

**For discussion
On 15 June 2007**

**Legislative Council Panel on Economic Services
The incident of the falling of a cabin of Ngong Ping Skyrail**

Purpose

The paper seeks to brief Members on the incident of the falling of a cabin of Ngong Ping Skyrail on 11 June 2007, and the follow up actions taken / to be taken by the Government, the MTR Corporation Limited (MTRCL) and Skyrail-ITM (Hong Kong) Limited (Skyrail).

Background

2. Ngong Ping 360 (i.e. Ngong Ping Skyrail and Ngong Ping Village) was opened on 18 September 2006. MTRCL is the franchisee of Ngong Ping 360 responsible for building, operating, managing and maintaining the facility. The project is operated and managed by Skyrail appointed by MTRCL. Since September 2006, the cableway has been in operation for 2,330 hours, and carried in excess of 1.5m guests.

System Safety and Reliability

(a) Safety as the top priority

3. Ensuring the safety of the Ngong Ping Skyrail has always been our top priority. Electrical & Mechanical Services Department (EMSD) is responsible for monitoring the safety of the cable car system in accordance with the Aerial Ropeways (Safety) Ordinance (Cap. 211). Regular inspections are conducted by EMSD to check the cable car system to ensure compliance of the safety requirements in operational and maintenance aspects by Skyrail. Safety inspections, including daily, weekly, bi-weekly and an annual ropeway survey, were also conducted by Skyrail to ensure the safety of the system.

4. As stipulated by the Aerial Ropeways (Safety) Ordinance (Cap. 211), an annual survey of all aspects of the cableway system is required to be conducted by an independent external expert who is accredited by EMSD. This annual ropeway survey commenced on 7 June 2007, and was expected to run for a period of 6 days and be completed by 13 June 2007.

5. In addition to regular surveys, MTRCL has separately commissioned an internationally recognized testing and certification agency to conduct an independent system review on the design, components, operation and maintenance of the cable car system earlier this year.

(b) System Reliability

6. The cable car system has, since its opening in September 2006 until end May 2007, achieved an overall reliability rate of 98.8%. The reliability for the year 2007 is 99.1%.

Dislodgement of Cabin

7. From 5 to 7 June 2007, the cable car system was suspended from operation by Skyrail for conducting a rope shortening exercise. This is a usual requirement for the cable car system to ensure the ropeway safety after the rope is tensioned for a period of time. Upon completion of this exercise, the cable car system resumed operation and Skyrail commenced an annual ropeway survey, as referred to in paragraph 4, for about one week to test different system components. The tests were conducted after the operating hours of the cable car system.

8. According to the report from MTRCL and Skyrail, on 11 June 2007 (Monday), all passengers were clear of the line by 6:45pm and one of the night's maintenance and testing procedures associated with the annual ropeway survey commenced. This survey was conducted by an external accredited ropeway surveyor from Europe. Under his direction a series of tests were conducted to determine the performance of the brake system. During these tests, the cableway system stopped unexpectedly at around 8 pm, with a sensor fault signal at tower 2B and an earth fault signal for section 2 of the cableway, followed by the discovery of one of the cabins which fell next to the tower. During the time of the incident, no one was online. Immediately the area was cordoned off.

Action taken by EMSD

9. Under the Aerial Ropeway (Safety) Ordinance (Cap. 211) EMSD has immediately ordered MTRCL to suspend the Ngong Ping Skyrail from operation in the evening of 11 June 2007 until the cause was identified and remedial actions taken. It has tasked MTRCL to conduct a thorough investigation. In the meantime, EMSD has -

- (a) conducted investigation at the incident site, examined the cable car cabin wreckage on site, tower 2B and associated installations on top of it;
- (b) reviewed the computer records at the material time of the incident and the brake testing arrangements and procedures during the incident;
- (c) conducted interviews with the independent ropeway surveyor, manufacturer's staff and maintenance personnel; and
- (d) ascertained weather conditions in the area of the Ngong Ping Skyrail at the time of the incident.

Action taken by MTRCL/Skyrail

10. The cableway service was suspended after the incident and major immediate technical activities were undertaken by MTRCL and Skyrail, including an initial check of tower 2B for mechanical and structural damage, checking of all towers to ensure no damages, and removal of the damaged cabin off site to complete the detailed examination.

11. On 12 June 2007 (Tuesday) Skyrail also undertook a detailed check of the structure of tower 2B and the equipment, and positioned personnel at all towers and stations to check all mechanical structures and equipment. It also checked all cabins on line from the access trail and by helicopter and met with all concerned parties to discuss proposed course of action.

Immediate Communication Measures

12. MTRCL has taken the following measures to inform the public, major trade partners and stakeholders of the suspension and refund arrangements -

- (a) signage advising of the suspension was positioned at the Tung Chung Skyrail Terminal and the Ngong Ping Village;
- (b) station notices and public announcements in MTR System;
- (c) alert at Ngong Ping 360 Website;
- (d) message included in the NP360 interactive voice respond system;
- (e) notification to Travel Industry Council, travel agents, trade and tenants;
- (f) communications with the Hong Kong Tourism Board (HKTB), Tourism Commission and District Councils; and
- (g) confirmation of the refund arrangement for the public and travel agents.

Arrangement for Village Tenants and Public to Ngong Ping 360

13. The Ngong Ping Village and the attractions there remain open and the village can be reached by bus or taxi. Special arrangements for tenants including the granting of rent free for the duration of the suspension and staff transportation will be arranged. Skyrail will also work closely with the New Lantao Bus Co. Ltd to facilitate staff transport for Village tenants and increased demand for public transport during service suspension.

Arrangement for tourists

14. Following the suspension of cableway service of Ngong Ping 360, the HKTB has already informed local and overseas travel trade and visitors through various channels. It has also immediately suspended its overseas promotion of the cableway service.

15. Hong Kong enjoys rich and diverse tourism assets, and Ngong Ping 360 is one of the city's wide array of attractions. The HKTB will strengthen its promotion of Hong Kong's multi-faceted appeal, including its distinctive living culture, its natural wonders and other attractions. It will also ride on the upcoming Hong Kong Shopping Festival in July and August 2007 to highlight Hong Kong's unbeatable shopping strengths.

Investigation

16. MTRCL has been tasked by EMSD to conduct a thorough investigation into the incident, including the operation, design, maintenance and management of the cable car.

17. The Government has appointed an Expert Panel, led by independent overseas experts and with the participation of EMSD, to examine and identify the causes of the incident; review the management, design, operation and maintenance of the Ngong Ping Skyrail; and identify remedial and improvement measures required to be taken for the safe operation of the Ngong Ping Skyrail, including testing and the arrangements for the trial runs before re-opening of the Ngong Ping Skyrail. The overseas experts are -

- (a) Prof. Gábor Oplatka, who is an expert in ropeways in Switzerland. He is a founding member and past president of OIPEEC (International Organisation for the Study of the Endurance of Wire Ropes). He is also a member of the OITAF (International Organisation for Transportation by Cables). He has decades of experience in ropeways, and was awarded the title of Professor and received the honorary title of Dr.h.c. in 1983 and 1995 respectively. He completed his doctorate with a thesis on the endurance of wire ropes. He is a heavyweight in the ropeway industry and would greatly assist the investigation; and

- (b) Prof Dr Josef Nejez, who is an expert in the investigation of ropeway accidents and has been engaged as court-appointed expert witness in Austria in investigations. He is the Chairman of the Austrian Standards Committee on Ropeways. He has also assisted in investigations of various ropeway accidents. We believe his precious experience would help in our investigation into this incident.

18. The investigation by EMSD is already underway. The most important issue is to ensure the safe operation of the Ngong Ping 360 before its resumption of service. The Government will keep the Economic Services Panel and the public informed of progress of investigation and publish the investigation findings of the Expert Panel in due course.

Economic Development and Labour Bureau
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