For discussion on 14 January 2014

TFKT/04/2014

Connecting Kowloon East – Environmentally Friendly Linkage System Stage 2 Public Consultation

PURPOSE

This paper aims to report and respond to the views collected during the Stage 1 public consultation on the proposed Environmentally Friendly Linkage System (EFLS) to enhance connectivity of Kowloon East, and seek Members' views and support on a proposed detailed feasibility study to address the various concerns before committing to project implementation.

BACKGROUND

2. The Civil Engineering and Development Department completed a preliminary feasibility study on the EFLS and came up with an EFLS proposal, which suggests adopting monorail as the EFLS to enhance inter- and intra-district connectivity of Kowloon East through the provision of a 9-kilometre 12-station elevated rail line linking Kai Tak Development (KTD), Kwun Tong and Kowloon Bay with the existing Mass Transit Railway (MTR) Kwun Tong Line and the future Shatin to Central Link (SCL).

3. The EFLS proposal is currently under a two-stage public consultation (PC) process. Stage 1 of the two-stage PC took place between February and October 2012, aiming at arousing public awareness of the study findings and gauging their views on the EFLS proposal. We consulted the Task Force on Kai Tak Harbourfront Development in March 2012 (Paper No. TFKT/04/2012). Other stakeholders consulted included

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various statutory and advisory bodies, relevant District Councils, professional institutions, transport operators and interested groups. Apart from the consultation meetings, we also conducted two public engagement workshops. A summary list of stakeholders consulted is at **Annex A**.

4. The views and suggestions received in the Stage 1 PC have been analysed to identify three issues of most concern. A Stage 1 PC report, which provides a more detailed record on the public views and suggestions received, could be downloaded from the EFLS website (http://www.ktd.gov.hk/efls).

STAGE 1 PUBLIC CONSULTATION OUTCOMES – PUBLIC VIEWS AND OUR RESPONSES

5. The Stage 1 PC revealed that the proposed EFLS was generally welcomed to enhance the connectivity of Kowloon East for the development of an alternative Central Business District (CBD). However, there were diverse views on the details of EFLS. These views and suggestions, which are largely categorized into three issues of most concern, together with our responses are outlined in the ensuing paragraphs.

Issue 1 – The Need for an Elevated Rail-based EFLS

Public Views

6. There were concerns about the financial viability of the EFLS and an alternative of using road-based green public transport, such as a modern tramway or electric bus, was proposed as a more cost-effective solution. Some also raised concerns about visual intrusion and suggested putting the EFLS underground or at street level. On the other hand, many others felt that the importance of the EFLS should not be assessed on direct commercial principles, but should also consider the wider benefits of supporting the development of a new CBD in Kowloon

East.

Our Responses

7. То world-class CBD. а transport serve infrastructure must provide a high level of service in terms of reliability, efficiency, safety and level of comfort. All the world's major CBDs are characterised by high accessibility with multi-modal public transport systems using different modes of transport including rail-based, road-based and walking modes to serve the areas. The existing CBDs in Hong Kong such as Central, Wanchai and Tsim Sha Tsui, are well served by MTR, franchised buses, taxis and grade-separated or underground walking systems (MTR station walk-in coverage shown at Annex **B**). Kowloon East has the potential to supply approximately 5.4 million square metres of office space in the long term, doubling the existing stock in the Central District. Obviously, provision of the basic public transport facilities to merely serve the transport need is inadequate for the development of a new CBD in Kowloon East, which looks for an integrated multi-modal linkage system that could provide high level of service.

8. Currently, the CBD in Kowloon East does not have a full coverage of MTR services. With the MTR system skirting around its periphery, large parts of Kowloon East are served only by road-based transport or walking only (MTR station walk-in coverage shown at Annex B). As the CBD in Kowloon East grows and starts to take shape, the demand for good connectivity will grow gradually and eventually reach a stage when the ground level transport will no longer be adequate to cope with demand or provide the service levels required for a CBD. Hence, implementation of the EFLS as an additional rail-based mode to form the core element in the integrated multi-modal linkage system to serve the CBD in Kowloon East is necessary in the The EFLS, as part of a multi-modal linkage longer term. solution, will provide unbeatable connectivity within the new

CBD, especially for areas not served by the existing or planned MTR network. It will give easy access to the MTR, through linking with the existing MTR stations at Kowloon Bay and Kwun Tong, and the planned Kai Tak Station of the SCL, for travel to other districts and beyond.

9. Starting from 2013, the elements of this integrated multi-modal linkage system for Kowloon East will be introduced in stages. The environmentally friendly road vehicles and improvements to the walking environment with new and enhanced subways, footbridges and widened walkways will be deployed progressively. After 10 to 15 years, as demand grows and more offices, facilities and attractions come on line, and the ground level transport can no longer meet demand or provide the required service levels for the expanding CBD, the EFLS will begin operations to become the core connectivity option for Kowloon East.

10. The EFLS in the form of an at-grade or underground system is not applicable in the context of Kowloon East. The roads in Kwun Tong and Kowloon Bay are already busy. Adding a ground-level modern tram or light rail system would drastically reduce road space, block side streets and building vehicular entrances, and compromise roadside activities and safety. The reliability and efficiency of the service would also be affected by traffic conditions. Building the EFLS system underground would be more costly and would also conflict with major underground facilities in the area, such as the existing Kai Tak Tunnel as well as the District Cooling System, the Central Kowloon Route, the Trunk Road T2 tunnel and the large-scale stormwater box culverts that are located or planned to run under the KTD. The EFLS also needs to link with the elevated MTR stations at Kwun Tong and Kowloon Bay. The interchange would be inefficient and inconvenient if an underground EFLS system is adopted.

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Issue 2 – Alignment and Coverage

Public Views

11. There was a suggestion to realign the EFLS via an existing Taxiway Bridge and along Wai Yip Street to Kwun Tong in order to avoid the need for the proposed Kwun Tong Transportation Link (KTTL) with its associated costs and the implications for high-mast vessels using the Kwun Tong Typhoon Shelter (KTTS). Some even suggested curtailing the KTTL section completely or postponing implementation of this section.

12. There was local aspiration for expanding the EFLS coverage, urging for extension of EFLS beyond Kowloon East to adjacent districts, such as To Kwa Wan, Hung Hom, San Po Kong, Sau Mau Ping, Choi Wan area, Ngau Tau Kok, Anderson Road Development, Yau Tong and Lei Yue Mun to improve the accessibility and linkage with the KTD.

13. There were suggestions to review the proposed locations of stations to maximise patronage and catchment areas for the EFLS. In regard to the alternative alignments in Kwun Tong for connecting to MTR Kwun Tong Station, i.e. the Hoi Yuen Road or King Yip Street alignment, both have their supporters.

Our Responses

14. The suggested alternative alignment via the Taxiway Bridge has the merits of no impact on the KTTS, better connectivity between Kwun Tong and Kowloon Bay business clusters as well as between Kowloon Bay and the former runway tip. However, due to a longer and less direct route to the MTR Kwun Tong Station, there is a strong probability with the Taxiway Bridge option that the MTR Kowloon Bay Station would become the primary interchange between the EFLS and the MTR

network. This poses a very significant risk of overloading the station, which already has high levels of passenger traffic. Besides, this route will also result in an overlapping service catchment area with the MTR Ngau Tau Kok Station (see **Annex B**), and, due to inadequate turning radius at Hoi Yuen Road and Wai Yip Street junction, it makes the final leg of the EFLS to MTR Kwun Tong Station via King Yip Street the only feasible option. Given the above, we recommend maintaining the original route via the KTTL as the preferred option, subject to mitigating the impact on the typhoon shelter. The suggested constructing the KTTL section of the route as a second phase could be explored in the proposed detailed feasibility study.

15. This KTTL alignment brings a number of potential benefits:

- (a) A direct link between Kwun Tong and the former runway tip will create synergy for the development of a leisure, recreation and tourism hub and benefit the cruise terminal, the multi-purpose sports complex and Kai Tak Fantasy;
- (b) Balanced interchange traffic between the Kwun Tong and Kowloon Bay MTR Stations (The Taxiway Bridge option would be likely to overload Kowloon Bay MTR Station);
- (c) No impact on planned developments, including hospital sites at the former south apron;
- (d) Both the Hoi Yuen Road and King Yip Street alignment options remain viable; and
- (e) A well-designed KTTL monorail-cum-pedestrian bridge with a cycle track could become an iconic landmark of Kowloon East.

16. The study has explored opportunities for enlarging the coverage to adjoining old developed districts, including To Kwa Wan, Kowloon City and San Po Kong. This was not pursued due to concerns about the noise and visual implications

in residential areas, privacy issues, and inadequate road space to accommodate the supporting structures. However, the possibility of building in the flexibility for future expansion of the EFLS will be considered in the proposed detailed feasibility study.

17. Inter-district travel between Kowloon East and adjacent districts such as Hung Hom, Choi Wan and Lei Yue Mun as well as linking to uphill developments at Anderson Road and Anderson Road Quarry needs to be considered in a wider perspective taking account of multi-modal public transport systems. Given that the EFLS is a light capacity rail system serving intra-district movements, it cannot cater for these inter-district transport needs of diverse area outside Kowloon East.

18. In response to the public suggestions, we have refined some locations of stations with a view to avoiding overlapping service catchment areas with SCL and to enhancing public access to the commercial developments at Kowloon Bay business district. As the Kai Tak public rental estates, including Kai Ching and Tak Long Estates, are within the walking distance of Kai Tak Station and the public transport interchange nearby, that station has been removed. A new station is added near the junction of Wang Kwong Road and Kai Cheung Road. The proposed station near the junction of Wang Kwong Road and Lam Wah Street has been moved to the open space adjacent to MegaBox (See Annex C). Major connections at the MTR Kowloon Bay and Kwun Tong Stations, and interchange with the future Kai Tak Station of the SCL will remain as the key elements of the EFLS alignment. The refined EFLS alignment as shown in **Annex C** is recommended as the preferred base option for the proposed detailed feasibility study. Both alternative alignments in Kwun Tong, i.e. Hoi Yuen Road and King Yip Street alignments, are kept open to provide an opportunity for further reviewing their synergy with the CBD

development, financial implications and impact on local traffic before making a final choice.

Issue 3 – Implications for Kwun Tong Typhoon Shelter

Public Views

19. Users of the Kwun Tong Typhoon Shelter, in particular, those high-mast vessels affected by the proposed 21m height restriction of the KTTL, requested the realignment of the route via the Taxiway Bridge to do away with the KTTL, or the identification of alternative sheltered spaces within Victoria Harbour for the affected tall vessels. In contrast, general views from the Kwun Tong District Council were strongly in favour of using the KTTL to link directly between the former runway tip and the Kwun Tong district.

20. Some others were keen to see the water body of the KTTS together with the Kai Tak Approach Channel be put to more beneficial use for the good of the wider community. Sports, boating and a more pleasant vista were high on the agenda.

Our Responses

21. Since the closure of the Kwun Tong Public Cargo Working Area in 2011, commercial marine activities in the typhoon shelter have drastically reduced, which would free the area during the normal days for other activities. Also, compared to previous years, notably fewer high-mast lighters have sought shelter in the area during typhoons. Taking into account the current usage of the Kwun Tong Typhoon Shelter, the proposed detailed feasibility study will explore the scope to release the water body for co-use with other activities and will investigate the need for and sourcing of alternative sheltered spaces for the displaced vessels. Close communication with the marine industry will be maintained. Task Force on Kai Tak Harbourfront Development

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NEXT MOVE FOR THE EFLS

22. CBD will play an important role sustaining the competitiveness and long-term economic growth of Hong Kong. As the CBD in Kowloon East develops, an integrated multi-modal linkage system serving the area will gradually evolve with elements introduced in stages. Once complete, this system will have the EFLS at its core, offering the high-quality connectivity essential to secure the district's success far into the future.

23. We have looked at the issues raised in the first stage of the public consultation to develop an EFLS proposal which offers the optimal solution to meet the connectivity needs of Kowloon East in the coming decades.

24. Before a decision is made on the proposed EFLS, we need a more in-depth study to ascertain critical issues, including:

- (a) the technical design of stations and depot, the choice of operating system and operation and maintenance requirements;
- (b) a preliminary environmental impact assessment;
- (c) ways to improve the financial efficacy of the project, project implementation strategy as well as more detailed capital cost estimates and financial assessments;
- (d) flexibility for future expansion of the EFLS network;
- (e) enhancement of the multi-modal connectivity of Kowloon East with neighbouring areas before and after the EFLS implementation; and
- (f) more beneficial use of the water body at Kai Tak and concerns about the loss of sheltered space for tall vessels.

We recommend a detailed feasibility study be conducted and

would welcome Members' views on the elements to be included in this study.

ADVICE SOUGHT

25. Members are invited to comment on the proposed detailed feasibility study for the EFLS.

Kowloon Development Office Civil Engineering and Development Department January 2014

Annexes

- Annex A: Summary List of Stakeholders Consulted in Stage 1 Public Consultation
- Annex B: MTR Station Walk-in Catchment Coverage
- Annex C: Refined EFLS Alignment Plan

SUMMARY LIST OF STAKEHOLDERS CONSULTED IN STAGE 1 PUBLIC CONSULTATION

In the Stage 1 public consultation for EFLS conducted during the period from February to October 2012, CEDD conducted two public engagement workshops and consulted the following list of statutory/advisory bodies, professional institutions, local forums/concerned groups, and transport operators:-

Category	Parties Consulted		
Statutory/Advisory	(a) Legislative Council Panel on Development	egisla	
bodies	(b) Kwun Tong District Council	wun 7	
	(c) Housing and Infrastructure Committee of the Kowloon City	ousing	
	District Council	istrict	
	(d) Wong Tai Sin District Council	ong T	
	(e) Local Vessels Advisory Committee	ocal V	
	(f) Task Force on Kai Tak Harbourfront Development of the	ısk Fo	
	Harbourfront Commission	arbou	
Professional	(g) Hong Kong Institute of Planners	ong K	
institutions	(h) Chartered Institute of Logistics and Transport Hong Kong,	narter	
	Transport Policy Committee	anspo	
	(i) Chartered Institution of Highways and Transportation – Hong	narter	
	Kong Branch	ong B	
	(j) Royal Institution of Chartered Surveyors Hong Kong	oyal I	
	(k) Hong Kong Institute of Surveyors	ong k	
	(l) Hong Kong Institution of Engineers	ong k	
Local forums/	(m) 土瓜灣居民交流會	:瓜灣	
Concerned groups	(n) 啟德新天地 你我齊共建	て徳新	
	(o) 麗港城居民諮詢會	港城	
	(p) Representatives from Marine Trade	epres	
Transport operators	(q) Kowloon Motor Bus Company Limited	owlo	
	(r) Mass Transit Railway Corporation Limited	lass T	

Annex B

港鐵車站的徒步覆蓋範圍 MTR Station Walk-in Catchment Coverage

現有核心商業區(中環、灣仔及尖沙咀) Existing CBD in Central, Wanchai and Tsim Sha Tsui



九龍東核心商業區 Kowloon East CBD





環保連接系統的修訂走線圖 Refined EFLS Alignment Plan

Annex C