

Inspection Firms for Examination, Inspection and Testing of Lifts and Escalators

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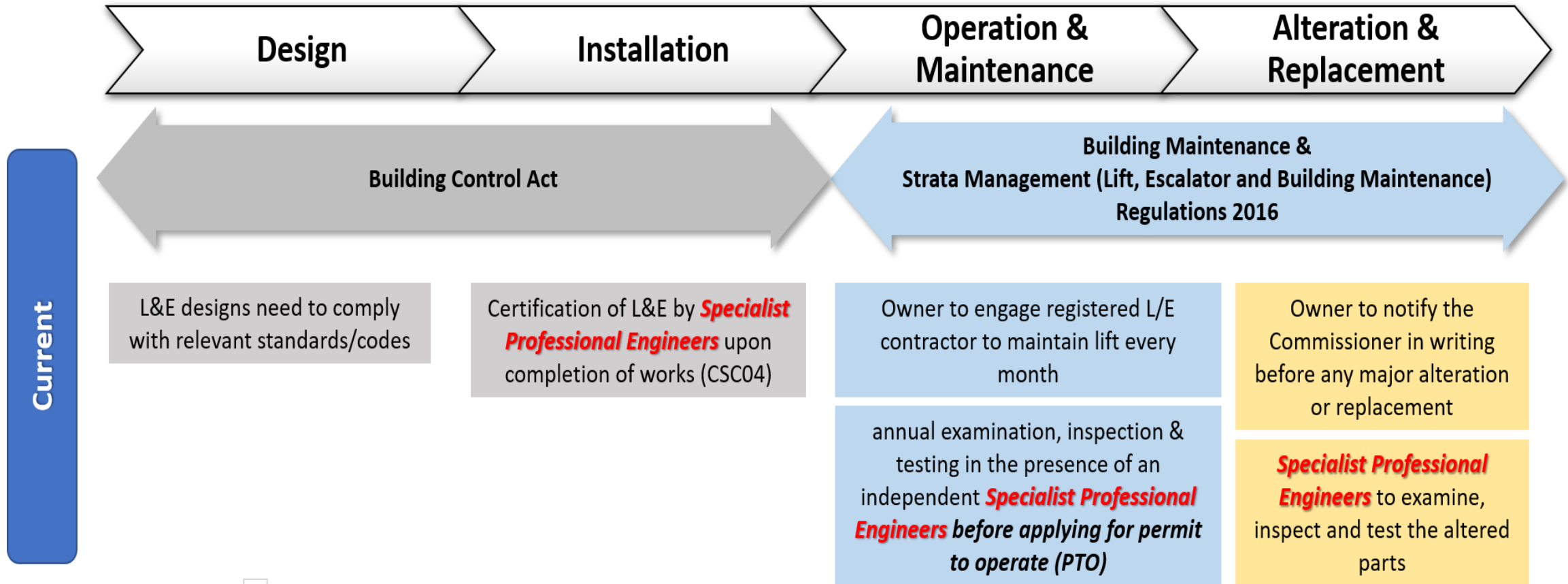
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The Current Lift and Escalator (L&E) Safety Regime



Challenges Ahead

- 1) Number of L&E in Singapore is expected to grow at 2-3% per year
- 2) Low growth of new SPE (L&E) to augment the pool of SPE to meet current and future demands for examination, inspection and testing (EIT)
- 3) L&E are getting more sophisticated and complex
 - a) Greater prevalence of more sophisticated equipment, such as Twin Lifts, Double-Decker Lifts, high-rise, or high speed lifts

Hence, greater need for in-depth cross discipline knowledge in both mechanical and electrical engineering

- 4) Limited technical growth and transfer of knowledge in the industry

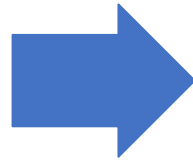


Proposed Lift and Escalator Inspection Regime



Individual SPEs

- Current practice of examination, inspection and testing of L&E by individual SPEs



Lift and Escalator Inspection Firms (LEIF)

- ✓ **Well-structured professional inspection firms that produces desired outcomes for the industry**
 - ❑ Sufficient inspectors to meet EIT demand
 - ❑ High-quality inspection outcomes
 - ❑ Well rounded engineering knowledge
 - ❑ Organic technical growth and transfer of knowledge



Accreditation to International Standards

LEIFs are to be accredited to ISO/IEC 17020 Conformity Assessment



Inspection scope, method, procedures, issuance of standardized inspection reports



Technical capabilities required (e.g. expertise in both mechanical and electrical discipline)



Training and development programme for inspectors



Organisation structure and Manpower



- ✓ Better professional image and international recognition
- ✓ Strong technical competence of people and processes
- ✓ Reliable results
- ✓ Trust and customer satisfaction

**With
Accreditation**



Note:

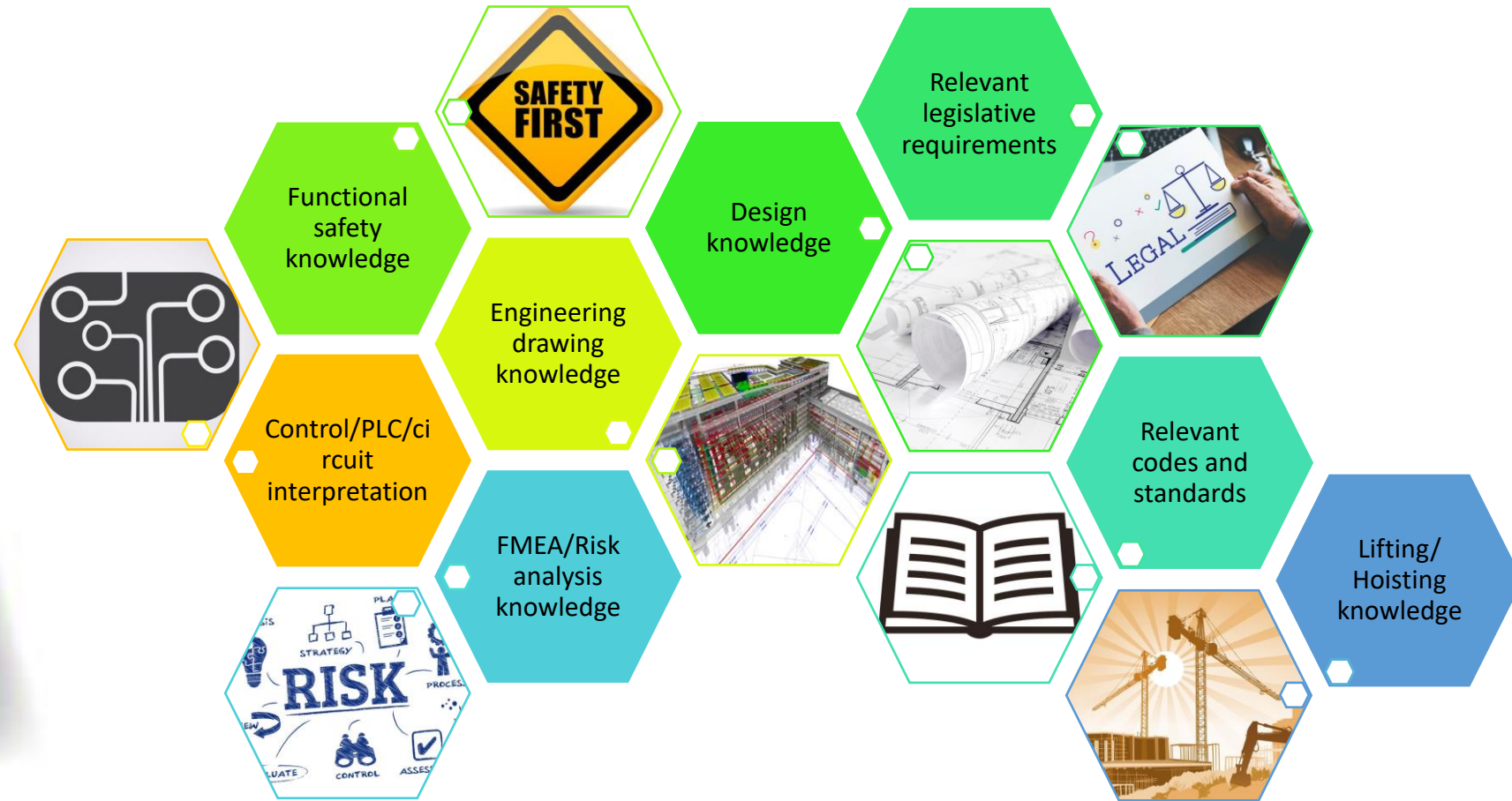
ISO/IEC 17020 Conformity Assessment is the international standard for accreditation of Inspection Bodies (IB)s

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All-rounded Competency And Capability

LEIFs can build all rounded competency including strong technical knowledge in fields of Mechanical and Electrical/Electronic Engineering, and relevant industry specific knowledge





Lift and Escalator Inspectors

LEIF can
engage LEIs
to carry out
EIT



❑ Well trained and skilled

❑ Certified by IES/ACES/BCA Joint Accreditation Committee (JAC) and registered with IES



❑ Can carry out inspection unsupervised

Note:

- IES stands for The Institute of Engineers
- ACES stands for Association of Consulting Engineers

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Technical Growth & Knowledge Transfer



LEIFs are well resourced to invest in training for sustainable growth and staff career progression

- ✓ Structured and systematic training for capability building and knowledge transfer
- ✓ A sustainable growth environment and opportunity for continual upskilling for technical growth





Adoption of Technologies For Innovation and Productivity



LEIFs are better positioned to invest in innovation and technology adoption to improve productivity and effectiveness

- ✓ Remote EIT
- ✓ Advanced tools in EIT (e.g. electromagnetic inspection of wire ropes) for enhanced accuracy



Benefits of a Lift and Escalator Inspection Regime



Well structured professional firms with sufficient inspectors for EIT



Provides service buyers with standardized and high quality EIT works



Comes with all-rounded competencies to better deal with possible technical and engineering challenges ahead



Provides technical growth and knowledge transfer for its staff for good career progression



Well positioned to invest in technology for innovation and productivity



Thank you



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