立法會 Legislative Council

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Panel on Development

Meeting on 26 March 2013

Updated background brief on lift and escalator safety

Purpose

This paper outlines the regulatory control on lift and escalator safety and provides a brief account of the views and concerns expressed by Members at the meetings of the Legislative Council ("LegCo") and the relevant committees on the subject since the 2010-2011 legislative session.

Background

2. In view of the number of lift incidents in recent years, in particular the one involving the plunging of a lift in Fu Shin Estate in Tai Po at the end of 2008, members of the public have become increasingly concerned about lift safety. The Ombudsman initiated a direct investigation into the regulatory system of lifts in January 2009, and released its findings and made 13 recommendations to the Administration in August 2009. Apart from implementing the recommendations of The Ombudsman, the Administration conducted a review of the Lifts and Escalators (Safety) Ordinance (Cap. 327)¹("LESO") and introduced the Lifts and Escalators Bill ("the Bill") into LegCo on 11 May 2011 to replace LESO. After the completion of the scrutiny of the Bill by the Bills Committee², the Lifts and Escalators Ordinance (Cap. 618) ("the Ordinance") was enacted in

¹ The Lifts and Escalators (Safety) Ordinance was enacted in 1960 with a number of amendments made subsequently.

² The Bills Committee on the Lifts and Escalators Bill has held 17 meetings to discuss with the Administration the various proposals under the Bill, and meet relevant trade associations, worker unions, professional organizations as well as members of the public for views on the Bill. The Bills Committee concluded its work in February 2012.

April 2012. For better carrying out of the provisions of the Ordinance and for prescribing the fees payable under the Ordinance, the Secretary for Development made the Lifts and Escalators (General) Regulation ("the General Regulation") and the Lifts and Escalators (Fees) Regulation under section 154 and section 155 of the Ordinance respectively³. The Ordinance together with the two regulations has come into full operation since 17 December 2012.

Regulatory control under the Lifts and Escalators Ordinance

- 3. The Ordinance introduces a series of enhanced regulatory control measures, including strengthening the registration regime for personnel engaged in lift and escalator works; increasing the penalty levels of offences; extending the coverage of the legislation; and enhancing operational efficiency and enforcement effectiveness.
- 4. The General Regulation mainly sets out the duties of responsible persons ("RPs")(i.e. owners of a lift/escalator and any other persons who have the management or control of the lift/escalator) and registered persons (i.e. registered lift/escalator contractors ("RCs"), registered lift/escalator engineers ("REs"), and registered lift/escalator workers ("RWs")), and specifies the procedural requirements relating to various applications to be made under the Ordinance, such as applications for use permits for a lift/escalator, applications for registration as registered persons.

<u>Duties of responsible persons and registered persons</u>

Lift/escalator works

- 5. Under the Ordinance, RPs have the duty to ensure that lifts/escalators are in proper state of repair and in safe working order. They are required to ensure that certain lift works or escalator works are to be carried out by RCs. Thorough examinations of the lift/escalator upon completion of installation, following major alteration and before the normal use and operation of the lift/escalator is resumed, and at regular intervals are to be carried out by REs.
- 6. The Administration asserted that the RP should stop the lift's operation if the RC advised that the lift's operation posed immediate danger.

³ The Administration consulted the Panel on Development on the proposals under the two regulations in March 2012.

When in doubt, the RP might seek a second opinion by consulting another RC or RE to decide on the appropriate actions to take. He might also notify the Electrical and Mechanical Services Department ("EMSD"). The Director of Electrical and Mechanical Services ("DEMS") might serve on the RP a prohibition order to prohibit the lift from being used, or an improvement order to carry out any work specified in the order within a specified date, as appropriate.

Documentation requirements

7. To facilitate enforcement of the provisions of the Ordinance by DEMS and the investigation of incidents, RPs and registered persons are required under the General Regulation to keep a log-book for each lift/escalator to record information such as works carried out, incident and failure occurred, and to maintain other documents relating to design, installation, maintenance and examination of a lift/escalator.

Notification requirements

8. Under the General Regulation, registered persons are required to notify DEMS certain matters including the undertaking, subcontracting of the lift/escalator works and change in particulars of a registered person within a specified period. The RC is required to attend to any reported failure of emergency lift devices (such as alarm system, emergency lighting, intercom system and ventilation fan) within four hours. To enable the Administration to effectively monitor the performance of the RC in reinstating these devices, the RC is also required to notify DEMS should he consider that the failed devices cannot be reinstated within 24 hours after the failure has come to his knowledge.

Registration of personnel engaged in lift/escalator works

9. DEMS is appointed to be the Registrar under the Ordinance to deal with the registration and renewal of registration of lift/escalator contractors, engineers and workers, as well as to maintain the registers with accurate information on these registered persons for public inspection. To address past problems that the status of some lift/escalator workers was tied to the employment by an RC and these workers would lose the status when they were no longer employed, the Ordinance introduces a registration system whereby an experienced worker who has passed a recognised trade test is qualified for registration as an RW. In this way, workers will have greater flexibility in choosing jobs and higher bargaining power in negotiating remuneration packages. Furthermore, to strengthen the registration

regime, the qualification requirements for REs have been upgraded to meet the advancements of lift and escalator technology. Under the Ordinance, RCs, REs and RWs are required to renew their registration every five years, in order to ensure their continued compliance with the relevant requirements.

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- 10. Members of the Bills Committee have expressed concern about the measures to be taken by the Administration to assist existing practitioners, in particular REs and RWs, to comply with the enhanced registration and renewal requirements. Some members stressed the importance for the Administration to make suitable transitional arrangements in order not to jeopardize the livelihood of these practitioners and to ensure sufficient manpower resources in the trade to provide services when the Ordinance came into operation.
- 11. RCs are required under the Ordinance to ensure that there was sufficient workforce to carry out lift/escalator works. The Ordinance also stipulates that in considering whether an applicant is suitable for registration as an RC or for renewal of his registration, the Registrar must take into account, inter alia, whether the person has and is capable of maintaining the necessary workforce to carry out such works. Moreover, the Code of Practice for Lift Works and Escalator Works issued by EMSD has specified that certain lift works had to be conducted by at least two lift workers together⁴.
- 12. During the scrutiny of the Bill, some members enquired whether a standard would be set for the ratio between the number of lifts maintained by an RC and the number of RWs deployed for the maintenance works. The Administration held the view that, instead of setting a rigid standard on the level of workforce to be maintained by RCs, the Registrar would conduct assessment on a case-by-case basis. To facilitate the Registrar's assessment on whether a reasonable level of workforce had been maintained, RCs would be required to submit relevant workforce information to EMSD regularly.

The latest edition of the Code of Practice was issued by EMSD in November 2012 and is available at the following hyperlink: http://www.emsd.gov.hk/emsd/eng/pps/le_pub_cp.shtml

Registered Lift/Escalator Contractors' Performance Rating Schemes

- 13. EMSD launched the Registered Lift Contractors' Performance Rating Scheme and the Registered Escalator Contractors' Performance Rating Scheme ("the CPR schemes") in 2009 and 2011 respectively to provide reference for lift/escalator owners and their property management agents to select suitable contractors for maintenance of the lifts/escalators in their premises. The implementation of the CPR schemes is not a requirement under the Ordinance but an administrative measure to supplement the enforcement of the Ordinance. The CPR schemes provide a point-deduction system whereby EMSD deducts performance monitoring ("PM") points of an RC based on non-compliance identified during its lift/escalator inspection. The performance rating is updated and published every three months on EMSD's website.
- 14. In view of the frequent occurrence of lift incidents in recent years, Members have urged the Administration to conduct more frequent spot checks on the lifts maintained by RCs with low performance ratings and consider incorporating the CPR schemes into the Ordinance so as to provide a legal basis for EMSD in deciding whether or not to revoke the registration of the RCs. The Administration advised that since EMSD would take appropriate enforcement action on non-compliance or disciplinary offence, irrespective of whether PM points were deducted, it was neither necessary nor appropriate to include the schemes in the legislation. As regards lift inspections, the Administration undertook that it would from time to time review EMSD's manpower to ensure that appropriate resources were allocated for law enforcement.
- 15. In response to some members' concern about the lack of association between the performance rating of RCs in the CPR schemes and the number of equipment fault incidents that they were involved, the Administration said that the performance rating of RCs were determined by a host of factors, not only incident-related ones. After revisiting the schemes, the Administration has proposed to reflect the occurrence of equipment fault incidents in the performance rating and increase the PM point for failure of some devices/components including alarm system, inter-communication system, levelling devices, etc.

Supply of qualified personnel for lift and escalator works

16. In the light of concerns about the adverse working environment, unsatisfactory remuneration packages, brain drain and succession problems

in the lift/escalator works industry, two Members raised questions separately at the Council meetings of 17 October 2012 and 23 January 2013 about the Administration's action to address the problems.

17. The Administration responded that the overall number lift/escalator works practitioners was stable in recent years. On improving working conditions, EMSD has been from time to time working with the industry to review and update the Code of Practice for Lift Works and Escalator Works to raise the requirements on the working conditions. EMSD has also collaborated with relevant institutions in organizing free training that can meet the requirements for registration and registration renewal under the Ordinance. The Vocational Training Council has been training new blood for the industry for many years through organizing relevant skills training courses to complement the apprenticeship scheme for lift and escalator mechanics. The Administration undertook to work with the industry and the Construction Industry Council to monitor closely the situation and take measures to timely address the manpower The questions and the Administration's requirements of the industry. replies are provided at Appendices I and II.

Latest development

- 18. On 2 March 2013, a lift carrying seven passengers dropped suddenly after it had reached the first floor from the ground floor of a building at 480 King's Road. The passengers were trapped in the lift and later rescued and taken to hospital. Against this background, two Members raised questions at the Council meeting of 20 March 2013 on the improvement measures to be adopted by the Administration to enhance lift safety as well as to strengthen its monitoring work over RCs. These questions and the Administration's replies are given at **Appendices III and IV**.
- 19. The Administration will update the Panel at its meeting scheduled for 26 March 2013 on the regulatory control on lift and escalator safety and related issues.

Relevant papers

20. A list of relevant papers is at **Appendix V**.

Council Business Division 1
<u>Legislative Council Secretariat</u>
22 March 2013

Oral question (the main question only) raised by Hon TAM Yiu-chung at the Council meeting of 17 October 2012 and the Administration's main reply

Practitioners in lift works and escalator works

Question:

The Chief Executive announced on August 21 this year that the Government would launch a "universal accessibility" programme (the programme) at the end of this year under which lifts would be installed at footbridges, elevated walkways and subways, etc. in 230 places all over Hong Kong to provide barrier-free access for the elderly, persons with disabilities and children. However, some members of the industry have pointed out that the working environment and remuneration packages of the engineers and workers currently engaged in the installation, repair works and maintenance of lifts and escalators (practitioners) are unsatisfactory, causing brain drain and succession problems. further pointed out that although the Lifts and Escalators Ordinance, planned to be fully implemented in December this year, will improve the registration and monitoring system of lift and escalator practitioners, the authorities have not taken any corresponding measure to help the industry ease the brain drain and train new blood. Some members of the public have expressed to me their worries that the shortage of personnel may affect the progress of the programme as well as the maintenance and repair works of the lifts and escalators concerned. In this connection, will the Government inform this Council:

(a) of the number of competent lift and escalator practitioners at present and their turnover rates in the past three years; and the number of practitioners required under the programme as assessed by the authorities; if no such assessment has been made, of the reasons for that; whether there are adequate competent practitioners available to tie in with the implementation of the programme and the maintenance and repair works concerned in future;

- (b) whether there are measures in place to improve the working environment and remuneration packages of lift and escalator practitioners, so as to ease the brain drain and recruit new blood; if so, of the details; if not, the reasons for that; and
- (c) whether it has helped the industry to train new blood; if so, of the details; if not, the reasons for that; whether the authorities will consider training more new blood for the industry through the Hong Kong Institute of Vocational Education or other tertiary institutions to ensure that there will not be any succession problems?

Reply:

President,

My reply to the three parts of Honourable TAM's question is as follows:

(a) At present, there are 302 registered engineers and 4,960 competent workers engaged in lift and escalator works in Hong Kong. The main duty of a registered engineer is to examine and certify whether a lift or an escalator is in safe working condition. As for competent workers, they are mainly responsible for carrying out installation, maintenance and repair works for lifts and escalators for which they are qualified.

In 2009, 2010 and 2011, there were 267, 279 and 294 registered engineers and 4,761, 4,950 and 4,959 competent workers respectively. These figures indicate a moderate increase in the number of registered engineers. According to a survey conducted by the Electrical and Mechanical Services Department (EMSD) this year, 54 people ceased to be competent workers in 2011, accounting for only 1% of the total number of competent workers. In addition, with new workers acquiring the status of competent workers in the same year, the overall number of competent workers has still remained steady. As at the end of 2011, there were about 59,000 lifts and 8,200 escalators in We estimate that the "universal accessibility" Hong Kong. programme will add about 100 lifts on average each year, a very slight increase in comparison with the existing 59,000 lifts. As such, the programme will not bring about undue pressure on the overall manpower demand. We believe that this should be manageable with the expected growth in manpower as well as suitable redeployment of resources and flexible work arrangements by the industry.

(b) The Government, the Construction Industry Council (CIC) and the industry are committed to improving site safety and working conditions for site personnel. The EMSD regularly organises activities with the industry for promoting safety in lift and escalator works to raise their awareness of work safety. The EMSD also reviews and updates the Code of Practice for Lift Works and Escalator Works (the Code) from time to time in conjunction with the industry and in accordance with the latest developments in the industry to raise the requirements on work safety and working conditions. instance, in the latest review of the Code, a requirement is added to stipulate that, before commencing any works in a lift shaft, a contractor must assess and confirm the working conditions in the lift shaft, in respect of temperature, ventilation and lighting to be suitable for the kind of works to be undertaken. Moreover, the CIC also issued in January this year Guidelines on Safety of Lift Shaft Works to promote site safety.

At present, registered engineers and competent workers are normally employed on a monthly basis, which is more stable. In addition to basic salary, they are entitled to various benefits and allowances. As the above statistics show, the overall number of practitioners in the industry has remained stable in recent years.

In terms of the regulatory regime, with the support of the Legislative Council and the industry, the Lifts and Escalators Ordinance (No. 8 of 2012) (the Ordinance) was enacted in April 2012 and the main provisions will come into operation in mid December this year. The Ordinance introduced a registration system for lift and escalator workers to recognise their competence, exert better control of workmanship, promote continuous self-development and replace the existing employment-tied competent worker arrangement, which provides workers with more flexibility in their choice of work.

(c) To attract graduates with relevant engineering degrees to enter the lift and escalator industry and to join the ranks of registered lift and escalator engineers, the EMSD actively encourages lift/escalator contractors to set up engineering graduate training schemes, recognised by the Hong Kong Institution of Engineers, in order to provide the graduates with opportunities to obtain professional qualifications. As regards workers, the Vocational Training Council (VTC) has been training new blood for the industry for many years through organising relevant skills training courses to complement the apprenticeship scheme for lift and escalator mechanics. Moreover, the industry is also planning to collaborate with the Employees Retraining Board and the VTC to organise a Certificate Course for Assistant Lift and Escalator Mechanics to attract new entrants to the industry.

We will work with the industry and the CIC to monitor closely the situation and take measures, such as increasing training places, to timely address the manpower requirements of the industry.

Written question raised by Ir Dr Hon LO Wai-kwok at the Council meeting of 23 January 2013 and the Administration's reply

Measures to complement the implementation of the Lifts and Escalators Ordinance

Question:

The Lifts and Escalators Ordinance (the Ordinance) (Cap. 618) has come into full operation since December 17, 2012. Regarding the measures to complement the implementation of the Ordinance, will the Government inform this Council:

- (a) whether the authorities have established a communication mechanism with the relevant professional bodies in the trade and taken concrete complementary measures (such as providing suitable incentives) to encourage practitioners in the trade (including registered engineers and registered workers) to pursue continuing education, so as to enable them to meet the professional qualifications and registration requirements as well as the contractors to meet the registration renewal requirements stipulated in the Ordinance; if they have, of the details; if not, the reasons for that;
- (b) as there have been comments that the lift and escalator practitioners face adverse working environment, unsatisfactory remuneration packages etc., which has led to a brain drain, and the contractors also face various difficulties in their businesses (e.g. price competition, difficulties in quality assurance, etc.), of the measures taken by the authorities to attract more new blood to join the trade; whether they have conducted any studies on the business difficulties faced by the trade and provided them with appropriate support; if they have, of the details; if not, the reasons for that; and
- (c) whether the Electrical and Mechanical Services Department, being the enforcement agency of the Ordinance, has allocated the resources needed and employed additional professional staff to discharge its monitoring duties; if it has, of the details; if not, the reasons for that?

Reply:

President,

The Lifts and Escalators Ordinance (the Ordinance), enacted in April 2012, aims at further enhancing lift and escalator safety in Hong Kong. Ordinance introduces a series of enhanced regulatory control measures, including strengthening the registration regime for personnel engaged in lift and escalator works; increasing the penalty levels of offences; extending the coverage of the legislation; and enhancing operational efficiency and enforcement effectiveness. We anticipate that the safety level of lifts and escalators in Hong Kong could be further enhanced after the main provisions of Ordinance full the came into operation mid-December 2012.

My reply to the three parts of the question is as follows:

(a) Since the bill drafting stage, the Administration has discussed the bill-related issues including driving practitioners' continuous studies and the renewal requirements for registered contractors, with stakeholders, such as relevant trade unions, trade associations, professional bodies and training organisations through the Task Force for Legislative Amendments to Lifts and Escalators (Safety) Ordinance (the Task Force) established by the Electrical and Mechanical Services Department (EMSD) in August 2010.

To assist practitioners, including registered engineers and registered workers, to comply with the training requirements for registration and registration renewal, EMSD has been introducing measures to encourage them to pursue continuous studies from time to time. These measures include the collaboration with stakeholders, such as the Vocational Training Council (VTC), the Lift and Escalator Contractors' Association, and the International Association of Elevator Engineers (HK-China Branch), in organising free training that can meet the requirements for registration and registration renewal. Besides, EMSD stipulates in its Code of Practice for Lift Works and Escalator Works (the CoP) that registered contractors shall provide adequate training to their workers so that they can carry out works properly and in a safe manner. Such in-house training can also help workers meet the requirements for registration and registration EMSD also actively encourages registered contractors to organise graduate training schemes accredited by the Hong Kong Institution of Engineers to help practitioners obtain the professional qualification for meeting the registration requirements for engineers.

On the other hand, EMSD has issued clear guidelines for engineers and workers on the contents and mode of training required for registration and registration renewal in order to facilitate their selection of appropriate training. In addition, EMSD has issued clear guidelines for contractors on registration renewal requirements, such as the facilities required, to facilitate their compliance. Besides, EMSD will give timely notifications to registered personnel before expiry of their registration to enable them to have sufficient time to comply with the requirements for registration renewal.

(b) We always keep abreast of the operating conditions of the lift and escalator industry through the Task Force and other channels. The implementation of the Ordinance will facilitate the long term and sustainable healthy development of the industry, improve its business environment and attract new entrants to the trade.

The Ordinance steps up the regulatory control measures against registered contractors. The measures include raising the penalty levels for offences, introducing a registration renewal regime for contractors, and tightening approval requirements for safety components. These measures lead to enhancement of the quality of registered contractors. On the other hand, through issuing guidelines and organising seminars, EMSD educates property owners and property management companies that, apart from cost, they should also consider factors like contractor's manpower and past performance in selecting contractors to maintain their lifts and escalators in a safe operation state. EMSD also publishes the performance ratings of registered contractors regularly to help property owners and property management companies make informed choices when selecting their The above measures can help registered registered contractors. contractors to undertake works contracts at reasonable prices thereby improving their business operating environment. The industry will in turn be better placed to ensure quality service and to invest in manpower.

Furthermore, we can attract more new recruits through enhancing the professional status of practitioners, improving their working conditions and strengthening training.

The Ordinance enhances the professional status of practitioners by raising the qualification requirements for registration as a registered engineer and introducing a registration regime for workers. Replacement of the employment-tied arrangement by the workers' registration regime also provides workers with greater flexibility in choosing jobs and higher bargaining power in negotiating remuneration packages.

On improving working conditions, EMSD has been from time to time working with the industry and in the light of the latest developments in the industry to review and update the CoP to raise the requirements on the working conditions. For instance, a new provision has recently been introduced requiring contractors to assess and confirm that the environmental factors, such as temperature, ventilation, lightings, etc., inside the lift shaft are suitable before commencing works.

The graduate training schemes mentioned above can attract graduates with relevant engineering degrees to join the ranks of registered engineers in the industry. VTC has also been organising relevant apprentice courses to train new entrants for the industry over the years. Currently, the Construction Industry Council is working with the related trade associations in pursuing the Contractor Cooperative Training Scheme. The trade is also planning to collaborate with the Employees Retraining Board and VTC to organise a Certificate Course for Assistant Lift and Escalator Mechanics to attract new entrants to the industry.

(c) To enhance the regulation of escalator and lift safety, approval was granted in 2010 for EMSD to expand its establishment by creating one engineer, one senior inspector and six inspectors posts. With the full implementation of the Ordinance, EMSD will continue to use its current resources to conduct risk assessments on a random basis and strictly enforce the Ordinance. The Administration will from time to time review EMSD's manpower to ensure that appropriate resources are allocated for law enforcement and public education.

Oral question (the main question only) raised by Hon TANG Ka-piu at the Council meeting of 20 March 2013 and the Administration's main reply

Stepping up regulation of lift contractors and training for lift practitioners

Question:

On the 2nd of this month, a lift in a building in North Point plunged from the first floor to the ground, injuring several passengers. It has been reported that the situation was very serious as all four suspension cables of the lift had snapped. As pointed out by some members of the trade, lift accidents have occurred from time to time in recent years, reflecting loopholes in the existing regulatory mechanism, and such accidents are also related to the shortage of manpower for lift repair and maintenance. In this connection, will the Government inform this Council:

- (a) whether the authorities will conduct a comprehensive review of the Registered Lift Contractors' Performance Rating Scheme and consider linking the Scheme to law enforcement work to enhance its effectiveness, e.g. revoking directly the licence of a contractor whose performance score is zero;
- (b) whether it knows the number of registered lift contractors who had provided training to lift workers who newly joined the trade and the respective numbers of new entrants who had completed the training and those who stayed in the trade afterwards, in the past three years; and which institutions had provided training courses for such entrants and the respective numbers of entrants who had completed the courses and those who stayed in the trade afterwards; as the "Code of Practice for Lift Works and Escalator Works" stipulates that lift maintenance and repair works must be carried out by two or more lift workers together, and the number of storeys of new buildings has been increasing, whether the authorities have assessed if the number of trained workers can meet the demand; whether the authorities have any new measures to attract new blood to the trade; if so, of the details; if not, the reasons for that; and

(c) of the number of lifts inspected each month by the Electrical and Mechanical Services Department (EMSD) at present; whether EMSD has conducted more frequent inspections and spot checks on lifts which are maintained and repaired by contractors with low ranking in performance rating; if it has, of the details; if not, the reasons for that?

Reply:

President,

The Lifts and Escalators Ordinance (Ordinance), enacted in April 2012, came into full operation in December 2012. The Ordinance has introduced a series of enhanced regulatory measures against registered contractors. It clearly stipulates that registered contractors must ensure that their lift maintenance works are carried out properly and safely; increases the maximum fine from HK\$10,000 to HK\$200,000 with the maximum imprisonment period maintained at 12 months; introduces a registration renewal system under which registered contractors are required to renew their registration every five years; and empowers the Registrar to cancel or suspend the registration of registered contractors pursuant to the provisions of the Ordinance. On enforcement, the Electrical and Mechanical Services Department (EMSD) conducts sample inspections on all lifts in Hong Kong on a risk-assessment basis to monitor the work of registered contractors. Furthermore, the EMSD implemented a Registered Lift Contractors Performance Rating Scheme (the Performance Rating Scheme) in June 2009 and published the performance ratings of registered contractors quarterly to help lift owners or their property management companies select suitable contractors to carry out maintenance and repair works for their lifts.

My reply to the three parts of the question is as follows:

- (a) Under the Performance Rating Scheme, the EMSD will deduct performance monitoring (PM) points of registered contractors according to an established mechanism for irregularities identified during inspections. Warning letters will be issued to relevant registered contractors under the following circumstances:
 - (i) where a total of 12 or more PM points are deducted for non-compliant items found in a single lift during inspection; or
 - (ii) where over 4 PM points are deducted on average within a 12-month period.

Registered contractors who have received a total of three warning letters may be subject to disciplinary hearings. Disciplinary action can include suspension of registration. Besides, the EMSD will take appropriate enforcement actions against registered contractors for non-compliances or disciplinary offences found in the course of inspections, including initiating prosecutions or requesting for setting up disciplinary boards to conduct disciplinary hearings.

The EMSD is carrying out a comprehensive review of the Performance Rating Scheme and its enforcement inspection system, with a view to enhancing its effectiveness in controlling the performance of contractors. The review includes considering to conduct more inspections for lifts maintained by registered contractors with relatively low performance ratings, and to conduct audit visits to these registered contractors to ascertain if they have the necessary facilities, resources and manpower to provide the level of service in compliance with the Ordinance.

(b) According to the information provided by registered contractors, 45 registered contractors have provided training to about 450 new entrants in the past three years. About 90% of them stayed in the trade after completing the necessary training needed to acquire the status of competent workers.

Further, the Vocational Training Council (VTC) has been conducting relevant apprentice courses to train new entrants for the industry. In the past three years, around 120 people joined the lift and escalator trade after completing the relevant courses.

As at February 2013, there are about 5 000 competent workers providing services to around 60 000 lifts and 8 200 escalators in Hong Kong. Although the works items requiring at least two workers working together has increased from 10 to 15 under the Code of Practice for Lift Works and Escalator Works (CoP) issued by EMSD in November 2012, we consider that this requirement has only minimal impact on manpower. The number of lifts increased only slightly by about 1% annually on average over the past several years and it would not cause too much pressure on the overall manpower demand. Notwithstanding these, we are implementing the following measures to attract new entrants to the trade:

(i) Enhancing the professional status of the workers

The registration regime for workers introduced under the Ordinance to replace the employer-tied arrangement, provides workers with more flexibility in choosing jobs and bargaining power in negotiating remuneration packages.

(ii) Strengthening training

Currently, the Construction Industry Council is deliberating with the Hong Kong Federation of Electrical and Mechanical Contractors, the Lift and Escalator Contractors Association and the VTC on ways to provide more training for the electrical and mechanical trade of the construction industry. To increase the manpower for the trade, they have agreed in principle to introduce the Contractor Cooperative Training Scheme for the electrical and mechanical trade of the construction industry and provide assistance to those trainees who intend to join the ranks of electrical and mechanical apprentices after completing VTC's basic craft courses in electrical and mechanical engineering.

(iii) Improving working conditions

The EMSD has been working from time to time with the trade and in the light of the latest developments in the industry to review and update the CoP with a view to enhancing the requirements on working conditions. For instance, the CoP has recently introduced a new provision that required contractors to assess and confirm that the environmental factors, such as temperature, ventilation, lightings, etc., inside the lift shaft are suitable before commencing works.

(c) At present, the EMSD conducts about 750 inspections on lifts and escalators a month on average. Since 2009, the EMSD has raised the ratio of spot checks from 1 in 10 to 1 in 7. It has also adopted a risk-based approach and accorded higher priority to the lifts maintained by contractors with poor performance, have long years of service or are of those models that have frequent breakdowns. To make our inspection work more focused, the Administration would consider factoring in flexibility and specific targets to the ratio of spot checks. For instance, the contractors or lifts that have the above-mentioned problems would be subject to more frequent inspections.

The EMSD obtained approval in 2010 to add a total of eight posts to its establishment. Before that, the EMSD had 15 staff to undertake the work of regulating lift and escalator safety. The manpower increased 53% in 2010 (including the ranks of engineers and inspectors) to enhance the regulation of lift and escalator safety. After the Ordinance has come into full operation, the EMSD continues to conduct audit inspections according to a risk-based approach and strictly enforce the provisions of the Ordinance. The Administration will also review from time to time the EMSD's manpower situation to ensure that appropriate resources are allocated for the department to carry out law enforcement and public education work.

Written question raised by Ir Dr Hon LO Wai-kwok at the Council meeting of 20 March 2013 and the Administration's reply

Measures to enhance safety of lifts

Question:

In an accident earlier this month in which a lift dropped suddenly, all four suspension cables of the lift involved had snapped, and its safety protection system had not functioned as designed to stop the lift from dropping. The authorities subsequently inspected the other lifts which were maintained by the contractor concerned, and found that quite a number of them had problems and had to suspend service immediately. It has been learnt that the ranking of the contractor in the "Registered Lift Contractors' Performance Rating" of the Electrical and Mechanical Services Department (EMSD) has all along been low. Some members of the public have pointed out that such incidents reflect that the regulatory system for the repair and maintenance of lifts is plagued with problems, and it fails to ensure proper repair and maintenance of lifts by contractors. In this connection, will the Government inform this Council

- (a) whether, apart from issuing warning letters to the registered lift contractors with low ranking in performance rating for a long period of time and repeatedly involved in safety problems, the authorities have taken other follow-up measures targeting at such contractors; if they have, of the details; if not, the reasons for that;
- (b) whether EMSD will, in the light of the aforesaid lift accident, conduct a comprehensive review of the regulatory system for the repair and maintenance of lifts, and correspondingly increase the resources needed and employ additional professional staff so as to step up its monitoring work; if it will, of the details; if not, the reasons for that;
- (c) whether the authorities have considered stepping up publicity and promotion work, so as to provide guidance for property owners and property management companies on the factors (including the contractor's manpower arrangements, past performance and performance scores, etc.) to be considered when selecting contractors

for the repair and maintenance of their lifts; if they have, of the details; if not, the reasons for that;

- (d) whether the authorities have conducted a comprehensive review to ascertain the number of lifts in Hong Kong which are so dilapidated that their replacement is required; whether the authorities have considered providing subsidies for property owners with financial hardship to pay the costs for such lift replacement works, to obviate the continued use of those lifts compellably; if they have, of the details; if not, the reasons for that; and
- (e) apart from enacting the Lifts and Escalators Ordinance (Cap. 618), which came into full operation on December 17, 2012, to enhance the safety standards for the repair and maintenance of lifts and to strengthen regulatory control, whether the authorities have any complementary measures to assist the trade in tackling its major business difficulties (e.g. vicious price competition, etc.), and to sort out the structural problems of the trade; if so, of the details; if not, the reasons for that?

Reply:

President,

The Lifts and Escalators Ordinance (the Ordinance), enacted in April 2012, came into full operation in December 2012. The Ordinance has introduced a series of enhanced regulatory measures against registered contractors. It clearly stipulates that registered contractors must ensure that their lift maintenance works are carried out properly and safely; increases the maximum fine from HK\$10,000 to HK\$200,000 with the maximum imprisonment period maintained at 12 months; introduces a registration renewal system under which registered contractors are required to renew their registration every five years; and empowers the Registrar to cancel or suspend the registration of registered contractors pursuant to the provisions of the Ordinance. On enforcement, the Electrical and Mechanical Services Department (EMSD) conducts sample inspections on all lifts in Hong Kong on a risk-assessment basis to monitor the work of Furthermore, the EMSD implemented in June registered contractors. 2009 a Registered Lift Contractors Performance Rating Scheme (the Performance Rating Scheme) under which performance monitoring (PM) points of registered contractors are deducted according to an established mechanism for irregularities found by EMSD during inspections. performance ratings of registered contractors are published quarterly to help lift owners or their property management companies select suitable contractors to carry out maintenance and repair works for their lifts.

My reply to the five parts of the question is as follows:

- (a) Under the Performance Rating Scheme, the EMSD will issue warning letters to the registered contractors in the following cases:
 - (i) where a total of 12 or more PM points are deducted for non-compliant items found in a single lift during inspection; or
 - (ii) over 4 PM points are deducted on average within a 12-month period.

Registered contractors who have received a total of three warning letters may be subject to disciplinary hearings. Besides, the EMSD will take appropriate enforcement actions against registered contractors for non-compliances or disciplinary offences found in the course of inspections, including initiating prosecutions or requesting for setting up disciplinary boards to conduct disciplinary hearings.

In the past three years, the EMSD has issued 23 warning letters as mentioned. Besides, the EMSD convicted four registered contractors on 11 charges in the past three years. At the request of the Director of Electrical and Mechanical Services, the Secretary for Development has set up two disciplinary boards to conduct disciplinary hearings on the performance of registered contractors.

(b) The EMSD is reviewing the monitoring mechanism for maintenance and repair works for lifts in the wake of an incident occurred at North Point in early March. One of the measures under consideration is factoring in flexibility and specific targets to the spot check ratio. For instance, lifts maintained by contractors with poor performance ratings, has long years of service and are of models with record of frequent breakdowns would be subject to more frequent spot checks. The Administration will set up a Lift and Escalator Safety Advisory Committee shortly. The Committee will comprise members drawing from both inside and outside the trade, including property management companies and consumers, in order to take in the views of various sectors on ways to ensure the safe operation of lifts and escalators.

With respect to manpower resources, the EMSD obtained approval in 2010 for creating eight new posts (including the ranks of engineers

and inspectors) to strengthen regulation for the safety of lifts and escalators. After the Ordinance has come into full operation, the EMSD continues to conduct audit inspections according to a risk-based approach and strictly enforce the provisions of the Ordinance. The Administration will review from time to time manpower situation to ensure that appropriate resources are allocated for law enforcement and public education work.

- (c) Through issuing Guidebook for Responsible Persons for Lifts and conducting talks, the EMSD publicises and promotes the following message to property owners and management companies. When selecting contractors for maintaining their lifts in safe working order, they are encouraged to also consider other factors in addition to price. These factors include manpower resources, technical support and past performance (including records of incidents and warning letters as well as performance ratings) of the contractors. Since 2012, the EMSD has held over 30 talks for over 3 000 property owners, management companies' representatives and trade practitioners. The Administration will conduct a comprehensive review on the publicity and promotion work, with a view to raising the public's awareness of lift safety and drawing their attention to the factors that should be considered when selecting contractors.
- (d) The Ordinance provides that every lift, irrespective of their years of service, must undergo maintenance works by a registered contractor at least once a month and examination by a registered engineer at least once a year. For ensuring public safety, the EMSD will not issue Use Permits to lifts that fail to meet the safety standards under examination, irrespective of their years of service. To help property owners maintain and repair their lifts, the EMSD issued the Guidelines on Modernising Existing Lifts in December 2011. It also launched a series of publicity activities. In addition to technical support, the Administration offers the following three kinds of financial assistance to help lift owners in need to carry out lift maintenance works:
 - (i) subsidies are available to owners of old and dilapidated buildings for carrying out repair and maintenance works, including lift maintenance works, under the Integrated Building Maintenance Assistance Scheme which is administered jointly by the Urban Renewal Authority and the Hong Kong Housing Society;

- (ii) interest free loans are available to eligible property owners for repair works, including lift works, under the Building Safety Loan Scheme of the Buildings Department; and
- (iii) assistance are available to owner-occupiers for maintenance and repair works to their properties and common areas, including lifts, under the Building Maintenance Grant Scheme for Elderly Owners administered by the Hong Kong Housing Society.
- (e) Some trade practitioners reflected that the trade faced problems of price competition and shortage of new entrants.

On price competition, besides stepping up regulation against registered contractors to protect public safety, we will also enhance publicity and promotion work mentioned in part (c) above to urge people to be mindful of factors other than price in selecting contractors to ensure safety. The EMSD will continue to publish the performance ratings of registered contractors regularly to help property owners and property management companies make informed choices in selecting appropriate registered contractors. These measures will enable registered contractors to bid for contracts at reasonable prices and improve their operating environment. The trade will also be better placed to make investments in manpower.

Various measures have been put in place to enhance the professional status of engineers, strengthen training and improve the working environment in order to attract more entrants to the trade. Details are as follows.

(i) Enhancing the professional status of the workers

The registration regime for workers introduced under the Ordinance to replace the employer-tied arrangement, provides workers with more flexibility in choosing jobs and bargaining power in negotiating remuneration packages.

(ii) Strengthening training

Currently, the Construction Industry Council is deliberating with the Hong Kong Federation of Electrical and Mechanical Contractors, the Lift and Escalator Contractors' Association and the Vocational Training Council (VTC) on ways to provide more training for electrical and mechanical trade in construction industry. To increase the manpower for the trade, they have agreed in principle to introduce the Contractor Cooperative Training Scheme for the electrical and mechanical trade of the construction industry and provide assistance to those trainees who intend to join the ranks of electrical and mechanical apprentices after completing VTC's basic craft courses in electrical and mechanical engineering.

(iii) Improving working conditions

The EMSD has been working from time to time with the trade and in the light of the latest developments in the industry to review and update the Code of Practice for Lift Works and Escalator Works (CoP) with a view to raising the requirements on working conditions. For instance, the CoP has recently introduced a new provision that required contractors to assess and confirm that the environmental factors, such as temperature, ventilation, lightings, etc., inside the lift shaft are suitable before commencing works.

Appendix V

Lift and escalator safety

List of relevant papers

| Date | Meeting/Event | References |
|---------------------|--|--|
| 19 November 2008 | Council meeting | Hansard oral question (No. 4) raised by Hon James TO on monitoring of lift maintenance (p. 1951 - p. 1963) http://www.legco.gov.hk/yr08-09/english/counmtg/hansard/cm1119-translate-e.pdf |
| 19 November 2008 | Council question | Hansard written question (No. 17) raised by Hon LAU Kong-wah on safety of lifts (p. 2003 - p. 2007) http://www.legco.gov.hk/yr08-09/english/counmtg/hansard/cm1119-translate-e.pdf |
| 3 December 2008 | Council meeting | Hansard oral question (No. 1) raised by Hon CHAN Kam-lam on maintenance of lifts in public housing estate (p. 2447 - p. 2452) http://www.legco.gov.hk/yr08-09/english/counmtg/hansard/cm1203-translate-e.pdf |
| 8 December 2008 | Panel on Development Panel on Housing | Administration's paper on regulatory control on lift safety (LC Paper No. CB(1)318/08-09(01)) http://www.legco.gov.hk/yr08-09/english/panels/dev/papers/devhg1208cb1-318-1-e.pdf Information note on lift safety (LC Paper No. CB(1)342/08-09(01)) http://www.legco.gov.hk/yr08-09/english/panels/dev/papers/devhg1208cb1-342-1-e.pdf Minutes of meeting (LC Paper No. CB(1)885/08-09) http://www.legco.gov.hk/yr08-09/english/panels/dev/minutes/devhg20081208.pdf |

| Date | Meeting/Event | References |
|---------------------|--|---|
| 10 December 2008 | Council meeting. | Hansard oral question (No. 4) raised by Hon IP Wai-ming on workers who maintain and repair lifts and escalators (p. 2752 - p. 2759) http://www.legco.gov.hk/yr08-09/english/coun mtg/hansard/cm1210-translate-e.pdf |
| 24 February 2009 | Panel on Development Panel on Housing | Administration's paper on "Maintenance of Lifts in Tenants Purchase Scheme Estates" (LC Paper No. CB(1)826/08-09(01)) http://www.legco.gov.hk/yr08-09/english/panel s/dev/papers/hgdev0224cb1-826-1-e.pdf Background brief (LC Paper No. CB(1)814/08-09(01)) http://www.legco.gov.hk/yr08-09/english/panel s/dev/papers/hgdev0224cb1-814-1-e.pdf Minutes of meeting (LC Paper No. CB(1)2381/08-09) http://www.legco.gov.hk/yr08-09/english/panel s/dev/minutes/devhg20090224.pdf |
| 28 April 2009 | - | Administration's paper on "Audit Inspection of Lifts in Tenant Purchase Scheme Housing Estates" (LC Paper No. CB(1)1359/08-09(01)) http://www.legco.gov.hk/yr08-09/english/panels/dev/papers/devcb1-1359-1-e.pdf |
| 20 May 2009 | Council meeting | Hansard oral question (No. 1) raised by Ir Dr Hon Raymond HO Chung-tai on registration requirements for persons carrying out lift and escalator works (p. 7846 - p. 7852) http://www.legco.gov.hk/yr08-09/english/counmtg/hansard/cm0520-translate-e.pdf |

| Date | Meeting/Event | References |
|-----------------|-------------------------|--|
| 27 October 2009 | Panel on Development | Administration's paper on "Update on the Regulatory Control on Lift Safety and the Legislative Amendment Proposal to the Lifts and Escalators (Safety) Ordinance, Chapter 327" (LC Paper No. CB(1)94/09-10(03)) http://www.legco.gov.hk/yr09-10/english/panels/dev/papers/dev1027cb1-94-3-e.pdf Background brief (LC Paper No. CB(1)94/09-10(04)) http://www.legco.gov.hk/yr09-10/english/panels// |
| | | s/dev/minutes/dev20091027.pdf |
| 22 June 2010 | Panel on Development | Administration's paper on "Public Consultation on Legislative Amendment Proposal to the Lifts and Escalators (Safety) Ordinance, Chapter 327" (LC Paper No. CB(1)2247/09-10(07)) http://www.legco.gov.hk/yr09-10/english/panels/dev/papers/dev0622cb1-2247-7-e.pdf Background brief (LC Paper No. CB(1)2247/09-10(08)) http://www.legco.gov.hk/yr09-10/english/panels/dev/papers/dev0622cb1-2247-8-e.pdf Minutes of meeting (LC Paper No. CB(1)2803/09-10) |
| | | http://www.legco.gov.hk/yr09-10/english/panels/dev/minutes/dev20100622.pdf |
| 30 June 2010 | Council meeting | Hansard written question (No. 18) raised by Hon IP Wai-ming on safety of repair works for lifts (p. 10607 - p. 10609) http://www.legco.gov.hk/yr09-10/english/counmtg/hansard/cm0630-translate-e.pdf |

| Date | Meeting/Event | References |
|------------------------------|--|--|
| May 2011 to February 2012 | Bills Committee on Lifts and Escalators Bill | Legislative Council Brief (File Ref.: DEVB(CR)(W)1-10/30) http://www.legco.gov.hk/yr10-11/english/bills/brief/b29_brf.pdf The Bill |
| | | http://www.legco.gov.hk/yr10-11/english/bills/ b201104212.pdf |
| | | Legal Service Division Report (LC Paper No. LS59/10-11) http://www.legco.gov.hk/yr10-11/english/hc/papers/hc0513ls-59-e.pdf |
| | | Background brief (LC Paper No. CB(1)2328/10-11(01)) http://www.legco.gov.hk/yr10-11/english/bc/bc 07/papers/bc070531cb1-2328-1-e.pdf |
| | | Papers http://legco.gov.hk/yr10-11/english/bc/bc07/pa pers/bc07 ppr.htm |
| 6 July 2011 | Council meeting | Hansard written question (No. 18) raised by Hon IP Wai-ming on personnel engaged in lift works and escalator works (p. 13605 - p. 13608) http://www.legco.gov.hk/yr10-11/english/counmtg/hansard/cm0706-translate-e.pdf |
| 13 July 2011 | Council meeting | Hansard oral question (Urgent question No. 1) raised by Hon IP Kwok-him on safety of escalators (p. 13905 - p. 13913) http://www.legco.gov.hk/yr10-11/english/counmtg/hansard/cm0713-translate-e.pdf |
| 24 February 2012 | House Committee | Report of the Bills Committee on Lifts and Escalators Bill (LC Paper No. CB(1)1117/11-12) http://www.legco.gov.hk/yr11-12/english/hc/papers/hc0224cb1-1117-e.pdf |

| Date | Meeting/Event | References |
|-----------------|-------------------------|--|
| 27 March 2012 | Panel on Development | Administration's paper on "Two regulations to be made under the Lifts and Escalators Bill" (LC Paper No. CB(1)1342/11-12(06)) http://www.legco.gov.hk/yr11-12/english/panels/dev/papers/dev0327cb1-1342-6-e.pdf Background brief (LC Paper No. CB(1)1342/11-12(07)) http://www.legco.gov.hk/yr11-12/english/panels/dev/papers/dev0327cb1-1342-7-e.pdf Minutes of meeting (LC Paper No. CD(1)2200141112 |
| | | CB(1)2208/11-12) http://www.legco.gov.hk/yr11-12/english/panel s/dev/minutes/dev20120327.pdf |
| 28 March 2012 | Council meeting | Hansard written question (No. 10) on safety of lifts and escalators in railway premises (p. 7526 - p. 7530) http://www.legco.gov.hk/yr11-12/english/counmtg/hansard/cm0328-translate-e.pdf |
| 2 May 2012 | Council meeting | Hansard written question (No. 15) on provision of elevators, escalators and footbridges in public housing estates (p. 9015 - p. 9018) http://www.legco.gov.hk/yr11-12/english/counmtg/hansard/cm0502-translate-e.pdf |
| 17 October 2012 | Council meeting | Hansard oral question (No. 2) on practitioners in lift works and escalator works" (p. 64 - p. 72) http://www.legco.gov.hk/yr12-13/english/counmtg/hansard/cm1017-translate-e.pdf |
| 23 January 2013 | Council meeting | Hansard written question (No. 7) on measures to complement implementation of Lifts and Escalators Ordinance (p. 5087 - p. 5091) http://www.legco.gov.hk/yr12-13/english/counmtg/hansard/cm0123-translate-e.pdf |

| Date | Meeting/Event | References |
|---------------|-----------------|---|
| 20 March 2013 | Council meeting | Oral question (No. 6) on stepping up regulation of lift contractors and training for lift practitioners (the main question and the Administration's main reply only) http://www.info.gov.hk/gia/general/201303/20/P201303200400.htm Written question (No. 9) on measures to enhance safety of lifts http://www.info.gov.hk/gia/general/201303/2 0/P201303200360.htm |