

Executive Summary

Direct Investigation Report

Regulatory Regime for Lifts and Escalators

Introduction

In Hong Kong, high-rise buildings are very common and lifts and escalators are frequently used in our daily lives. Components of lifts and escalators are susceptible to wear-and-tear and ageing. For the sake of users' safety, proper maintenance and periodic examinations are of paramount importance.

2. There had been a number of serious lift and escalator accidents in Hong Kong in 2017 and 2018, which cast doubt on the adequacy of the Government's safety regulation of lifts and escalators. Some of those accidents involved aged lifts which did not fully meet the latest safety standards established by the Electrical and Mechanical Services Department ("EMSD"). This revealed the problem of ageing and antiquated lifts and escalators in Hong Kong.

Our Findings

3. Our investigation has identified inadequacies in the following six areas in EMSD's regulation of safe operation of lifts and escalators.

(I) Effectiveness of Inspection Mechanism Being Questionable

4. The Lifts and Escalators Ordinance ("LEO") requires that lifts and escalators shall undergo periodic maintenance at least once a month. Nevertheless, the varied quality of maintenance work for lifts and escalators has been shown in a number of previous incidents. Our findings show that EMSD had not targeted monitoring of the quality of routine maintenance of lifts and escalators in its inspection strategy. When this direct investigation was ongoing, EMSD extended the coverage of inspection targets in order to step up monitoring of the maintenance work of aged lifts.

5. Prior to an inspection, EMSD usually contacts the relevant registered contractor to confirm its schedule for maintenance work as it considers such confirmation necessary. In our opinion, this arrangement will undermine the deterrent effect of inspections and EMSD should increase the ratio of surprise inspections. In addition, while registered contractors are required to submit their schedules for maintenance via EMSD's e-Platform, it is necessary for EMSD to introduce specific measures to ensure that registered contractors will submit or update their schedules for periodic maintenance in a timely manner to enable effective arrangement for inspections.

6. Currently, EMSD monitor the maintenance work by workers of registered contractors by means of on-site observation. We consider that under this arrangement, it would be difficult for EMSD staff to assess any fault in the components of lifts and escalators or the actual performance of workers. EMSD should explore more feasible inspection modes and strategies and consider requiring registered contractors or engineers to keep copies of photographs showing the major components of lifts and escalators under maintenance. That will allow EMSD to check the photographs when necessary and monitor more effectively the day-to-day performance of contractors and workers. Besides, EMSD should establish specific and clear guidelines for site inspections to ensure an effective checking of the performance of registered contractors and their personnel.

(II) More Stringent Monitoring of Lift and Escalator Examinations Is Necessary

7. According to our findings, there were few site inspections conducted by EMSD on periodic examinations of aged lifts and escalators maintained by contractors with low performance rating. Besides, the ratio of EMSD's random checks on lift and escalator examination reports and joint inspections on components with the registered contractors was rather low, and EMSD's review on periodic examinations did not cover all the examination items. Although registered engineers are required to keep copies of photographs of lift suspension system or escalator drive system upon completion of periodic examinations, EMSD had not proactively conducted random checks on such photographs or made good use of this arrangement to strengthen reviews on routine examinations by registered engineers.

8. In our view, EMSD should increase the ratio of random checks on examination reports and consider including more examination items for review to enhance the effectiveness of random checking. EMSD should also consider imposing more

stringent requirements on submission of photographs by requiring registered contractors or engineers to submit photographs of lift suspension system or escalator drive system regardless of the condition of those systems. Besides, the Department may require photographs of other major components and safety devices of lifts and escalators to achieve more stringent monitoring of examinations by registered contractors or engineers.

(III) Follow-up Action on Non-compliance Cases Should Be Strengthened

9. Pursuant to LEO, the Director of Electrical and Mechanical Services may refer any suspected cases of non-compliance (including professional misconduct or negligence and conviction of any offence under LEO) involving registered contractors, engineers or workers to the Development Bureau for establishing a disciplinary board (“the Board”) to consider taking disciplinary action. In this regard, EMSD has set up the Disciplinary Action Review Panel (“DAR Panel”) to examine suspected cases and decide whether they should be referred to the Board.

10. We notice that some of the previous cases, regardless of whether the registered contractors or persons involved had been prosecuted or convicted by the court after trial or not, were not referred to the Board for disciplinary hearings. In our opinion, EMSD should review the prevailing internal guidelines of DAR Panel and establish clearer criteria to reflect properly the various factors that DAR Panel will consider as regards referral of cases to the Board. The Department should also ensure that all non-compliance cases of serious nature will be carefully examined by DAR Panel.

(IV) Insufficient Monitoring of “Maintenance Work beyond the Maximum Number”

11. Currently, if registered workers carry out maintenance work for more than six lifts or escalators in one day, the registered contractors concerned are required to report to EMSD afterwards the number of such cases with explanation. EMSD will follow up on the cases according to the reasons given by the contractors. In our view, this practice of allowing registered contractors to carry out “maintenance work beyond the maximum number” and report relevant cases afterwards has rendered EMSD, the monitoring authority, very passive. Moreover, EMSD has not specified what criteria are justifiable for “maintenance work beyond the maximum number” and the circumstances in which such arrangement will be acceptable.

12. We consider that EMSD should take proactive steps to monitor such “maintenance work beyond the maximum number”. For example, EMSD can require registered contractors to submit beforehand the schedule for maintenance work and provide reasons for “maintenance work beyond the maximum number”, and exercise more stringent regulation of and conduct more inspections on contractors involving such cases. Besides, EMSD should establish clear and specific criteria and guidelines for determining what grounds and number of maintained lifts/escalators in excess are acceptable for cases involving “maintenance work beyond the maximum number” and explain how unreasonable cases can be followed up.

(V) Inadequate Information Dissemination on Lift and Escalator Incidents

13. EMSD will publish on its website information on lift and escalator incidents involving mechanical faults, but those records contain only very brief facts of the incidents, which may not be useful in helping the public and the industry to understand the actual events and how serious those incidents were. On the other hand, the Board will publish in the Gazette the disciplinary orders made against registered engineers or workers, listing only the allegations and the Board’s decision while further details of the cases will not be disclosed. EMSD does not provide details of cases involving disciplinary hearings on its website or via other channels either.

14. We are of the view that EMSD should take the initiative to release more details about lift and escalator incidents. EMSD should also explore together with the Board the possibility of publishing more information about cases subject to disciplinary hearings on EMSD website or via other channels so that the public and the industry can understand the details and cause of those incidents.

(VI) Effectiveness of Modernisation of Lifts and Escalators less than Satisfactory

15. EMSD has issued guidelines for modernising lifts and escalators, in which responsible persons are advised to retrofit safety devices to their aged lifts and escalators. However, our findings are that as at the end of 2020, only about 18% of aged lifts and 7.5% of aged escalators had undergone modernisation works. The effect of the guidelines seems rather insignificant. Meanwhile, the Lift Modernisation Subsidy Scheme launched by the Government and Urban Renewal Authority for retrofitting of safety devices to aged lifts could cover only 18% of the total number of aged lifts (which is more than 45,000) in Hong Kong.

16. We have learned that EMSD has started a feasibility study on mandatory modernisation of lifts and will continue with the aforesaid scheme. In our opinion, EMSD should also proactively explore other feasible options, such as introducing more measures to encourage owners to consider and plan for modernising their aged lifts and escalators in a timely manner, hence enhancing the safety of lifts and escalators in Hong Kong.

Recommendations

17. In view of the above, The Ombudsman has made the following 11 recommendations to EMSD:

- (1) increase the ratio of surprise inspections for stronger deterrent effect;
- (2) introduce measures to ensure timely submission of maintenance schedules by registered contractors in order to facilitate EMSD's inspections;
- (3) explore feasible inspection modes and strategies to achieve more effective monitoring of day-to-day performance of registered contractors and workers;
- (4) review and improve the existing checklist for site inspections to set out the items and tests to be covered in various inspections, and establish specific and clear guidelines for inspection procedures;
- (5) step up monitoring of periodic examinations of lifts and escalators including conducting more random checks on examination reports and examining more items during inspections;
- (6) consider requiring registered contractors or engineers to submit photographs of lift suspension system or escalator drive system regarding periodic examinations and conducting more random checks on those photographs; and consider requiring also photographs of other major components and safety devices;

- (7) review the prevailing internal guidelines of DAR Panel to ensure that it will examine and refer non-compliance cases of serious nature for disciplinary hearings;
- (8) require registered contractors to submit beforehand the maintenance work arrangements of their workers to strengthen regulation of cases involving “maintenance work beyond the maximum number”;
- (9) establish clear and specific criteria and guidelines for determining what grounds and number of maintained lifts/escalators in excess for cases involving “maintenance work beyond the maximum number” are acceptable, and explain how unreasonable cases can be followed up;
- (10) take the initiative to release more details about incidents involving lifts and escalators and explore together with the Board the possibility of publishing more information about cases subject to disciplinary hearings; and
- (11) proactively explore feasible ways to further promote modernisation of aged lifts and escalators so as to enhance the safety of lifts and escalators in Hong Kong.

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