(ACE-EIA Paper 3/2003)
For Advice

Environmental Impact Assessment Ordinance (Cap. 499)
Environmental Impact Assessment Report

Tung Chung – Ngong Ping Cable Car Project

Purpose

This paper presents the key findings and recommendations of the Environmental Impact Assessment (EIA) Report for the Tung Chung – Ngong Ping Cable Car Project submitted by the Mass Transit Railway Corporation (MTRC) under section 6(2) of the Environmental Impact Assessment Ordinance (EIAO). Comments from the public and the ACE will be taken into account by the Director of Environmental Protection when he makes his decision on the approval of EIA report under the EIAO.

Advice Sought

2. Members' views are sought on the findings and recommendations of the EIA report.

Need for the Project

3. The cable car project aims to enhance tourism in Ngong Ping on Lantau Island. The project proposal was first promulgated in the North Lantau Development Study in 1992. It was further developed through the Visitor and Tourism Study for Hong Kong (VISTOUR), commissioned by the Hong Kong Tourist Association and the Planning Department, in 1995.

Description of the Project

4. The cable car system will be about 5.7km long connecting Tung Chung and Ngong Ping on Lantau Island. The system will consist of two terminals, two angle stations (one at the Airport Island and one at the Nei Lak Shan (NLS)) for turning direction and eight numbers of supporting towers. The NLS angle station and five supporting towers will fall within the Lantau North Country Park and its proposed

extension.

5. The proposed project is a Designated Project under Item Q.1, Schedule 2 of the EIAO (i.e. projects partly or wholly in an existing or gazetted proposed country park). Construction of the proposed project will start in 2003 for completion in 2005.

The Selected Option

6. The selection of the alignment of the cable car project has taken into account the ecological, visual and landscape impacts. Seven potential alignments have been assessed in the EIA Report and the selected alignment has minimised the impact on woodland and the visual impact. It would be away from or not be visible by relatively large number of residents in Tung Chung and Ngong Ping, and would have less landscape impact at the hillside portion due to the seclusion of valley and the concealment by intervening ridgeline.

7. The Ngong Ping Terminal will be located at a grassland. The recommended location of the Ngong Ping Terminal will have less ecological impact, as compared with another potential location which requires a substantial clearance of vegetation and site formation. The Tung Chung Terminal will be located on a reclaimed land. The recommended location of the Tung Chung Terminal will have less environmental impact as compared with some other potential locations which require reclamation near Pak Sha Tsui and will have impact on the San Tau Beach Site of Special Scientific Interest where mangroves and seagrasses are found.

8. 2S (bicable) car cable system is proposed in the project. Compared with another potential system, namely Funitel, 2S system requires less number of supporting towers and would not require a tower in the sea channel between the Airport Island and Lantau Island. 2S system requires a maximum of eight supporting towers whilst Funitel system requires about twenty-one. With reduced number of supporting towers, the environmental impact of the cable car project will be reduced.

Specific Environmental Aspects to Highlight

9. The key environmental issues identified for this project are : visual and landscape, ecology and water quality.

<u>Visual and Landscape</u>

10. As mentioned in paragraphs 6 to 8 above, the cable car alignment, locations of the terminals and cable car system have been selected to minimize the

visual and landscape impacts. To further reduce the visual and landscape impacts, particularly at the mid-section which will fall within the country park area with spectacular mountainous landscape, the following key measures will be implemented :-

a) sensitive design and chromatic treatment of the supporting towers by using lattice steel frame and color of recessive orchre tones;

b) sensitive architectural design and chromatic treatment of the NLS angle station by using transparent glazing material for canopy and considering the use of roof panel with interchangeable color (e.g. green in summer and ochre in winter to blend with the environment at different seasons);

c) sensitive design of the emergency rescue trail underneath the cable car alignment by using "boardwalk" (the type of footpath used in Mai Po), applying local curvature and limiting the width to maximum 1.5m;

d) grassy surface treatment of helicopter touch-down points for emergency rescue; and

e) landscape planting at various structures like terminals, angle stations and supporting towers, etc.

Ecology

11. As mentioned in paragraphs 6 to 8 above, the cable car alignment, locations of the terminals and cable car system have been selected to minimize ecological impacts through avoiding ecologically sensitive areas. Construction of the cable car project will cause permanent and temporary loss of habitats of about 3.4ha and 2.1ha respectively. Out of the total 5.5ha loss of habitats, only about 0.25ha of woodland and tall shrub are considered to have high ecological value. For compensation, about 2ha woodland and tall shrub will be planted near the NLS angle station. In addition, during construction, it is preferable to use helicopter, instead of installation of temporary material ropeway, to deliver construction materials to further reduce the temporary loss of habitats.

Water Quality

12. The major water quality concern will be the wastewater discharge or site run-off at works sites during construction, particularly the sites located within country

park or water gathering ground (WGG) areas. To minimize the water quality impact during construction, various key measures such as :

- banning of the use of concrete batching plant;
- banning of kitchen or canteen facilities within WGG;
- provision of chemical toilets; and
- installation of tent-like structure and bounding of works sites' perimeter to prevent ingress of rainfall and off-site migration of materials, etc.

will be adopted at works sites falling within WGG and country park. In addition, for the works site for Ngong Ping Terminal, any wastewater generated will be treated on-site either by using settling ponds or mobile filtration plant to reduce suspended solids before discharge. An emergency response plan will also be formulated and implemented to handle any accidental spillage of chemicals during construction. With the mitigation measures in place, there will be no adverse residual water quality impact during construction.

Environmental Monitoring and Audit (EM&A)

13. An EM&A programme was proposed in the EM&A Manual submitted together with the EIA report. A detailed Implementation Schedule was included. For those elements of the proposed project that are Designated Projects, the EM&A requirements will be enforced as Environmental Permit conditions.

Comments received so far from the Public during the Public Inspection Period

14. The MTRC has made the EIA report, the EM&A Manual and the Executive Summary available for the public to comment under the EIAO since 29 March 2003. Members will be briefed on any comments received from the public at the meeting.

Environmental Assessment and Noise Division
Environmental Protection Department
April 2003