West Island Line and South Island Line

Introduction

This paper updates Members of the Advisory Council on the Environment on the development of the West Island Line and South Island Line (SIL/WIL).

Background

- 2. After considering the proposal submitted by the MTR Corporation Limited (the Corporation) on the Island Line Extension (ILE) and SIL, the Executive Council on 21 January 2003 that:
 - a. the Corporation should be asked to proceed with further planning on the West Island Line Phase 1 (WIL) from Sheung Wan to Belcher of the ILE including a possible link with the SIL:
 - b. Development of South Island Line (SIL) should be considered along with Route 7. The planning of Route 7 would be kept under review; and
 - c. the Corporation should be asked to examine modifications to its preliminary proposal for the SIL, with a view to arriving at a more cost effective option, in particular options in railway technology;
- 3. The Corporation agreed with Government that there could be substantial benefits in integrating the development of the SIL and WIL and commissioned a feasibility study in July 2003 to develop schemes for integrating the two railway lines.

Latest Position

- 4. The main objective of the feasibility study is to develop an optimum railway scheme which will serve the Western and Southern Districts, interchange conveniently with the existing railway network on the northern side of Hong Kong Island, and help relieve the traffic congestion within the central business areas. The study will also explore available new railway technology to optimize the cost effectiveness and to increase the economic and social value of the railway.
- 5. Cognizance to environmental issues is also taken in regard to the construction of the scheme as well as its future operations. This work will result in a robust Project Profile to be submitted to the Environmental Protection Department under the Environmental Impact Assessment Ordinance.

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6. As of January 2004, the study has reached its final stage in that the preferred alignment options and the railway system have been identified. The recommendations in specific areas are briefly outlined in the following paragraphs:-

a. Railway System

- 7. Based on the latest population and employment forecast issued by Government, the estimated ultimate peak hour patronage of the WIL/SIL is around 20,000 passengers, which is about one quarter of the peak hour capacity of the existing MTR urban lines of 85,000 passengers. A medium capacity railway system will be more cost effective in handling this demand, rather than the more expensive heavy rail system used on the existing MTR and KCR.
- 8. It is anticipated that the WIL/SIL will employ trains of shorter lengths which will reduce length of the platforms and thus the size of the stations. The use of a medium capacity railway system will also provide an opportunity to reduce the operating and maintenance costs as well as environmental impact.

b. Alignment

- 9. The preferred railway alignment for WIL and three railway alignments for SIL (shown in Figure 2) have been recommended after a thorough consideration on the constructability, patronage, costs, environmental and economic benefits and financial viability of the various alignment options identified in the option study stage.
- 10. The WIL will start at a new Sai Ying Pun station which is a short extension of the Island Line. The line will then extend in a loop serving all major population and employment centres around the west side of Hong Kong Island, terminating at Wong Chuk Hang, where it will connect with the SIL. Stations at Queen Mary Hospital and Tin Wan are possible additions.
- 11. The SIL will start at Admiralty station and then serve Ocean Park and Wong Chuk Hang, before continuing to Ap Lei Chau with two more stations. The other two possible alternative alignments would allow extra stations to be added at Wanchai and Happy Valley.
- 12. The proposed railway alignments are mostly underground, except for short sections on viaducts, which will help to minimise any potential environmental problems arising from the train operation.

c. Interchange

13. The WIL/SIL will interchange with the Island Line at Sai Ying Pun and Admiralty and the interchange between WIL and SIL will be at Wong Chuk Hang.

d. Finance

14. The Corporation's financial assessment suggests that the WIL/SIL would not be a financially viable project based on fare revenue alone, when considered from an investment point of view of the business. Nonetheless the project will bring along substantial economic or environmental benefits to the society.

Public Consultation

- 15. Public views are being sought through the district councils and other avenues on the planning and design of the railway throughout the course of the study.
- 16. In 2003, the Corporation reported to the Legislative Council Transport Panel, Southern District Council, Central & Western District Council and Wanchai District Council on the progress of the study and obtained valuable comments on the preferred railway alignments from the Councils. It is noted that Councillors are in general supportive to the railway extension. Specific issues raised include:
 - a. the railway must serve Kennedy Town and Aberdeen and should interchange at Admiralty;
 - b. the railway design should be compatible with the character of the local community;
 - c. the railway should cause minimum visual and noise impact to the neighbourhood;
 - d. Government should revisit its policy in railway funding in conjunction with the feasibility study of WIL/SIL;
 - e. the impact to other public transport service providers should be assessed; and
 - f. the railway should be built as soon as possible.
- 17. The Corporation has taken into account the views of the Councils in the development of project proposal and will continue to hear the views of the community throughout the planning and development of the WIL/SIL.

Opportunities Offered by the WIL/SIL

- 18. All the traveling public, whether using railway or not, will either benefit from the speedy service of the railway or from the less congested road network. The total time saving in traveling would be amounted to over 900 million hours in 40 years.
- 19. The WIL/SIL will meet the transport needs of the Southern and Western Districts and will defer the need for Route 7. In comparison with Route 7, the WIL/SIL would allow the south-west Hong Kong shoreline to be developed for amenity purposes

with a net decrease in roadside emissions. In addition it is estimated that there would be a net financial benefit to Government of \$12 billion by not building Route 7.

- 20. The shift to the railway will relieve the traffic congestion in Wanchai, Causeway Bay and Central with a reduction of vehicles on road leading to improvements in localized air quality and noise pollution as well as a reduction in road-related transport accidents.
- 21. The development of both Southern and Western Districts is constrained by the lack of a reliable mass transportation system. The WIL/SIL will remove this constraint and allow the districts to development in a more sustainable manner.
- 22. The WIL/SIL would increase financial returns to Government in the form of increased property taxes, taxes on rental income and higher land sale values. Financial returns to property owners would improve due to the increase in asset value with a railway nearby.
- 23. It is estimate that the WIL/SIL could assist in creating 20,000 new jobs

Next Step

- 24. The Corporation will submit a project proposal to the government in March 2004.
- 25. Following support of the proposal, the Corporation will submit the Project Profile to EPD, progress the EIA and commence detailed design.

MTR Corporation Limited January 2004