Minutes of the 16th Meeting of the Lift and Escalator Safety Advisory Committee (LESAC)

Date: 31 July 2020 (Friday)

Time: 2:30 p.m.

Venue: Via video conference

Present: Mr KO Chi-wai, Gary Chairman

Mr TING Tsan-kau, Chris Member

Mr HO Sau-chiu Member

Mr KUOK Hoi-sang Member

Mr LAU Chun-ming Member

Mr POON Tai-fai Member

Ms Esther CHEUNG Member

Mr WONG Kai-hon, Charles Member

Ms WONG Hiu-kwan Member

Mr CHANG Wai-ip, Daniel Member

Mr KWOK Wing-yin Member

Ms KI Ying-ying Member

Mr WONG Chun-ho, Franky Member

Ms WONG Wai-ling Member

Mr POON Kwok-ying, Raymond Member

Ms CHOI Wing-yee, Cornelia

Mr TSE King-wa

In attendance: Mr WONG King-wai Secretary/EMSD

Mr LAU Lik-kee EMSD

Mr YIU Tak-tai, Boris EMSD

Mr CHAN Chun-wai EMSD

Member

Absent with

apologies:

Mr CHAN Wai-tung, Tony Member

Action

1 Welcoming

1.1 The Chairman welcomed attendees to the 16th meeting of the Lift and Escalator Safety Advisory Committee (the Advisory Committee) and stated that due to the severe epidemic situation, the meeting was conducted via video conference.

2 Confirmation of Minutes of the Last Meeting (Agenda Item 1)

2.1 Members did not raise any amendment to the minutes of the 15th meeting. The Chairman declared the minutes of the 15th meeting officially confirmed.

3 Matters on Declaration of Interests (Agenda Item 2)

3.1 The Chairman asked members to declare their interests. If a member became aware that there might be a conflict between a matter to be discussed and his own interests, he should declare his interests. If the matter to be discussed only involved the overall interests of his sector, no declaration was required.

No attendees indicated any conflict of interests with the matters under discussion at this meeting.

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

Mr TING Tsan-kau, Chris, convener of the Working Group on Matters Relating to Responsible Persons, reported on the work progress of the working group. The discussion on the progress report at the meeting was as follows:

4.1 Among the 1 771 escalator incidents in 2019, 96% (1 700 cases) were caused by passenger behaviours, including passenger falling due to loss of balance or collision when walking on escalators. To minimise the number of accidents, the Electrical and Mechanical Services Department (EMSD) called on members of the public to hold the handrail tightly and stand on either side of escalator steps when using escalators.

The EMSD launched a new series of Announcements in the Public Interest (APIs) on TV and radio and posters in March 2020 to promote the guidelines on the safe use of escalators with "stand on either side of escalator steps and hold the

handrail" as one of the promotion focuses.

The EMSD was in the process of producing a series of APIs on TV and radio and posters on the "safe use of lifts". Analysis of the statistics on lifts in 2019 revealed that among the 367 lift incidents during the year, 85% involved passenger losing balance and having their finger pinched while entering or exiting the lift and 30% involved injuries to children. Nearly half of those cases involved children unaccompanied by adults, indicating that the public should be reminded to take care of children and avoid letting children use the lift by themselves. On the other hand, malfunctioning of lifts was often signs of lift failures or incidents. In order to tackle lift failures as early as possible and prevent lift incidents, members of the public should inform the responsible persons (RPs) for lifts or registered contractors about the malfunctioning as soon as possible for follow-up actions. The EMSD's new series of APIs would focus on the above message.

To enhance communication and information exchange with the trade, the RPs and members of the public, the EMSD's Lift and Escalator Newsletter would be published twice a year starting from this year. The 6th issue of the Lift and Escalator Newsletter was published in June and the 7th issue would be published in December this year. The EMSD welcomed members' contributions or suggestions on topics for reference.

- EMSD 4.2 The latest round of maintenance price survey on lifts at private residential and commercial premises was completed in the first half of 2020. The updated information was uploaded to the Responsible Persons' Corner on the EMSD website and published through press release. Maintenance price information would continue to be updated on a half-yearly basis, and the release date of the results of the next survey was tentatively scheduled for this November.
- EMSD 4.3 To facilitate building owners of private residential and residential/commercial building in expediting lift modernisation, the Government had allocated a total of \$4.5 billion to implement the Lift Modernisation Subsidy Scheme (LIMSS) to subsidise modernisation works for about 8 000 lifts in relevant properties and commissioned the Urban Renewal Authority (URA) to administer the LIMSS. The LIMSS also provided outreach services to needy residents, such as delivery of food and meals, purchasing daily necessities on their behalf, provision of stair-climber services, etc. so as to reduce the inconvenience caused to them by the modernisation works.

The first-round application was closed on 1 August last year. The URA had continually arranged consultants to organise lift modernisation works for the 1 400 lifts with higher priority from the first-round application and disbursed

subsidies. The second-round application was opened on 6 January 2020 and the application deadline was extended to 30 September 2020 to allow sufficient time for building owners to convene general meetings for passing the resolution on applying for the LIMSS. Owners may also nominate two representatives of the management committee/owners to apply for the LIMSS before the deadline and submit the minutes of the general meeting on or before 31 December 2020.

EMSD 4.4 To ensure the safety of aged lifts, "special maintenance" for aged lifts should be conducted at least twice a year. However, there were still less than 2% of the aged lifts that did not undergo special maintenance". The EMSD would step up its enforcement actions. The EMSD also recommended RPs for lifts to include the "special maintenance" in the lift maintenance contract during contract renewal so as to avoid delay of "special maintenance" due to negotiation of relevant costs.

To facilitate contractors to submit records of "special maintenance", the EMSD would complete the optimisation of the electronic platform in August 2020. The EMSD had briefed the trade on the optimisation of the electronic platform on 29 May 2020.

The "special maintenance" was a short-term measure to enhance the safety of aged lifts. The EMSD called on RPs for lifts to modernise or replace aged lifts in the long run to enhance the safety, reliability and comfort of lifts.

EMSD 4.5 To further promote lift modernisation, the EMSD was conducting a study on the feasibility of mandating the lift modernisation works. The EMSD would make reference to the relevant experiences of other countries and the implementation and enforcement of similar legislation in Hong Kong, and take the impact on the community and the trade into consideration. Before submitting proposals, the EMSD would consult the public, councillors and the trade in due course.

The EMSD also engaged consultants to conduct a benchmark study on the mandatory measures or other initiatives for modernising aged lifts in different regions and cities. The study was completed in the first quarter of this year. The EMSD was reviewing the study report and would formulate further studies afterwards.

EMSD 4.6 The Contractors' Performance Rating System (CPR) was launched in 2009. The EMSD reviewed and improved the CPR from time to time. The 8th review for the CPR was underway to more fully reflect contractors' performance. The proposed amendments were issued to the trade for consultation in May 2020. The revision was scheduled to be completed in the second half of this year.

5 Progress Report of the Working Group on Matters Relating to the Trade (Agenda

Item 4)

Mr HO Sau-chiu, convener of the Working Group on Matters Relating to the Trade, reported on the work progress of the working group. The discussion on the progress report at the meeting was as follows:

EMSD 5.1 The EMSD completed the revision of the design requirements of lifts in Part 1 and 2 of the Code of Practice on the Design and Construction of Lifts and Escalators (CoP) with reference to the EN81-20/50 standard. The 2019 edition of the CoP was gazetted on 30 August 2019 (G.N. 5428) and came into effect on 1 June 2020.

As for the revision to Part 4 – Escalators of the CoP, EN115-2017 would be used as the blueprint. The EMSD had been working on the revision at full capacity and would consult the trade and relevant departments in due course. The revision was scheduled to be completed in the second half of 2021.

- EMSD 5.2 The EMSD was reviewing the Code of Practice for Lift Works and Escalator Works to introduce clear guidelines on obvious negligence and persistent irregularities in maintenance works. Trade consultation was scheduled to be conducted in the third quarter this year.
- EMSD 5.3 With a view to enhancing the monitoring of mechanized vehicle parking systems gaining increasing popularity in Hong Kong, as well as facilitating the trade to develop local markets, the EMSD published the Guideline for Implementing Mechanized Vehicle Parking Systems in June this year, covering the relevant mechanical safety and legislative requirements.
- EMSD 5.4 In relation to the measures suggested by the EMSD to prevent major incidents of escalators vide EMSD Circular No. 10/2017, the working group reminded the trade that from 31 August 2017 onwards, escalators with a vertical rise of 2.5 metres or above were required to undergo a brake load test every five years. A three-year grace period was put in place and the deadline of the first test was 31 August 2020.

In light of the series of social events and COVID-19 pandemic, the EMSD decided to postpone the deadline to 31 December 2020 in the hope that registered contractors could make good use of the extended grace period and arrange brake load test for escalators with the RPs.

As at mid-June 2020, 69% of escalators that required testing completed the test. The completion rate was 14% higher than that in early May.

EMSD 5.5 To encourage RPs to modernise lifts and enhance the RP's capability to manage and provide quality lift service, the EMSD once again launched the Quality Lift Service Recognition Scheme. A dedicated webpage was set up to introduce the scheme in late April. The EMSD had also been promoting the scheme via various

channels.

EMSD

5.6 Since lift/escalator contractors were required to submit Form 7 after the completion of major alternation works, the EMSD would conduct a safety inspection before issuing a Resumption Permit. In general, more time was needed for resumption of lift/escalator operations.

The EMSD set up an online booking system for submission of Form 7, allowing contractors or RPs for lifts/escalators to make appointment with the EMSD for the safety inspection two weeks before the submission of Form 7, thereby enabling better understanding of the work flow and scheduling in a bid to minimise the time required for service suspension.

After launching the booking system, the EMSD would optimise the appointment priority to allow lift/escalator contractors to make priority appointment for the lifts/escalators in special buildings, such as hospitals, homes for the elderly, buildings equipped with only one lift, etc. in the second stage. The online booking system was opened to the trade in June 2020 and met with positive feedback.

EMSD/

VTC/

Lift and Escalator Contractors' Association

5.7

The EMSD formed a working group with the Lift and Escalator Contractors' Association and the Vocational Training Council (VTC) to develop virtual reality (VR) safety training courses, enabling workers to receive simulated training under different scenarios in a safe environment using VR technology. The training courses in respect of "entering and leaving lift car tops" and "working on lift car tops" were completed and opened for contractors to use as training for workers in the third quarter of 2018. The VTC also provided training courses in respect of "entering and leaving lift pits" and "risk assessment of working in machine rooms" last year. The production of the third round of training courses in respect of checking of landing doors and maintenance of brakes had commenced in June this year.

EMSD

5.8 As at June 2020, the total number of registered lift/escalator workers was 5 813 and the number of registered lift/escalator engineers totalled 364. Besides, as at March 2020, there were about 1 906 general workers in the trade to assist registered engineers/workers in conducting lift/escalator works. After receiving relevant training and accumulating sufficient experience, these general workers could apply to become registered lift/escalator workers.

EMSD

The EMSD was recruiting a new batch (the fifth batch) of apprentices under the 5.9 "Pilot Cooperative Apprentice Training Scheme". Recruited apprentices would be deployed to participating contractors for training for a period of four years to enable them to acquire sufficient experience and qualifications for application as registered lift and escalator workers. The working group encouraged the trade to support the scheme and employ more trainees. EMSD announced the latest starting salaries of technician trainees in January this year. Compared with the previous salaries, there was an increase of about 25%

in various categories.

The EMSD was also examining the establishment of skill-based professional qualifications tentatively titled "Lift Master". The EMSD established a task force with the trade, the academia and union representatives in October 2019 to set up targets of the professional ladder, duties and work schedule for registered workers. The Working Group on Programme Development was established under the task force and the first meeting was held on 25 May 2020.

The programme development for the "Lift Master" would be based on the following three fundamental aspects:

- First, concerning the skill level, "Lift Master" would be skill-based and include on-the-job training. It would be a professional diploma programme of vocational qualifications of QF Level 5.
- Secondly, in regard to the curriculum, the initial design of the programme was a two-year part-time study covering basic academic and professional courses. The medium of instruction would be Cantonese and English. It would focus on both classroom learning and practical work.
- Thirdly, regarding the programme structure, the programme would tentatively include 12 units with a total of 144 credits and a total of about 450 to 500 hours of lessons. The Working Group on Programme Development would further examine the assessment system.

Upon confirmation of the above details by the working group, the programme would be submitted to Hong Kong Council for Accreditation of Academic and Vocational Qualifications for review and approval.

EMSD

- 5.10 The next written examination for registered engineers would tentatively be held in December this year. The written examination and interview would cover the new edition of the CoP (2019 edition). The EMSD specifically requested contractors to inform candidates to prepare for the examination. Practitioners would also be informed subsequently via EMSD circular. The EMSD would organise a briefing on candidates' common mistakes and examination preparation.
- EMSD 5.11 The ultimate goal of the Lifts and Escalators Ordinance (the Ordinance) was to raise the qualification requirements of registered engineers to the level of professional engineer. Among the three pathways to be accepted as a registered engineer as stipulated in the Ordinance when it was published in 2012, the arrangement of accepting applicants holding a higher diploma or higher certificate, or equivalent, with five years' relevant working experience as

fulfilment of registration requirements were repealed in 2018.

The EMSD would continue to monitor the relevant manpower situation and raise

the qualification requirements for registered engineers in a progressive manner so as to enhance its professional level. In recent years, the majority of new registered engineers were bachelor degree holders. The EMSD would commence the work on raising the qualification requirements of registered engineers to the level of professional engineer in the coming two years with the target of only accepting registered professional engineer qualification holder with two years' relevant working experience as the fulfilment of registration requirements.

EMSD

5.12 As for the registration of workers, the Ordinance would no longer accept single type registration and would only accept registration application of lift workers and/or escalator workers of all types (installation/demolition, maintenance and examination) starting from May 2023. Applicants should have at least four years' relevant working experience and at least an aggregate period of not less than one year of experience obtained within the five years immediately before the date of submission of application for registration.

6 Recent Trade Matters (Agenda Item 5)

To let members better understand the latest development of the trade, the Secretary briefed members on recent trade matters. The discussion on the matters at the meeting was as follows:

EMSD

6.1 The EMSD conducted a trade survey every two years with registered lift/escalator contractors, registered engineers, registered workers, general workers and apprentices as the target. The last round of trade survey was completed in 2019. The EMSD had commenced the work for the new round of trade survey.

The previous trade surveys covered the pay trend and structure of practitioners, their working environment and mode of operation, factors and difficulties encountered by the trade which had affected the quality of maintenance services as well as their opinions. The new trade survey would further categorise the pay trend and structure of general workers by the type of work and investigate the application of innovation and technology in the trade. The EMSD welcomed members to provide suggestions on the content of the trade survey.

EMSD

6.2 The EMSD sent out questionnaires to all contractors on a quarterly basis to conduct contractor surveys. According to the result of the latest survey, the average ratio between workers and lifts/escalators was 29.98. The ratio between workers and lifts/escalators for individual contractors was slightly above 50. The EMSD followed up on the causes and provided suggestions on improvement measures. The ratio between lift/escalator failure and number of lifts/escalators for five contractors was higher than that in the last quarter. The EMSD had stepped up the inspection work of individual contractors.

EMSD 6.3 The Secretary reported on the statistics on reportable incidents for every thousand lifts and escalators from 2015 to 2020 (up to end-June).

The total number of lift and escalator incidents was relatively stable and showed a falling trend. Data analysis revealed that passenger behaviour was the main cause of incident. The EMSD would strengthen the promotion on the safe use of lift and escalator through various channels, including outreach talks, poster and APIs on TV.

- EMSD 6.4 The EMSD issued a circular in September last year to provide guidelines on handrail cleaners. The installation and maintenance of handrail cleaners must be undertaken by a registered escalator contractor. The EMSD reminded that RPs for escalators and registered escalator contractors to jointly conduct risk assessment before installing handrail cleaners.
- EMSD 6.5 As regards the COVID-19 outbreak since early 2020, the EMSD had maintained close liaison with the trade, including reminding contractors to initiate contingency measures in January, sending emails to contractors to remind them to adopt relevant responsive measures to maintain normal lift servicein March, and conducting a survey by questionnaire in April to consult contractors on maintaining normal operation of lifts during the epidemic. Survey findings revealed that the contractors had put in place appropriate responsive measures. More specifically, the contractors had:-
 - maintained sufficient parts and protective equipment, and closely monitored the supply chain;
 - maintained sufficient manpower for lift maintenance/examination service;
 - formulated back-up manpower deployment plan to avoid service disruption due to the epidemic.

The EMSD thanked the trade for staying on duty and providing safe and reliable services to the public during the epidemic.

EMSD 6.6 The Finance Committee of the Legislative Council approved in April 2020 the funding for the second round of the Anti-epidemic Fund, in which about \$4.3 billion would be used to benefit companies of the construction trade and frontline worker. This was one of the 21 measures under the Anti-epidemic Fund of the Hong Kong SAR Government and would be coordinated and disbursed to the trade by the Construction Industry Council.

The EMSD informed the unions and eligible persons of about the details of the application for the second round of the Anti-epidemic Fund via email and SMS in late May.

EMSD

6.7 The EMSD would engage consultants to study the structural integrity of the important components of aged lifts during the work period of lift modernisation works. Important components included traction machines (such as drive shafts, gears, bearings, etc.), car frame, counterweight frame, rail clips, etc., in the lift shaft. The study would involve visual inspection of the components at the scene. If necessary, the EMSD would further arrange non-destructive testing and select a number of traction machines for in-depth study, including laboratory testing.

The EMSD planned to select about 50 lifts of various brands for structural integrity study from August 2020 to February 2021.

During the study, the consultants would liaise with the RPs for lifts and the contractors. Assistance, such as coordination of the entry time of the consultants, logistics and preparation works, demolition of components, cleaning, lending of components for further investigation, etc., may be requested by the consultants.

7 <u>Any Other Business (Agenda Item 9)</u>

The Secretary briefed members on other works commenced recently by the EMSD:

EMSD

7.1 The Office of the Government Chief Information Officer launched the iAM Smart account in collaboration with Cyberport to enable members of the public to use a single digital identity and authentication to conduct government and commercial transactions online. Upon successful registration, iAM Smart account would be bound to the personal mobile device of the applicant. Users can make use of the biometric functions (including facial recognition, fingerprint identification, etc.) provided by their personal mobile devices to authenticate their identities and log in online services.

The EMSD had commenced the application of iAM Smart for online submission of forms relating to lifts/escalators. The EMSD would report the progress and provide briefing in due course.

EMSD

7.2 The EMSD updated the format of the log-book for lifts in August 2018. The relevant requirements came into effect on 1 February 2019. The EMSD was studying the format update of the log-book for escalators. The consultation was scheduled to be conducted in the fourth quarter this year.

EMSD

7.3 In light of the latest development of the COVID-19 pandemic and in response to minimise contact with public installations in the fight against the epidemic, the EMSD installed contactless lift button installations at a number of lifts in the

EMSD Headquarters to evaluate their effectiveness. RPs for lifts and contractors may consider adopting the installations when necessary.

8 <u>Date of Next Meeting</u>

- 8.1 The next meeting was scheduled for January 2021. Members would be informed of the exact meeting date in due course.
- 8.2 The meeting ended at 4 p.m.