

1. INTRODUCTION

Background

- 1.1 The Shatin to Central Link (SCL) is one of the priority railways recommended for implementation in the Railway Development Strategy 2000. It is also one of the ten large-scale infrastructure projects announced by the Chief Executive in his 2007-2008 Policy Address. The Executive Council has endorsed on 11 March 2008 the SCL scheme jointly developed by the MTR Corporation Limited (MTR) and the HKSAR government to proceed with further planning and design for this line.
- 1.2 The SCL alignment comprises 17 kilometres of rail line that will connect several existing railway lines, creating two distinct east-west and north-south railway corridors. It will also provide interchange opportunities at six of its ten stations (Tai Wai, Diamond Hill, Homantin, Hung Hom, Exhibition and Admiralty). From east to west, the SCL will connect the existing Ma On Shan Line with the West Rail Line. The north-south corridor will be formed by extending the existing East Rail Line to Hung Hom Station (HUH) and then across Victoria Harbour to the planned Exhibition Station (EXH) and Admiralty Station (ADM). At ADM, interchanges will be provided with the existing Island Line, Tsuen Wan Line and the South Island Line (East) (SIL(E)). A schematic diagram of the rail network is illustrated in [Appendix 1.1](#).
- 1.3 The SCL is strategically important as it is connecting existing railway lines into an integrated rail network. The east-west connection will allow the creation of a 57km east-west corridor across the city connecting Wu Kai Sha with Tuen Mun via Kowloon. The north-south connection will operate over a 41km north-south corridor with services originating in Lok Ma Chau or Lo Wo travelling via the existing East Rail Line to ADM. This will facilitate a direct link between Mainland China and Hong Kong Island. The proposed SCL alignment is shown in [Appendix 1.2](#).
- 1.4 For the purposes of Environmental Impact Assessment (EIA), five EIA studies have been conducted to cover different sections of the SCL, which include:
- **SCL - Mong Kok East to Hung Hom Section [SCL (MKK-HUH)]** (hereinafter referred to as “the Project” being considered in the EIA) – The realignment work for the existing EAL tracks from the tunnel portal near Oi Man Estate (Portal 1A) to the proposed North Ventilation Building, Plant Rooms and Emergency Access (NOV)¹ in Hung Hom;
 - **SCL – Hung Hom to Admiralty Section [SCL (HUH-ADM)]** – The section from proposed NOV in Hung Hom across the harbour to the Causeway Bay Typhoon Shelter (CBTS), EXH and then to ADM, namely “SCL – Hung Hom to Admiralty Section” [SCL (HUH-ADM)];
 - **SCL Protection works at Causeway Bay Typhoon Shelter** – A section of approximately 160m long of the SCL tunnel protection works at the crossing over Central-Wan Chai Bypass (CWB) tunnels, which would be constructed under the CWB project;
 - **SCL Tai Wai to Hung Hom Section [SCL (TAW-HUH)]** – The extension of the Ma On Shan Line from Tai Wai Station via Hing Keng, Diamond Hill, Kai Tak, To Kwa Wan, Ma Tau Wai and Ho Man Tin to Hung Hom, and link up with the existing West Rail Line along with a proposed stabling sidings option in Diamond Hill (DHS)²; and

¹ The future North Ventilation Building, Plant Rooms and Emergency Access at Hung Hom will be constructed under the Shatin to Central Link - Hung Hom to Admiralty Section [SCL(HUH – ADM)]

² The ultimate suitability of using either the DHS or HHS or a combination of both sites for train stabling would be subject to the findings of detailed engineering and EIA studies.

- **SCL – Stabling Sidings at Hung Hom Freight Yard [SCL (HHS)]** – a proposed stabling sidings option for SCL (TAW – HUH) at the former freight yard in Hung Hom².

- 1.5 SCL (MKK – HUH), is approximately 1.2 km long from the tunnel portal near Oi Man Estate (Portal 1A) to the proposed NOV in Hung Hom. As illustrated in [Figures No. NEX2213/C/361/ENS/M50/501](#), the Project realigns from the tunnel portal near Oi Man Estate (Portal 1A) and the cut-off demarcation between the Project and SCL (HUH – ADM) is located at the north of the proposed NOV. The proposed NOV and the section beyond NOV across the harbour to new EXH and ADM of approximately 6 km long fall under SCL (HUH – ADM). The Project also includes a number of facilities, including new platforms at the existing HUH, north and south sides ventilation shafts and cooling tower.
- 1.6 The construction of the Project is scheduled to commence in 2012 for completion in 2018. For SCL (HUH – ADM), with the significant programme implication and works interfaces with Wanchai Development Phase 2 (WDII) and Central Wanchai Bypass (CWB) projects, the construction is expected to be completed in 2020. EAL will continue its mode of operation and the new platforms at the HUH as well as the approach tunnels will not be commissioned until SCL (HUH – ADM) is completed.

Designated Projects under the EIAO

- 1.7 The Project together with some associated works would cover three designated project (DP) elements as specified under the *Environmental Impact Assessment Ordinance* (EIAO) (Cap. 499) as identified below:
- Item DP1: A railway and its associated stations under A.2 in Schedule 2 Part 1, i.e. railway from Portal 1A to the new NOV and the HUH;
 - Item DP2: A railway tunnel more than 800m in length between portals under A.7 in Schedule 2 Part 1, i.e. from Chatham Road Interchange to the new NOV; and
 - Item DP3: A road which is an expressway, trunk road, primary distributor road or district distributor road including new roads, and major extensions or improvements to existing road under A.1 in Schedule 2 Part 1, i.e. realignment of the existing Cheong Wan Road which is a district distributor. (The shifted alignment is shown in [Appendix 1.3](#))
- 1.8 Apart from the above DP Elements, the following minor modification works would be conducted at the nearby siding and good yards which are currently designated project exempted under Section 9(2) of the EIAO:
- A railway siding, depot, maintenance workshop, marshalling yard or goods yard under A.4 in Schedule 2 Part 1; i.e. Ho Man Tin siding. Based on the latest information, there will be neither change in frequency nor function of the sidings. Three existing tracks will be reduced to one track with a spur track approaching the Hong Kong Polytechnic University Phase 8 (HKPU Phase 8) area and the number of crossing will be reduced (See [Appendix 1.4](#)).
 - A railway siding, depot, maintenance workshop, marshalling yard or goods yard under A.4 in Schedule 2 Part 1; Mong Kok Freight Terminal at MKK. Based on the latest information, there will be no change in function of the terminal. MKK will be slightly modified for additional work area of buildings and facilities of existing terminal. There will be neither modification nor addition to the existing three rail tracks (see [Appendix 1.5](#)).
- 1.9 Based on the technical review conducted in chapters 4 to 10, the above modification works would not result in adverse environmental impacts leading to violation of criteria in Annexes 4 to 10 of the

²The ultimate suitability of using either the DHS or HHS or a combination of both sites for train stabling would be subject to the findings of detailed engineering and EIA studies.

EIAO-TM. These minor works would not constitute a material change as defined in Section 6.1 of the EIAO-TM to exempted DPs.

- 1.10 An application for an Environmental Impact Assessment (EIA) Study Brief was made to the Environmental Protection Department (EPD) and the EIA Study Brief No. ESB-192/2008 for the Project has been issued under Section 5(1) of the EIAO. AECOM Asia (HK) Company Limited (AECOM) was commissioned by MTR as the Consultant to conduct this EIA study for SCL (MKK-HUH). The potential environmental impacts associated with the SCL (TAW-HUH), SCL (HHS), SCL (HUH-ADM), and SCL Protection Works at Causeway Bay Typhoon Shelter have been assessed and presented in the other 4 standalone EIAs under the EIA Study Brief No. ESB-191/2008, ESB-233/2011, ESB-193/2008 and ESB-213/2010 respectively.
- 1.11 Subsequent to the issue of the Study Brief, the SCL gazettal arrangements have been modified. To align with the latest SCL gazette and avoid public confusion, the Project title of the EIA Study has been amended from “Shatin to Central Link – Cross Harbour Section (Phase I – Mong Kok East to Hung Hom)” to “Shatin to Central Link – Mong Kok East to Hung Hom Section”. Despite the fact that the title has been amended, the scope of works as described in the Study Brief largely remains unchanged. The only change is that the demarcation between the Project and SCL (HUH – ADM) has been slightly shifted to the south of HUH. However, the scope of works within the additional areas is in a similar nature as compared with what has been covered in the Study Brief, including works areas for site offices, construction of railway tunnel and associated facilities. The scope of issues covered by the Study Brief is adequate to cover these changes.

Objectives of the EIA Study

- 1.12 The objective of the EIA Study is to provide information on the nature and extent of environmental impacts arising from the construction and operation of the Project including cumulative impacts with concurrent projects and associated mitigation measures for protecting the environment. The information obtained in the EIA Study will contribute to decisions on:
- the conditions and requirements for the detailed design, construction and operation of the Project to mitigate adverse environmental consequences whether practicable;
 - the overall acceptability of any adverse environmental consequences that are likely to arise as a result of the Project; and
 - the acceptability of residual impacts after the proposed mitigation measures is implemented.
- 1.13 The EIA study has been conducted and completed in accordance with the requirements of the EIA Study Brief (ESB-192/2008) under the EIAO and the guidelines on assessment methodologies provided in Annexes 12 to 19 of the Technical Memorandum on Environmental Impact Assessment Process (EIAO-TM). The EIA Report has been prepared to address the requirements of the EIA Study Brief, which are outlined below:
- to describe the Project, associated works, and any option(s) of alignment together with the requirements and environmental benefits for carrying out the Project;
 - to identify any individual designated project element(s) under Schedule 2 of the EIAO to be covered in the Project; to ascertain whether the findings of this EIA study have adequately addressed the environmental impacts of these projects;
 - to identify and describe the elements of the community and environment likely to be affected by the Project and/or likely to cause adverse impacts to the Project, including both the natural and man-made environment and the associated environmental constraints;
 - to present the considerations of alternative(s) with regard to avoiding and minimizing the potential environmental impacts on the sensitive receivers; to compare the environmental benefits and dis-benefits of the option(s) (including Project alignment, location(s) and size(s)

of station / platform(s), train system, locations and size of works areas / works sites and construction method(s)); to provide reasons for selecting the preferred option(s) and to describe the part that environmental factors played in the selection;

- to identify and assess noise impacts, air quality impacts, water quality impacts, waste management implications, potential land contamination issue, landscape and visual impacts, and determine the significance of impacts on sensitive receivers and potential affected uses;
- to propose provision of mitigation measures so as to minimize pollution, environmental disturbance and nuisance during construction and operation of the Project;
- to investigate the feasibility, practicability, effectiveness and implications of the proposed avoidance or mitigation measures;
- to identify, predict and evaluate the environmental impacts expected to arise from railway realignment and modification works to the existing railway section from Mong Kok East to Hung Hom during the construction and operational phases in relation to the sensitive receivers and potential affected uses; and to consider, if applicable, any potential / consequential operational environmental performance implication on the existing railway in relation to the reduction of 12-car to 9-car train configuration and other associated change(s);
- to identify, predict and evaluate the residual environmental impacts (i.e. after practicable mitigation) and the cumulative effects expected to arise during the construction and operational phases in relation to the sensitive receivers and potential affected uses;
- to identify, assess and specify methods, measures and standards, to be included in the detailed design, construction and operational stages of the Project which are necessary to avoid or mitigate these environmental impacts and cumulative effects and reduce them to acceptable levels;
- to investigate the extent of the secondary environmental impacts that may arise from the proposed mitigation measures and to identify constraints associated with the mitigation measures recommended in the EIA study, as well as the provision of any necessary modification; and
- to establish and specify the environmental monitoring and audit requirements to ensure the effective implementation of the recommended environmental protection and pollution control measures.

Report Structure

1.14 This EIA Report comprises fourteen chapters, starting with chapter providing a broad overview and considerations of the entire project, and then details of technical assessments. The monitoring requirements, summary of the environmental outcome, implementation schedule and conclusion are the final chapters concluding the EIA study. The content of each of the chapters is outlined below:

- Chapter 1 presents the background of the project and introduction of this EIA Study;
- Chapter 2 discusses the consideration of alternatives;
- Chapter 3 outlines the project description and construction methodology proposed for the Project;
- Chapter 4 identifies and assesses potential landscape and visual impacts arising from the construction and operation of the Project;

- Chapter 5 assesses potential air quality impacts arising from the construction and operational phases;
- Chapter 6 identifies and assesses potential airborne noise impacts arising from the construction and operational phases;
- Chapter 7 identifies and assesses potential ground-borne noise impacts arising from the construction and operational phases;
- Chapter 8 reviews potential water quality impacts arising from the construction and operational phases;
- Chapter 9 identifies issues in relation to waste management;
- Chapter 10 identifies issues in relation to potential land contamination;
- Chapter 11 highlights the Environmental Monitoring and Audit (EM&A) requirements;
- Chapter 12 presents the summary of the environmental outcomes;
- Chapter 13 presents the implementation schedule; and
- Chapter 14 presents the overall conclusion.