Development Principles and Proposed Phasing

Chapter 18

CHAPTER EIGHTEEN
DEVELOPMENT PRINCIPLES AND PROPOSED PHASING

1. A fundamental aim of the TDS is to provide development strategies which are sustainable in terms of the environmental objectives and criteria, yet robust enough to accommodate the transport, planning and economic requirements. On the basis of the findings of the foregoing assessments, a series of development principles are derived taking into account the individual requirements of each specific area, in addition to environmental thresholds. These are presented as a general set of guidelines followed by specific principles for development within NWNT and NENT.

2. A summary of environmental development principles which have been considered or should be incorporated into the Strategic Planning process are summarised below:

- modification and management of transport demand through development of local services and employment opportunities;
- integration of land use management and development of landuse - transport plans which reduce traffic demand, facilitate the patronage of public transport and bring the jobs and people closer together;
- develop pollution pricing mechanisms and congestion pricing mechanisms;
- introduction of traffic restrictions in environmentally sensitive areas (e.g. warning systems on days when air pollution levels are high in Metro area);
- enhancement telecommunication systems for road traffic networks to reduce congestion and queuing in sensitive areas;
- further development of pedestrian and cycle access only (may be at certain times of the day);
- promotion of research and development into the use of energy efficient transport modes;
- promotion of tariffs which reflect the environmental and social costs of various modes of transport (should not be constraining for public transport);
- promotion of research and development into full technologies for industry and transport modes;
- promotion of research, development and ways to implement energy and water consumption reduction measures for industrial and transport sectors;
- identification of measures which can be implemented to introduce institutional arrangements to encourage energy producers to invest in improved technology. This is more applicable in the wider TDS context than in the territorial sector but should be part of the overall development strategy;
- introduction of a new zoning classification to create a buffer zone encouraging redevelopment compatible with both industrial and residential developments to take place;
- exploration of new traffic reduction measures in densely populated areas;

- establishment of the institutional framework requiring Environmental Assessments for redevelopment of Industrial/Residential and Transport/Residential interfaces;

- development of integrated resource management and planning mechanisms to develop ways to incorporate the benefits of energy efficiency, environmental protection and fiscal returns;

- encouragement of the industrial sector to reuse, recycle and recover materials to reduce disposal requirements and for pollution control;

- implementation of the recommendations of the Waste Reduction Study at the earliest opportunity;

- maximisation of residential developments in areas which have easy access to or can be linked to multi-modal public transport systems;

- maximisation of residential development in areas where sewage collection, treatment and disposal systems can be expanded or treatment levels enhanced to protect receiving water quality;

- development of a strategic sewerage scheme for the NT to centralise treatment, rationalise collection and utilise disposal mechanisms with the least impact on receiving water quality;

- investigation of sustainable sewage treatment options including the use of mangrove swamps (akin to reed beds) through pilot scale testing, as these could provide alternative solutions for small scale domestic effluent disposal schemes especially in rural coastal areas;

- in view of the protection afforded to Deep Bay, Mirs Bay and Tolo Harbour Water Control Zones and the realisation that external forces could affect the pollution prevention plans already in hand, consideration should be given to strategic options for effluent treatment and disposal for the NT as a whole (review of SMP's will also be required in view of changes in population forecasts);

- high technology corridors which utilise the existing nodes are favoured as they have less reliance on new linkages and do not require the implementation of Route Y;

- industrial development strategies need to be carefully controlled to avoid driving manufacturers/employers into the Shenzhen region, thereby producing more development pressure on the NT;

- port developments in the west of the territory are favoured as these reduce the requirement of river trade vessels to use Victoria Harbour and encourage the utilisation of the transport links developed in the NWNT;

- conservation and provision of recreational facilities are vital as the overall aim of TDS is to maintain the high standard of living enjoyed in Hong Kong and to provide wider opportunities for leisure and recreation pursuits;

- protection of the remaining wetlands, Buffer Zones I and II in Deep Bay from further development;

- upgrading of many of the NWNT coastal areas such as Lau Fau Shan will provide

a benefit to this area;

- development of conservation management centres in NENT and NWNT, marine parks and controlled development of educational facilities for the promotion of conservation (e.g. dolphin tours).

3. In addition to the foregoing it is also recommended that consideration by given to the following:

(a) development of Regional Environmental Protection Goals (REPG's);

(b) definition of environmental thresholds and carrying capacities for all of the sub-regions and sub-divisions in Regional and territorial terms (long term goal);

(c) definition of environmental tolerance levels in territorial terms;

(d) definition of Environmental Quality Objectives (EQO's) for future targets; and

(e) preparation of Strategic Environmental Management Plans (SEMPS) which would examine the existing 'baseline' conditions within each area (e.g. by Air Control Zones) taking all environmental criteria into account. Development plans or proposals would then be examined in holistic terms (like SMPS but not just for effluent), so that management plans/options would be thoroughly considered rather than looking just at transport in terms of air/noise/interfaces etc.

4. One of the requirements of the Brief was to assist in the formulation and phasing of the Refined Preferred Options. Recommended phasing (from an environmental quality and control perspective) is outlined in Table 18.1.

Table 18.1 PROPOSED PHASING OF REFINED PREFERRED OPTION (SCENARIOS A and B)

Development Component or Strategy	Scenario A	Scenario B
Residential Developments		
Kai Tak - Kowloon Bay	2001	2001 with Phases 2 and 3 from 2006>
Green Island	2006	2006
Tseung Kwan O Phase 3	2001	2001 with extension > 2006
Tung Chung	2001	2001 with extra pop >2006
Tai Ho	-	2006>
Hong Kong Island South	2006>	2006>

Development Component or Strategy	Scenario A	Scenario B
Lok Ma Chau/San Tin	-	2006>
Kam Tin	-	2011
Yuen Long South	2001>	-
Fanling North	-	2006>
Rural NWNT	2006>	2006>
Tuen Mun East	2006	2006>
Whitehead	-	2006
Border Development (subject to very detailed study)	-	>2011
Transport Links		
As shown in Table 4.2	-	
LPRX and Route Y	-	>2011
Port Back Up		
Tuen Mun	2011	2011
San Tin (subject to detailed study)	2006>	2006>
CT10	2001>	2001>
CT11/12	2006	2006
Tuen Mun Port	2011	2011
Open Storage		
Kau Leung Hang	>2001	>2001
Ping Che	>2006	>2006
Nam San Wai	>2006	>2006
Pat Heng Area	>2006	>2006
PFA Lagoon	-	2006
Junk Island Borrow Area	-	2001
Pillar Point Borrow Area	-	2006
Black Point Borrow Area	-	2011
Castle Peak Firing Range	-	?

5. The recommendations made in Table 18.1 are based on the assessments contained within the foregoing sections, and can be rearranged to illustrate (from an environmental quality and control perspective) which components of the Refined Preferred Options could be considered to be suitable for incorporation into the medium term strategy and which are recommended as long term development options.

6. In the medium term (up to 2006) the components proposed are as follows:

Strategy	Scenario A	Scenario B
Residential	Kai Tak/Kowloon Bay, Green Island, Tseung Kwan O, Tung Chung, Yuen Long South	as A without Yuen Long South
Port	CT10	as A
Open Storage	Kau Leng Hang	Junk Island Borrow Area

7. In the long term the components proposed are as follows:

Strategy	Scenario A	Scenario B
Residential	Hong Kong Island South, Rural NWNT, Tuen Mun East	Hong Kong Island South, Tai Ho, Lok Ma Chau/San Tin, Kam Tin, Fanling North, Rural NWNT, Tuen Mun, Whitehead, Border Area
Port	Tuen Mun, San Tin, CT11/12	as A
Open Storage	Ping Che, Nam San Wai, Pat Heng Area	Ping Che, Nam San Wai, Pat Heng Area, PFA Lagoons, Pillar Point Borrow Area, Borrow Area at Black Point
Transport	LRPX, Route Y	as A