立法會 Legislative Council

LC Paper No. CB(1)885/08-09 (These minutes have been seen by the Administration)

Ref: CB1/PL/DEV+HG

Panel on Development and Panel on Housing

Minutes of joint meeting held on Monday, 8 December 2008, at 9:00 am in the Chamber of the Legislative Council Building

Members present: Members of the Panel on Development

Hon LAU Wong-fat, GBM, GBS, JP (Chairman)

- * Prof Hon Patrick LAU Sau-shing, SBS, JP (Deputy Chairman) Ir Dr Hon Raymond HO Chung-tai, SBS, S.B.St.J., JP
- * Hon James TO Kun-sun
- * Hon CHAN Kam-lam, SBS, JP Hon Mrs Sophie LEUNG LAU Yau-fun, GBS, JP Hon WONG Yung-kan, SBS, JP
- * Hon Abraham SHEK Lai-him, SBS, JP Hon Albert CHAN Wai-yip
- * Hon LEE Wing-tat
- * Hon Alan LEONG Kah-kit, SC Hon CHEUNG Hok-ming, SBS, JP
- * Hon KAM Nai-wai, MH Hon Mrs Regina IP LAU Suk-yee, GBS, JP Dr Hon Samson TAM Wai-ho, JP

Members of the Panel on Housing

Hon WONG Kwok-hing, MH (Chairman)
Hon Fred LI Wah-ming, JP
Hon LEUNG Kwok-hung
Hon CHAN Hak-kan
Hon WONG Sing-chi
Hon WONG Kwok-kin, BBS

* Also members of the Panel on Housing

Members attending: Hon LEE Cheuk-yan

Hon Andrew CHENG Kar-foo

Hon IP Wai-ming, MH

Members absent : Members of the Panel on Development

Hon Albert HO Chun-yan

Dr Hon Philip WONG Yu-hong, GBS

Hon Emily LAU Wai-hing, JP

Hon Timothy FOK Tsun-ting, GBS, JP

Hon Cyd HO Sau-lan Hon Starry LEE Wai-king

Hon Tanya CHAN

Dr Hon Priscilla LEUNG Mei-fun Hon IP Kwok-him, GBS, JP

Members of the Panel on Housing

Hon LEUNG Yiu-chung

Hon Tommy CHEUNG Yu-yan, SBS, JP

Hon Frederick FUNG Kin-kee, SBS, JP (Deputy Chairman)

Dr Hon Joseph LEE Kok-long, JP

Public officers attending

: Agenda item II

Mrs Carrie LAM CHENG Yuet-ngor, JP

Secretary for Development

Mr HO Kwong-wai, JP

Director of Electrical and Mechanical Services

Mr Michael CHEUNG Ping-kuen

Assistant Director (Gas & General Legislation) Electrical & Mechanical Services Department

Mr Albert LEE

Assistant Director (Estate Management)2

Housing Department

Mr CHIU Kin-chee

Chief Manager/Management (Support Services 1)

Housing Department

Clerk in attendance: Ms Anita SIT

Chief Council Secretary (1)4

Staff in attendance: Mr WONG Siu-yee

Senior Council Secretary (1)7

Ms Christina SHIU Legislative Assistant (1)7

Action

I Election of Chairman

Mr WONG Kwok-hing was elected Chairman of the joint meeting.

II Lift safety

LC Paper No. CB(1)232/08-09(03) -- Letter dated 14 November 2008 from Hon LEE

Cheuk-yan on lift safety

LC Paper No. CB(1)232/08-09(04) -- Letter dated 14 November

2008 from Hon James TO Kun-sun and Hon LEE

Wing-tat on lift safety

LC Paper No. CB(1)318/08-09(01) -- Administration's paper on

regulatory control on lift safety

LC Paper No. CB(1)342/08-09(01) -- Paper on lift safety prepared by

the Legislative Council Secretariat (Information note)

- 2. The <u>Secretary for Development</u> (SDEV) said that the Administration's paper (LC Paper No. CB(1)318/08-09(01)) gave an account of the actions taken by the Administration since the Shin Nga House lift incident. The package of improvement measures to enhance the existing regulatory framework would be carefully implemented to assess their effectiveness and the Administration would provide a further report to Members within three months.
- 3. The <u>Director of Electrical and Mechanical Services</u> (DEMS) said that the technical report on the Shin Nga House lift incident had been released on 5

December 2008. The incident was a result of the failure of the counterweight pulley bearing, which caused the dislodgement of all eight suspension ropes from the counterweight. Without the balance of the counterweight, the lift car started descending abruptly. The activation of the safety gear at the lift car slowed down the lift car but could not bring it to a stationary position. The lift car therefore overshot the ground floor level into the lift pit. The impact led to overstressing tensile failure of the suspension ropes so that seven out of the eight suspension ropes were broken.

Causes of the incidents

- 4. Mr James TO said that he noted that the lift in question was inspected in August 2008 and asked whether the bearing was a standard inspection item of lift inspection. If not, the inspection system was at fault. If it was a standard inspection item, he asked whether the bearing was a wear and tear item requiring periodic replacement or whether its service life would last until failure occurred. He further asked whether the bearings of lifts of a similar age would face a similar risk of failure, and whether such bearing failure could occur suddenly within a short period of time, say 20 days after a lift inspection which had not detected such failure.
- 5. <u>Mr CHAN Hak-kan</u> asked whether the items to be inspected by contractors were clearly specified and whether the bearing was one of the inspection items.
- 6. In response, <u>DEMS</u> said that according to EMSD's Codes of Practice and lift manufacturer's guidelines, annual inspection should include inspection of the bearing. The service life of a bearing should not last until failure occurred because problems could be discovered during monthly and annual inspections. For the incident in question, there was corrosion of the bearing and the corrosion would not occur within a very short period of time. As the incident might involve criminal liability, he could not disclose further details at present.
- 7. <u>Prof Patrick LAU</u> asked whether the maintenance reports of the lift at Shin Nga House had revealed any problems.
- 8. The Assistant Director (Estate Management)2, Housing Department explained that as Fu Shin Estate was a housing estate under the Tenants Purchase Scheme, EMSD was responsible for audit inspection of the lifts of the buildings in the estate. <u>DEMS</u> said that while reports of inspections conducted by registered engineers had to be submitted to EMSD, reports of regular maintenance work carried out by workers would only be submitted if so requested.

- 9. Mr CHAN Kam-lam sought clarification on whether the failure of the suspension ropes was due to the load of the lift, the counterweight and compensating ropes, or faults of the suspension ropes themselves. It was rare that seven out of the eight suspension ropes were broken because suspension ropes had a very strong tensile strength. As one of the four suspension ropes of another lift in Wan Tau Tong Estate was also broken, he asked whether it was possible that the suspension ropes were the real cause of the failure. He further asked whether the safety gear had performed its intended function and requested the Administration to provide further explanation on the two incidents.
- 10. <u>DEMS</u> replied that the tensile strength of the eight suspension ropes of the lift at Shin Nga House were tested and found to comply with the manufacturer's technical specification and be in line with the requirements laid down in international standards. It was possible that the bearing was broken when the lift started to move again after the last passenger had alighted. The incident was rare and the technical report showed that the broken bearing led to exceptional stress on the suspension ropes, which were also subject to abrasion with the concrete slabs of the lift well. The loosened counterweight and compensating ropes added to the load of the lift. The safety gear slowed down the lift car but could not stop it completely. As a result, the seven suspension ropes were broken. As regards the Wan Tau Tong Estate incident, the technical report had been completed and failure of the broken suspension rope was the cause of the incident. The safety circuit was activated and stopped the lift car in this incident. The circumstances of the two incidents were different.
- 11. Mr WONG Kwok-kin said that his understanding based on the technical report was that the suspension ropes were broken by the rapidly descending lift car after the bearing had been broken. The suspension ropes themselves were not the cause of the Shin Nga House incident. Corrosion of the bearing was an indication of the lack of maintenance and this was a human fault. The maintenance contractor should be held responsible and the Administration should take action in this regard. The Administration's monitoring work should focus on the standards of the maintenance contractors to ensure that regulations were adhered to. He asked whether there would be any penalty imposed on the contractor concerned and remedial measures in future.
- 12. In response, <u>DEMS</u> said that EMSD would take action to investigate the responsibility aspects and gather further evidence on the incident. If there was sufficient evidence showing that the persons/parties concerned had committed an offence, EMSD would initiate prosecution and the maximum penalty was a fine of \$5,000 or six months' imprisonment. As criminal investigation was in progress, he could not disclose further details at present. Disciplinary proceedings would be initiated if registered engineers were involved and the maximum penalty was their removal from the register of lift engineers.

- 13. Mr IP Wai-ming said that apart from identifying the parties to be held responsible, the investigation should include examining the existing work system and workers' workload. Workers often complained that they did not have sufficient time for carrying out lift inspection work because they had to inspect up to nine lifts within eight to nine hours. They were worried that the criminal investigation would put the blame on frontline staff.
- 14. In response, <u>SDEV</u> said that while no further details could be released at present, registered engineers and registered contractors would be the parties to be held responsible under the relevant legislation if they committed an offence. A tripartite working group comprising EMSD, lift contractors and worker representatives would review the existing Codes of Practice to address issues such as the frequency and duration of specific maintenance tasks.

Monitoring by EMSD

- 15. Mr Andrew CHENG was worried that internal redeployment of additional resources to EMSD to step up audit inspections and spot checks of lifts would reduce inspections on other systems, such as Ngong Ping 360 and the railway system. He considered that even if the proportion of audit checks had been increased from one out of ten to one out of seven, it was still on the low side. He expressed concern that the bearing failure incident was only the tip of the iceberg. It would be extremely dangerous if the maintenance contractors had not dutifully carried out their maintenance work and EMSD's inspection could not discover the problems. He hoped that more resources could be allocated to lift inspection work in the next financial year.
- 16. In response, <u>SDEV</u> said that as the additional resources for lift inspection work were redeployed from the Development Bureau to EMSD rather than within EMSD itself, the redeployment would not affect other inspection work of EMSD. The Development Bureau would assess the effectiveness of the improvement measures and consider the staffing requirement for the next financial year. In line with the spirit of professional regulation, EMSD as a regulatory body should not replace registered engineers and contractors in what should be their legal obligations in lift inspection.
- 17. Mr KAM Nai-wai asked how the Administration would monitor and ensure that the registered engineers of those contractors had really carried out their lift inspection work on site and that there was sufficient time for inspection. He said that the fees charged by some contractors were only in the region of \$1,000 per lift. Under an all-inclusive maintenance contract, the fees were inclusive of maintenance charges and parts. Therefore, contractors engaged under such contracts were inclined not to replace the parts as far as possible until they could no longer be used. This would be problematic if the inspections could

not discover potential failures of the parts. He asked how the Administration would ensure that those contractors would maintain the lifts to ensure their normal operation and safety.

- 18. In response, <u>DEMS</u> said that the proportion of audit checks by EMSD had been increased from one out of ten to one out of seven and about 7 000 lifts would be inspected on site annually. Apart from audit checks, EMSD would conduct surprise inspections. There would also be a new arrangement that for annual inspections, contractors were required to notify EMSD seven days in advance so that EMSD could observe the inspection process on site. Maintaining lift safety required the concerted efforts of the Government, the industry and citizens. EMSD would further enhance the relevant Codes of Practice. It had also strengthened the contents of the sample tender document for procurement of lift maintenance services to facilitate the public in procuring such services, and the document had been placed on its website. An enquiry hotline would also be made available to the public.
- Mr LEE Cheuk-yan said that under the existing tender system, tenders would be awarded to the lowest offer. The maintenance fee of some \$1,000 per lift was insufficient for supporting the provision of quality lift maintenance. In order to solve the problem, revision of the Codes of Practice on lift safety should proceed at full speed. The minimum time and the minimum number of workers required for carrying out maintenance work should be specified in the Codes of Practice. Two workers should be required for carrying out maintenance work within a specified time, say one or two hours, and attendance records should be kept. Without these arrangements, inspections would be futile. He asked when the review of the Codes of Practice would be completed, and whether the Administration would urge the owners' corporations to re-tender their lift maintenance contracts so as to engage new contractors.
- 20. In response, <u>SDEV</u> said that the tripartite working group was actively following up the review of the Codes of Practice. She urged owners' corporations not to put residents' safety at risk in procuring lift maintenance services. They should draw reference from the sample tender document posted by EMSD on its website. She however said that it would not be appropriate for the Administration to urge owners' corporations to re-tender lift maintenance services.
- 21. Mrs Sophie LEUNG said that the management culture in Hong Kong should be enhanced. Apart from contractors and "competent lift workers", the tripartite working group should explore the feasibility of requiring each contractor to establish a quality management system for the maintenance work and to ensure that their workers were provided with regular training to enhance their skills. The bearing failure of the Shin Nga House incident showed that the maintenance work was not carried out satisfactorily. In bidding for maintenance

contracts, registered contractors should understand that the quality of their workers should be up to standard and the knowledge of the workers should be updated regularly to keep up with the trend. The Administration should consider updating the relevant legislation so that contractors would be held responsible for their maintenance work. This approach was a better way forward and stepping up inspections by EMSD was not an ideal solution to the problem.

22. In response, <u>DEMS</u> said that the Administration would discuss with contractors and encourage them to consider Mrs Sophie LEUNG's suggestions, because the Administration had no legal authority to require them to do so at present. <u>SDEV</u> added that the Administration was implementing improvement measures and if the experience revealed questions about the legal requirements, the Administration would consider further measures in this direction.

Maintenance contracts and availability of parts

- 23. Mr LEE Wing-tat said that some estates did not engage the original manufacturers for maintenance because the costs were unreasonably high. However, other maintenance contractors found it difficult to obtain the necessary parts from and master the software of the original lift manufacturers. As such, there were safety concerns if other contractors demanding lower costs were engaged. He was concerned that there was monopoly of maintenance contracts by lift manufacturers in private housing estates and asked how the Administration would handle the situation.
- 24. In response, <u>SDEV</u> said that as a service provider, the Electrical and Mechanical Services Trading Fund would undertake the repair and maintenance works of lifts in Government buildings according to its own service procurement guidelines. As for public housing estates, the Housing Department would arrange for procurement of lift repair and maintenance services. Lift repair and maintenance services procurement for private housing estates adopted the market mechanism and owners were free to procure repair and maintenance services. As a regulatory body, EMSD would further promote to the public procurement methods which were worthy of recommendation.
- 25. <u>Prof Patrick LAU</u> declared that he was a member of the Housing Authority. He asked whether contractors other than the original manufacturer had any difficulty in obtaining the original parts for lift maintenance and whether the bearing in the Shin Nga House incident was manufactured by the original manufacturer.
- 26. In response, <u>DEMS</u> said that before taking up a maintenance contract from the existing contractor, the new contractor had to prove that they had the necessary staffing, experience and resources, and that they could obtain the necessary parts. Otherwise, they should not take up the maintenance contract.

While they could use available original parts, they could also use some compatible parts of the same quality available in the market. The existing contractor had a responsibility to provide the new contractor with the relevant technical information. The new contractor had to engage a registered engineer to inspect the lifts concerned to ensure that they were safe. As bearings were common parts used in many mechanical devices, lift manufacturers would purchase bearings available in the market and would not manufacture bearings by themselves.

- 27. Mr Albert CHAN expressed concern about monopoly of lift maintenance contracts by lift manufacturers. He said that those manufacturers controlled the prices of maintenance contracts through pricing of their parts. Other contractors had to pay a very expensive price for obtaining parts from lift manufacturers. They might not even be able to obtain some parts, such as electronic parts, from manufacturers. The tender exercises for lift maintenance were therefore conducted in an unfair manner. Many owners' corporations were forced to engage lift manufacturers to maintain their lifts at a very expensive price. The Administration should look into the matter.
- 28. In response, <u>DEMS</u> said that safety should be the primary concern in procuring lift maintenance services. As regards the availability of original electronic parts, he understood that there had been cases of contractors converting the circuits of electronic parts to suit their lift maintenance work. <u>SDEV</u> said that the Administration would look into the matter of tendering of lift maintenance contracts, although it was a matter of commercial competition.

Enhancing workers' competence and safety

- 29. As regards enhancing workers' competence, Mr Andrew CHENG considered that those who possessed sufficient skills and experience but had not undergone formal academic training or craft apprenticeship should take a trade test. Those who could reach the required standard should be qualified as a "competent lift worker" under route (a) mentioned in paragraph 15 of the Administration's paper. The remaining should be required to attend relevant courses to enhance their competence to the required standard and route (b) should no longer be made available. Otherwise, the standard of the workers would vary and maintenance contractors might employ incompetent workers to save costs.
- 30. Mr IP Wai-ming said that as workers qualified under route (b) did not possess a formal registration status as a "competent lift worker", they had no channel to lodge complaints against their employers because they were worried that they would be sacked, thus losing their status as a "competent lift worker".

- 31. <u>SDEV</u> concurred that route (b) was not entirely satisfactory because the qualification of a "competent lift worker" of those workers was pegged to a registered lift contractor and they did not possess a formal status of their own. The Administration would look into the matter when implementing the second stage of the Construction Workers Registration Ordinance to see how those workers could attain an independent registration status. Meanwhile, refresher top-up training courses would be offered so that they could qualify as "competent lift workers" under route (a). The Administration would study whether such courses alone could cater for the needs of the some 3 000 workers qualified under route (b).
- 32. <u>Ir Dr Raymond HO</u> expressed support for the idea of providing eligible lift workers with an independent registration status.
- 33. The <u>Chairman</u> asked whether the Safety Guide to Working in Confined Spaces would specify that at least two workers would be required for carrying out work in confined spaces, such as lifts, so as to ensure the safety of the workers. He was concerned that carrying out lift maintenance work by only one worker would be in breach of industrial safety, and dangers such as electric shock could arose.
- 34. In response, <u>DEMS</u> said that the tripartite working group would formulate specific guidelines for different lift maintenance tasks. Tasks such as handling lift trapping might require two or more workers, and tasks such as changing light bulbs in lifts might only require one worker. The details would be specified in the relevant Codes of Practice.
- 35. Mr LEUNG Kwok-hung said that he heard that the workload of frontline workers had increased to the point that they could not dutifully carry out their work. The situation also applied to registered engineers. Lift safety was thus at stake. He also expressed concern about shortage of original parts. He enquired whether the Administration had information on the time spent on lift maintenance work, such as timesheets.
- 36. In response, <u>DEMS</u> said that the tripartite working group was conducting in-depth study of issues such as appropriate duration of specific maintenance tasks, and it would take into consideration the maintenance requirements of various brands of lifts due to their different designs. Lift maintenance data could be disseminated after completing the review of the Codes of Practice and subject to legal clearance.

Lifts in public housing estates managed by the Hong Kong Housing Authority

37. <u>Mr WONG Yung-kan</u> asked whether the Housing Department, which was responsible for maintaining lifts in public housing estates, had plans for

replacing the ropes of the lifts after they had been used for a certain period of time. By way of illustration, he said that the ropes of vessels had to be replaced periodically. Ropes became aged as time passed and this would create dangers.

38. In response, the Chief Manager/Management (Support Services 1), Housing Department said that the Codes of Practice required that the ropes should be inspected by registered engineers and workers regularly and during annual inspections. The Housing Department had a monitoring mechanism to ensure lift safety. Annual inspections conducted by registered engineers were very comprehensive and the ropes and other parts would be inspected. If damages reaching a certain level based on the guidelines of the manufactures were discovered, the ropes would be replaced. A certificate would be issued after annual inspection to prove that the lift was safe. At present, there was no requirement for replacing the ropes of lifts periodically and whether there was a need for replacement would depend on the actual circumstances. According to experience, replacement of ropes would normally take place after they had been used for around 7 to 10 years.

Dissemination of information on performance of service providers

- 39. Mr Albert CHAN asked whether the Administration could disseminate performance information in respect of the maintenance services of lift manufacturers and other contractors. Such information would facilitate owners' corporations in choosing the most appropriate service providers. Mr CHAN Hak-kan asked whether the scores obtained by contractors in the Administration's internal marking scheme could be released to owners' corporations upon request to facilitate them in choosing quality contractors. Mr LEUNG Kwok-hung considered that the Administration should study the legal basis and resolve the legal complications involved.
- 40. <u>SDEV</u> responded that while the Administration had an internal marking scheme, the Administration had to study the legal basis for the dissemination of the information to the public because there was no such requirement in the legislation. The Administration would study the issue and the legislation would be updated if necessary.

Other comments

41. <u>Ir Dr Raymond HO</u> sought clarification on the type of engineers referred to in paragraph 9 of the Administration's paper. He considered that registered building services engineers could contribute to enhancement of lift safety. Apart from incidents involving falling lifts, lift trapping incidents could also pose dangers to the passengers. <u>DEMS</u> clarified that the engineers referred to in the Administration's paper were registered lift engineers.

- 42. Mr CHAN Hak-kan enquired whether the Administration had any plan to require the owners concerned to replace old style lifts using sliding doors in some buildings 30 to 40 years in age. Those lifts might face safety issues similar to those of public housing estates. DEMS said that the registered engineers responsible for carrying out inspections would recommend to the owners' corporation concerned if replacement of the lifts or parts were required.
- 43. In reply to the Chairman's enquiry on when the Administration would revert to Members on the improvement measures and the relevant reviews, <u>SDEV</u> advised that the Administration would submit the results of the implementation of the improvement measures to Members within three months. The Administration would assess the effectiveness of the improvement measures and the legislation would be updated if necessary.

III Any other business

44. There being no other business, the meeting ended at 10:10 am.

Council Business Division 1
<u>Legislative Council Secretariat</u>
24 February 2009