

LEGISLATIVE COUNCIL BRIEF

MASS TRANSIT RAILWAY SOUTH ISLAND LINE

INTRODUCTION

At the meeting of the Executive Council on 18 December 2007, the Council ADVISED and the Chief Executive ORDERED that –

- (a) the MTRCL should be asked to proceed with the preliminary planning and design of SIL (East);
- (b) negotiations with the MTRCL on the detailed scope, cost and implementation programme for SIL (East) should commence;
- (c) the Wong Chuk Hang Estate site should be reserved for the SIL depot with above-depot private property development, and the site to the north of the Ocean Park Station should be reserved for private property development with associated park and ride facilities, both subject to rezoning approval; and
- (d) Route 4 and the MTRCL's proposed SIL (West) should continue to be kept under review.

2. The background on the SIL (East), SIL (West) and Route 4 is set out at **Annex**.

JUSTIFICATIONS

Transport and Economic Justifications

Traffic Congestion along Aberdeen Tunnel

3. The residential and commercial nodes in the Southern District mainly stretch along two clusters with one on the west, namely the Cyberport, Pok Fu Lam, Wah Fu Estate and Aberdeen, and another lying to the east, namely South Horizons, Lei Tung Estate, Wong Chuk Hang and the Ocean Park. In going to the city areas, the former cluster relies more on Pokfulam Road and Victoria Road, and the latter on the Aberdeen Tunnel. The Southern District is the only remaining district

in Hong Kong with no rail service.

4. At present, traffic piles back from the Cross Harbour Tunnel and Causeway Bay daily in the peak hours and in turn causes congestion in the Aberdeen Tunnel. Intermittent closures of the northbound traffic during rush hours are frequent. The congestion will persist and continue to hamper the smooth operation of the road-based transport modes. Besides, a number of new schools in Wong Chuk Hang which have been or will be completed in these few years will exacerbate the problem.

5. SIL (East) has clear transport benefits. The 500-metre catchment population of the four stations in the Southern District will be about 121 000 in 2016 and the corresponding catchment employment will be about 46 000. SIL (East) will help reduce traffic on the road, particularly the Aberdeen Tunnel. Travelling by road-based transport from South Horizons to Admiralty now takes about 25 to 45 minutes during rush hours, which will be about 9 minutes if through SIL (East).

Tourism and Commercial Development in Aberdeen

6. The Ocean Park is being redeveloped into a world-class marine-themed leisure facility, featuring more than 70 attractions to be delivered from 2007 to 2012-13. Visitors to the Park will increase from the current annual total of about 4.9 million to about 5.8 million by 2012-13, and over 7 million by 2021-22. In addition, the Park is contemplating plans to build three hotels by 2011-13.

7. Wong Chuk Hang is expected to undergo considerable redevelopment. Approval from the Town Planning Board for a number of hotel proposals have already been granted and lease modifications for some commercial developments have been approved.

8. The Tourism Commission (TC) has plans to redevelop and revitalise both sides of the Aberdeen harbour under the theme of "Fisherman's Wharf" and enlarge the activity area of the promenades. A conceptual design for the project has been prepared. TC envisaged that works might begin in mid-2009 for completion by 2012/2013.

9. All these tourism projects and land developments will attract more traffic to the Southern District. SIL (East) could relieve the increasing demand for road-based public transport and avoid the

further deterioration of traffic conditions at the Aberdeen Tunnel. Although the Ocean Park redevelopment and the Aberdeen tourism project were planned on a non-rail scenario, SIL (East) will provide an additional choice of transport. Tourists may choose to stay longer in the district in view of the quick and more reliable MTR service. This will benefit the local retail and other tourism related businesses.

Economic Benefits

10. The economic benefits accrued to transport infrastructure is generally measured in terms of time saving to road users. The Economic Internal Rate of Return (EIRR) of SIL (East) is about 9% per annum measured in real terms. It is estimated that SIL (East) will save the public on average about 12 million hours in one year. Taking into account the monetised time savings, as well as other benefits such as operating cost savings and safety benefits, the economic benefits including time savings over 30 years of the operation of SIL (East) are estimated to be about \$32 billion in 2006 prices.

11. The SIL is one of the major infrastructure projects the Chief Executive announced in his Policy Address, which would contribute to promotion of economic development and job creation.

Impact on Non-rail public transport modes

12. Though the Southern District Council (SDC) and the residents have shown great support, the franchised bus companies operating on southern Hong Kong Island as well as the Green Minibuses (GMB), red minibuses (RMB) and taxi trades have expressed concerns about the possible negative impact of the SIL on their operation and fare revenue. We are looking into the impact of the SIL on the other public transport modes.

13. We will assess different levels of intermodal coordination that would be required after the commissioning of the SIL to enhance the co-ordination of public transport service, maintain their overall efficiency and minimise wasteful competition. The guiding principle is to ensure efficient and well coordinated public transport service with the new railway as the backbone while a viable network of bus and GMB service is maintained. With SIL (East) going ahead first while SIL (West) continues to be kept under review in the light of whether SIL (East) can meet the growing transport needs of the Southern District, this would give other public transport operators time to adjust to the new operating environment. There will also be new business opportunities in providing feeder routes serving residents living in Pok Fu Lam, Wah Fu and Aberdeen to SIL (East). These opportunities

could reduce the adverse impact on these operators. We will inform the relevant District Councils and the affected road-based public transport trades of the preliminary service reorganisation scenarios. This will include reduction in some of the existing services as well as introduction of new feeder routes.

Interchange at Admiralty

14. The MTRCL proposes to locate the Admiralty Station for SIL (East) parallel to the proposed Shatin to Central Link track alignment at Admiralty. The new location will further improve the interchange convenience for passengers between SIL (East) and the Shatin to Central Link as well as the existing Island Line and Tsuen Wan Line.

Provision of Happy Valley Station

15. We note the public has expressed diverse views on whether SIL(East) should also serve Happy Valley, where the catchment population is about 19,000. There are engineering issues to be resolved for a MTR station in Happy Valley, and the disruption to road traffic during the construction could be considerable. At present, there is a variety of public transport services for residents in Happy Valley as well as the Happy Valley Race Course goers. We are advised that a MTR station in Happy Valley will add about \$1.3 billion to the total project costs of the SIL(East), and 2.5 minutes to the journey time between Admiralty and South Horizons on top of the original estimate of 9 minutes. We are nevertheless prepared to consider the need for a Happy Valley Race Course Station, provided that the following are met:

- i the consequential additional costs for the SIL(East) project should be borne by the Hong Kong Jockey Club;
- ii the very tight implementation programme for the SIL(East) (construction to commence in 2011 for completion in 2015) should not be affected by the addition of this suggested station; and
- iii any changes in land use arising from or associated with the provision of this station should be compatible with the district planning requirements, and the HKJC should see that they are given the required planning approval.

16. We are asking MTRCL to explore with the Hong Kong Jockey Club the feasibility of a Happy Valley Race Course Station in accordance with the above mentioned requirements. As the MTRCL has to embark quickly on the preliminary planning of the project, an agreement on whether a station to serve the Race Course has to be

reached within the next six months to avoid any delay in the planning work.

South Island Line (West) and Route 4

17. Unlike the situation for the Aberdeen Tunnel, serious congestion does not frequently occur along Pokfulam Road and Victoria Road. We will continue to keep the proposed SIL (West) under review, in the light of whether SIL (East) can meet the growing transport needs of the Southern District. For Route 4, we will continue to keep it under review, pending any new development of the Western District, including the way forward for SIL (West).

Financial Arrangement

18. The estimated capital cost of the SIL (East) will exceed \$7 billion and the project is not financially viable. As funding support is necessary, FSTB and HyD will engage consultants to assess the financial details of the estimate in the detailed design stage. Further studies will also need to be conducted on the planning parameters and scope of development at the railway station and depot sites. In this respect, the government will continue to study the proposal of granting the property development rights at railway station and depot sites along SIL (East) to bridge the funding gap of the project.

Wong Chuk Hang (WCH) Estate site

19. Owing to the scarcity of land, the WCH Estate site is the only available piece of government land situated along the proposed alignment of the SIL for depot development. The WCH Estate is currently under the redevelopment programme of Housing Authority and is scheduled to be totally demolished by around mid 2009.

OCP Station and associated Park and Ride Facility site

20. The site is located at the gateway to the Ocean Park, and the park and ride facilities to be built adjacent to the future OCP station will bring about flexibility and convenience to motorists who may wish to shift to the railway mode in going to the city areas.

21. We propose to reserve the above-mentioned Wong Chuk Hang Estate site and the site to the north of the Ocean Park Station for consideration of using the property development rights for these two sites to fill the funding gap. If these two sites are to be used for property development, the necessary planning approval will be required and the MTRCL will have to pay full market premium on a green field

basis.

WORKS PROGRAMME

22. We plan to ask the MTRCL to proceed with the preliminary planning and design of SIL (East) immediately. The construction of the SIL (East) will commence in 2011 for completion no later than 2015.

ECONOMIC IMPLICATIONS OF SIL (East)

23. MTRCL estimates that the SIL (East) will generate an economic internal rate of return (EIRR) of 9% per annum. This includes monetised time saving to road users, operating cost saving for operators and safety benefits. In addition to the economic benefits mentioned above, the implementation of the SIL (East) will expand the capacity and catchment of MTR, stimulate economic activities, revitalise old areas within the catchment, and elevate overall efficiency through enhancing connectivity, comfort, cleanliness, air quality etc., thereby bringing along other indirect benefits.

ENVIRONMENTAL IMPLICATIONS

24. The SIL (East) will be a designated project under the Environmental Impact Assessment (EIA) Ordinance. The environmental impact for the SIL (East) will be assessed by the MTRCL.

25. The MTRCL will address in the EIA Study under the EIA Ordinance various key environmental issues including the operational noise impact, construction impact in particular noise nuisance and water quality, the ground borne noise transmission to the various properties along the alignment, the disposal of construction and demolition materials, and the impact on cultural heritage. Under the EIA Ordinance, the public and the Advisory Council on the Environment will be consulted on the findings of the EIA study.

SUSTAINABILITY IMPLICATIONS

26. According to our initial sustainability assessment, the proposed SIL (East) should help improve mobility and air quality in the long term through enabling more commuters to switch to rail from road traffic. The identified potential problems, including the noise during construction and operation, air pollution from works sites, loss of open space and waste generated from tunnel excavation will be addressed carefully at the detailed planning stage in consultation with the relevant departments. Temporary traffic arrangements will also be put in place to minimise disruption during the construction period. The

sustainability implications of the project will be reviewed upon completion of the detailed planning.

PUBLICITY

27. A press release announcing the Executive Council's decision will be issued. We will also brief the SDC on the latest development of SIL (East) and the transport trades. Press briefings will be conducted as necessary.

SUBJECT OFFICER

28. The subject officer is Mr Henry CHAN, Principal Assistant Secretary for Transport and Housing (Transport) (Tel. 2189 2187).

Transport and Housing Bureau

19 December 2007

BACKGROUND INFORMATION OF SOUTH ISLAND LINE (EAST), SOUTH ISLAND LINE (WEST) AND ROUTE 4

West Island Line (WIL)/South Island Line (SIL)

The Island Line Extensions (ILE), which comprise the North Hong Kong Island Line (NIL) and WIL, is one of the six rail projects shortlisted for implementation in the Railway Development Strategy 2000 (RDS-2000).

2. In response to the request of the Government, the MTRCL submitted a project proposal for the ILE (i.e. NIL & WIL) on 16 July 2001.

3. Subsequently in April 2002, the MTRCL submitted a revised financial proposal for the ILE taking into account, amongst other things, the change in population forecast, the change in land use of the Comprehensive Development Area site for the proposed NIL Exhibition Station and inclusion of options for delinking part of WIL from Western District Development (WDD).

4. In June 2002, the MTRCL submitted a preliminary proposal for a medium capacity SIL. The proposed scheme was a monorail system looping from the proposed Belcher Station (now renamed as University Station) of the WIL to Ocean Park via Ap Lei Chau and eventually terminating at the existing Wanchai Station.

5. As a result of the reduction in forecast employment and uncertainty associated with WDD, Executive Council (ExCo) decided on 21 January 2003 that completion of the NIL should be deferred to beyond 2016 and that the MTRCL should be asked to –

- (a) proceed with further planning on the WIL Phase 1 from Sheung Wan to University with a possible link with the SIL;
- (b) plan for the WIL Phase 2 from Belcher to Kennedy Town should be held in abeyance until the way forward for the WDD reclamation is clear;

- (c) consider the development of the SIL along with the Route 4 (previously called Route 7); and
- (d) modify the preliminary proposal of the SIL to come up with a more cost effective scheme.

6. In July 2003, the MTRCL undertook a feasibility study for the SIL as well as the section of the WIL from Sheung Wan to University with the objective to explore possible options and recommend the best option for a new railway to serve the Western and Southern Districts.

7. In March 2004, the MTRCL submitted the Project Proposal for WIL/SIL to Government, comprising the following key elements –

- (a) a proposed Island Line extension from Sheung Wan to Sai Ying Pun;
- (b) a proposed WIL from Sai Ying Pun to Wong Chuk Hang;
- (c) a proposed SIL from South Horizons (SOH) to Admiralty; and
- (d) a proposed depot at Wong Chuk Hang with property development above.

8. At its meeting on 28 May 2004, the Legislative Council (LegCo) Panel on Transport passed a motion urging Government to suspend the planning of the WIL/SIL, pending a review of the population growth in Western and Southern Districts, and the development of Southern District into a tourism/commercial centre.

9. After taking into account the views expressed by various parties, the MTRCL subsequently refined the railway scheme and undertook further studies on the feasibility of phased implementation of the projects. In February 2005, the MTRCL submitted to Government a revised proposal for Phased Implementation of WIL and SIL. The revised scheme consisted of three major components –

- (a) the West Island Line (WIL): the proposed extension of the MTR

Island Line (heavy capacity rail) from Sheung Wan to Kennedy Town with two intermediate stations at Sai Ying Pun and University;

- (b) the South Island Line (West) (SIL (WEST)): the proposed medium capacity rail line running from University to Wong Chuk Hang with three intermediate stations at Cyberport, Wah Fu and Aberdeen; and
- (c) the South Island Line (East) (SIL (EAST)): the proposed medium capacity rail running from Wanchai to South Horizons with three intermediate stations at Ocean Park, Wong Chuk Hang and Lei Tung Estate.

10. At the meeting of the LegCo Panel on Transport on 25 February 2005, the Panel passed 3 motions urging Government to implement the WIL, SIL as well as Route 4 as soon as possible.

11. After reviewing the February 2005 proposal from the MTRCL, we consulted the Policy Committee in May 2005 and ExCo in June 2005. The ExCo decided, inter-alia, that

- (a) the SIL (WEST) and SIL (EAST) should be kept under review and their way forward considered in the light of the results of the review on the planning of tourism and commercial development in the Southern District and our consideration of Ocean Park's redevelopment proposal; and
- (b) the proposed Route 4 should be kept under review and its way forward considered in the light of our decision on the SIL (WEST) and SIL (EAST).

12. On 11 January 2006, the LegCo passed a motion to urge Government to expedite the construction of SIL for commissioning in or before 2012.

13. In June 2007, the MTRCL submitted to Government for consideration the Revised Project Proposal for SIL (EAST). The alignments of SIL (East), SIL (West) and WIL are shown at **Enclosure 1**.

Route 4

14. In early 1998, the Administration obtained funding approval from Finance Committee to undertake an Investigation and Preliminary Design Consultancy Study for the section of Route 4 between Kennedy Town and Aberdeen at a cost of \$66 million. The study was completed in August 2000.

15. In July 2001, the Administration put forward a proposal to proceed with an engineering review on the section of Route 4 between Kennedy Town and Pok Fu Lam.

16. The Panel was concerned that the phased implementation of Route 4 could not help satisfy the transport needs of the local community. The Panel passed a motion at the meeting on 13 July 2001 strongly requesting the Administration to construct Route 4 from Kennedy Town to Aberdeen mainly in tunnel form as soon as possible.

17. In September 2001, the Panel received views from local bodies and green groups on Route 4. There were divided views among the attending deputations on the development of rail and road infrastructure in the areas.

18. The Administration commissioned a Study in early 2002 to develop a number of dual 2-lane alignments for the route, as well as considering the option of upgrading existing roads.

19. In early 2003, the Administration briefed the Panel on the findings of the Study. The capital cost of Route 4 is \$10 billion (in September 2001 prices) and the construction cost of the Interim Measures for improving Pok Fu Lam Road is about \$50 million.

20. At the meeting on 25 February 2005, the Panel was briefed on the tunnel and coastal options of Route 4 between Kennedy Town and Aberdeen. In one of the three motions passed at the meeting, the Panel urged Government to expedite the construction of the proposed Route 4.

21. At the same meeting mentioned in paragraph 11, ExCo decided that the proposed Route 4 should be kept under review and its way forward considered in the light of Government's decision on SIL (WEST) and SIL (EAST).

南港島線路線 (2007 計劃) Alignment of The South Island Line (2007 Proposal)

