

立法會
Legislative Council

LC Paper No. CB(1)1165/16-17(06)

Ref: CB1/PL/DEV

Panel on Development

Meeting on 26 June 2017

**Updated background brief on the proposed
Environmentally Friendly Linkage System for Kowloon East**

Purpose

This paper provides background information on the proposed Environmentally Friendly Linkage System ("EFLS") for Kowloon East and a brief account of the views and concerns expressed by Members on the subject since the 2011-2012 legislative session.

Background

2. The Kai Tak Outline Zoning Plan approved in 2007 provides for a possible rail-based EFLS, running within the Kai Tak Development ("KTD"). In December 2009, the Civil Engineering and Development Department commissioned a preliminary feasibility study on the proposed EFLS. In the 2011-2012 Policy Address, the Chief Executive announced an initiative to transform Kowloon East, comprising KTD, Kwun Tong and Kowloon Bay, into a central business district ("CBD"). According to the Administration, in drawing up the preliminary EFLS proposal through the study, the important role of EFLS in enhancing the inter-district and intra-district connectivity of Kowloon East had been considered.

3. The Administration subsequently conducted a two-stage public consultation ("PC") exercise on the preliminary EFLS proposal between early 2012 and early 2014.¹ Meanwhile, members' views on the said

¹ The approved project estimate of the preliminary feasibility study and PC exercise is \$18.7 million.

proposal was sought at the meeting of the Panel on Development ("DEV Panel") on 17 April 2012. Taking into account the views received from the PC exercise, the preliminary feasibility study suggested adopting an elevated monorail system as EFLS linking the MTR Kowloon Bay Station through KTD, and across a new Kwun Tong Transportation Link ("KTTL") above the Kwun Tong Typhoon Shelter to the MTR Kwun Tong Station. The said EFLS would be commissioned in 2023 at the soonest. A drawing of the preliminary EFLS proposal is in **Appendix I**.

4. The Administration briefed DEV Panel on the outcome of the two-stage PC exercise and sought the Panel's support for a funding proposal for conducting a detailed feasibility study on the proposed EFLS at the Panel meetings on 27 May, 16 July and 28 October 2014. The scope of the detailed feasibility study is in **Appendix II**. The funding proposal (at an estimated cost of \$92.3 million in money-of-the-day prices) was approved by the Finance Committee ("FC") on 16 July 2015. According to the Administration, the study would be completed in phases by the third quarter of 2017.

Major views and concerns expressed by Members

5. The major views and concerns expressed by Members on the proposed EFLS at the meetings of the Legislative Council,² DEV Panel and FC are summarized in the ensuing paragraphs.

Scope of the detailed feasibility study

6. Some Members stressed the importance for the Administration to avoid adopting a pre-conceived position that the monorail option was the only choice for EFLS. These Members queried about the Administration's reservations of adopting other more cost-effective options (e.g. modern tramway) as EFLS. As such, they sought the assurance of the Administration that under the detailed feasibility study, it would evaluate various transport modes, including modern tramway, monorail, electric buses, travellers, in respect of their suitability for adoption as EFLS.

7. According to the Administration, the findings of the preliminary feasibility study had indicated that the development of an elevated

² Members raised oral and written questions about the proposed EFLS and related subjects at a number of the Council meetings. Hyperlinks to these questions and the Administration's replies are provided in **Appendix III**.

monorail in Kowloon East had a higher feasibility. The modern tramway was not so feasible due to space constraints on the ground level in Kowloon East. That said, in view of Members' concerns, the Administration would, on an equal-weighting basis and without any pre-conceived position, select the most suitable and cost-effective green public transport mode(s) as EFLS under the detailed feasibility study.

8. The Administration advised that the detailed feasibility study would be conducted in two stages. The first stage of the study was to formulate a well-planned integrated multi-modal linkage system ("IMMLS")³ by evaluating various green public transport modes to enhance the connectivity of Kowloon East at its different stages of development. Upon completing the first stage of the study, a PC exercise would be conducted to gauge public views on the proposed IMMLS including the recommended mode(s) of green public transport. After securing a public consensus on the transport mode(s) of EFLS, the Administration would devise a detailed EFLS scheme in the second stage of the study. The decision on whether to implement the EFLS project would be subject to the findings of the study (including the results of financial, technical and environmental assessments) and the outcomes of the PC exercise.

Financial viability and procurement approach

9. Members expressed concern that the development and operation of the proposed EFLS would involve substantial costs and might be financially unviable. Taking in view that EFLS might bring about a low return rate, some Members considered that the system should be taken as an infrastructure investment of the Government. Some other Members expressed concern that if an elevated monorail would be adopted as EFLS, the construction and operation of EFLS might be entrusted to the MTR Corporation Limited ("MTRCL"). As a result, the market of railway service would be further dominated by MTRCL and the residents in Kowloon East might have to pay a high fare for EFLS in future.

10. The Administration advised that the objective of the detailed feasibility study was, after examining all possible options, to recommend

³ IMMLS features conventional road-based transport, enhanced pedestrian facilities, EFLS and MTR. According to the Administration, at the early stage of the development of the Kowloon East CBD, it is envisaged that conventional road-based transport and enhanced pedestrian facilities may suffice to meet the growing traffic demand. In the longer term, EFLS will serve as the backbone of IMMLS to enhance the connectivity of Kowloon East.

the most cost-effective mode(s) that could serve the largest number of passengers in Kowloon East. The said study included financial assessment (covering construction costs, recurrent operating costs and fare income), procurement options and implementation programme assessment for the proposed EFLS. As the selection of the future EFLS operator was hinged on the recommended procurement method, the Administration considered it premature for the time being to decide on whether to entrust the EFLS project to MTRCL.

Network coverage

11. During the motion debate on "Implementing the Kai Tak Planning to dovetail with Kowloon East development" held at the Council meeting of 20 March 2013, the Administration was urged, among others, to expeditiously implement the construction of a monorail system to connect Kai Tak, the various areas in Kowloon East and Kowloon City District, and at the same time, study the extension of the system to the mid-level areas of Kowloon East. The wording of the motion passed is in **Appendix III**.

12. At various meetings of DEV Panel and FC, some Members relayed the local communities' requests for extending the coverage of the proposed EFLS to adjacent districts such as Kowloon City, Ngau Tau Kok, San Po Kong and To Kwa Wan. Noting that an EFLS station located at the public housing estates in KTD was proposed to be relocated to a location closer to the commercial developments, some Members pointed out that the proposed EFLS should not only serve new commercial developments in Kowloon East. It should also address the needs of local residents to travel within Kowloon East. Some other Members expressed concerns on whether there would be sufficient passenger demand to sustain the operation of the elevated monorail system.

13. The Administration advised that apart from revisiting the alignments and locations/numbers of stations, the detailed feasibility study would consider the possibility of building in flexibility for future expansion of EFLS to adjacent districts. In estimating the patronage of EFLS, the population residing or working within a zone of 500-metres radius of and eight minutes' walk from any of the proposed EFLS stations would be assumed to be within the catchment areas of the system. According to an initial assessment conducted during the preliminary feasibility study, the forecast daily patronage of EFLS in 2031 would be about 200 000.

Implementation programme

14. Some Members expressed disappointment that the transport arrangements for KTD were still under planning while the Kai Tak Cruise Terminal ("KTCT") had been commissioned and some residential developments at KTD had been completed. They considered that adequate transport service should be provided to cope with the growing traffic demand arising from phased completion of KTD and asked if the detailed feasibility study would explore short-term measures to improve the accessibility of KTCT.

15. The Administration said that it endeavoured to speed up the detailed feasibility study and the EFLS project. PC exercises would be carried out concurrently with the conduct of the detailed feasibility study. Moreover, the detailed feasibility study would examine ways to enhance the connectivity of Kowloon East at its different stages of development, including short-term measures to enhance the connectivity of KTCT.

Kwun Tong Typhoon Shelter

16. Under the preliminary EFLS proposal, KTTL will run across the entrance of the existing Kwun Tong Typhoon Shelter with a suggested vertical clearance of 21 metres above the sea level, thereby rendering it impossible for some high-mast vessels to use this typhoon shelter. Some Members opined that in the absence of a satisfactory arrangement for accommodating high-mast vessels in other suitable typhoon shelters, height restriction must not be implemented at the Kwun Tong Typhoon Shelter. Some other Members suggested that, in view of the public aspirations to use the said typhoon shelter for water recreational activities, consideration should be given to relocating the Kwun Tong Typhoon Shelter.

17. The Administration advised that the detailed feasibility study would look into possible mitigation measures to address the impact of KTTL on high-mast vessels and the reprovisioning options for the Kwun Tong Typhoon Shelter. The trades concerned would also be consulted on the matter.

Latest development

18. At the meeting of DEV Panel to be held on 26 June 2017, the Administration will update the Panel on the progress of KTD and consult

members on the most suitable green transport mode(s) as recommended in the detailed feasibility study for the proposed EFLS.

Relevant papers

19. A list of relevant papers with their hyperlinks is in **Appendix IV**.

Council Business Division 1
Legislative Council Secretariat
19 June 2017

環保連接系統初步建議
Preliminary proposal of the Environmentally Friendly Linkage System



資料來源：立法會PWSC(2015-16)33號文件
Source : LC Paper No. PWSC(2015-16)33

Scope of the detailed feasibility study for the proposed Environmentally Friendly Linkage System for Kowloon East⁴

The scope of the detailed feasibility study comprises:

- (a) formulation of a well-planned integrated multi-modal linkage system to enhance the connectivity of Kowloon East at different stages of the central business district development;
- (b) in-depth evaluation on the most suitable green public transport mode(s) as the proposed Environmentally Friendly Linkage System ("EFLS") for Kowloon East;
- (c) review on the network development for the proposed EFLS to address key issues identified from the two-stage Public Consultation exercise and the latest development of Kowloon East, with sensitivity tests on alternative alignments or routings, station and stop locations, and connections with MTR stations covering patronage forecast, and associated economic and financial performance assessment;
- (d) study to examine the preferred alignment or routing, operation mode, station and stop design, related electrical and mechanical works, rolling stock and depot requirements of the proposed EFLS, if necessary;
- (e) assessment on innovative designs, and arrangements for enhancing attractiveness and cost-effectiveness for the proposed EFLS;
- (f) technical assessments, including preliminary environmental assessment, for the proposed EFLS;
- (g) financial assessment, procurement options and implementation programme assessment for the proposed EFLS;
- (h) topical study to examine the impacts of the proposed Kwun Tong Transportation Link ("KTTL") on the use of the water body at Kwun Tong Typhoon Shelter and/or Kai Tak Approach Channel, justifications for KTTL, mitigation measures to address impact of KTTL on high-mast vessels and any reprovisioning options of Kwun Tong Typhoon Shelter to comply with the requirements of the Protection of the Harbour Ordinance;
- (i) public consultation with relevant stakeholders; and
- (j) preliminary site investigation works including supervision.

⁴ Source: [LC Paper No. PWSC\(2015-16\)33](#)

(Translation)

**Motion on
"Implementing the Kai Tak Planning
to dovetail with Kowloon East development"
Moved by Hon WONG Kwok-kin
at the Council meeting of 20 March 2013**

**Motion as amended by Hon Frederick FUNG, Hon CHAN Kam-lam,
Hon Frankie YICK, Hon WU Chi-wai and Dr Hon LEUNG Ka-lau**

That, given that the Kai Tak New Development Area is currently the largest urban waterfront development project in Hong Kong with a total planning area of more than 320 hectares; Kai Tak in the future will become a new core district in Kowloon and drive the development of the whole Kowloon Peninsula, and the various works projects in the area will be completed one after another starting from this year, this Council urges the Government to expeditiously implement the various planning for the new development area and the ancillary work in nearby communities, including:

- (1) to expeditiously give the public a full account of any plan to revise and adjust the planning for Kai Tak (including proposals relating to increasing the plot ratios and resident population, and whether to build a helipad on the runway, etc.);
- (2) to closely keep in view the problem of big rent hikes in the adjacent areas driven by the Kai Tak development, so as to ensure that small business traders and even workers in the creative and cultural sector in the district can continue their operation to provide residents with inexpensive and quality daily consumer goods amidst the transformation;
- (3) to expeditiously discuss with the relevant District Councils plans for support arrangements after the commissioning of the first berth of the Kai Tak Cruise Terminal in June this year (including traffic and transport arrangements, and on-shore power supply facilities, etc.), so as to avoid impacting and pressuring the nearby communities and the environment after the commissioning of the terminal;

- (4) to ensure that the recreational and sports facilities in the Multi-purpose Sports Complex at Kai Tak are open for public use at all times in the future, so as to resolve the long-standing shortage of public sports facilities in Kowloon;
- (5) to review the overall road transport network of Kowloon, assess whether the traffic capacity of the existing roads in the various communities is adequate to meet the future development and population needs of Kai Tak and the various areas in Kowloon, and expeditiously conduct improvement works in this regard;
- (6) to expeditiously implement the construction of a monorail system to connect Kai Tak, the various areas in Kowloon East and Kowloon City District, and at the same time, study the extension of the system to the mid-levels areas of Kowloon East, so as to better meet the transport needs of residents in these communities;
- (7) to expeditiously construct a general hospital in Kai Tak and expedite the expansion of the United Christian Hospital, so as to meet the medical needs arising from the future population growth and development of Kowloon East and Kowloon City District;
- (8) to perfect the pedestrian linking systems and barrier-free facilities in the old areas of Kowloon East, Kowloon City District and Kai Tak new area, deepen the connection between Kai Tak and adjacent areas, and develop semi-sunken open underground street networks to merge pedestrian flows and add special features to the areas;
- (9) to study and implement the construction of cycle tracks along the coastline of Kowloon East to the waterfront of Kowloon West via the Kai Tak New Development Area and Kowloon City District and linking the adjacent communities, so as to develop an urban cycle track network;
- (10) to integrate the cultural monuments and existing waterways in Kai Tak and the nearby communities, such as linking Nga Tsin Wai Village, Longjin Bridge and Kai Tak River to form an area with historical and ecological values, and develop a special heritage trail embracing environmental protection, historical monuments, local culture and tourism;

- (11) to increase the space for greening and public art in Kai Tak, the various areas in Kowloon East and Kowloon City District, and introduce bazaars with local characteristics (e.g. temple fairs) to attract tourists and create employment opportunities;
- (12) to make use of the site of the former Tai Hom Village and San Po Kong Industrial Area, etc. to develop cultural and creative industries, so as to develop Kai Tak and the relevant areas into a tourist spot related to Hong Kong movies; and
- (13) to develop featured waterfront areas in Kai Tak, Kowloon East and Kowloon West (including making good use of the vacant land under the flyovers near the Kwun Tong waterfront), so as to develop them into creative spaces, markets and community facilities with local cultural characteristics and styles;
- (14) to construct a bridge connecting Kwun Tong Ferry Pier and the ex-runway tip, with a headroom allowing the passage of all marine working vessels; and
- (15) to construct a new Kowloon harbourfront promenade from Lei Yue Mun to Sham Shui Po, and study the feasibility of constructing a berthing area for yachts at the Kwun Tong Typhoon Shelter and increasing leisure water sports facilities on the condition that the continued provision of enough berthing spaces for various types of marine working vessels will be guaranteed, so as to perfect the planning for Kai Tak;
- (16) to expedite the progress of building the Trade and Industry Tower in Kai Tak, and enable government building clusters to move into Kai Tak expeditiously, so as to drive the economic development of the adjacent areas and create employment;
- (17) to develop waterborne transport, to enable Lei Yue Mun to dovetail with the Kai Tak Cruise Terminal development, and promote the development of local featured tourism projects;
- (18) to expedite the development of the commercial facilities near the cruise terminal and inside the Kai Tak Development Area, and encourage the development of local creative industries and shopping facilities, so as to support local culture and create employment;

- (19) through improving the population planning criteria, to appropriately relax the plot ratios in Kai Tak and increase land supply, so as to construct more subsidized housing;
- (20) to retain the two government factory buildings in Kowloon Bay for promoting the development of creative industries and meeting the needs of persons in the creative industry; and
- (21) to expeditiously implement the expansion of Our Lady of Maryknoll Hospital; and
- (22) to reserve sites in Kai Tak for planning the construction of private hospitals, Integrated Community Centres for Mental Wellness, elderly health centres, residential care homes for the elderly and residential care homes for persons with disabilities.

Proposed Environmentally Friendly Linkage System for Kowloon East

List of relevant papers

Council/Committee	Date of meeting	Paper
Panel on Development	17 April 2012	Administration's paper on "Environmentally Friendly Linkage System for Kowloon East" [LC Paper No. CB(1)1514/11-12(02)] Minutes of special meeting [LC Paper No. CB(1)2565/11-12]
Council meeting	27 June 2012	Hansard — written question (No. 8) on "Environmentally Friendly Linkage System for Kowloon East" (p. 16484-16487)
Council meeting	24 October 2012	Hansard — oral question (No. 1) on "Ancillary Transport Facilities for New Cruise Terminal" (p. 532-544)
Panel on Development	7 January 2013	Administration's paper on "Progress Report of Energizing Kowloon East Office and its Continuing Operation" [LC Paper No. CB(1)287/12-13(03)] Minutes of meeting [LC Paper No. CB(1)581/12-13]
Council meeting	20 March 2013	Hansard — written question (No. 10) on "Ancillary Transport Facilities for Future Development at Anderson Road Quarry" (p. 7565-7570) and Member's motion (No. 5) on "Implementing the Kai Tak Planning to Dovetail with Kowloon East Development" (p. 7782-7873)
Council meeting	6 November 2013	Hansard — written question (No. 20) on "Planning for Kai Tak Development Area" (p. 1888-1891)

Council/Committee	Date of meeting	Paper
Council meeting	14 May 2014	Hansard — written question (No. 2) on "Proposed Environmentally Friendly Linkage System in Kowloon East" (p. 10913-10915)
Panel on Development	27 May 2014	Administration's paper on "65TR — Detailed Feasibility Study for Environmentally Friendly Linkage System for Kowloon East" [LC Paper No. CB(1)1456/13-14(04)] Minutes of meeting [LC Paper No. CB(1)2016/13-14]
Panel on Development	16 July 2014	Administration's paper on "65TR — Detailed Feasibility Study for Environmentally Friendly Linkage System for Kowloon East" [LC Paper No. CB(1)1774/13-14(01)] Administration's follow-up paper [LC Paper No. CB(1)89/14-15(03)] Minutes of meeting [LC Paper No. CB(1)132/14-15]
Council meeting	15 October 2014	Hansard — written question (No. 18) on "Kai Tak Cruise Terminal" (p. 228-233)
Panel on Development	28 October 2014	Minutes of meeting [LC Paper No. CB(1)347/14-15]
Council meeting	20 November 2014	Hansard — oral question (No. 6) on "Ancillary Transport Facilities for Kai Tak Cruise Terminal" (p. 2210-2220)
Public Works Subcommittee	30 June 2015	Administration's paper on "65TR — Detailed Feasibility Study for Environmentally Friendly Linkage System for Kowloon East" [LC Paper No. PWSC(2015-16)33]

Council/Committee	Date of meeting	Paper
		Minutes of meeting [LC Paper No. PWSC242/14-15]
Finance Committee	16 July 2015	Administration's follow-up paper [LC Paper No. FC240/14-15(01)] Minutes of meeting at 4:45 pm [LC Paper No. FC79/15-16] Minutes of meeting at 7:20 pm [LC Paper No. FC80/15-16] Minutes of meeting at 9:25 pm [LC Paper No. FC81/15-16]
Council meeting	20 April 2016	Hansard — written question (No. 20) on "Kwun Tong Ferry Pier Waterfront Development Under "Energizing Kowloon East" Initiatives" (p. 7656-7660)
Panel on Development	22 November 2016	Administration's paper on "Extending the Operation of Energizing Kowloon East Office" [LC Paper No. CB(1)133/16-17(04)] Administration's follow-up paper [LC Paper No. CB(1)361/16-17(01)] Minutes of meeting [LC Paper No. CB(1)411/16-17]