

Aims and Objectives

Chapter 2



CHAPTER TWO AIMS AND OBJECTIVES

Environmental Objectives

1. The primary objective of the environmental assessments of the two Preferred Options is to identify the extent of any environmental impacts associated with, or benefits which could be accrued from, the development proposals and to determine whether carrying capacities are likely to be exceeded as a result of such proposals. The present assessment also identified any necessary remedial or mitigation measures which may be required to make the overall strategic development proposals more environmentally acceptable. A critical component of the overall evaluation process is the assessment of the proposed developments at different time horizons and the implications of the phasing of developments or components thereof in both fiscal and environmental terms. For example, it may be that individual strategies could be made more environmentally acceptable if certain components are brought on stream at different time horizons. To permit direct comparisons to be drawn and to determine whether improvements could be made through phasing of the developments, the assessment criteria were maintained for each time horizon.
2. The two Preferred Options of the TDS have evolved from an iterative evaluation process using a series of performance criteria to screen out undesirable elements, to protect areas of specific conservation value and to focus on development which could be achieved in a controlled manner. Account has been taken of the development potential in the PRD which has provided the regional context for the development strategies in terms of land use - transport - environment. Due to the lack of detailed information available in connection with the Pearl River Delta (PRD), it has not been possible to carry out cumulative assessments of the developments proposed in Hong Kong and the PRD although this will be an integral component of further studies. Recourse has been made to any relevant consultancy reports including the "Study of Development Trends in Guangdong Province" (Planning Department, 1993).

Specific Objectives

3. The principal TDS objective which has been espoused throughout the course of the TDS Review is as follows:

"to enhance and protect the quality of the environment with regard to air quality, water quality, noise, solid wastes disposal and potentially hazardous installations by minimising net environmental impacts to the community and maximising opportunities to improve existing environmental problems".
4. Some of the other TDS principal objectives which are also relevant to the environmental assessment include landscape, ecology and local habitats. The sub-objectives of the TDS are outlined below :

Water Quality

- to achieve and maintain the quality of inland coastal and ground waters with particular reference to the treatment of industrial and domestic effluents;
- to minimise pollution of freshwater flows and groundwater supplies; and
- to minimise the pollution of coastal waters in accordance with the Technical Memorandum on Effluent Standards (1990) and Water Pollution Control Ordinance (WPCO, 1980). [It must be stressed that some of the previously agreed sub-

objectives cannot be defined in quantitative terms or evaluated against defined standards as the methods available are inappropriate for the scale of this Study, these apparent shortcomings are highlighted in the text along with the need for further studies].

Air Quality

- to minimise or reduce air pollution associated with transport corridors or industrial emissions;
- to minimise conflict of sensitive receptors and new road proposals; and
- to minimise the impact of emissions from industrial development zones and the transport corridors.

Noise

- to minimise or reduce noise impacts from major transport corridors and industrial sources;
- to minimise the impacts of freight rail traffic; and
- to reduce noise impacts of major road links.

Waste Management

- to minimise wastes production and ensure development proposals conform to available wastes disposal capacities; and
- to minimise solid wastes production.

Hazardous Installations

- to minimise the risk to the population at large from hazardous installations; and
- to ensure protection of the population in the vicinity of Potentially Hazardous Installations (PHIs).

Ecology

- to maximise the opportunity for conservation of ecologically important areas; and
- to minimize the extent of distinct plant and animal communities that may be adversely affected by proposed developments.

Planning Guidelines Compliance

- to ensure compliance of all proposals with the requirements of the Hong Kong Planning Standards and Guidelines (HKPSG); and
- to minimize the frequency of noncompliance associated with each development proposal for air, noise, water, waste, ecology and PHI's.

5. It must be stressed that although the subobjectives defined above have been adhered to as far as practical in the overall evaluation process, some of the criteria are not able to be applied to strategic level studies (e.g. compliance with the Water Quality Objectives and the ecological criteria) but they will need to be considered as part of further studies. Furthermore, when considering the findings of the environmental assessments in the context of the overall developments, cognisance must be given to Chapter 9 of the HKPSG which states that standards and criteria need to be applied with a degree of flexibility and not in isolation.

Moreover, it is of paramount importance to address environmental problems and incorporate environmental factors and criteria throughout the land use planning process. In applying the guidelines for the preparation of land use plans, it will be necessary to take account of resultant implications of alternative measures and tradeoffs between associated costs and benefits to the community in general. (HKPSG, Chapter 9, Environment).

Evaluation Principles

6. At the commencement of the TDS Review, it was determined that the following basic principles should be espoused for use throughout the evaluation process. Essentially, these axioms are as follows:
 - (a) empirical data should always be used in preference to qualitative data;
 - (b) the data set should allow evaluation both between the different options, individual components or development zones and the common values or parameters of different development scenarios; and
 - (c) the environmental variables generate a collection of unrelated parameters which are difficult to integrate. The concept of weighting these criteria is to be avoided as this can mask any problem areas and over-emphasise other issues of lesser importance".
7. For the assessment of the Hybrid Options, the six strategies are ranked in connection with individual criteria and were ascribed an overall rank or performance level. For the Preferred Options, the options were not ranked. Instead, the nature and extent of the predicted impacts were assessed, or where possible quantified, at three time horizons (i.e. 2001, 2006, 2011) taking account of the limitations which are inherent in any integrated evaluation process of this scale.
8. Planning Guidelines which were adopted as part of the overall evaluation of Initial Options, and utilised in the Evaluation of the Hybrid Options are given in Appendix A. These Planning Guidelines were also embraced within the Preferred Options.