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立法會交通事務委員會

研究和推行鐵路發展計劃有關的事宜小組委員會

地鐵竹篙灣鐵路線 - 工程項目協議

引言

在本小組委員會二零零二年七月二十二日的特別會議上，議員要求地鐵有限公司(地鐵公司)就竹篙灣鐵路線的票價釐定，以及地鐵沿線的額外收益，提供進一步資料。地鐵有限公司工程總監在本年七月二十四日寫給署理環境運輸及工務局局長的信，現載於附件。

竹篙灣鐵路線的預計工程費用

2. 工程費用估計為 20 億元，比原來估計的 26 億元減少 23%。正如我們在較早時向小組委員會報告，上述估計已考慮到目前的經濟情況、近期的通縮趨勢，以及地鐵

公司所實施的各項節省成本措施。我們相信有關的建造費用估計是合乎實際的。

3. 不同鐵路項目的建造費用會因各項不同因素而有所差異。這些因素包括鐵路的長度、設計、自然地理限制等，因此不容易作出全面比較。不過，假如我們把將軍澳支線與竹篙灣鐵路線比較，後者的工程費用屬於合理水平。不可忘記的是，竹篙灣鐵路線項目的設計、建造和用料，必須與香港迪士尼樂園的標準配合。

| <u>將軍澳支線與竹篙灣鐵路線的比較</u> | | |
|------------------------|--------------|---------------|
| | <u>將軍澳支線</u> | <u>竹篙灣鐵路線</u> |
| 長度 | 12.5 公里 | 3.5 公里 |
| 車站數目 | 5 | 2 |
| 成本 | 180 億元 | 20 億元 |

估計內部回報率

4. 估計內部回報率為 11.25%。這是根據地鐵公司的債項成本和股本成本的加權平均數而計算出來，並與其他運輸基建項目，例如收費隧道，的內部回報率相若。

5. 《西區海底隧道條例》和《大欖隧道及元朗引道條例》分別就西區海底隧道和三號幹線的收費調整機制作出規定。根據有關機制，假如某一年的淨收入比條例所規定的幅度為低，有關的專營公司可根據上述法例增加收費。最低和最高淨收入的附表反映了立法會所接受的合理但不過高的內部回報率。就西區海底隧道來說，有關幅度為 15%與 18.5%之間，而三號幹線的則為 13.75%與 17.08%之間。

載客量和票務收入

6. 我們預計在香港迪士尼樂園開幕的一年會有約 550 萬人

入場，這些遊客是竹篙灣鐵路線主要的乘客來源。其他往主題樂園的人包括位於香港迪士尼樂園的酒店的住客和主題樂園及其他相關設施的僱員。全數加起來，他們組成了總體市場，而我們預計當中會有 30% 至 40% 的人會乘坐竹篙灣鐵路線。

7. 我們預計竹篙灣鐵路線的大部份乘客都會從大嶼山以外的地方出發。他們會先乘坐其他地鐵線去陰澳然後再轉乘竹篙灣鐵路往香港迪士尼樂園。在計算 7.98 億元的財務差額時，從香港其他地方去陰澳的乘客所帶來的額外車費收入，已一併計算在內。

8. 由陰澳至主題樂園的單程車費可能在 5 元至 7.5 元之間。正式的車費將會由地鐵公司在鐵路啟用前決定。在釐定車費時，地鐵公司會考慮在鐵路線啟用時的經濟狀況、乘客的負擔能力及市場競爭等因素。

9. 從地鐵其他網絡到達竹篙灣，乘客須付多於 5 元至 7.5 元的車費。這是因為要行走較遠的距離。所以，我們可以合理地假設，因竹篙灣鐵路線而引致地鐵其他路線的額外車費收入，比

只來往竹篙灣鐵路線兩端所得的車費收入，佔總車費收入一個較高比重。

10. 在二零零一年，地鐵公司平均從每位乘客收取到 6.8 元。這相等於尖沙咀至美孚或上環至柴灣的成人八達通車費。現時由尖沙咀至青衣的成人八達通車費是 8.2 元，而從金鐘至青衣則為 11.8 元。

建造時間表

11. 正如我們之前強調，竹篙灣鐵路線的建造時間表非常緊湊。地鐵有限公司已就大陰頂隧道和陰澳站的兩份關鍵性合約選定承建商。由於工程項目協議延遲簽立，上述兩份合約也因此延遲批出。整個鐵路項目牽涉超過十份合約。這兩份合約的延遲會對其他所有合約的進度有負面影響。

12. 更重要的是由於竹篙鐵路線是香港迪士尼樂園整體發展的重要部分，這條鐵路線的工程與土木工程署進行的有關香港迪

士尼樂園發展的工程有很多事宜需互相配合。雙方某些工程實際上是在同一幅土地但不同期間進行。因此，假如地鐵公司的合約有所延遲，會對土木工程署的工程有成本及時間上的影響。

環境運輸及工務局

2002年7月24日

Our Ref. PJD/RAE/18

Date 24 July 2002/7/31

BY FAX & POST

(2840 1528)

Mr. Stephen Lam, JP
Acting Secretary for Environment, Transport and Works
(Transport and Works)
Environment, Transport and Works Bureau
3rd Floor
Main Wing,
Central Government Offices
Lower Albert Road
Hong Kong

Dear Mr Lam,

Penney's Bay Rail Link (PBRL)

LegCo Transport Panel Questions

The Corporation's response to questions raised by the LegCo Transport Panel are as follows :-

1. **Basis of the capital cost estimate (HK\$1,978m money of the day)**

The estimate has been prepared based upon the Corporation's current as delivered level of costs for the Tseung Kwan O Extension Project. The costs for PBRL have been built up from a professional consideration of the individual civil and structural elements of the project together with all the various electrical and mechanical system that make up the railway.

The project cost have been subject to detailed examination by the Railway Development Office of the Highways Department and have been agreed with them after a lengthy discussion, as being reasonable and appropriate in the current market conditions taking into account the Tsuen Kwan O experience. The Railway Development Office also has West Rail and Ma O Shan costs for reference.

Whilst a cost comparison between any two railways suffers from a wide variety of dissimilar circumstances the estimated cost for the relatively low capacity 2-station PBRL is approximately HK\$600 million/route kilometre and for the expected outturn cost for the heavy duty 5-station Tseung Kwan O Extension, now in the final completion stage, is approximately HK\$1,450 million/route kilometre.

2. Fares

The Corporation's financial viability assessment, agreed by Government and its financial advisors, for PBRL is based, for viability purposes only, on Yam O Station to Disney Station likely fare range of HK\$5.00 to HK\$7.50.

The Corporation will decide on the actual fare much closer to the opening date based upon economic circumstances, the market situation and affordability at the time.

3. Project internal rate of return

As a listed company with public shareholders it is vital that Corporation can demonstrate that it can produce a commercial return on its railway projects. At the time of the listing of the Corporation, the prospectus stated that, in order to compensate the Corporation for the risks inherent in the relevant railway project, the Corporation will require these returns to be at a suitable commercial margin over its costs of capital. The prospectus also stated that, in this connection, Government recognised this would originally be between 1% and 3% above the estimated weighted average cost of capital of the Corporation. The PBRL project was specifically mentioned in the prospectus as a project for which the Corporation needs to ensure a commercially acceptable rate of return and that Government would be identifying ways of filling any funding gap. The prospectus also noted that the Government has agreed that it will not require the Corporation to construct and operate any future railway project without the Corporation's agreements.

The PBRL project's expected internal rate of return is 11.25% and has been extensively discussed and negotiated with Government. A company's weighted average cost of capital is calculated by reference to the company's cost of equity and cost of debt on a weighted basis. Government has advised the Legislative Council (paragraph 9 of CB(1) 227901-02(01)) that, as a listed company with public shareholders, the Corporation's weighted average cost of capital is a commercially sensitive figure and, accordingly, cannot be disclosed. However, we confirm that the Corporation's expected internal rate of return 11.25% for the PBRL project falls between 1% and 3% above the Corporation's estimated weighted average cost of capital.

4. Derivation of funding gap of HK\$798 million (at net present value)

The funding gap of HK\$798 million (at net present value) was derived by calculating the shortfall resulting from discounting the cash flows from the Project, over the expected life of the project, at 11.25%. The cash flows from the Project include cash outflow from, inter alia, (i) capital costs, (ii) future asset replacement cost and (iii) annual operating costs, and cash inflows from, inter alia, (iv) revenues (including fare revenues and non-fare revenues such as advertising).

5. Programme

Government require the railway to open to public service by 1 July 2005. To achieve delivery of an operational railway in 34 months time it is essential that contracts for the construction of Yam O Station and the Running Tunnel be awarded immediately, which in both cases will be later than the Corporation's desired programme. Further electrical/mechanical contracts must be awarded in August and September. Any delay will render the 1 July 2005 completion date unachievable.

The Tunnel and Yam O Station contracts have been ready to award for some time with both renders currently being held on letters of intent. The tender prices are for a contract programme of fixed duration. As the award date is accumulating delay the completion date is also being delayed correspondingly.

6. Incremental revenue from usage of existing network

Consistent with the practice applied in the financial viability assessment of all railway extension investments, the incremental ridership and hence revenue across the whole of the MTR network is taken into account and credited to the benefit of the extension.

Therefore for PBRL all additional revenue throughout the network that is generated by adding the PBRL to the network has been included in the viability assessment.

It is expected that most passengers on the PBRL will also use some part of the existing network and therefore the majority of the fare revenue will actually be earned on the existing network.

Yours sincerely,

R.J. Black
Project Director

c.c. Secretary for Financial Services & the Treasury
Deputy Secretary for Financial Services & the Treasury