are new to Hong Kong to be evaluated for possible adoption in Kowloon East on road and on the dedicated EFLS.
In fact, monorail systems are not widely used in the world with most of the existing systems serving airports or amusement parks and none of them having completed expansion as originally planned, due to cost and operational difficulties. We note that Sydney has just decided to scrap its 24 year old monorail system. The generic disadvantages of monorail systems when compared with other public transport systems are set out below.

- Monorail systems require the construction of an elevated, dedicated track.
- The costs of construction are high.
- The time for construction is long.
- The elevated structure creates problems for direct integration with other transport systems.
- The grade-separated stations make access by both able and disabled passengers difficult.
- The flexibility to follow the evolution of ridership and frequencies is very low.
- The operating costs, in particular the maintenance costs, are high.
- Emergency evacuation of passengers is difficult.

We have nevertheless kept an open mind on a monorail for Kowloon East. Our Transport Policy Committee was briefed on the proposal by the Development Bureau, Civil Engineering and Development Department and the AECOM consultants. Unfortunately the information we gathered has confirmed our concerns as follows:

- The carrying capacity of the system at 7500-15000 pphpd may be too low.
- The arrangement for accommodating mainly standees with few seats for passengers will be objectionable to travellers due to the adverse effect on passenger comfort.
- The system lacks flexibility for capacity improvement, even in the face of increase in demand in the future.
- The limited capacity of the system will not meet the demand of interchanging passengers exiting from the MTR stations.
- The system will likely have to rely on pedestrian links and other means to satisfy unmet passenger demand. The proposed pedestrian subways may be quite unattractive to pedestrians.
- Due to the level difference, the system will not be that user-friendly to the elderly and disabled passengers.
- The need for widening the viaduct to facilitate passenger evacuation in the case of emergency will add to the construction costs.
- The construction cost of $12 billion is very high.
- The economic benefit of 1% EIRR is very low.
- The financial performance will not be attractive enough for the private sector and would therefore require public funding.
- There are concerns on the noise levels of the system in residential areas and parks.
- There are concerns on the visual and physical impact of the system in particular in already crowded streets.
ANNEX

- The opening date in 2023 is too far away given the population intake in the area will start next year.
- There is no comparison and evaluation with other options.

For the EFLS, several technical choices (including LRT, tram, trolley and BRT with green buses) are possible but with large variations in image, environmental efficiency and investment. But these have not been evaluated. The choice of the system can make a huge difference in terms of sustainable development and environmental impact. We urge the Government to conduct a comprehensive evaluation on other options before making a decision on the EFLS.

We suggest that Government should invite transport system proposals from the transport operators in Hong Kong, whose knowledge and expertise would be invaluable in determining the best way forward.

For the short term, we support using the latest green buses for on-road public transport prior to the implementation of the EFLS. The consultation paper notes that trials are to be conducted on battery-electric super capacitor and hybrid buses, and that these may be used in Kowloon East subject to satisfactory tests. We suggest that the Government should also work with transport operators to trial trolley buses, so that all these transport systems which are new to Hong Kong may be tested for possible ongoing use in the on-road public transport system for Kowloon East, and included in any assessment of appropriate environmentally-friendly technologies when decisions are taken on the EFLS.

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