

(Translation)

Minutes of the 21st Meeting of
the Lift and Escalator Safety Advisory Committee (LESAC)

Date: 30 January 2023 (Monday)

Time: 2:30 p.m.

Venue: Room 7102, 7/F, EMSD Headquarters, 3 Kai Shing Street, Kowloon Bay

Present:

Ir KO Chi-wai, Gary	Chairman
Ms CHAN Nga-yan	Member
Ir HO Sau-chiu	Member
Mr KUOK Hoi-sang	Member
Mr KWOK Wing-yin	Member
Mr LAI Ka-kui	Member
Mr LEE Ling-kit, Anka	Member
Ms LEUNG Wai-chun, Karmen	Member
Mr THONG Wang-fai, William	Member
Mr TSE King-wa	Member

In attendance:

Mr WONG King-wai	Secretary/EMSD
Mr CHOW Hau-keung, Vincent	EMSD
Mr LAU Lik-kee	EMSD
Mr CHAN Chi-wai, Richard	EMSD
Mr CHAN Chun-wai	EMSD
Mr CHUNG K.K.	Aristo Market Research & Consulting Company Limited (Agenda Item 3 only)
Prof CHENG Ka-wai, Eric	PolyU Technology and Consultancy Company Limited (Agenda Item 4 only)

Absent with apologies:

Ms CHIU Chi-san, Angela	Member
Ms CHAN Wing-yan	Member
Mr CHAN Wai-tung, Tony	Member
Mr LAU Chun-ming	Member
Sr LEE Man-kwong	Member
Mr LEUNG Chun-pong, Maverick	Member
Ms MAN Wing-po	Member
Mr POON Kwok-ying, Raymond	Member

<u>Action</u>	1 <u>Welcoming Members of the Lift and Escalator Safety Advisory Committee</u>
	1.1 The Chairman confirmed that the number of members present met the quorum requirement (i.e. eight non-official members) of the Lift and Escalator Safety Advisory Committee (the Advisory Committee), and welcomed attendees to the 21st meeting of the Advisory Committee.
	2 <u>Confirmation of Minutes of the Last Meeting (Agenda Item 1)</u>
	2.1 Members did not raise any amendment to the minutes of the 20th meeting. The Chairman declared the minutes of the 20th meeting confirmed.
	3 <u>Matters on Declaration of Interests (Agenda Item 2)</u>
	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 declared interests in the matters under discussion at this meeting.
	4 <u>Thematic Presentation – Maintenance Price Figures for Lifts at Private Premises (Agenda Item 3)</u>
EMSD	4.1 <u>Mr. CHUNG Kwok-kuen of Aristo Market Research & Consulting Company Limited (the consultant company)</u> briefed members on the results of the maintenance price survey on lifts at private residential and commercial premises. Following the recommendations of the Advisory Committee, the Electrical and Mechanical Services Department (EMSD) had been releasing the average monthly maintenance contract price figures for lifts at private residential and commercial premises since November 2014. The release of price figures would keep the responsible persons (RPs) for lifts informed of the maintenance cost of the lifts concerned, which could serve as a reference when they engage registered lift contractors for lift maintenance services. The EMSD would arrange for market surveys and update the figures on its website on a half-yearly basis. The consultant company would conduct surveys at random lift locations in Hong Kong and classify the lifts into eight groups according to the number of landings and rated speed. The consultant company would collect the

maintenance price figures of each group of lifts and carry out screening and weighted calculation of the data in accordance with the established practices, in order to estimate the price of an all-in comprehensive maintenance contract for lifts in each group.

The results of the latest round of maintenance price survey on lifts at private residential and commercial premises were uploaded to the Responsible Persons' Corner on the EMSD website in November 2022. The maintenance prices of all groups of lifts had been on a steady uptrend, with individual groups showing greater price movements due to smaller sample size. The consultant company would enlarge the sample size of the relevant groups in future. The results of the next survey were tentatively scheduled to be released in May 2023.

Members noted the methodology and results of the maintenance price survey on lifts at private residential and commercial premises, and suggested the EMSD step up efforts to encourage RPs to opt for all-in comprehensive maintenance contracts for more thorough lift maintenance services.

5 Thematic Presentation – Technical Study on Electrical Parts and Components of Lifts (Agenda Item 4)

EMSD 5.1 Prof CHENG Ka-wai, Eric of PolyU Technology and Consultancy Company Limited briefed members on the progress of the technical study on electrical parts and components of lifts.

The EMSD had engaged the Department of Electrical Engineering of the Hong Kong Polytechnic University to conduct a technical study on electrical parts and components of lifts, with a view to formulating measures on the inspection and monitoring of the condition of the electrical parts and components and strategies for timely maintenance and replacement. The scope of study included the service lifespans of major electrical parts and components of lifts, such as timers, levelling sensors and speed sensors. The study was aimed at understanding the factors affecting the reliability and service lifespans of the parts and components concerned and the ideal maintenance approach for electrical parts and components.

The research team drew reference from related studies and literature by regulatory organisations, academia and professional bodies worldwide and summarised the risks of damage to major electrical parts and components of lifts. Afterwards, the team carried out association analysis between the risks and reportable lift incidents involving failures of electrical parts and components that took place in Hong Kong in recent years to identify electrical parts and components for detailed study.

After identifying the parts and components for study, the research team studied the service lifespans of various major electrical parts and components in accordance with the international standard IEEE 1205-2014, and found that some of the identified samples showed significant wear and tear after testing. The research team suggested the EMSD carry out more in-depth

study on certain major electrical parts and components with relatively high risk of damage and/or those causing serious incidents (such as uneven levelling of lift cars) based on the findings, so as to determine the replacement frequency and formulate maintenance strategies for those parts and components.

EMSD Members noted the findings and suggested the EMSD carry out more in-depth study on electrical parts and components concerning the levelling of lift cars, so as to determine the replacement frequency and formulate maintenance strategies.

6 Progress Report of the Working Group on Matters Relating to Responsible Persons (Agenda Item 5)

On behalf of Sr LEE Man-kwong, Convener of the Working Group on Matters Relating to Responsible Persons, the Secretary reported on the work of the Working Group. The discussion was as follows:

EMSD 6.1 To raise public awareness of lift and escalator safety, the EMSD proactively organised and participated in briefing sessions to share knowledge related to lift and escalator safety. In 2022, the EMSD organised a total of 29 face-to-face or online briefing sessions, with a total attendance of over 2 700 participants. The EMSD also conducted 412 outreach activities online or in-person at schools and elderly centres to share the tips on safe use of lifts and escalators, with a total attendance of over 15 000 participants.

EMSD 6.2 The EMSD told the meeting that the 11th issue of the Lift and Escalator Newsletter was published in December 2022 and the Building Services Operation and Maintenance Executives Society was invited to share about its collaboration with the EMSD in promoting the Digital Log-books System. The EMSD had successfully invited the Lift and Escalator Contractors Association to share about the adoption of the new technology of Modular Integrated Construction in the installation of lifts in the 12th issue of the Lift and Escalator Newsletter, which was expected to be published in June 2023. The EMSD welcomed members' contributions or suggestions on topics for reference.

EMSD 6.3 Regarding the progress of the Lift Modernisation Subsidy Scheme (LIMSS), successful applicants had been progressively recruiting registered lift contractors, commencing works and applying for subsidy through the electronic tendering platform of the Urban Renewal Authority. As at the end of December 2022, tendering exercises for the modernisation works of 214 lifts were expected to be conducted in the second quarter of 2023; tenders were being invited for the works of 402 lifts; tenders had closed or owners' meetings were being arranged for the selection of contractors for the works of 808 lifts; works contracts had been awarded or works had been commenced for 697 lifts; and works had been completed for 391 lifts.

EMSD 6.4 The EMSD stated that the modernisation of aged lifts not only enhanced the safety level, comfortability and reliability of lifts, but also improved energy efficiency and saved operating costs. Moreover, the significant savings in energy costs brought by the replacement of lifts provided additional financial incentives to owners to modernise aged lifts as soon as possible. The EMSD was stepping up publicity efforts to promote the LIMSS to RPs by various means, such as updating publicity materials, visiting individual districts for promotion and case sharing, etc.

EMSD 6.5 The EMSD briefed members on the work related to the implementation of the Digital Log-books System. The Digital Log-books System was officially launched in November 2022 and it was free of charge. Besides, the digital log-books were accepted as a specified form in law, in other words, RPs could fulfil the statutory requirements for keeping log-books by adopting the digital log-books. RPs who were interested in adopting the digital log-books could contact their registered contractors to arrange for the activation of the Digital Log-books System and the creation of an account. Once done, the RPs could view the information of lifts/escalators anytime, anywhere through mobile phone or computer.

As for publicity and promotion, the EMSD had been publicising the Digital Log-books System on different occasions through various channels to encourage more RPs to adopt the digital log-books, with a view to facilitating the joint monitoring of lift and escalator operation by RPs, the trade and the Government.

7 Progress Report of the Working Group on Matters Relating to the Trade (Agenda item 6)

Ir 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 7.1 The EMSD indicated that the written examination for registered engineers (REs) would be held at the Wan Chai campus of the Institute of Professional Education And Knowledge of the Vocational Training Council (VTC) on 11 February 2023. A briefing session on candidates' common mistakes and examination preparation was held on 5 December. Application for the written examination was closed on 5 January 2023, with a total of 116 persons applying for it.

EMSD 7.2 The EMSD was encouraging registered contractors to organise certificate programmes in mechanical/electrical engineering accredited at level 2 or 3 under the Qualifications Framework to provide tailor-made content and flexible learning environment, with a view to enhancing the skills and knowledge of the staff to meet the actual needs and operation of their companies and the trade. These qualifications would become recognised

as the required qualifications for registration as a registered worker (RW) or could articulate into other programmes. Two registered contractors submitted applications regarding the relevant programmes to the Hong Kong Council Accreditation of Academic and Vocational Qualifications for review. The programmes were expected to commence in 2023.

In addition, to further refine the progression ladder for RWs, the EMSD, in collaboration with the VTC and the trade, was planning to launch a certificate programme, which was to be pitched at level 4 under the Qualifications Framework, for workers of supervisory level. The programme was dedicated for training middle-level supervisory personnel of the trade and could serve as a bridging course to the programme of “Professional Diploma Meister in Lift and Escalator Engineering”. The programme was expected to commence in 2023.

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| EMSD | 7.3 | The Lifts and Escalators Ordinance (LEO) stipulated that the qualification requirements for registration as RWs would be raised in a progressive manner. The current practice of accepting registration for one or more classes of works would be changed to only accepting registration for all classes of works (i.e. installation/demolition, maintenance and examination) starting from May 2023. The EMSD was in discussion with the VTC and the trade for optimising the arrangements of trade tests by allowing candidates to take trade tests for individual classes of works without compromising the standards of workmanship. |
| EMSD | 7.4 | The EMSD was actively exploring the feasibility of carrying out lift maintenance with the use of remote monitoring system, in response to challenges posed by ageing population and business growth issue of registered lift contractors. The EMSD invited lift contractors to join a six-month pilot scheme which was aimed at evaluating the effectiveness of remote monitoring system in the areas of lift fault diagnostic, emergency plan, etc. Also, comparative field tests would be conducted to make comparison between the maintenance results of remote monitoring system and that of routine maintenance works. The EMSD would draw up guidelines based on the tests results and grant approval-in-principle on a case-by-case basis regarding the use of remote monitoring system for enhancing the monitoring of the condition and usability of lifts, and allow contractors to adjust the maintenance frequency without compromising the safety level of equipment. The EMSD was studying the information collection, technical content and testing venues with the contractors. |
| EMSD | 7.5 | In tandem with the rollout of the new e-Licence System, the EMSD had been issuing newly designed registration cards to REs/RWs since mid-October 2022. A QR code containing the registration details of the card holder was printed on the registration card for verification of the engineer’s or worker’s identity by the public. Moreover, REs and RWs might choose to present their electronic registration cards on the E&M Trade App as a substitute for their physical cards. |

8 Recent Trade Matters (Agenda Item 7)

The Secretary briefed members on recent trade matters as follows:

EMSD 8.1 The Secretary reported that there were a total of 347 REs, 6 210 RWs and 2 181 general workers in the lift and escalator trade as at the end of 2022.

8.2 Regarding the licence renewal of REs, December 2022 was the peak of REs' renewal of their registration every five years. As at 31 December 2022, of the 278 REs whose licences expired in December 2022, a total of 249 had their renewal applications approved. Around 30 REs did not renew their registration due to retirement, emigration, etc. Most of them already reached the age of retirement and only four of them carried out a small amount of lift/escalator examination work in 2022.

Regarding the uplift of the professional qualifications of REs, following the discussion of the last meeting, the EMSD planned to, in the second half of 2023, report to the Legislative Council Panel on Development and introduce a bill for repealing the remaining transitional arrangements for negative vetting. The route of having a relevant bachelor's degree in engineering and four years of experience was intended to be cancelled by the end of 2027. In the meantime, the EMSD would continue to encourage the registered contractors to provide Graduate Scheme "A" Training of the Hong Kong Institution of Engineers (HKIE) and participate in the HKIE's mentorship programme; motivate and assist trade practitioners to obtain professional qualifications; and continue to hold the written examination for REs until 2027.

Regarding the licence renewal of RWs, the EMSD had earlier sent out an SMS to remind RWs to submit their renewal applications well in advance, and actively collaborated with registered contractors to encourage them to submit renewal applications for their RWs in batches to facilitate both the contractors and RWs. A total of 1 154 RWs' licences would expire in the first quarter of 2023. As at 31 December 2022, 513 RWs had their renewal applications approved. The EMSD would monitor the licence renewal situation closely.

8.3 The Secretary reported on the number of reportable incidents for every thousand lifts and escalators for the period from 2016 to November 2022.

The total number of lift and escalator incidents remained low. The incidents were mainly caused by passenger behaviours. Public education and publicity activities conducted by the Government and the trade helped enhance the awareness of safety on lifts/escalators and reduce incidents.

In respect of lift equipment fault incidents, most incidents were related to uneven levelling of lift cars. The EMSD would continue to step up inspection against incidents relating to uneven levelling of lift cars. For escalator equipment fault incidents, the commonest causes for the incidents included unsynchronised handrail operation and sudden stop of handrail resulting in passenger injury. The EMSD would continue to step up

inspection against incidents relating to the operation of handrails.

- 8.4 The Secretary shared the recent rope breakage incident at a lift of Golden Industrial Building in Kwai Chung. The preliminary findings revealed that the lift car was stuck in the liftway. As the drive sheave was still revolving, four suspension ropes of the lift finally broke. The EMSD would investigate in the direction of external factors and/or equipment fault, and announce the investigation results in a timely manner.

The EMSD raised the recent public concern about step collision incidents. Upon analysis, substantially most of the step collision incidents were triggered by external objects. For example, passengers' clothes or shoes were too close to the step edge and passengers dropped small objects to the steps, causing the steps or comb plate to dislocate and then the two to collide. Escalators were equipped with safety devices, which would be activated to stop the escalator in case an accident occurred, to safeguard the safety of passengers.

The EMSD issued a publicity poster and a video about step collision in November 2022 to briefly explain the causes and remind passengers of the precautions to be taken when using escalators. The EMSD invited members to assist in sharing the relevant poster and video with organisations and resident representatives.

- EMSD 8.5 The EMSD reported that during July to December 2022, six summonses were issued in relation to the prosecution of persons/companies that were suspected of having contravened the LEO. The suspected contraventions mainly included allowing the use of a lift without a valid use permit and failure to ensure that the lift works were carried out properly.

9 Any Other Business (Agenda Item 8)

- 9.1 No other business was raised at the meeting.

10 Date of Next Meeting

- 10.1 The meeting ended at 4:45 p.m. The date of next meeting was to be confirmed.