



Transforming Singapore's Lift & Escalator Industry: Key Initiatives for Safety, Livability and a Dynamic Industry

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16 April 2026



Our lift and escalator (L&E) industry faces three converging challenges

Context of L&E market (as of Nov 2025):

- Over 79,000 lifts serving Singapore's high-rise living, with ~70% lifts in residential buildings
- Over 7,900 escalators
- ~100 SPE(L&E)
- ~200 L&E contractors registered under BCA workheads

Three converging challenges:

- Aging L&Es → Keeping up with modern standards
- Increasingly complex equipment → Increasing demand for more reliable lifts
- Aging workforce → Increasing need for smarter and more productive industry

Together, we are uplifting Singapore's L&E industry with the following three key focus areas and their key initiatives:

Safety

Prevention-focused rather than reactive compliance, towards tomorrow's increasingly complex L&Es

- Firm-based certification framework

Liveability

Improve reliability of increasingly complex L&Es for greater livability

- Lift modernisation
- Remote monitoring and diagnostic (RM&D) solutions

Dynamic Industry

Future-ready workforce supported by innovative technology solutions

- Robotics integration with buildings
- Future-proofing L&E workforce

For more info on LECF:



Complex L&Es will be certified by L&E Certification Firms (LECFs)

BCA-licensed LECFs to certify more complex L&E systems under the new firm-based regime, targeted in 2027/2028

- Future-ready industry for more complex L&Es through:
 - Firm-level governance, expertise and resources
 - Talent development and knowledge retention within firms
- Individual SPEs can continue to certify simpler L&Es and home lifts, which account for over 60% of installations, as of Sep 2025

Accreditation scheme for LECF launched in April 2025

- Aim to have at least 2 accredited LECFs by 2H 2026
- **Owners and contractors should consider engaging LECFs early**



Modernisation of aging lifts

For more info on
lift modernisation:



Enhancing safety and improving reliability of lifts for greater livability

- Aging lifts can face increased breakdowns, rising maintenance costs, and parts obsolescence
- Lift modernisation is essential for enhanced safety and reliability

With BCA's intervention, eight private residential estates successfully passed resolutions to modernise their lifts in 2025

- *2025-2026 activities:* Engaged ~140 MCSTs over 3 sessions and ~20 individual engagement; trained ~120 MAs; conducted 2 technical seminar runs (Feb & Mar 2026) for 460+ accredited MAs; launched lift modernisation webpage to guide owners
- *2026 targets:* 3-4 additional MCST sessions and 25+ individual engagements; conduct at least one more MA seminar (May); update lift owner guide with modernization focus

Remote Monitoring and Diagnostics (RM&D) solutions improve reliability and uptime.

For more info on RM&D:



RM&D continuously collects and analyses lift data to **detect, diagnose and predict maintenance issues before they occur**

- In 2022, BCA introduced a regulatory sandbox allowing lifts with approved RM&D solutions to extend servicing intervals from monthly to quarterly
- To date, 11 approved RM&D solutions applied to ~1,600 lifts – ***Early RM&D adoption has reduced ~60% breakdowns and increased ~30% in lift uptime***

Continue educating owners on benefits of RM&D and guiding owners on the alternative quarterly maintenance regime

- ~13,000 lifts by several major OEMs fitted with RM&D solutions but did not apply for the alternative maintenance regime
- **Owners should discuss with OEMs on applying for the alternative maintenance regime**

Video on ELEVATE @
BCA Braddell Campus:

Robotics integration with lifts in large buildings

Push for more lifts to be Application Programming Interface (API)-ready and develop standards for robot-ready buildings

- Several established lift OEMs (representing combined ~20% market share) can provide **API-based connectivity that can enable robot integration with lifts**

For owners of large non-residential buildings, **robotics integration with lifts can help with repetitive, manual and laborious operations**

- Both RoMi-H software in Changi General Hospital and Open Digital Platform in Punggol Digital District provide integration of delivery and cleaning robots with lifts.
- Developers should include **API connectivity for new lifts in upcoming tender specifications**
- Building owners that intend to carry out full modernisation (total replacement) should demand **API connectivity for the modernised lifts**

ELEVATE @ BCA Braddell Campus as a national sandbox for robotics middleware framework (RMF)

- Physical and virtual test environments for robots and lifts to interact safely



More information on the
BETC Grant:

Built Environment Technology and Capability (BETC) Grant

- **S\$100 million initiative** launched by BCA in 2025
- Support **large-scale, longer-term capability development** in Built Environment (BE) firms to transform and achieve outcomes aligned with the BE Industry Transformation Map
- **Funding Structure**
 - **SMEs:** Up to 70% of qualifying costs; **Non-SMEs:** Up to 50% of qualifying costs
- **Potential projects** to test and scale up the use of advanced technologies include:
 - *Innovative solutions to L&E installation, operations and maintenance*



Future-proofing our L&E workforce

Latest info on
PWM for L&E firms:



Continued need to rejuvenate and **develop L&E workforce**

- Since 2024, PWM median age reduced from 46 to 40; local workforce increased by 7%; median wage rose by up to 14% annually
- Reflecting growing skills and expertise of workforce

Building on this momentum **through structured training** for:

- Technicians under PWM
- Engineers and inspectors under LECF regime

Enhanced by technology adoption, such as:

- RM&D solutions providing real-time performance data, allowing technicians to proactively address issues
- AI technologies to complement RM&D, such as KONE's Technician Assistant reducing technical helpdesk escalations by ~30%.





Thank You



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