Minutes of the 4th Meeting of the Lift and Escalator Safety Advisory Committee (LESAC)

Date: 22 July 2014 (Tuesday)

Time: 2:30 p.m.

Venue: Room 7102, EMSD Headquarters, 3 Kai Shing Street, Kowloon Bay

Present: Dr. POON Lok-to, Otto Chairman

Mr. KUOK Hoi-sang Member Mr. LI Kwan-chi. Simon Member Member Mr. TSE King-wa Mr. WONG Kai-hon, Charles Member Mr. KWOK Sai-wang Member Mr. TO Wing, Christopher Member Mr. YU Siu-fai, Ivan Member Member Mr. LUI Kam-tong Mr. WAN Chun-wah, Martin Member Mr. LEUNG Man-kwong Member Mr. WOO Kin-ming Member Ms. LEE Wing-yan, Charis Member

In attendance: Ms. Catherine FUNG On behalf of Mr. CHUI Chun-king, Simon

Ms. Angela YUEN Construction Industry Council

Mr. CHAU Kwok-leung, Wilson Development Bureau

Mr. CHEUNG Kwok-fai EMSD
Mr. PANG Yiu-hung, Eric EMSD
Mr. CHU Kei-ming, Barry EMSD
Mr. CHONG Kwok-kee EMSD
Mr. NG Tak-hei EMSD

Absent with Apologies: Mr. CHUNG Fuk-wai, Simon Member

Mr. YEUNG Man-kai, Gary Member Mr. CHUI Chun-king, Simon Member Ms. CHOI Ngar-chun, Ada Member Ms. LI Tsau-ha, Jessica Member

Action 1. Confirmation of Minutes of the Last Meeting (Agenda Item 1)

- 1.1 A member raised the following amendment to the attendance record at the meeting:
 - Amended as Mr. LEUNG Man-kwong was present at the last meeting.

The meeting confirmed the minutes of the 3rd meeting including the above

amendment.

2. <u>Matters on Declaration of Interests (Agenda Item 2)</u>

- EMSD 2.1 EMSD explained to members the reasons and mechanism for declaration of interests, and proposed to put in place the one-tier reporting system. If a member became aware of a potential conflict of interests over a matter to be discussed, he/she should, as soon as practicable, make disclosure of his/her interests involved to the Chairman. The Chairman should decide whether the member might speak or vote on the matter, remain in attendance as an observer, or should temporarily withdraw from the meeting. If the Chairman had a conflict of interests over a matter to be discussed, the chairmanship might be temporarily taken over by another member. As members usually came from different sectors, they were not required to declare their interests if a matter to be discussed only involved the overall interests of the sector.
 - 2.2 Members endorsed the proposed declaration mechanism. It was declared that the one-tier reporting system would be implemented from this meeting onwards. All members remarked that they did not have any potential conflict of interests over the matters to be discussed at this meeting.

3. <u>Progress Report by the Working Group on Matters Relating to Responsible Persons (Agenda Item 3)</u>

Mr. YEUNG Man-kai, convener for the Working Group on Matters Relating to the Responsible Persons, was unable to attend the meeting. The progress report was therefore delivered by EMSD on his behalf. Progress of the working group and the discussion at the Advisory Committee meeting were as follows:

3.1 Publicity on General Duties of Responsible Persons

Twenty-one public talks were organised by EMSD in collaboration with district offices on a range of subjects including the duties of responsible persons for lifts and escalators, how to select a suitable lift contractor, the safe use of lifts and escalators, how to manage lifts and escalators maintenance works and modernisation of aged lifts. Additionally, a talk on innovative technology was also organised on 19 June.

Also, EMSD had completed a number of publicity and promotion projects, including shooting two short videos each lasting for about 20 minutes on maintenance of lifts and escalators, producing a 30-second TV announcement on modernisation of aged lifts, distributing posters on modernisation of aged lifts and making goodwill visits to the responsible persons at private buildings of over 40 years.

A new Responsible Persons' Corner was set up on the EMSD website to consolidate under one platform the information required by responsible persons in general, such as maintenance price information of lifts at government premises, sample contracts for procurement of lift and escalator maintenance services, guidance notes/guidelines for general responsible persons, TV announcements, registers and specified forms. A member suggested that the electronic version of the Guidelines on Safety of Lift Shaft Works – Volume 3 should be linked on the webpage of EMSD's Responsible Persons'

EMSD

Corner.

EMSD

EMSD would continue to organise district-based talks for responsible persons, hold regular talks on innovative technology, carry out goodwill visits to promote modernisation of aged lifts and enhance the platform of the Responsible Persons' Corner.

3.2 Publication of Maintenance Price Data of Lifts

EMSD

The pricing data on maintenance service for government lifts was published on the EMSD website on 29 January 2014 and thereafter being updated once every six months. The next publication was scheduled for 23 July 2014.

EMSD

EMSD had commenced the survey on the maintenance price data of lifts at private buildings. A consultant was engaged to collect the maintenance price data of lifts at single-block private residential buildings, multi-block private housing estates and private commercial buildings in phases since July 2014. The mode of publication would be similar to the existing practice.

3.3 Review on the Format of the Use Permit

EMSD

EMSD had conducted a review on the format of the use permit, and collected views from the public and the trade. A summary of the mainstream views is as follows:

- it was suggested that the name and telephone number of the contractor concerned should be shown; and
- it was suggested that the expiry date of examination with load should be printed on the front of the use permit to facilitate inspection by the responsible person.

EMSD pointed out that given the limited signal reception of mobile phones inside the lift cars, lift passengers might not be able to contact the contractor. Besides, the registered contractor should have already posted a label with the contractor's name and emergency contact telephone number inside the lift car or near the lift lobby as required under the Code of Practice. Furthermore, if the expiry date of examination with load was printed on the front of the use permit, it might be confused with the expiry date of the use permit. Members agreed that the existing format of the use permit be maintained, and the feasibility of issuing spare copies of the use permit be explored. While security features for the use permits were not necessary for the time being, further discussion could be conducted by the Working Group.

3.4 Refurbishment of Lift Landing Doors

It was discussed at the Working Group meeting that there were cases in which the responsible persons employed non-registered lift contractors to carry out refurbishment works for lift landing doors. EMSD pointed out that as stipulated in the Lifts and Escalators Ordinance, "lift works" should be carried out by a qualified person or a person under the direct supervision of a qualified person at the place at which the works were carried out. Therefore, the responsible person of the lift should check whether the works in question were "lift works" before any works involving the lift were carried out. The responsible person might seek advice from the registered lift contractor responsible for the maintenance. When any works involving a lift were completed, the responsible person should arrange a registered lift contractor to inspect

and confirm that the lift was in a safe working order before it was put into service again.

4. <u>Progress Report by the Working Group on Matters Relating to the Trade (Agenda Item</u> 4)

Mr. CHUNG Fuk-wai, convener for the Working Group on Matters Relating to the Trade, was unable to attend the meeting. The progress report was therefore delivered by EMSD on his behalf. Progress of the working group and the discussion at the Advisory Committee are as follows:

4.1 Opinion Survey Among the Lift and Escalator Trade

EMSD

EMSD had commissioned a consultancy firm to conduct a survey among registered lift/escalator contractors, engineers, and workers to find out the pay trend and pay structure of trade practitioners and their work pattern and work environment. The objective of this survey was to identify the issues and difficulties encountered by the trade and to seek improvement methods. EMSD would complete the scrutiny of the relevant survey report in July and would from August onwards begin organising briefings for members of the Advisory Committee and other different stakeholders to report the survey results.

4.2 Sharing Talk on New Maintenance and Repair Technologies

EMSD

On 19 June 2014, EMSD hosted a talk on innovative technologies for lifts and escalators at its headquarters. Trade members were invited to introduce new technological options to property management associations, government bodies, and owners' representatives with the view to promoting the application of new technologies. The talk aimed to further alleviate the problem of manpower shortage in the trade and to enhance the standards and efficiency of maintenance services. The new technologies introduced at the talk include:

- Remote monitoring and maintenance device for lifts;
- Stability control for escalators stopped by an emergency brake;
- Modern passenger conveyors with easy installation;
- Application of condition-based maintenance solutions on lifts and escalators; and
- Modernisation of existing escalators.

EMSD planned to organise regular talks, around once every six months, to which the Hong Kong Housing Authority and Hong Kong Housing Society would be invited. EMSD would also study the feasibility of piloting the remote monitoring and maintenance device on the lifts in government buildings, and would consider issuing guidelines with respect to stability control requirement for escalators stopped by a remote brake. Additionally, EMSD would examine the practicability of modernising the existing government escalators.

4.3 Survey on Maintenance Time for Lifts

EMSD

The survey aimed to establish a reasonable and acceptable standard for required maintenance time, so as to work out an appropriate ratio between worker and lift for reference by the trade.

The survey method involved studying the log-book records to analyse the time required for routine maintenance, emergency repair and rescue works in respect of different lift models and contractors. Meanwhile, information regarding the time required for routine maintenance, emergency repair and rescue works in respect of typical lift models (with 24 years of service, rated speed at 1.5 m/s, rated load at 1 200 kg, and serving 14 levels on average) was also collected, and site inspections were conducted to find out the actual work procedures and items, and the time required.

The average maintenance time per year for each lift was calculated by comparing the findings of log-book data analysis against the contractors' estimation. Log-book analysis revealed that the total maintenance time was 54.7 hours, while the contractors' estimation was 53.8 hours. The results of both were very close.

EMSD would continue to carry out site inspections to confirm the accuracy of the contractors' estimation and the daily maintenance items.

4.4 Publicity on General Duties of Registered Engineers and Registered Workers

EMSD organised briefings on the general duties of registered engineers on 7 November and 17 December 2013, and all registered engineers were invited to attend.

With regard to the promotional activities targeting registered workers, EMSD organised a briefing in December 2013 to provide an overview of the teaching materials, comprising booklets and powerpoint slides, for contractors' training personnel. The teaching materials were distributed to the contractors in April 2014. In addition, EMSD also produced a short publicity video on the general duties of registered workers to help them understand their statutory obligations. The video had been uploaded to the EMSD website.

- 4.5 Occupational Safety and Health of Workers
 - ◆ Improving Design of Access to Lift Shaft and Lift Pit

EMSD and the Lift and Escalator Contractors' Association had suggested to the Buildings Department that amendments be made to the Code of Practice for Building Works for Lifts and Escalators. It was suggested that an access door be provided for a pit with a depth of over 2 metres, sufficient space be allowed between lifts in the shared lift shaft, a safe and clear access with adequate and emergency lighting to the machine room be maintained, and the use of crawl ladders of over 2 metres long to access the machine room be avoided. EMSD would continue to follow up with the Buildings Department on the proposed amendments to the Code of Practice for Building Works for Lifts and Escalators.

EMSD

Design Review of Lifts for Footbridges

After deliberation with the trade, it was recommended that the installation of air conditioners in lift shafts of lifts for footbridges should be avoided, with additional louvres used instead to improve ventilation. The thickening of the walls of lift

shafts and the addition of ventilation fans at lift shafts or heat insulation film on glass panels were also suggested. These recommendations were incorporated into the technical specifications of lifts for footbridges in May 2014.

◆ Lift Top Safety

EMSD

The Working Group was studying the adverse effect of the air-conditioners installed at lift top on work space safety and other occupational safety and health issues, as well as reviewing the ventilation arrangement for work in lift shafts.

◆ Work Safety Competition

EMSD

EMSD planned to organise a work safety and conditions improvement suggestion competition in late 2014/early 2015.

5. The Numbers of Registered Engineers and Registered Workers (Agenda Item 5)

EMSD reported that as at July 2014, a total of 5 173 persons had successfully qualified as registered lift/escalator workers. Meanwhile, a total of 304 persons had successfully qualified as registered lift/escalator engineers.

6. Review on Incidents (Agenda Item 6)

EMSD reported that there were 330 and 223 cases of lift incidents in 2013 and as at June in 2014 respectively. The main cause of the incidents was improper use by passengers. There were 5 and 2 cases of lift incidents due to equipment failure in 2013 and first half of 2014 respectively. As compared with 2012, the main reason for the rise in number of lift incidents was the increased number of minor incident reports received by EMSD. This was because EMSD's stepped-up promotional campaign of escalator safety had resulted in greater safety awareness among the responsible persons. In respect of escalators, there were 1 416 and 870 escalator incidents in 2013 and as at June in 2014. The main cause of the incidents was improper use by passengers as well. There were 3 and 0 lift incidents due to equipment failure in 2013 and first half of 2014 respectively.

EMSD

A member suggested that EMSD should also supply in the report the numbers of passenger injuries and deaths in lift and escalator incidents and launch targeted publicity and education campaigns after analysing the incidents. It was further suggested that EMSD should enhance its effort to educate property management personnel about how to calm passengers down properly if and when they were trapped in the lift. In addition, the newly designed lifts were fitted with more advanced safety control systems, which, in event of malfunction, would not just stop the lift, but also conduct self-test after stopping the lift. If the test was passed, the lift would automatically be sent to a designated floor for passengers to exit, reducing the instances of passengers being trapped. However, such operations of the lift often gave passengers the impression that the lift was plunging while in fact it was not. A member suggested that EMSD improve passengers' knowledge of the operation of lifts through stepped-up publicity and education campaigns.

7. Any Other Business (Agenda Item 6)

- **FMSD** 7.1 EMSD indicated that in order to further improve the performance monitoring (PM) points scheme for registered contractors, the PM point items and their definitions would be reviewed based on performance. For example, same points would be deducted for loose ropes and broken ropes, as they were equally hazardous to operation. The review was expected to be completed by the end of this year/early next year. Upon completion of the review and implementation of the new PM points scheme, EMSD would proceed with the corresponding review of the Contractors' Performance Rating scheme.
 - 7.2 A member enquired about what effect the recent interruption of electricity supply by a power company had on lift operations. EMSD responded that the operation of aged lifts could be stopped by a reduction in voltage. After discussing the matter with the power company, EMSD had set requirements in its code of practice for lift operations in case of a voltage drop. New lifts could withstand a brief voltage drop. On the other hand, to minimise the occurrence of shut-in-lift incidents caused by a voltage drop, the installation of automatic rescue devices was also promoted in the modernisation solutions for existing lifts.

Date of next meeting 8.

- The next meeting will be held in January 2015. Members will be informed of the date 8.1 of next meeting in due course.
- 8.2 The meeting was adjourned at 5 pm.