(Translation)

Public Hearing of the Public Accounts Committee in response to the Director of Audit's Report No. 81 Chapter 3: Maintenance and Modernisation of Lifts and Escalators in Public Rental Housing Estates

Opening Remarks by the Secretary for Housing

Chairman,

Thank you, Chairman. I would like to thank the Audit Commission for its comprehensive audit and valuable comments on the maintenance and modernisation of lifts and escalators in public rental housing estates carried out by the Housing Department (HD). I would also like to thank the Public Accounts Committee for giving us an opportunity to allow my colleagues and I to explain the details and propose ways in which we can make further progress and improvements in the future. Colleagues from the HD agree with the contents of the Audit Report and accept its recommendations. The HD will continue to closely monitor the implementation progress and situations of the improvement measures to ensure that the recommendations in the Audit Report are effectively and fully implemented.

- 2. As of June 2023, the HD was responsible for the management of 193 public housing estates, including a total of 6 056 lifts and 277 escalators. We understand that lifts and escalators are closely related to the lives and convenience of residents. Therefore, we will not compromise the safety of lifts and escalators, and will strive to minimise the breakdowns of lifts and escalators.
- 3. Public housing estates are densely populated and many members of the public come to our shopping centres and other facilities. Therefore, the usage of lifts and escalators is much higher than that of ordinary private residential estates. However, we have been told by some industry peers that the breakdown rates of lifts and escalators maintained by the HD have always been maintained at a low level. Data reveal that there were on average less than one breakdown per lift maintained by HD and less than one breakdown per escalator maintained by HD in every six months. In recent years, the Audit Commission has also noticed that our overall breakdown rate has been decreasing. Of course, we also strive to further improve and do better in all aspects. In fact, some breakdowns were caused by human factors, for example, accidental collisions, etc. There were also many cases of suspension of lift services precisely due to the actuation of safety devices; for example, safety devices were actuated when there

was an obstruction to the opening or closing of lift doors to ensure the safety of lift users. These cases might not be related to equipment failure, and in most cases, lift services could be resumed within a short period of time after inspection. Suspension of lift services for over two days only account for 0.7% of all the cases.

- 4. As mentioned in the Audit Report, more than 99% of lifts and 98% of escalators services suspension cases of the HD could be resumed services within two days. is attributed to the HD's effective monitoring of contractors and more stringent maintenance requirements than the statutory requirements. For example, contractors carry out periodic maintenance on a weekly basis for each lift and escalator, which is four times the statutory requirement of once a month. More frequent periodic maintenance could enable more timely preventive maintenance of lifts and escalators, thereby enhancing system stability and services safety. Apart from that, the HD regularly assesses and monitors the performance of the contractors, together with surprise checks and extra inspections conducted by different teams, to ensure that the maintenance performance of contractors meets the requirements. In fact, the HD's lifts and escalators are maintained by the original manufacturers. They have absolute liability on lift safety, direct supply of spare parts and technical backup, and readily available and comprehensive maintenance services. Notwithstanding the large number of lifts and escalators under the HD's management, the vast majority of the services suspension cases mentioned in the Report were relatively minor and were not categorized as incidents that are legally required to be reported to the Electrical and Mechanical Services Department (EMSD).
- Since 1988, the HD has been implementing the Lift Modernisation Programme 5. and has so far carried out modernisation works for more than 1 500 lifts in more than The HD evaluates lifts that have been in operation for more 60 public housing estates. than 25 years annually and carries out modernisation works in an orderly manner depending on the situation. Unlike many private housing estates, the lift modernisation works carried out by the HD are more comprehensive. machinery for the lift installation is completely renewed, and the lift machine room, lift shaft, etc. will be thoroughly inspected and even re-conditioned. The HD has also reviewed and streamlined some procedures to shorten the shut-down period of lifts due In order to further enhance the safety standards of lifts, the HD has also additionally equipped the lifts with the latest safety devices in accordance with the guidelines of the EMSD in tandem with Lift Modernisation Programme.
- 6. For escalators, the HD requires contractors to completely dismantle the escalators periodically for inspection and replacement of worn-out parts, and install new safety devices in accordance with the guidelines of the EMSD. These are extra requirements imposed by the HD on the contractors in addition to the statutory requirements. Most of the escalators managed by the HD have been retrofitted with

these safety devices and a small number of remaining escalators will be retrofitted in 2024/25 as planned.

- 7. In addition to the above programmes, the Housing Bureau (HB) has been actively seeking to adopt advanced technology and innovative thinking to enhance construction safety and efficiency, as well as optimising property management. November this year, the HB signed a Memorandum of Understanding (MOU) with the Hong Kong Applied Science and Technology Research Institute (ASTRI) to establish a strategic partnership and make good use of innovative technologies to bring and optimize solutions to property management. ASTRI has also repeatedly expressed to me the importance attached to this collaboration with the HB. In the aspect of lift maintenance work, ASTRI will develop an Artificial Intelligence (AI) Predictive Maintenance System for lifts to analyse Internet of Things (IoT) data, and to obtain the data pattern of lift operations to effectively predict the lift breakdown patterns. AI Predictive Maintenance System is compatible with lifts from different manufacturers, and through remote real-time monitoring and accurate breakdown predictions, it will improve the efficiency of on-site maintenance inspections, reduce the suspension of lift services and enhance the quality of property management services.
- 8. In summary, we have six directions for continuous improvement, including:
 - (1) research into the application of new technologies;
 - (2) switch to the comprehensive use of digital log-books;
 - (3) wider application of IoT sensors;
 - (4) promote the information of proper use to the public;
 - (5) combat malicious damage (15 points can be allotted at present, and we will issue a Notice-to-Quit upon accumulation of 16 points); and
 - (6) explore and work collaboratively with the industry to enhance the services quality.
- 9. As always, the HD is committed to providing residents with better and safer lift and escalator services. My colleagues and I are pleased to respond to Members' questions on the details, particulars and improvement proposals of this Chapter.
- 10. Thank you, Chairman.