

# **LEGISLATIVE COUNCIL BRIEF**

## **KWUN TONG LINE EXTENSION FUNDING ARRANGEMENT**

### **INTRODUCTION**

At the meeting of the Executive Council on 17 May 2011, the Executive Council ADVISED and the Chief Executive ORDERED that approval should be given to grant the MTR Corporation Limited (MTRCL) property development rights of the ex-Valley Road Estate Phase 1 site (the Site) as a form of financial assistance to the MTRCL to implement the Kwun Tong Line Extension (KTE) project.

### **BACKGROUND**

2. KTE is an extension of the existing MTR Kwun Tong Line from Yau Ma Tei Station to Whampoa, with two new stations at Ho Man Tin and Whampoa. Passengers can interchange at the proposed Ho Man Tin Station for the future Shatin to Central Link (SCL). KTE will serve the 146 000 people living in Whampoa and Ho Man Tin and the estimated daily patronage in 2016 is 180 000. It will provide convenient and reliable railway service to the residents of Ho Man Tin, Hung Hom and Whampoa area. It will bring about visible economic benefits to the community through saving in transportation time. At present, traffic congestion from the Cross Harbour Tunnel seriously affects access to and from Hung Hom during peak hours with traffic tailing back from the Cross Harbour Tunnel to the road networks in Hung Hom and Yau Ma Tei. Travelling by road-based transport between Whampoa and Mong Kok takes about 25 minutes during rush hours. With KTE, passengers from Whampoa and Ho Man Tin will be able to reach Mong Kok in about five minutes. The Highways Department estimate that the economic internal rate of return (EIRR) for the KTE will be at 6.9%.

3 On 11 March 2008, the Chief Executive in Council decided, inter alia, that-

- (a) MTRCL should be asked to proceed with further planning and preliminary design of KTE, which would serve Ho Man Tin and Whampoa; and
- (b) further discussion should be carried out with MTRCL on the implementation details of KTE based on the ownership approach to fund the project.

When considering the funding of the KTE on 11 March 2008, the Council also noted that the Site might be suitable for the rail-plus-property model at the proposed Ho Man Tin Station. However, in view that the Site was then planned for public rental housing development, suitable and adequate replacement site should be given if the Site was to be developed for private housing by the MTRCL. We briefed the Legislative Council Panel on Transport's Subcommittee on Matters Relating to Railways (the Railways Subcommittee) the above in March 2008.

## **FINANCING ARRANGEMENT**

### **(A) Project Cost**

4. KTE, being a natural extension of the Kwun Tong Line, will be an ownership project under the terms of the Operating Agreement between the Government and the MTRCL signed in 2007 upon implementation of the rail merger. Under the ownership approach, the MTRCL will be responsible for the finance, construction and operation of the KTE and will own the KTE. Funding support will be required from the Government if the project is considered not financially viable.<sup>1</sup>

5. In March 2008, we briefed the Railways Subcommittee that the then estimated capital cost for the project was about \$4.2 billion (April 2007 prices). The KTE would not be financially viable based on fare and non-fare revenue alone. The funding gap, which requires the Government to provide funding support to the MTRCL required for the implementation of the project, was then estimated to be \$2.2 billion.

6. With detailed design for the project nearing completion and the scope of the works clearly defined, the MTRCL submitted the latest estimate in June 2010. We commissioned an independent checking consultant (ICC) to check the estimated cost and revenue for the KTE project prepared by the MTRCL. This is to ensure that the MTRCL has not grossly over-estimated the costs and hence the funding support required. ICC completed the checking in April 2011 and considered that MTRCL's estimate was generally in order. A breakdown of the cost estimate checked by ICC is as follows:-

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<sup>1</sup> A railway project is considered not financially viable if the present value of all its revenues net of expenditures falls short of the expected return on capital, which in the case of the MTRCL is its Weighted Average Cost of Capital (WACC) plus 1% to 3%. This shortfall is known as the funding gap.

<b>Description</b>	<b>Cost Estimate Checked by ICC (\$ million, Dec 2009 prices)</b>
Civil, architectural and building works, finishes, trackwork and overhead line	2,225
Building services, E&M system wide, signalling and control	1,166
Rolling stock	437
Design and site investigation	257
Land cost <sup>2</sup>	203
Project management cost	533
Contingency	476
<b>Total</b>	<b>5,297</b>

7. The cost estimate checked by ICC, as compared with that in March 2008, is summarised below:

Item	Estimate by the MTRCL in 2007	Estimate Checked by ICC in March 2011
(a) Capital Cost	\$4.2 billion (Apr 2007 prices)	\$5.3 billion (Dec 2009 prices)
(b) Economic Internal Rate of Return	8%	6.9%
(c) Funding Gap	\$2.2 billion	\$3.3 billion (net present value at Dec 2010)

The increase in the capital cost of \$1.1 billion (\$5.3 billion minus \$4.2 billion) is attributed mainly to the price escalation for the construction sector between 2007 and 2009. Although refinement of the project details and amendments in the detailed design also account for some increase in the estimate, MTRCL has also enhanced the design of railway facilities. Some of the enhanced design help reduce the cost and offset the cost increase in the detailed design as described above.

### **(B) The Rail-plus-Property Model**

8. Rail plus property funding model has served the rail development of Hong Kong well; MTRCL will pay full market premium (on a green field basis<sup>3</sup>); and the Government can, through this arrangement, transferred all the associated commercial risks arising from market fluctuations and rail operations to MTRCL. There are also other operational advantages

<sup>2</sup> Land costs include rental for works areas, acquisition, clearance, compensation and Lands Department administrative cost etc.

<sup>3</sup> Land premium is assessed based on green field site principle by which the “full market value” ignoring the presence of the railway shall be the amount payable by the MTRCL to the Government.

such as ensuring smooth interface between station, depot and above-station developments and facilitating the arrangement to allow works to be done simultaneously. It not only ensures timely completion of the construction works, but also avoids the need of carrying out works for the property development within the railway in future affecting the railway operation.

9. We have examined carefully how the Site at the proposed Ho Man Tin Station should be used under the rail-plus-property model to ensure that the funding support provided by the Government for the KTE project is reasonable. The aim is to enable the rail project to be smoothly implemented and public resources used properly without undermining the prudent commercial principles for rail operation. To achieve this, we have adopted two measures. Firstly, when considering how the MTRCL should be allowed to develop the Site, we have taken into account relevant planning considerations to ensure that any development should be compatible with the surrounding land uses and public expectation. Secondly, the ICC, which helps us to check the project cost and funding gap of the project, is also commissioned to conduct an estimation of the profit of the development. This provides us a useful basis to assess whether the funding assistance is reasonable.

### **(C) The Site at the Proposed Ho Man Tin Station**

10. We have resolved the competing use of the Site by providing a replacement site for the public housing development. We propose to grant the property development right of the Site to the MTRCL to bridge the funding gap of the KTE project.

11. The Site will sit above the proposed Ho Man Tin Station with an area of about 2.6 ha suitable for residential development. A site plan is at **Annex A**. In planning the development of the Site, we take note of the aspiration of the community such as compatibility with surrounding land uses, development intensity, building height, landscape, compatibility with nearby residential developments, impact on air ventilation of the neighbouring areas, as well as public concerns on possible “wall effect” development. Notwithstanding that the maximum allowable plot ratio for the site in the Ho Man Tin Outline Zoning Plan No. S/K7/20 is nine, we have adopted a maximum domestic plot ratio of five for the planning and design of the Site. The proposed plot ratio of five is also in line with that adopted for the nearby ex-Valley Road Estate Phase 2 site. The maximum domestic gross floor area (GFA) will be 128 400 square metres. The MTRCL has proposed to develop the Site with 10 residential towers of approximately 25 storeys. The development will provide about 1 400 to 1 800 flats of sizes ranging from 40 to 200 square metres so as to supply units with different sizes for the market. To meet housing demand, the MTRCL plans to complete the residential development in two phases, with the first phase to be available in about five years after the completion of

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the KTE, and the second phase in the following two years, depending on the prevailing marketing conditions.

**(D) Funding Assistance**

12. We are cautious that the land to be granted to the MTRCL should not be more than what is required to bridge the funding gap. In this regard, apart from ICC's assessment, two independent surveying firms have also been engaged to provide property valuation for the development. The valuations by ICC and the two independent surveying firms were conducted according to the Valuation Standards on Properties published by Hong Kong Institute of Surveyors and other relevant statutory regulations. The difference between these assessments is within 2%. Based on the property valuation provided by ICC and the two independent surveying firms, the capital cost as explained in paragraph 7 as well as the estimated funding gap of about \$3.3 billion<sup>4</sup> in implementing the KTE, the ICC estimates that even with the funding assistance to be generated from the property development, there may still be a gap of about \$0.58 billion to \$0.6 billion in the KTE.

13. ICC has conducted a sensitivity analysis against various key assumptions in the funding assistance to be generated from the property development, including  $\pm 10\%$  of the construction cost of the property development and  $\pm 10\%$  of the assessed cumulative increase in property prices over a period of twelve years<sup>5</sup>. The two independent surveyors have reviewed the assumptions for property prices and agreed that the range is appropriate. Taking account of the above variations, the ICC has estimated the financial situation of the KTE under the pessimistic scenario and optimistic scenario. The ICC concludes that with the funding assistance to be generated from the property arrangement, there may be a small funding gap of \$0.1 billion even under the optimistic scenario. The remaining funding gap under the pessimistic scenario will be \$1.1 billion in the KTE, which is larger than that under the base case as explained in paragraph 12 above.

14. In considering the plot ratio and GFA adopted for the Site, we have taken due consideration of the compatibility of the development with the surrounding land uses as well as public concerns and expectation. The MTRCL has agreed to provide flats of different sizes to meet market need. The timeframe that the MTRCL plans to complete the residential development is considered reasonable in view of the site size and flat number. We have engaged an ICC to assist us to assess the cost and revenue of the residential development and two additional surveying firms to help in the property evaluation process. Based on the ICC's estimation, the profit to be generated from the property development may just be

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<sup>4</sup> All estimates regarding funding gap in paragraphs 12 and 13 are in Net Present Value at December 2010.

<sup>5</sup> ICC's assessment is done on the basis of the MTRCL's plan to complete the property development in two phases, with the first phase completed in 2020 and second one in 2022.

barely able to cover the estimated funding gap even under the optimistic scenario and the MTRCL has to bear all the associated commercial risks from market fluctuations and rail operations. This is a balanced approach which will fund the implementation of the KTE with effective use of resources without undermining the prudent commercial principles of rail operation.

#### **FINANCIAL AND CIVIL SERVICE IMPLICATIONS**

15. The funding gap of KTE is \$3.3 billion (NPV at December 2010) and would be bridged by granting development right of the Site under the rail-plus-property model at the proposed Ho Man Tin Station.

16. Essential Public Infrastructure Works (EPIW) for the KTE is to provide a safe, convenient and barrier free access to the KTE through enhancement of pedestrian and transport links to the railway line. The fund required for the EPIW for the KTE has been approved by Finance Committee on 15 April 2011.

17. Additional civil service posts have been supported for the bureau/department concerned to take forward a number of railway projects, including KTE in past Resource Allocation Exercises.

#### **ENVIRONMENTAL IMPLICATIONS**

18. The KTE is a designated project under the Environmental Impact Assessment (EIA) Ordinance and an Environmental Permit (EP) is required for the construction and operation of the KTE. The Director of Environmental Protection approved the EIA report on 19 August 2010 and granted the EP to MTRCL on 27 September 2010. The MTRCL subsequently submitted an application for variation of the EP (VEP) on 9 November 2010 to cover the amendments to the KTE scheme gazetted on 25 June 2010. The Director of Environmental Protection granted the VEP on 1 December 2010. The MTRCL will implement all recommended mitigation measures in the approved EIA report and comply with the conditions in the EP, the environmental protection provisions under the EIA Ordinance for the scheme amendments, and other statutory requirements for environmental protection.

19. Future development at the Site would be planned, designed and implemented in accordance with environmental guidelines and criteria laid down in the Environment Chapter of the Hong Kong Planning Standards and Guidelines.

#### **ECONOMIC IMPLICATIONS**

20. The KTE will be an extension of the existing MTR network and is essential for meeting the transport needs of Whampoa, Hung Hom and Ho

Man Tin areas and to serve the continuing economic and social development in Hong Kong. The Highways Department estimates that KTE would generate net economic benefits over 50 years of operation of the KTE of about \$22.4 billion at December 2009 prices. These economic benefits include time savings to commuters, operating cost savings for other public transport operators and safety benefits. The economic internal rate of return (EIRR) of the KTE is estimated at 6.9%.

21. Apart from the economic benefits mentioned above, the provision of mass transit mode of transport should help improve connectivity of old areas in Hung Hom, thereby revitalising and bringing along business opportunities to these areas.

### **SUSTAINABILITY IMPLICATIONS**

22. According to our sustainability assessment, the proposed KTE should help improve mobility and air quality in the long term through enabling more commuters to switch from road to rail transport. The implementation of the project would inevitably cause some adverse impacts on the environment, including noise during construction and operation, air pollution from works sites and ventilation shafts, loss of open space, loss of trees and waste generated from tunnel excavation. Proper measures and temporary traffic arrangement will be implemented to reduce the adverse impact as far as possible. The differing concerns and views of the public, in particular those from various stakeholders, will be handled with care.

### **PUBLIC CONSULTATION**

23. The Administration and the MTRCL have carried out extensive consultation on the KTE in the past few years. We have been staying in very close touch with the Kowloon City District Council (KCDC) on the progress of the project. The KCDC has all along been urging for the early implementation of the project.

24. We have also been keeping the Legislative Council Panel in the picture. The Subcommittee on Matters relating to Railways of the Legislative Council Panel on Transport also expresses the wish to see the early implementation of the KTE.

25. Before the commencement of the KTE works, the MTRCL will set up community liaison groups to enable direct dialogue with the local community including affected owners and residents and to handle enquiries and complaints.

**SUBJECT OFFICER**

26. The subject officer is Mr. C. W. CHOW, Principal Assistant Secretary for Transport and Housing (Transport), (Tel: 2189 2187).

**May 2011**

**Transport and Housing Bureau**



觀塘線延線  
擬設於何文田站上蓋物業發展 — 位置圖

Kwun Tong Line Extension  
Proposed Property Development Site above Ho Man Tin Station - Location Plan