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Electrical and Mechanical Engineering Group

29 July 2022

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Dear Sir/Madam

## **REMOTE MONITORING AND DIAGNOSTICS SOLUTIONS FOR LIFTS - AMENDMENTS TO THE BUILDING MAINTENANCE AND STRATA MANAGEMENT (LIFT, ESCALATOR AND BUILDING MAINTENANCE) REGULATIONS**

### **Objective**

This circular informs the industry of changes made to the Building Maintenance and Strata Management (Lift, Escalator and Building Maintenance) Regulations 2016 (the “LEBM Regs”) to support the implementation of Remote Monitoring and Diagnostics (“RM&D”) solutions in lifts.

### **Background**

2. Under the LEBM Regs, it is the duty of an owner of a lift to engage a registered lift service contractor to carry out the regular maintenance on the lift. All lifts (other than a home lift, a vertical platform lift or a stair lift) must be maintained at least once every month. For home lifts, vertical platform lifts and stair lifts, they must be maintained at least once every three months or according to the manufacturer’s recommendation, whichever is more frequent.

### **Regulatory Sandbox for an Alternative Maintenance Regime for RM&D Lifts**

3. Advancements in technologies, such as RM&D<sup>1</sup> solutions, have presented unprecedented opportunities for the industry to automate maintenance checks on lifts while achieving better safety and reliability of lifts. For the lifts that adopt RM&D solutions that could effectively monitor and diagnose the performance of the lifts between maintenance visits by the service contractor, there is room to adopt a more flexible maintenance regime, in place of the current monthly maintenance regime.

4. To facilitate the adoption of RM&D solutions for lift maintenance, the Building and Construction Authority (“BCA”) has amended the LEBM Regulations. Lift owners who install RM&D solutions for their lifts, and have obtained approval from the Commissioner of Buildings (COB), may maintain the lifts once every three months.

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<sup>1</sup> Remote Monitoring & Diagnostics solution refers to a system that is able to: a) continuously collect data from an operating lift, b) perform analysis of the data collected for detection, diagnosis and prediction of issues in lifts and recommend action for the lift’s maintenance.

## Application for Approval to maintain RM&D Lifts at Reduced Frequency

5. With effect from 1<sup>st</sup> August 2022, a lift owner, together with the RM&D solution provider and lift service contractor, may apply to the COB under the LEBM Regs to allow his lifts, installed with an RM&D solution, to be allowed for maintenance at three-monthly intervals. To assess the application, the COB would require the following information as part of the application process:

- a. Performance data of the lifts (including maintenance findings detected by the RM&D Solution and servicing records) for at least 6 months.
- b. Documentation demonstrating compliance with the Code of Practice for Design and Performance of Remote Monitoring & Diagnostics Solution for Lifts (“COP”).

6. The COP, which provides the technical basis for a longer maintenance interval, includes the minimum system architecture of the proposed RM&D solution must possess, proof of use of data analytics by the solution for predictive maintenance as well as meeting the indicators for the performance of the RM&D solution.

7. Upon written approval of the application, the lift service contractor may carry out maintenance works based on the approved frequency, subject to the conditions as the COB may impose.

8. For more information on the application process and requirements, please refer to the COP as well as the Guidelines - Approval Process for Remote Monitoring and Diagnostics for Lifts on BCA’s website (URL: <https://www1.bca.gov.sg/regulatory-info/lifts-escalators/remote-monitoring-diagnostics-for-lifts-in-singapore>). You may also write in through BCA’s Online Feedback Form at <https://www.bca.gov.sg/feedbackform> to seek clarifications or a consultation to discuss further on the application process or requirements.

### Feedback and Clarification

9. For further information, feedback or clarification, please submit your enquiry through BCA's Online Feedback Form at <https://www.bca.gov.sg/feedbackform> or call us at (65)1800-342 5222 (1800-DIAL BCA).

Yours faithfully



TEO ORH HAI  
GROUP DIRECTOR  
ELECTRICAL AND MECHANICAL ENGINEERING GROUP  
BUILDING AND CONSTRUCTION AUTHORITY  
for COMMISSIONER OF BUILDINGS

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