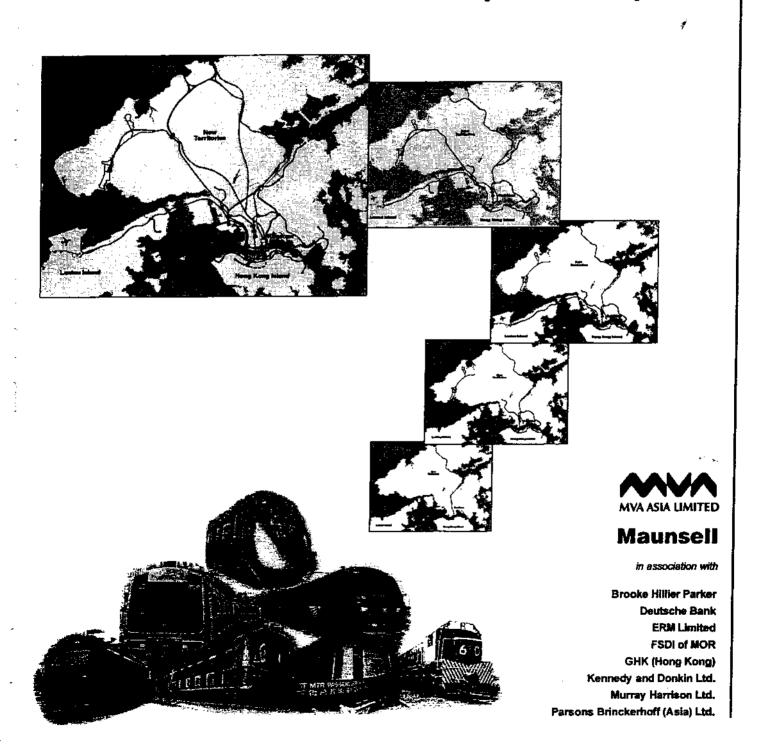
Environmental Assessment of the Schemes within the Rail Development Proposals



7. ENVIRONMENTAL ASSESSMENT OF THE SCHEMES WITHIN THE RAIL DEVELOPMENT PROPOSALS

7.1 Introduction

- 7.1.1 This chapter presents the findings of the environmental assessments undertaken for each of the Component Schemes and Stand Alone Schemes that make up the proposed network development options. Information is also presented for two of the Longer Term Schemes; the South Island Line (SIL) and the Shenzhen By-pass.
- 7.1.2 As outlined previously, the Component Schemes are centred around the FHC and generally provide relief to existing parts of the network. The degree of design advancement varies for each scheme. However, none of the alignments that were assessed are fixed and each is subject to alteration during the design development process.
- 7.1.3 At this strategic study level, the purpose of the assessment was to identify whether there were any potential 'strategic' environmental implications that would make the scheme under consideration 'unattractive' from an environmental perspective or would require particular attention during the future development of the scheme. It was not the intention of this assessment to undertake detailed evaluation to a level more commensurate with an EIA Study. Such detailed evaluations will need to be undertaken at a later phase of the development process for each of the routes once the design has been further progressed and the alignment is better defined.
- 7.1.4 As the detailed design of each of the Component Schemes within both rail development options have still to be developed, some of the schemes considered include minor alternative alignments possibilities. Whilst the alternatives alignments are not substantially different, each has been assessed.
- 7.1.5 The environmental benefits that may be accrued from the implementation of the Component Schemes are related principally to potential air quality benefits. The detailed assessment of such benefits on a scheme by scheme basis is outside the scope of a strategic study, nevertheless, whilst the generic environmental benefits of adopting rail in preference to equivalent road alternatives are presented in Section 3.2, a comparison of the cumulative air quality 'benefits' that may be derived from the implementation of the network development proposals is presented in Section 8.2.

7.2 Generic Construction and Operational Environmental Impacts

7.2.1 Before presenting the key findings of the assessments, it is considered worthwhile to present some generic discussion regarding the potential construction and operational impacts that could result from the rail developments. It should be noted that the information presented on this topic is only intended to give a broad overview of the generic impacts; the actual impacts will vary on a case by case basis depending upon the locality, construction method, and finalised operational details. A detailed evaluation of the impacts will be undertaken as part of any subsequent EIA Study that is undertaken before the schemes can be implemented.