

# Competition in the Market for Lift Maintenance

Consumer Council  
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# COMPETITION IN THE MARKET FOR LIFT MAINTENANCE

## TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY .....</b>	<b>I</b>
INTRODUCTION.....	I
SCOPE OF RESEARCH.....	I
ISSUES ADDRESSED .....	I
ISSUES FOR FURTHER CONSIDERATION.....	III
INDUSTRY OVERVIEW .....	V
CONSULTATION PROCESS.....	VI
INFORMATION SOURCES .....	VII
<b>SECTION ONE – USER EXPERIENCES AND COMPLAINTS.....</b>	<b>1</b>
NATURE OF COMPLAINTS.....	1
QUESTIONS OF ANTI-COMPETITIVE BEHAVIOUR.....	1
COST OF MAINTENANCE.....	3
<b>SECTION TWO – THE LIFT SUPPLY AND MAINTENANCE INDUSTRY.....</b>	<b>4</b>
INDUSTRY OVERVIEW .....	4
GOVERNMENT REGULATIONS .....	4
LIFT MAINTENANCE SAFETY AND COST.....	4
ESTIMATION OF MARKET TURNOVER.....	5
<b>SECTION THREE – EXPERIENCE IN OTHER JURISDICTIONS .....</b>	<b>7</b>
AUSTRALIA.....	7
CANADA.....	7
JAPAN.....	7
UNITED KINGDOM.....	7
UNITED STATES .....	8
<b>SECTION FOUR – MEETING OF STAKEHOLDERS – 1999 PUBLIC SEMINAR ....</b>	<b>9</b>
THE SEMINAR.....	9
THE DRAFT RECOMMENDATIONS.....	9
<b>SECTION FIVE – THE RELEVANT MARKET AND MARKET POWER .....</b>	<b>12</b>
DEFINING THE RELEVANT MARKET .....	12
TWO APPROACHES IN DEFINING MARKETS.....	13
MARKET POWER IN EQUIPMENT SUPPLY AS COMPARED TO MAINTENANCE .....	16
OBLIGATIONS OF SUPPLIERS TO THE MAINTENANCE MARKET.....	16
INTELLECTUAL PROPERTY RIGHTS.....	16
<b>SECTION SIX – COUNCIL DISCUSSIONS WITH INDUSTRY AND PROPERTY MANAGEMENT .....</b>	<b>18</b>
SAFETY AND TRAINING.....	18
MARKET POWER IN THE MAINTENANCE MARKET .....	18
SUPPLY OF SPARE PARTS.....	19
MAINTAINING COMPETITORS' LIFTS .....	19
TECHNICAL INFORMATION DATA BANK .....	20
CODE OF PRACTICE.....	21
HONG KONG ASSOCIATION OF PROPERTY MANAGEMENT COMPANIES (HKAPMC).....	21
<b>SECTION SEVEN – COUNCIL DISCUSSIONS WITH GOVERNMENT.....</b>	<b>23</b>

PLANNING, ENVIRONMENT AND LANDS BUREAU .....23  
ELECTRICAL AND MECHANICAL SERVICES DEPARTMENT.....24  
COUNCIL RESPONSE TO EMSD PROPOSAL .....25  
**SECTION EIGHT – CONCLUSION .....26**  
ISSUES ADDRESSED .....26  
ISSUES FOR FURTHER CONSIDERATION.....28



## EXECUTIVE SUMMARY

### Introduction

1. The Consumer Council has over time received inquiries and complaints regarding the lift maintenance industry, specifically the lack of choice in obtaining lift maintenance services and allegations of anti-competitive conduct.
2. Consumers of lift maintenance services, i.e. tenants, through their property management companies, do not exercise choice in purchasing lifts. In the case of private residential properties, the monthly lift maintenance charge is about 11% -12% of the monthly property management expenses. In the absence of a viable independent maintenance provider sector, tenants' demand for lift maintenance services will be captive to the services provided by the original lift supplier.
3. This report provides a summary of the Consumer Council's initiatives in holding a public seminar, producing discussion papers for the Government and industry, arranging meetings between the parties, and holding discussions with the Government and market participants in relation to the building owners' concerns and the allegations of anti-competitive conduct.
4. The Council's report highlights the progress that has been made on a number of issues, and indicates what future work can be done. The Council trusts that the report not only informs the public of the progress made in relation to this sector, but also points to areas for further action in the future.

### Scope Of Research

5. The scope of research in this report has examined the question of relevant market definition and market power in relation to lift maintenance and repair services in Hong Kong, some statistical information on market shares and associated costs for end users. The results of various discussions with industry, government and end users of lift maintenance services are also presented.

### Issues Addressed

6. In light of the information obtained and discussions with various government policy bureaux, Electrical and Mechanical Services Department (EMSD) and the industry, the following issues have been addressed through negotiation between the parties:

#### ***Access to Business Inputs to Enhance Competition***

7. A major issue in maintaining a competitive maintenance market is whether parties other than the original lift suppliers can have access to technical information that is necessary to safely and efficiently provide a competitive maintenance service.
8. In previous discussions with industry and Government, the Council has recommended that lift suppliers should be required to provide the Government with relevant information necessary to undertake repair and maintenance of lifts, and that the information in the data bank can be made available by the Government to building owners incorporations and relevant lift maintenance service providers. This process of information storage and dissemination is

similar in principle to the current requirement whereby some information on electrical, water and gas supply is filed with the relevant authorities and made available to relevant service providers for maintenance and repair purposes<sup>1</sup>.

9. The Council considers EMSD's alternative proposal to require lift suppliers to provide Operation and Maintenance (O&M) manuals direct to building owners incorporations is a positive response to the problems that independent maintenance contractors are facing or will face in the future. Nevertheless, the Council suggests that maintaining a data bank should remain a long-term option.

#### ***The Role of Property Developers***

10. Because the eventual consumers of lift maintenance services do not exercise the initial choice in lift supply, the initial competitive pressures relating to maintenance will come from the property developers in the bargaining stage of contracting for supply of lifts.
11. Property developers can therefore play a part in attempting to reduce the ongoing costs of lift maintenance by the building's eventual owners or by assisting owner corporations in their future negotiations with regard to lift maintenance. They could do this through a number of alternative means:
  - a) Securing a longer warranty period than currently provided, with comprehensive coverage for regular maintenance work, inclusive of spare parts.
  - b) Ensuring that an indication is given, within tenders for supply of lifts, of the life cycle costing of the particular lift or lifts supplied, and incorporating this as important criteria for selection.
  - c) The supply agreement includes conditions regarding the provision of technical drawings and diagrams to the building owners for the purpose of ongoing maintenance work, after the warranty period has expired.
12. As building owners become more conscious of the burden on management fees attributed to lift maintenance, this factor could be a selling point for prospective unit purchasers.

#### ***The Role of Government***

##### ***Safety***

13. Safety must always be the prime concern. According to EMSD it has been exercising close monitoring and exerting tight control on the performance of contractors and technical personnel. It also notes that a high lift/escalator safety level has been maintained in the territory as compared to other major cities. EMSD should continue to vigilantly enforce legislative and administrative safeguards.

##### ***Assistance to Building Owners***

14. EMSD, industry, and Home Affairs Department's District Building Management Liaison Teams can provide a valuable role to assist building owners to choose and negotiate competitive maintenance agreements as

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<sup>1</sup> With regard to water, electrical and gas network information it is noted that while some information is in the hands of related authorities, other information on those services is also in the custody of the developers or owners, and not kept by the relevant authority.

follows:

15. As far as EMSD is concerned:
    - a) EMSD is now considering the preparation of an Owners' Guidebook to facilitate building owners in maintaining lifts/escalators.
    - b) EMSD issues circular letters to lift contractors on technical matters. The circular letters are also posted on the EMSD Homepage at which interested parties (including building owners) can access.
    - c) EMSD issues and updates the Code of Practice for Lift Works covering the mandatory maintenance requirements for putting lifts in safe working order.
  16. Both industry associations are willing to provide information on their members' services that can assist building owners in considering their options for lift maintenance; for example, a list of accredited contractors.
  17. Home Affairs Department has indicated that if details for constructing a tender specification and the ways to negotiate competitive maintenance agreements are provided by professionals in the lift maintenance industry, and the details are described in layman terms, it will put the materials for reference of the public in Building Management Resource Centres.
- Capacity Building*
18. In light of the Government's sector specific approach to competition policy, the Government should consider to devote more resources to promote competition in the market for lift maintenance.
- Building Owners Obligations***
19. Building owners have an obligation to ensure maintenance programmes are up to the best standards possible and to put in place a plan for long-term maintenance programmes and budgeting for major refurbishment work to lessen the financial burden of substantial one-off costs.
  20. Owners incorporations should take initiatives to acquire the necessary information that will enable them to choose and negotiate competitive maintenance agreements, by making full use of both EMSD's information service and that of Home Affairs Department district building management liaison teams; and to have dialogue with building management companies to have the best interest of all building owners in mind. The more informed that consumers of lift maintenance services are, the more pressure there will be on service providers to satisfy demand for lower prices and a high quality of service.

### **Issues For Further Consideration**

21. Safety, choice and price are issues of major concern to consumers when making decisions in the market for lift maintenance services. The Council puts forward the following suggestions for further deliberation by the concerned parties, recognizing that gauging public feedback and industry response on the viability of these suggestions takes time.

### ***Consumer Price Information***

22. A common concern for owners incorporations and management companies (more so for the former) is whether the maintenance cost quoted is reasonable. Where building owners are unable to obtain competing quotes from a range of lift maintenance service providers and they are captive to the services provided by the original lift supplier, those building owners will not be in a position to determine whether the maintenance service charge is reasonable.
23. The inverse can also sometimes be a problem. For example, where a price quoted is too low to be realistically capable of providing a sufficiently professional service, and consumers need to be aware of potential problems in taking the cheapest quote.
24. As for pricing disputes where the concern is that consumers might have paid too much, the Council considers that the industry should explore offering a service to members of the public, on request and at reasonable cost, administered by an industry association secretariat that delegates an independent body to provide some indication as to whether the maintenance charges quoted are reasonable. This is similar to the process of taxation of the costs billed by a solicitor, where a dissatisfied party is entitled to require any costs to be 'taxed' (i.e. examined) by the court. The Council considers that having regard to the current economic climate there is an opportunity for the development of independent consultancy services for lift maintenance.

### ***Industry Code of Practice***

#### *Competitor access disputes*

25. In view of the Government's preference for self-regulation and administrative measures to address competition issues, the Council considers that in the absence of a competition law administered by a competition authority (which is its first preference) a joint code of practice for the lift industry could address the means by which disputes, if any, over supply of spare parts, and technical information, can be resolved.
26. For instance, the relevant industry associations could construct a code of practice introducing competition safeguards such as the ability for a competitor to seek arbitration where it claims it is being unreasonably denied access to inputs necessary to compete in the repair and maintenance market. While it is up to industry to work out the means by which a code can come about, EMSD, as the industry's supervising agency, could play a facilitation role in this aspect.

#### *Pricing conduct*

27. The industry code of practice should also include a general exhortation to association members requiring that where building owners are unable to obtain competitive quotes and are thereby locked into the services of a particular lift maintenance contractor:
  - a) an association member is not to take advantage of any position of market power by levying unreasonable charges; and
  - b) where a complaint is made to the association by a building owner in the position described above, the association member should submit its charges to independent cost assessment, as described above. (Paragraph 24 refers).



### ***Data Bank for Operation and Maintenance Manuals***

28. With regard to the Council's suggested data bank option, both LECA and EMSD have raised doubts on its feasibility. For example, EMSD notes that the proposal would not be feasible without the cooperation of the lift suppliers; there are liability issues as to the accuracy of the information kept by the operator of the data bank; and there may be conflicts of interest for the Government to operate the data bank and to act as a service provider as well as a regulator at the same time.
29. The Council notes the position of both parties, but considers that the option should remain an ongoing matter for long-term consideration. The extent to which this becomes a more pressing matter will depend on how effective the current agreed positions on the development of O&M manuals for use of maintenance contractors will provide positive results for competition in the industry.

### **Industry Overview**

30. Lift safety is governed by the Lifts and Escalators (Safety) Ordinance. As at November 2002, there were 48 registered lift contractors in Hong Kong. Information provided to the Council indicated that in 1999 there were close to 50,000 lifts in Hong Kong, of which about 6,000 (i.e. approximately 12%) were being serviced by contractors who were not the original installers of the lifts (independent contractors). As at end of 2001, EMSD stated that there were about 7,000 lifts out of over 50,000 (14%) that were maintained by independent contractors. It is likely that the percentage of independent maintenance is higher for older lifts, rather than for the latest generation of lifts that have a higher degree of computerisation.
31. The Council understands that the cost of entering into maintenance agreements can vary according to various factors, e.g., the number of lifts in an estate or building, the age of the lifts, and the degree of complexity (especially for newer lifts). Initial information provided to the Council was that maintenance charges are generally discussed as a percentage of the current cost of supply for an equivalent lift.
32. Information provided to the Council indicates that in Hong Kong the annual maintenance charges tend to be around 7.5% of price for supply, which is similar to the percentages for Singapore and Taiwan, lower than in Japan and higher than Indonesia.
33. The following estimates of the cost of lift supply and maintenance charges in residential developments over the last four decades were provided to the Council in November 2002 by REECA. LECA considered that the figures provided in the following table were not particularly informative due to the fact that pricing information is quite dated and may vary depending on models, and the table might not reflect a correct maintenance cost/price ratio. Also, the coverage and quality of maintenance services may vary widely. Nevertheless, the Council considers that the information is indicative of price movements in the industry over time.

	Lifts installed in residential developments (no. of floors)		
	in 60s (<15 floors)	in 70s (25 floors)	in 80s - 90s (>35 floors)
(a) Price of lift (HK\$)	\$500,000 - \$600,000	\$600,000 - \$700,000	\$800,000 - \$1,000,000
(b) Annual maintenance charge (HK\$)			
Serviced by LECA members	\$30,000	\$37,800	\$65,000 - \$110,000
Serviced by REECA members	\$26,400	\$31,200	\$45,000 - \$63,000
(b)/(a) (%)	4.8% - 5.5%	4.8 - 5.8%	6.0 - 9.7%

Note: Figures are for reference only.

Source: Figures are provided by REECA.

### Consultation Process

34. The issue of limited choice of service contractors, and difficulty in obtaining spare parts and technical information, was first referred to the relevant policy bureau for this sector, the Trade and Industry Bureau (TIB), in October 1997.
35. TIB's response at time was that limited choice did not necessarily reflect anti-competitive practices in the market, but might simply reflect the dynamics of the market. More research was undertaken by the Council and a public seminar on the subject was held in May 1999 in conjunction with the Home Affairs Department. A copy of a speech outlining the Council's preliminary findings and recommendations at the time, made at the seminar can be found at <<http://www.consumer.org.hk>>.
36. Following the seminar, a Council discussion paper was provided to the recently formed Competition Policy Advisory Group (COMPAG), the then Planning, Environment and Lands Bureau (PELB), and EMSD. That paper served the basis of further discussions with those agencies in the Council's efforts to progress the matter. The paper also forms a part of this report.
37. In light of subsequent responses from the Government and industry associations to the paper, further discussions were held between the Council and concerned parties to assess the feasibility of the Council's initial recommendations. More information was obtained from industry and Government, and further recommendations were made, refining the Council's initial views and leading to the position currently reached between industry, the Council and Government.
38. In relation to the Council's main recommendations concerning the code of practice and the data bank, LECA remain of the view that an industry code of practice to resolve consumer or competitor disputes is not required, due to its perception of the high state of competition in the industry. EMSD considered that the code option required further study and discussion and in any event required industry agreement. Given the Council's statutory function under Section 4 of the *Consumer Council Ordinance* to encourage industry associations to develop codes of practice, and the Government's preferred option to use codes of practice to address competition concerns in the economy rather than a competition law, the Council considers the code of practice option is still worth pursuing and is willing to assist in this regard.

## Information Sources

39. The report has been constructed from information obtained from the following sources.
  - a) Views made to the Council by individual building owners, owners incorporations, business corporations, and independent lift repair and maintenance contractors (i.e. not aligned with lift suppliers).
  - b) Issues raised at the May 1999 seminar by users and service providers, and at subsequent meetings with the Lift and Escalator Contractors Association (LECA) and the Registered Elevator and Escalator Contractors Association (REECA).
  - c) Responses received from related Government bureaus and departments, in particular the EMSD.
  - d) Research on other jurisdictions concerning their approaches to the issue of competition in the lift maintenance industry.
40. The Council also conducted site visits by invitation from major lift maintenance and supply companies in Hong Kong.
41. The Council wishes to express its appreciation to those persons and corporations who have assisted the Council in its work.



## **SECTION ONE – USER EXPERIENCES AND COMPLAINTS**

### **Nature of Complaints**

- 1.1 The Consumer Council has, over time, received inquiries and consumer complaints on lift maintenance that:
- there is little alternative but to use the original lift supplier to provide maintenance;
  - lift maintenance is expensive; and
  - lift owners are not always sure that repairs or replacements are necessary and will resolve recurring problems.
- 1.2 The allegations were that major lift suppliers do not compete with each other in the market for lift maintenance and that the growth of independent maintenance is being impeded, most likely because of the difficulty in obtaining spare parts and proprietary information such as circuit diagrams.
- 1.3 In one case, a complaint was lodged by a major developer/property owner which had tried to invite competitive tenders for lift maintenance services from independent maintenance operators, but it had not received any expressions of interest.
- 1.4 Importantly, there have been public concerns at the lack of funds allocated by property management for lift maintenance problems, especially in the modernisation of lifts. If a market is not operating at optimal competitive conditions to maintain downward pressure on prices, the cost for an overhaul could be prohibitive for some tenants and impede efforts to bring about modernisation or appropriate maintenance. A competitive and efficient lift repair and maintenance market is therefore important for public safety.
- 1.5 By the same token in a competitive market where building owners are more prone to switch among different service providers, there may be pressure for service providers to cut costs in order to win contracts. Where this cost cutting is related to an inability to compete on level terms because of the inability to obtain spare parts from manufacturers, or to access important technical information to undertake maintenance tasks, then this may lead to potential safety problems. It is important to realise in these circumstances that while safety is of paramount concern, the role that competition plays in keeping downward pressure on prices and forcing higher levels of service quality, should be also be given appropriate recognition.

### **Questions of Anti-Competitive Behaviour**

- 1.6 An absence of competition in the provision of lift maintenance service between lift suppliers, and difficulty on the part of independent service providers to obtain necessary inputs in order to compete, might lead some persons to assume that there is an anti-competitive purpose or effect in such behaviour.
- 1.7 In jurisdictions that have competition laws, such conduct could be subject to scrutiny by a relevant competition authority that administers such laws. If this

was the case in Hong Kong, allegations of anti-competitive conduct could be tested against transparent rules governing market conduct, and the innuendo that injures reputations, or causes concern in the community, could be clearly refuted for the benefit of industry and consumers alike.

- 1.8 In other comparable advanced economies, it is a matter of public record that there have been cases involving anti-competitive practices in the lift maintenance market where general competition law has been used by relevant competition authorities to effect pro-competitive outcomes in the lift maintenance sector of the industry. More detail on the experiences of other comparable advanced economies in this sector can be found at Section Three of this report.
- 1.9 In Hong Kong SAR, the Government relies on a sector specific administrative and self-regulatory approach to address community concerns over competition complaints.
- 1.10 Notwithstanding the allegations and innuendo regarding the state of competition in this sector, the Council has not received any information that could be considered as evidence to support untoward conduct by industry members, e.g. anti-competitive price fixing or market sharing agreements between lift suppliers and/or maintenance providers. Nevertheless, the Council considers that the continuing consumer concern with the sector, and the importance that is placed on competition as a means towards achieving the Government's objective of economic efficiency, warrants research and analysis on the issues raised.
- 1.11 In summary, the Council's understanding is that there are a number of issues giving rise to the level of public dissatisfaction, from the demand and supply perspective. Those issues are as follows:
  - Because major lift suppliers compete with each other for supply of lifts, but do not compete with each other for repair and maintenance of each others' lifts, competition will need to arise largely through the presence of maintenance providers who are independent of lift suppliers.
  - Independent maintenance providers need to obtain the necessary technology (spare parts, lift specification data and maintenance manuals) in order to compete with the maintenance activities of lift suppliers.
  - The consumers of lift maintenance services, i.e. tenants, through their property management companies, do not exercise choice in purchasing lifts. In the absence of a viable independent maintenance provider sector, tenants' demand for lift maintenance services will be captive to the services provided by the original lift supplier.
  - Because the eventual consumers of lift maintenance services do not exercise the initial choice in lift supply, the competitive pressures relating to maintenance will come from the property developers in the bargaining stage of contracting for supply of lifts, whose long term interests are not the same as tenants.

## Cost of Maintenance

- 1.12 Based on a study of 24 large and small-scale private residential properties conducted by the Hong Kong Association of Property Management Companies in 2002, the monthly lift maintenance charge is estimated at about 11% -12% of monthly property management expenses. The monthly lift maintenance charge for a lift in general is about \$6,364 – \$7,391.

Residential Properties	No. of Lifts (A)	Monthly Property Management Fee (B)	Monthly Lift Maintenance Fee (C)	Monthly Lift Maintenance Fee per Lift (C)/(A)	(B) / (A) %
<b>Small-scale housing estate (single block)</b>					
1	2	\$93,500	\$11,590	\$5,795	12.40%
2	5	\$589,359	\$57,391	\$11,478	9.80%
3	2	\$70,949	\$13,000	\$6,500	18.30%
4	2	\$116,446	\$13,600	\$6,800	11.70%
5	2	\$117,654	\$12,950	\$6,475	11.00%
6	3	\$176,333	\$30,103	\$10,034	17.10%
7	3	\$156,746	\$19,100	\$6,367	12.10%
8	5	\$423,782	\$36,000	\$7,200	8.50%
9	4	\$167,207	\$30,230	\$7,558	18.10%
10	2	\$104,992	\$10,087	\$5,044	9.60%
11	2	\$103,084	\$13,680	\$6,840	13.30%
12	2	\$133,219	\$9,286	\$4,643	7.00%
13	3	\$224,034	\$16,464	\$5,488	7.30%
Total:	37	\$2,477,305	\$273,481		
Weighted Average:				\$7,391	11.04% (7.00-18.30%)
<b>Large-scale housing estate (at least 5 blocks)</b>					
1	31	\$1,792,354	\$181,300	\$5,848	10.12%
2	59	\$3,143,854	\$351,210	\$5,953	11.17%
3	22	\$1,368,432	\$134,564	\$6,117	9.83%
4	29	\$1,790,524	\$166,705	\$5,748	9.31%
5	38	\$2,262,717	\$185,000	\$4,868	8.18%
6	31	\$1,480,894	\$155,000	\$5,000	10.47%
7	17	\$920,928	\$117,430	\$6,908	12.80%
8	34	\$1,294,200	\$208,000	\$6,118	16.10%
9	31	\$1,925,194	\$357,630	\$11,536	18.50%
10	17	\$710,218	\$56,525	\$3,325	7.90%
11	32	\$1,614,926	\$256,810	\$8,025	15.90%
Total:	341	\$18,304,241	\$2,170,174		
Weighted Average:				\$6,364	11.86% (7.90-18.50%)

Note: Figures refer to comprehensive lift maintenance. Lift maintenance fees may vary in accordance with lift specification, number of floors, type of motor, and operation/control mode.

Source: Hong Kong Association of Property Management Companies.

## **SECTION TWO – THE LIFT SUPPLY AND MAINTENANCE INDUSTRY**

### **Industry Overview**

- 2.1 Two trade associations represent the lift maintenance industry in Hong Kong. The Lift and Escalator Contractors Association (LECA) represents the ten major companies that supply lifts as well as maintain them. The Registered Elevator and Escalator Contractors Association (REECA) represents some 14 companies that primarily do maintenance work. Some REECA members are affiliated companies of LECA members.
- 2.2 Information furnished by members of LECA in 1997 indicated that there were about 43,000 lifts at that time, of which 39,300 were serviced by original suppliers. Independent maintenance was therefore estimated at 8.6%. REECA informed the Council in 1999 that at that time their estimate was that about 6,000 lifts out of close to 50,000 lifts were being serviced by contractors who were not the original installers of the lifts (independent contractors); i.e. approximately 12% of lifts were being serviced by independent contractors. EMSD confirmed that as at end of 2001, there were about 7,000 lifts out of over 50,000 lifts (14%) that were maintained by independent contractors. In November 2002 LECA claimed that over the past five years the maintenance of over 3,000 lifts and escalators had moved to independent contractors.
- 2.3 It appears therefore that over that five-year period the percentage growth in independent maintenance had increased and outpaced the growth of lifts. Nevertheless, the overall independent maintenance share was still small in absolute terms. Moreover, based on comments by REECA, it is likely that the percentage of independent maintenance is higher for older lifts, rather than for the latest generation of lifts that have a higher degree of computerisation than those that entered the market up until relatively recently.

### **Government Regulations**

- 2.4 As a matter of course, cost effectiveness needs to be balanced against the primary consideration of safety. Lift safety is governed by the *Lifts and Escalators (Safety) Ordinance*, which provides Electrical and Mechanical Services Department (EMSD) with authority to regulate the design, operation, examination and testing of lifts. Regular inspections are required. Only registered lift contractors and registered lift engineers who are, in the opinion of the Director of Electrical and Mechanical Services, qualified to carry out the duties may perform maintenance, tests and examinations. By November 2002, there were 48 registered lift contractors in Hong Kong.

### **Lift Maintenance Safety and Cost**

- 2.5 Building owners, through either property management companies or owners incorporations, are responsible for ensuring lift maintenance is adequately carried out. After a warranty period has expired, building owners will need to enter into periodic maintenance agreements. The Council understands that the cost of entering into maintenance agreements can vary according to various factors, e.g., the number of lifts in an estate or building, the age of the lifts, and the degree of complexity (especially for newer lifts).
- 2.6 Within the industry, maintenance charges are generally discussed as a percentage of the current cost of supply for an equivalent lift. Information



provided to the Council indicates that in Hong Kong the annual maintenance charges tends to be around 7.5% of price for supply which is similar to the percentages for Singapore and Taiwan, lower than in Japan and higher than Indonesia.

2.7 The following estimates of the cost of lift supply and maintenance charges in residential developments over the last four decades were provided to the Council in November 2002 by REECA. LECA considered that the figures provided in the following table were not particularly informative due to the fact that pricing information is quite dated and may vary depending on models, and the table might not reflect a correct maintenance cost / price ratio. Also, the coverage and quality of maintenance services may vary widely. Nevertheless, the information is indicative of price movements in the industry over time.

	Lifts installed in residential developments (no. of floors)		
	in 60s (<15 floors)	in 70s (25 floors)	in 80s - 90s (>35 floors)
(a) Price of lift (HK\$)	\$500,000 - \$600,000	\$600,000 - \$700,000	\$800,000 - \$1,000,000
(b) Annual maintenance charge (HK\$)			
Serviced by LECA members	\$30,000	\$37,800	\$65,000 - \$110,000
Serviced by REECA members	\$26,400	\$31,200	\$45,000 - \$63,000
(b)/(a) (%)	4.8% - 5.5%	4.8 - 5.8%	6.0 - 9.7%

Note: Figures are for reference only.

Source: Figures are provided by REECA.

### Estimation of Market Turnover

2.8 The following Council estimate of the total market turnover for lift maintenance market is based on the following information.

	Average monthly lift maintenance cost per lift
Public Rental Housing (1)	\$ 6,000
Private Residential Housing (2)	
- Small scale housing estate	\$ 7,391
- Large scale housing estate	\$ 6,364

Source:

(1) Housing Department (figure based on 5,100 lifts)

(2) Based on samples provided by Hong Kong Association of Property Management Companies

2.9 The Council has decided to take a conservative approach, in that the lowest figure quoted, i. e. \$6,000, is used to estimate the total market turnover.

In Hong Kong, the total number of lifts is about 50,000 (both residential & commercial lifts):

Total monthly market turnover is therefore: \$6,000 X 50,000 = \$ 300 million; or  
Total annual market turnover: \$3,600 million (\$3.6 billion)

Assumptions:

· Figures on public housing only refer to public rental housing of Housing

Department. Costs for maintaining Housing Department's subsidized sales flats, the Housing Society's public rental housing and subsidized sales flats have not been calculated in the public rental figure.

- Figures on private residential housing are based on a study of 24 large and small-scale private residential properties conducted by the Hong Kong Association of Property Management Companies.
- Number of lifts installed in commercial buildings is not available but their lift maintenance cost is expected to be higher than that installed in residential buildings.

## **SECTION THREE – EXPERIENCE IN OTHER JURISDICTIONS**

- 3.1 In considering this matter, it is instructive to identify how other jurisdictions have approached allegations of anti-competitive conduct, particularly with regard to the supply of spare parts and other technical information to competing lift maintenance contractors. The following gives a brief summary of other jurisdictions' practice in the lift maintenance market.

### **Australia**

- 3.2 Although there have been no investigations into complaints about anti-competitive practices, the Australian Competition and Consumer Commission (ACCC) which administers Australian general competition law (the Trade Practices Act) was aware of concerns over this issue, when contacted in 1999. The ACCC noted that when considering an acquisition of one lift company by another in 1995, under the competition law, it had obtained an undertaking from the acquiring company that it would make its service personnel, together with the appropriate diagnostic tools, available to any owner or service provider, to assist that owner or service provider to service of any of its lifts. The acquiring company claimed that it would provide this undertaking for a period of 10 years.

### **Canada**

- 3.3 Canada has a general competition law (the Competition Act) administered by the Competition Bureau that would have application to any anti-competitive practices in the lift maintenance industry. There were no reported cases on this issue in Canada, and the Council understands from research that in practice manufacturers are prepared to supply owners of lifts with spare parts and specifications so that they can employ another maintenance company, apart from the lift supplier.

### **Japan**

- 3.4 In 1980 the Japan Fair Trade Commission (JFTC) which administers Japan's general competition law issued a warning to four major lift manufacturers - Mitsubishi, Toshiba, Fujitech and Otis. These companies had subsidiaries engaged in maintenance and refused to sell spare parts to each other or to independent maintenance providers. JFTC issued a warning that this refusal was anti-competitive and should cease.
- 3.5 Toshiba continued to refuse to supply, and in 1990 an independent elevator service maintenance company alleged that it was being squeezed out by a contract requiring purchasers of Toshiba elevators to use Toshiba's maintenance company. A private action was brought, in which the plaintiff was awarded damages.

### **United Kingdom**

- 3.6 The UK has general competition law (the Competition Act) that has application to the lift maintenance industry, administered by the Office of Fair Trading. In the UK's Lift and Escalator Industry Association Constitution, members undertake to "make available to other member companies spare parts at fair prices and without undue delay."

## United States

- 3.7 The US Department of Justice which (in conjunction with the Federal Trade Commission) administers US general competition laws did not have any record of cases in the lift maintenance area. However, a US Supreme Court decision on a complaint against an original equipment supplier refusing to supply spare parts and consumables (the *Kodak* case) suggests that a refusal by a lift supplier to supply spare parts (or to restrict supply through tying contracts) would be at risk of breaching US competition laws. The *Kodak* case is explained in more detail in Section Five of this report.

## **SECTION FOUR – MEETING OF STAKEHOLDERS – 1999 PUBLIC SEMINAR**

### **The Seminar**

- 4.1 In an effort to examine and resolve this matter, the Council, in conjunction with the Home Affairs Department, organized a seminar on 8 May 1999. Interested stakeholders were invited to attend the seminar and provide their views on the extent of the alleged difficulties in obtaining competitive services in lift maintenance services. The seminar was also intended to explore what if anything can or should be done in regard to the matter.
- 4.2 Panel speakers were invited from the industry, as follows:
- The Chief Engineer  
General Legislation Division  
Electrical & Mechanical Services Department  
Hong Kong SAR Government
  - The President  
Hong Kong Association of Property Management Companies Ltd.
  - The Chairman  
Registered Elevator and Escalator Contractors Association
  - The President  
Lift and Escalator Contractors Association
  - The Chairman  
Competition Policy Committee  
Consumer Council
- 4.3 Approximately 300 interested persons attended the seminar and provided comments and asked questions from the floor. The list of interested persons was made up of:
- residents and building owners;
  - officers of owners incorporations;
  - employees of property management companies;
  - the suppliers – lift suppliers and maintenance contractors;
  - property developers;
  - government representatives; and
  - media.

### **The Draft Recommendations**

- 4.4 The Council proposed a number of draft recommendations at the seminar to attempt a resolution of the concerns raised by interested persons. The Council believed the way forward was for all stakeholders to play their part in improving the environment in which the maintenance market operates and develops. This involved not only lift manufacturers and maintenance contractors, but building owners, property developers, and relevant government authorities.
- 4.5 The recommendations were largely based on using the concept of

self-regulation to resolve the problems with regard to supply of spare parts, that REECA members claimed were at the heart of the lack of competition in the industry. A copy of the paper presented by the Council at the seminar is available at <<http://www.consumer.org.hk>>. The draft recommendations covered the following areas.

### *Safety*

- 4.6 Safety was considered to be the prime concern. It was noted that EMSD enforces the *Lifts and Escalators (Safety) Ordinance*. Considering the vast number of lifts and escalators in Hong Kong, the Council urged the Government to ensure that EMSD is provided with adequate resources to vigilantly enforce the Ordinance. Any indication that safety might be compromised by the actions, or the inaction of those parties involved with ensuring lifts are safe, should be addressed by EMSD.

### *The Role of EMSD*

- 4.7 The Council noted that a higher degree of competition can and should be promoted in the market for lift maintenance. In its *May 1998 Competition Policy Statement*, the Government stated that it would promote economic efficiency and free trade through competition by (amongst other things) initiating pro-competition measures on a sectoral basis, through administrative measures, and through encouraging industry self-regulation.
- 4.8 The Council considered that EMSD, as the industry's supervising agency, could play a part in promoting competition in the market for lift maintenance. In fact, because there is no general competition regulator in Hong Kong, the responsibility to examine the means by which competition can be improved in one of the economic sectors under its scrutiny will fall on the shoulder of EMSD. By the same token, the Council considered that Government has a responsibility to ensure that EMSD has adequate resources to undertake this role.

### *Property Developers*

- 4.9 Property developers could play a part in attempting to reduce the ongoing costs of lift maintenance by the building's eventual owners. For example, ensuring lift supply agreements include conditions regarding ongoing supply of spare parts, technical drawings and diagrams to the building owners, after the warranty period has expired. This would assist building owners to negotiate advantageous maintenance agreements with subsequent maintenance contractors.

### *Building Owners*

- 4.10 Building owners had to ensure their maintenance programs were up to the best standards possible, through planning the extent of their long-term maintenance programs and budgeting for major refurbishment work to lessen the financial burden of substantial one-off costs. This should remove any temptation to avoid expenditure by compromising on maintenance and refurbishment.
- 4.11 Building owners should also acquire information not only in relation to the mandatory safety requirements in lift maintenance, but also on the details in constructing a tender specification and the ways to negotiate competitive

maintenance agreements. The Council considered that the Home Affairs Department's Building Management Liaison Team would have an essential role to play.

#### *Competition Disputes*

- 4.12 A major issue in maintaining a competitive maintenance market is the resolution of disputes between different market participants. The Council considered that at the very least, the concerns by independent maintenance contractors regarding access to spare parts and technical information should be addressed. In view of the Government's preference for self-regulation and administrative measures to address competition, the Council recommended that EMSD, as the industry's supervising agency, should encourage the development of a joint code of practice for the lift industry by LECA and REECA members.
- 4.13 One of the matters that the Council suggested that the code should address is the means by which disputes over supply of spare parts, and technical information, could be resolved. The Council suggested that an arbitration process could be devised, with an arbitrator jointly agreed to by the parties, and the process overseen by EMSD. Such a process would provide transparency as to the causes of delay etc, and provide an expert forum that would be in a position to resolve disputes. There may also be additional matters affecting competition in the industry, in addition to safety and consumer welfare matters that should be addressed in the code.

## **SECTION FIVE – THE RELEVANT MARKET AND MARKET POWER**

### **Defining the Relevant Market**

- 5.1 In the course of the May 1999 seminar, and in particular with regard to responses to comments and suggestions put forward by the Council, a number of issues were raised by the panel speakers and interested persons regarding the question of the relevant market and the existence of market power. Some of the issues were elaborated by LECA and REECA in subsequent meetings with the Council.
- 5.2 The key questions examined were whether the industry is characterised by one market for the supply and maintenance of lifts, or whether there are separate markets for the supply and for the maintenance of lifts. If there is only one market for the supply and maintenance of lifts, there would be no reason to question a refusal of supply particular products such as spare parts or a circuit diagram. This would arise because competitive substitutes exist which diminish the opportunity for misuse of market power, or because it is not economically feasible to separate the product from its upstream source.
- 5.3 If the industry is characterised by the one market, one possible solution would be to require lift suppliers to include an on-going maintenance service contract in their bids to property developers. LECA members stated that this has actually been the recent practice involving contracts with large projects such as those of the MTRC. Moreover, the major lift suppliers actually welcomed such a continuous contract because it guaranteed future business.
- 5.4 If it is the case that the lift industry is a vertically integrated with non-separable supply and maintenance, it would be more useful to devise reasonable vertically integrated (supply-cum-maintenance) safeguards, and to ensure that at the very beginning the bidding process for supply and maintenance contracts is competitive.
- 5.5 However, while it might be feasible for the MTRC (for example) to contract for maintenance and supply, the contractual negotiations for supply of lifts to residential buildings is not undertaken with the eventual payers of the maintenance services. The initial contract is entered into by property developers, whose major consideration is with the price for initial supply of lifts.
- 5.6 Negotiating a supply and maintenance contract for residential buildings is therefore very much a short-term matter. Eventually the subject of independent maintenance will arise for building owners, when the maintenance contract (negotiated between the property developer and supplier in the context of a warranty period) expires.
- 5.7 Notwithstanding the conceptual arguments for and against there being either one or two markets, it is important to note that LECA has always stated that it is willing to supply spare parts to independent contractors. The implication being that if an independent maintenance provider is willing to contract for maintenance of a lift, regardless of the fact that it may be technically advanced and require specialised knowledge, it will be given spare parts and necessary product support 'at a reasonable price' to undertake the work. The bottom line will always be what is a reasonable price for the supply of 'spare parts'. Nevertheless, it is important for the purpose of ascertaining what safeguards



need to be put in place, in order to satisfy the concerns that arise from complaints, that these issues be explored in some detail.

- 5.8 In essence there are four main issues that arise in light of the question as to whether there is, in regard to antitrust analysis, a separate market for lift maintenance, and what conditions should apply to the supply of spare parts. A discussion of these issues follows:

### **Two Approaches in Defining Markets**

- 5.9 There are two basic approaches consistent with standard anti-trust practice that can be used to assess whether the supply of equipment maintenance services constitutes a non-separable market from the supply of equipment. The first examines the existence of market power (which by implication defines the relevant market), while the second looks at the economic feasibility of separating different functions in the supply and maintenance of lifts.

#### *The Market Power Approach*

- 5.10 A landmark US Supreme Court case brought under the Sherman Act is particularly instructive as to the approach that can be taken with regard to market power. A summary of the case of *Eastman Kodak Co. v. Image Technical Services, Inc.*, 119 L Ed 2d 265 (1992) follows.

#### *Facts*

- 5.11 Kodak sold photocopiers in competition with many other firms and also provided Kodak replacement parts and service to its customers.
- 5.12 Kodak refused to supply certain replacement parts to independent service organization (ISOs) and an action was brought against it, under the US Sherman Act, for tying the sale of its photocopiers with its replacement parts and service. In order to be able to get replacement parts, customers could not use the repair services of the ISOs. This restriction, combined with Kodak's refusal to supply replacement parts to the ISOs, allegedly forced ISOs out of the business of repairing Kodak photocopiers, excluded service competition, inflated service prices, and forced unwilling consumption of Kodak service.

#### *Kodak's position*

- 5.13 Kodak submitted that because there was no demand for replacement parts separate from service, there could not be separate markets for service and parts.
- 5.14 Kodak asked that the case be dismissed because Kodak faced competition in the initial sale of photocopiers. Kodak claimed that it could not have the ability to raise prices of service and parts above the level that would be charged in a competitive market. Kodak contended that customers would not buy from Kodak if they knew that they would be overcharged on repair parts and service.

*The majority decision*

- 5.15 The Court rejected Kodak's argument. Kodak's claim that charging more for service and parts would be "a short-run game" disregarded the fact that the increased revenues from the higher-priced sales of service and parts could more than compensate for the lower revenues from lost equipment sales. Kodak's argument that there was no demand for replacement parts separate from service, would lead to the unrealistic conclusion that there could never be separate markets, for example, for cameras and film, computers and software, or automobiles and tires.
- 5.16 According to the Court, even if Kodak lacked market power initially in photocopiers, it is theoretically possible that consumers would be uninformed as to the true costs, or that they are unable to forecast their repair cost and the existence of significant switching costs. This could create a less responsive connection between service and parts prices and equipment sales.
- 5.17 Essentially, the Court ruled that any equipment manufacturer could be considered a monopolist of its own unique repair parts and that a factual investigation is necessary to resolve a tie-in case even if there are hundreds of competing manufacturers of equipment.

*The minority decision*

- 5.18 There was a dissenting opinion by a minority of the Court, that the bundling arrangement could be considered as a "marketing strategy of spreading over time the total cost to the buyer of Kodak equipment." That is, Kodak could charge subcompetitive prices for equipment and make up the difference with supra-competitive price for service, resulting in an overall competitive price. A manufacturer's bundling of aftermarket products may facilitate manufacturer efforts to ensure that the equipment remains operable and thus protect the seller's business reputation. Also, it may create the conditions for implicit consumer financing of the acquisition cost of the tying equipment through the resultant manufacturer control of aftermarket activity, yield valuable information about component or design weaknesses that will materially contribute to product improvement.

*The Functional Separation Approach*

- 5.19 Another approach to market definition considered by competition agencies has been to examine the functional dimension of a market taking the approach of identifying circumstances where it is appropriate to define separate markets for the purpose of access to 'essential facilities'. An established precedent exists in the telecommunications industry. For example, in a telecommunications context, the question at hand would be at what functional layer would a firm be required to grant access to its 'local loop' infrastructure to permit downstream competition in the provision of long distance services.
- 5.20 This test considers whether the layers at issue are in fact separable from an economic point of view. The crucial question being whether the transaction costs involved in the separate provision of the good or service at the two layers would not be so great as to prevent such separate provision from being feasible. The test recognises that while separability is a necessary condition for distinct functional layers to form distinct markets, it is not sufficient. It must also be the case that serving each of the distinct layers requires assets

specialised to that layer, so that supply-side substitution (moving from one layer to another) is not so immediate as to effectively unify the field of rivalry within which services at the two layers are provided.

- 5.21 Using this approach to market definition would yield a similar conclusion to that found in examining market power. In other words, the specialised assets in the case of lift maintenance services would be the spare parts, consumables, wiring diagrams and diagnostic equipment necessary for the ongoing maintenance of the various lifts currently in existence.
- 5.22 While there have been a number of court cases regarding this issue, with varying outcomes, and a difference of opinion remains among commentators, the Council is attracted to the competition law analysis expressed by the US Supreme Court in 1992<sup>2</sup>. This case proposes that whether there are in fact two separate markets is largely determined by demand side characteristics. The main factor being whether consumers who bear the costs of maintenance are fully informed of the costs of having maintenance only obtainable from authorised maintenance providers when they purchase a product, and are able to factor this into the decision as to whether to purchase the product or not.
- 5.23 Having regard to the facts of lift maintenance provision in Hong Kong, it is understood that normally it is the property developer, not the ultimate users, who will decide which lifts to purchase and install; particularly in the case of tenants of residential buildings. The supply of a lift is usually tied in with a standard five years maintenance contract with the original supplier where the maintenance cost thereafter will be borne by the ultimate users in the form of regular management fee.
- 5.24 As such, it would be unlikely that property developers would factor in the cost of having limited competitive maintenance opportunities for building tenants or owners (after expiration of the warranty period) when making decisions on the purchase of a lift. There would be incentives for the property developers to select a lift with low capital costs (to be borne by them). There would also be an incentive to negotiate an adequate warranty during the period when the building or units in the residential development are being sold, or running concurrently with the building warranty period provided to the building owner by the developer. However, once the warranty period has expired, the purchasers of the maintenance services would no longer be the same purchasers who made the decision to select the particular make of lift. In these circumstances, having regard to the principle outlined above, there is an inescapable assumption to be drawn that with two different sets of purchasers, there are in fact two separate markets; one for the supply of lifts and one for the supply of maintenance services.
- 5.25 In these circumstances, it follows that in order to avoid the risk of contravening general competition laws (if Hong Kong had such laws), there would be an obligation on a lift supplier to make fundamental maintenance information on its product available to independent contractors operating in the maintenance market. The remaining issue would be how the information is to be supplied in order to satisfy intellectual property concerns of the lift supplier.

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<sup>2</sup> See *Eastman Kodak Co. v. Image Technical Services, Inc.*, 119 L Ed 2d 265 (1992).

## **Market Power in Equipment Supply as Compared to Maintenance**

- 5.26 Another key issue is whether market power in the equipment supply market necessarily includes power in the supply of maintenance services and spare parts. The ruling in the US Kodak case clearly illustrates the point that “any equipment manufacturer could be considered a monopolist of its own unique repair parts and that a factual investigation is necessary to resolve a tie-in case even if there are hundreds of competing manufacturers of equipment.”
- 5.27 The critical question rests with the underlying conditions in the market for supply of the upstream product, i.e. the lift, and the extent of information available to buyers as to the long-term costs of purchasing a particular lift. Where the ultimate purchasers of lift maintenance services are precluded from the initial selection of a lift, there is a clear absence of any informed decision making by the ultimate purchasers of lift maintenance services.

## **Obligations of Suppliers to the Maintenance Market**

- 5.28 Another issue is whether it is fair for lift suppliers to hold large inventories of spare parts, at considerable working capital cost, to cater for any independent maintenance providers' demand. According to some REECA members, their ability to compete for maintenance contracts is impaired by the difficulty in obtaining original spare parts. While they may be able to obtain the parts they need in the 'grey' market or purchase compatible parts, this nevertheless puts them at a disadvantage, given that there could be some concern on the part of lift owners in using 'non original' parts. There could also be delays in obtaining the necessary parts.
- 5.29 As noted in the section on overseas experiences, lift suppliers in other jurisdictions (UK, Japan, Canada and Australia) are either required or have undertaken to make spare parts available to lift owners and other companies. In the case of Hong Kong, LECA said in the seminar that it has not and will not refuse supply of spare parts to third parties.
- 5.30 The issue that arises is what reasonable inventory levels should be maintained, given the difficulty in forecasting demand for other maintenance providers; the cost to suppliers for holding stocks; and what price purchasers should pay. As a general observation, it can be assumed that lift suppliers would generally be aware of the number of their lifts in the market and could estimate the probability of demand for spare parts and consumables.

## **Intellectual Property Rights**

- 5.31 In the course of the Council's study, there were some queries raised as to whether the issue of proprietary elements (in terms of intellectual property in software or diagnostic tools) legitimises a refusal to supply. The existence of intellectual property rights in products such as lift specification data and maintenance manuals has been claimed by LECA as one reason for withholding access to some information. However, the mere existence of proprietary rights would not justify the withholding of access to spare parts or similar products such as wiring diagrams when competition in the relevant market may be distorted. What this points to is the need to find an appropriate process by which the concerns of intellectual property right holders are addressed without diminishing the underlying market conditions necessary for competition to play its part. The solution is one of safeguarding the proprietary rights of the intellectual property right holder, and the right to

recover investment costs and make a reasonable return.

- 5.32 In other jurisdictions that have general competition law, the issue could most likely be resolved in commercial arrangements between the parties. The arrangements, under a form of contract, would bind the party receiving the information under a license to observe certain intellectual property safeguards. The resolution would usually come about because a failure to amicably resolve the issue could lead to an action under competition law by either the party being refused supply (seeking the resolution of their particular dispute) or by a competition authority (seeking the resolution to an industry wide problem).
- 5.33 The Council's recommendation on this issue, at the May 1999 seminar, was that an arbitration process could be devised, to resolve disputes as to the conditions under which the information would be made available, and the reasonableness of prices (in the case of spare parts).
- 5.34 The form that such an arbitration process could take, raised a number of options to resolve this matter. As per the *Government's May 1998 Statement on Competition Policy*, which called on all government entities to propose initiatives to further the Government's competition objectives, it is clear that there is an obligation on relevant government agencies to facilitate a resolution.

## **SECTION SIX – COUNCIL DISCUSSIONS WITH INDUSTRY AND PROPERTY MANAGEMENT**

- 6.1 In light of the responses from the May 1999 seminar and the meetings, subsequent discussions were held between the Council and the two lift associations to follow up observations made by the Government and to assess the feasibility of the Council's draft recommendations.

### **Safety and Training**

- 6.2 To illustrate the importance and high cost of training, site visits were provided by LECA of its members' training facilities, spare parts warehouses and emergency call centres. LECA emphasised that any proposal to increase additional measures to promote competition must be carefully studied to ensure public safety. It noted that a high standard of safety could only be attained and maintained through continuous investment such as in constructing sophisticated 24 hours emergency centres and training, which independent contractors might not be able to afford. LECA argued that any perceived higher maintenance fee charged by its members was justifiable when considering better protection of passengers' safety and the longer economic life of the lifts.
- 6.3 It noted that a large amount of resources had been put into high quality services e.g. staff training and ready availability of spare parts. It noted that as each lift was now serving more people, average cost per person was spread wider and maintenance costs for building owners were not necessarily higher than before. It felt that consideration should be focused on lift safety and staff training rather than price.
- 6.4 As far as safety was concerned, REECA stated that their maintenance work was monitored by EMSD through routine lift inspection. In these circumstances, if there were any problems with unsatisfactory work, which they did not concede existed, the problems would be picked up by the relevant authority.
- 6.5 On the quality of maintenance work, REECA emphasised that its members had no difficulties in delivering quality services and had no need to invest in expensive training centres as they were able to attract experienced staff from the original lift suppliers.

### **Market Power in the Maintenance Market**

- 6.6 On the question whether lift suppliers can exercise market power in the maintenance market, LECA members contended that a company's sales will suffer if its lifts are perceived to be expensive to maintain. It was said that in some cases major customers seek tenders that include a prolonged period of maintenance. LECA also noted in November 2002 that over the past five years the maintenance of over 3000 lifts and escalators had moved to independent contractors.
- 6.7 However, as noted previously in this report, a decision on the purchase of a lift is usually made by a property developer, whereas the maintenance charge will, once the building is occupied, be paid by tenants.
- 6.8 With regard to annual lift maintenance charges, REECA said that its members

could quote on average 30% to 40% discount off that quoted by LECA members, if they had access to necessary parts and information.

- 6.9 In response to the then PELB's observations that there was an increasing level of competition as evidenced by the market share figures provided by LECA, REECA commented that the increase in market shares from its members was mainly due to the recent economic downturn where residents were becoming more cost conscious. REECA also noted that EMSD's altered regulatory stance in registering lift maintenance contractors had facilitated the entry of more independent contractors.

### **Supply of Spare Parts**

- 6.10 On the issue of supply of spare parts at the 1999 public seminar, LECA stated that its members did not generally receive requests from independent contractors for purchase of spare parts. They attributed this to the fact that independent contractors could obtain the parts cheaper through grey markets in the region. LECA added that notwithstanding the availability in grey markets, they welcomed invitations from other contractors to purchase spare parts from them at reasonable price.
- 6.11 Some LECA members stated that they could only hold stocks of spare parts for the lifts they maintain and the stock levels were calculated with reference to their own maintenance contracts, and not the potential demand from independent service providers. Parts ordered by independent maintenance contractors might not, therefore, be available and may need to be flown in from the factory. This could lead to extra costs and delay. It was said that what might appear to REECA members to be unreasonable prices and delay in supply of spare parts might therefore be due to the above reasons.
- 6.12 REECA also noted that for reasons of maintaining commercial confidentiality of their projects, it was preferred to source parts through Mainland China, Taiwan and USA rather than from their potential competitors. However, it was not always possible to obtain supply of computerised control devices for more recent lifts.
- 6.13 Both LECA and REECA informed the Council in November 2002 that members of both associations, who were in a position of supply, had subsequently agreed to supply spare parts to either the general public (owners incorporations and other contractors). The issue of supply of spare parts was therefore no longer considered in dispute.

### **Maintaining Competitors' Lifts**

- 6.14 LECA stated that it generally would not be in their members' commercial interests to maintain lifts of another supplier, as the time and effort required in training staff to acquire company specific knowledge of another lift supplier, would not be recouped through the work obtained. It was also stated that overseas principals have decided as a matter of principle not to enter this line of businesses.
- 6.15 Some LECA members noted that one of the reasons there is limited independent maintenance is that owners incorporations are not always knowledgeable about lifts, and in a position to put together a specification for a tender on maintenance services.

- 6.16 This suggests to the Council that in addition to any problems faced by independent maintenance providers in obtaining necessary parts etc, there is another potential problem on the demand side. It is questionable whether independent maintenance will remain a viable long-term option if building owners do not have the expertise to put together tenders for increasingly complex maintenance contracts unless they
- (a) are given guidance on how to prepare tender documents; and
  - (b) are acquainted with the market for independent maintenance contractors, i.e. the range of businesses potentially capable of undertaking lift maintenance.

### **Technical Information Data Bank**

#### *REECA's position*

- 6.17 REECA expressed concerns that notwithstanding its members' current abilities to provide viable competition to lift suppliers, its members were experiencing difficulties in competing in the growing computerised lift segment of the market as the market was evolving in degrees of technical sophistication. It was said that this was not a major concern for the time being as only 10% of lifts maintained by REECA members were in the highly computerised segment.
- 6.18 However, the inability to access proprietary information, such as lift specification data and manuals, wiring diagrams etc, will most likely impede further competition in the market. In this regard, REECA requested the Council to urge EMSD to require all lift suppliers to file their lift operation manuals (most importantly wiring diagrams) with EMSD. REECA stated that it was a requirement in Mainland China to file this information with regulatory authorities (for emergency use). In Japan and Korea, it is a requirement for lift suppliers to maintain manuals and wiring diagrams in the lift maintenance chamber. The Council was informed that in Hong Kong, lift suppliers also maintain manuals and wiring diagrams in the lift chamber, but the materials are removed when the lift supplier no longer maintains the lift.
- 6.19 REECA pointed to the fact that electrical circuits, water supply and gas pipe layout need to be filed with the relevant authorities for control purposes REECA considered it reasonable therefore that lift manuals or wiring diagrams should also be filed with the relevant authorities; considering that lifts are an essential public asset of the building.
- 6.20 Moreover, REECA suggested that the lift and the lift maintenance manuals are inseparable. Because the lift was an asset belonging to the lift owners, i.e. the building owners, it followed that the relevant manual was part of that asset. For this reason, REECA believed that owners should have a right to inspect the maintenance manuals and retain them for facilitating maintenance work by other maintenance service providers. However, it felt that for the sake of convenience and for control purposes, a government department should take up this role to maintain a data bank for public inspection.
- 6.21 REECA felt that setting up a data bank would not only facilitate competition but more importantly would also ensure public safety. For example, it would allow the Government to intervene if in an emergency situation maintenance providers (be it a LECA or REECA member) could not provide services, for whatever reason.



### *LECA's position*

- 6.22 LECA felt that setting up a data bank would cause problems because if there were any inadequacies in the data base this could put public safety at risk. LECA considered the issue could be best resolved through an Operation and Maintenance (O&M) manual that could be provided to contractors when required, that would have up to date information. LECA stated in November 2002 that it was looking at international best practice of how to construct an O&M manual. EMSD had also been working on this.

### **Code of Practice**

- 6.23 LECA considered that due to its perception of the high state of competition in the industry no assumption should be made on the necessity of setting up an industry arbitration scheme for either competitor or consumer disputes.

### **Hong Kong Association of Property Management Companies (HKAPMC)**

- 6.24 The HKAPMC informed the Council that many building owners do not have adequate knowledge to determine whether lift repair and maintenance fees are reasonable. It suggested that the Council urge EMSD and the industry associations to set a range of fees (e.g. HK\$ 8,000 to HK\$ 10,000 for a particular lift) as an indication of a reasonable maintenance price for building owners' reference.
- 6.25 The indicative price could vary in accordance with lift specifications (e.g. lift travelling distance (from bottom to roof of the building), number of floors (number of lift doors), type of motor, and operation/control mode. The lift maintenance price can be comprehensive or non-comprehensive and the respective scope of maintenance should be clearly stated so that consumers can understand the difference between different types of maintenance programs. For example, a comprehensive as compared to non-comprehensive lift maintenance: 100/40-60. The major difference between the two being that comprehensive maintenance includes cable and motor but non-comprehensive does not.
- 6.26 HKAPMC opined that if independent maintenance contractors encounter difficulty (with respect to supply and price) in purchasing original spare parts from lift suppliers, then the property developer should sign a contract with the lift supplier to specify the prices of spare parts. The price would have to be adjusted accordingly with the rate of inflation or deflation. This could allow for the lift suppliers to make a reasonable profit as well as protecting consumer interest. HKAPMC also stated that lift suppliers should also ensure they will supply parts to building owners for certain period after the expiry of the original maintenance contract.
- 6.27 HKAPMC suggested that EMSD should categorize lift maintenance contractors so that the property management companies and building owners can have reference for calling tenders.
- 6.28 HKAPMC also noted that at present, the log book recording damaged items kept in buildings is inadequate for building owners to monitor the maintenance work. HKAPMC suggested that service providers should produce a comprehensive monthly maintenance report, e.g. inspection, repairs, and parts replaced.

6.29 The HKAPMC also noted that comprehensive maintenance contracts include free replacement of many spare parts, but an ordinary user does not know whether the parts have in fact been replaced in a timely fashion. HKAPMC noted that if all the parts of a lift (in particular the cable) were replaced within a set time, the lift could be guaranteed to operate safely and properly.

## **SECTION SEVEN – COUNCIL DISCUSSIONS WITH GOVERNMENT**

7.1 Following the May 1999 seminar, the issues identified by the Council in regard to competition in lift maintenance, and the draft recommendations were referred to COMPAG, PELB, and EMSD for their further consideration.

### **Planning, Environment and Lands Bureau**

7.2 In November 1999, PELB (now called the Planning and Lands Bureau) made the following comments in response to the Council's submission.

- (a) PELB was keen to introduce new measures to promote competition in the industry. For example, it had removed the agency link requirement<sup>3</sup> in applications for contractor registration since January 1999. However, it said that any pro-competition measures had to be carefully considered to ensure safety was not compromised.
- (b) PELB claimed that there was an increasing level of competition. Market share of small lift contractors who maintain lifts not supplied by them had risen from 13% in 1994 to 16% in 1998. The number of contractors rose from 35 in 1994 to 40 in 1998.
- (c) There was no evidence that registered lift or escalator contractors in Hong Kong were charging unfairly high rates. According to the statistics provided to the PELB by LECA, the average annual maintenance cost of 7.5% of the cost of lifts was not unfairly high when compared to other countries in the region.
- (d) PELB had not received complaints on the unavailability of spare parts for lifts.
- (e) As regards the inclusion of an on-going maintenance agreement within tenders for supply of lifts, PELB said it was undesirable for the Government to control the negotiations between the property developers and the lift suppliers during the project planning stage. However, on the basis of not interfering with the market dynamics, PELB would study the feasibility of the recommendation and other details such as the agreement for on-going supply of spare parts and provisions of drawings, wiring diagrams, etc.
- (f) On the establishment of a joint code of practice for access to spare parts and technical information by another party, PELB would consider the feasibility, in particular the legal status and the enforcement of the proposed joint code including how to oversee the arbitration process.

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<sup>3</sup> Under the Lifts and Escalators (Safety) Ordinance, property owners are required to engage registered contractors to carry out any necessary major alternation works to lifts or escalators, to examine and test any altered lifts or escalators, and to examine and test lifts or escalators at prescribed intervals. In assessing applications for inclusion in the register for lift contractors or that of escalator contractors, EMSD previously imposed an agency link requirement whereby an applicant had to demonstrate that he had technical support from a lift or escalator supplier. Following a review of the agency link requirement, EMSD replaced the requirement with alternative arrangements so as to open up the lift or escalator maintenance market. Since January 1999, lift or escalator contractors have been admitted to the respective registers under the new arrangements.

## **Electrical and Mechanical Services Department**

- 7.3 Following the receipt of comments from PELB, as noted above, and discussions with industry, as noted in Section Six, a Council draft discussion paper was forwarded to EMSD in October 2000 repeating the substance of the Council's earlier recommendations, as noted in Section Four.
- 7.4 In addition to the earlier draft recommendations, the Council proposed that EMSD set up a data bank of relevant operation and maintenance information, including technical documentation, that is necessary for contractors to use in repairing and maintaining lifts. This was repeating the suggestion by REECA, and a modification of the Council's earlier draft recommendation (Number 3) that property developers should ensure that lift supply agreements include conditions regarding ongoing supply of spare parts, technical drawings and diagrams to the building owners.
- 7.5 The Council's intention was that EMSD would maintain the data bank in the same way that other building infrastructure information is maintained, and make that available for inspection by any registered lift contractor with relevant authorisation from the lift supplier; at a reasonable fee to be predetermined by EMSD. Users could, if necessary, enter into a contractual obligation that they would not infringe any intellectual property rights of the lift supplier. EMSD expressed some reservations on the Council's recommendations, and also made observations on the industry generally. EMSD comments and the Council responses, are as follows.

### *Operation and Maintenance Data Bank*

- 7.6 EMSD proposed, as an alternative to the Council's suggestion that lift supplier/installers would be required to
- (a) furnish to building owners an Operation and Maintenance (O&M) manual with a definitive coverage of the lift or lifts in the building;
  - (b) provide guarantees to building owners regarding the supply of spare parts; and
  - (c) provide technical advice to independent maintenance contractors to tackle what it described as 'difficult problems' due to complicated computerised lifts.
- 7.7 EMSD considered that measures such as the databank were impractical at this stage because of the substantial workload required for updating, following any modifications that might be undertaken. In addition, it felt that Government would be subject to civil claims if misuse of proprietary information arose. It also considered that it is sometimes difficult to differentiate whether a failure is the result of a design or maintenance fault. As for EMSD's role in the industry, it considered that it should not take up both the role of regulator and an information service provider at the same time.
- 7.8 EMSD felt the O&M manual obligation was easier to put in place, but time was required to discuss in detail what information should be included in the O&M manuals.
- 7.9 EMSD proposed that all new lifts would be required to have O&M manuals, and that there were several control points which could be used to determine

the procedure for providing O&M manuals. For example, when lift suppliers apply for approval of new models with EMSD. In addition, upon installation of lifts in premises when lift installers asked for permits from EMSD, installers could be directed to furnish O&M manuals to the building owners. Failure to provide an O&M manual would result in nil certification. However, EMSD acknowledged that if lift installers did not comply, it was impractical not to grant a permit as this would penalise the building owners. The issue of replacement O&M manuals, if they are misplaced by owners incorporations was also a matter to be considered.

- 7.10 With regard to the coverage of O&M manuals, EMSD were of the view that manuals should contain basic information which would facilitate contractors' performance of maintenance work. EMSD considered there were three types of information necessary for inclusion, i.e. basic information, proprietary information and password information.
- 7.11 EMSD also acknowledged that there was a need to give further thought on the document flow for provision of O&M manuals. According to EMSD's initial plan, lift suppliers would be required to provide a free copy of an O&M manual to owners incorporations after installing a lift, and any spare copies would be provided to the owners incorporations at cost.
- 7.12 EMSD noted that it was in the process of engaging with the industry on:
- (a) further work on defining the information to be covered in the O&M manual;
  - (b) further study on the document flow of manuals from the time when supply tenders are called until handing over building owners incorporations; and
  - (c) consideration on quality assurance certification of contractors.

### **Council Response to EMSD Proposal**

- 7.13 The Council considers that EMSD's proposal on the O&M Manual, in effect, is not that much different to what the Council had earlier proposed in its recommendation that building owners ensure that maintenance documentation is provided with lifts at the time of supply. However, the adequacy of EMSD's proposal is dependent on:
- (a) what obligations will be set for lift supplier/installers as to the extent of information that they will be required to provide to building owners; and
  - (b) what remedies exist for independent contractors, if they find that the information provided to building owners is inadequate for them to undertake the work. This is particularly relevant given that EMSD has acknowledged that independent contractors are in a subordinate relationship to lift suppliers/installers in that they will be expected to have to ask the suppliers/installers for assistance on complex tasks.

## SECTION EIGHT – CONCLUSION

- 8.1 The Council is keen that a resolution of this long-standing matter is found and that vigorous competition is used as an effective tool to contain prices and promote diversity and quality in services. While there may be disagreement over some of the recommendations, progress is being made and issues are currently being addressed. This report provides a framework for continuing that work, recognising that there are issues that need further consideration.
- 8.2 In view of the progress that has been made since the Council made its initial recommendations (as noted in Section Four) the Council has identified, in the following paragraphs, those issues currently addressed, and those issues that it considers warrant further consideration. The Council welcomes the efforts by EMSD to promote competition in the industry and is willing to assist the industry and Government in implementing relevant policies.

### Issues Addressed

- 8.3 In light of the information obtained and discussions with various government policy bureaux, Electrical and Mechanical Services Department (EMSD) and the industry, the following issues have been addressed through negotiation between the parties:

#### ***Access to Business Inputs to Enhance Competition***

- 8.4 A major issue in maintaining a competitive maintenance market is whether parties other than the original lift suppliers can have access to technical information that is necessary to safely and efficiently provide a competitive maintenance service.
- 8.5 In previous discussions with industry and Government, the Council has recommended that lift suppliers should be required to provide the Government with relevant information necessary to undertake repair and maintenance of lifts, and that the information in the data bank can be made available by the Government to building owners incorporations and relevant lift maintenance service providers. This process of information storage and dissemination is similar in principle to the current requirement whereby some information on electrical, water and gas supply is filed with the relevant authorities and made available to relevant service providers for maintenance and repair purposes<sup>4</sup>.
- 8.6 The Council considers EMSD's alternative proposal to require lift suppliers to provide Operation and Maintenance (O&M) manuals direct to building owners incorporations is a positive response to the problems that independent maintenance contractors are facing or will face in the future. Nevertheless, the Council suggests that maintaining a data bank should remain a long-term option.

#### ***The Role of Property Developers***

- 8.7 Because the eventual consumers of lift maintenance services do not exercise the initial choice in lift supply, the initial competitive pressures relating to maintenance will come from the property developers in the bargaining stage

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<sup>4</sup> With regard to water, electrical and gas network information it is noted that while some information is in the hands of related authorities, other information on those services is also in the custody of the developers or owners, and not kept by the relevant authority.

of contracting for supply of lifts.

- 8.8 Property developers can therefore play a part in attempting to reduce the ongoing costs of lift maintenance by the building's eventual owners or by assisting owner corporations in their future negotiations with regard to lift maintenance. They could do this through a number of alternative means:
- a) Securing a longer warranty period than currently provided, with comprehensive coverage for regular maintenance work, inclusive of spare parts.
  - b) Ensuring that an indication is given, within tenders for supply of lifts, of the life cycle costing of the particular lift or lifts supplied, and incorporating this as important criteria for selection.
  - c) The supply agreement includes conditions regarding the provision of technical drawings and diagrams to the building owners for the purpose of ongoing maintenance work, after the warranty period has expired.
- 8.9 As building owners become more conscious of the burden on management fees attributed to lift maintenance, this factor could be a selling point for prospective unit purchasers.

### ***The Role of Government***

#### ***Safety***

- 8.10 Safety must always be the prime concern. According to EMSD it has been exercising close monitoring and exerting tight control on the performance of contractors and technical personnel. It also notes that a high lift/escalator safety level has been maintained in the territory as compared to other major cities. EMSD should continue to vigilantly enforce legislative and administrative safeguards.

#### ***Assistance to Building Owners***

- 8.11 EMSD, industry, and Home Affairs Department's District Building Management Liaison Teams can provide a valuable role to assist building owners to choose and negotiate competitive maintenance agreements as follows:
- 8.12 As far as EMSD is concerned:
- a) EMSD is now considering the preparation of an Owners' Guidebook to facilitate building owners in maintaining lifts/escalators.
  - b) EMSD issues circular letters to lift contractors on technical matters. The circular letters are also posted on the EMSD Homepage at which interested parties (including building owners) can access.
  - c) EMSD issues and updates the Code of Practice for Lift Works covering the mandatory maintenance requirements for putting lifts in safe working order.
- 8.13 Both industry associations are willing to provide information on their members' services that can assist building owners in considering their options for lift maintenance; for example, a list of accredited contractors.
- 8.14 Home Affairs Department has indicated that if details for constructing a tender

specification and the ways to negotiate competitive maintenance agreements are provided by professionals in the lift maintenance industry, and the details are described in layman terms, it will put the materials for reference of the public in Building Management Resource Centres.

*Capacity Building*

- 8.15 In light of the Government's sector specific approach to competition policy, the Government should consider to devote more resources to promote competition in the market for lift maintenance.

***Building Owners Obligations***

- 8.16 Building owners have an obligation to ensure maintenance programmes are up to the best standards possible and to put in place a plan for long-term maintenance programmes and budgeting for major refurbishment work to lessen the financial burden of substantial one-off costs.
- 8.17 Owners incorporations should take initiatives to acquire the necessary information that will enable them to choose and negotiate competitive maintenance agreements, by making full use of both EMSD's information service and that of Home Affairs Department district building management liaison teams; and to have dialogue with building management companies to have the best interest of all building owners in mind. The more informed that consumers of lift maintenance services are, the more pressure there will be on service providers to satisfy demand for lower prices and a high quality of service.

**Issues For Further Consideration**

- 8.18 Safety, choice and price are issues of major concern to consumers when making decisions in the market for lift maintenance services. The Council puts forward the following suggestions for further deliberation by the concerned parties, recognizing that gauging public feedback and industry response on the viability of these suggestions takes time.

***Consumer Price Information***

- 8.19 A common concern for owners incorporations and management companies (more so for the former) is whether the maintenance cost quoted is reasonable. Where building owners are unable to obtain competing quotes from a range of lift maintenance service providers and they are captive to the services provided by the original lift supplier, those building owners will not be in a position to determine whether the maintenance service charge is reasonable.
- 8.20 The inverse can also sometimes be a problem. For example, where a price quoted is too low to be realistically capable of providing a sufficiently professional service, and consumers need to be aware of potential problems in taking the cheapest quote.
- 8.21 As for pricing disputes where the concern is that consumers might have paid too much, the Council considers that the industry should explore offering a service to members of the public, on request and at reasonable cost, administered by an industry association secretariat that delegates an independent body to provide some indication as to whether the maintenance charges quoted are reasonable. This is similar to the process of taxation of the costs billed by a solicitor, where a dissatisfied party is entitled to require any costs to be 'taxed' (i.e., examined) by the court. The Council considers



that having regard to the current economic climate there is an opportunity for the development of independent consultancy services for lift maintenance.

***Industry Code of Practice***

*Competitor access disputes*

8.22 In view of the Government's preference for self-regulation and administrative measures to address competition issues, the Council considers that in the absence of a competition law administered by a competition authority (which is its first preference) a joint code of practice for the lift industry could address the means by which disputes, if any, over supply of spare parts, and technical information, can be resolved.

8.23 For instance, the relevant industry associations could construct a code of practice introducing competition safeguards such as the ability for a competitor to seek arbitration where it claims it is being unreasonably denied access to inputs necessary to compete in the repair and maintenance market. While it is up to industry to work out the means by which a code can come about, EMSD, as the industry's supervising agency, could play a facilitation role in this aspect.

*Pricing conduct*

8.24 The industry code of practice should also include a general exhortation to association members requiring that where building owners are unable to obtain competitive quotes and are thereby locked into the services of a particular lift maintenance contractor:

- a) an association member is not to take advantage of any position of market power by levying unreasonable charges; and
- b) where a complaint is made to the association by a building owner in the position described above, the association member should submit its charges to independent cost assessment, as described above.

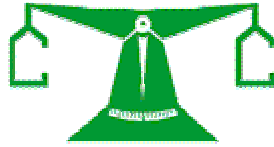
*Safety and Consumer Welfare*

8.25 The code of practice should also include general exhortations to association members to abide by high standards of safety and to observe industry practices that are conducive to the promotion of consumer welfare.

***Data Bank for Operation and Maintenance Manuals***

8.26 With regard to the Council's suggested data bank option, both LECA and EMSD have raised doubts on its feasibility. For example, EMSD notes that the proposal would not be feasible without the cooperation of the lift suppliers; there are liability issues as to the accuracy of the information kept by the operator of the data bank; and there may be conflicts of interest for the Government to operate the data bank and to act as a service provider as well as a regulator at the same time.

8.27 The Council notes the position of both parties, but considers that the option should remain an ongoing matter for long-term consideration. The extent to which this becomes a more pressing matter will depend on how effective the current agreed positions on the development of O&M manuals for use of maintenance contractors will provide positive results for competition in the industry.



## 消費者委員會 電梯維修服務市場競爭研究報告

### 報告摘要

#### 引言

1. 消費者委員會收到消費者及公司就有關電梯維修的查詢或投訴，主要是涉及電梯維修服務缺乏競爭，因而衍生維修費用是否合理的疑問。
2. 新建樓宇的電梯裝置通常是由地產商選定，住客或業主則負責電梯保養維修的費用。一般而言，私人住宅樓宇的每月電梯保養維修費用大約佔每月物業管理整體支出的 11%-12%。若獨立維修服務市場沒有足夠生存空間，業主立案法團往往只能用原廠供應商提供的服務。
3. 本報告闡述了本會與政府及業內人士討論有關電梯維修服務市場涉及違反競爭的問題，包括本會對行業的分析、舉辦研討會、與政府及行業討論及會議等。
4. 本報告列出與各方面達成的共識。本會公布報告，除了讓公眾得知事件的進展外，並提出須進一步探討的事項。

#### 研究範圍

5. 報告討論如何界定電梯的維修市場、評估電梯維修保養服務公司的市場力量，分析其市場佔有率及維修費用。報告同時總結本會與行業、政府及電梯維修服務用家的討論成果。

#### 已達共識事項

6. 本會根據政府有關的政策局、機電工程署（機電署）及行業提供的資料，經與各方商議討論，達成下列共識：

#### **獲取技術資訊加強市場競爭**

7. 促進維修服務市場的競爭，首先要解決非原廠電梯維修承建商技術資訊的問題。這確保市場參與者取得必須的技術資訊作安全及有效維修。

8. 本會原建議電梯供應商向政府提供電梯維修和保養所需的資料，讓提供維修的公司及業主可以查閱資料庫。儲存及發放資料的做法與現時法例對電力線路、供水和氣體喉管網絡須在有關部門存檔並在有需要時向有關服務提供者提供的原則相類似。<sup>1</sup>
9. 機電署的建議是電梯供應商應直接向業主立案法團提供大廈電梯的操作及保養手冊。這建議亦可解決非原廠電梯維修承建商現正或將來面對的問題。本會建議政府可考慮採取分階段措施，將設立儲存電梯維修資料的資料庫訂為長遠方案。

### **地產發展商的角色**

10. 地產發展商建樓時選定的電梯，會影響消費者入住後支付的維修保養費用。換句話說，最終負責電梯維修保養費用的消費者沒有選定電梯的話事權。因此，要促進電梯維修服務的競爭，最早的時機是地產發展商就電梯供應招標的時候。
11. 地產發展商可以協助減輕日後業主在電梯維修方面的經常開支，當業主日後與維修承建商洽議維修服務時，地產發展商可以考慮在下列方面提供協助：
  - (a) 訂立較長期的電梯保用期合約。保養範圍訂明全保，包括定期保養和更換零件。
  - (b) 確保在電梯招標文件內，供應商向業主提供該電梯的「安裝及保養總成本計算法」，並以此作為衡量中標公司的重要考慮。
  - (c) 供應合約的條文亦可訂明保用期滿後，供應商會繼續向業主提供維修電梯所需的技術資料，例如：線路圖。
12. 業主對電梯保養維修費用佔物業管理費的比重越來越關注，地產發展商可以藉推出上述措施，作為銷售樓宇的賣點。

### **政府擔當的角色**

#### **確保電梯使用安全**

13. 電梯安全是首要關注的問題。機電署表示，「該署向來緊密監管電梯維修承建商及技術人員的服務表現；相比其他主要城市，香港的升降機/自動梯的使用安全處於高水平。」機電署表示，他們會繼續嚴格執行有關法例及行政措施。

#### **支援大廈業主履行責任**

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<sup>1</sup>據悉，電力線路、供水和氣體喉管網絡資料部分由有關部門存檔，部分則由地產發展商或業主管有，而非所有資料由有關部門保管。

14. 機電署、行業和民政事務總署的「地區大廈管理聯絡小組」可以透過以下措施，協助業主選擇及洽議電梯維修服務合約：
15. 在促進有效升降機維修保養方面，機電署提供下列資料作配合：
  - a) 正在考慮草擬一本升降機/自動梯擁有人手冊，幫助市民了解升降機/自動梯的保養；
  - b) 就升降機的技術事項，向承建商發出通告函件。有關函件亦會在機電工程署的網頁刊載；及
  - c) 發出及更新升降機工程實務守則，使承建商清楚明白保養升降機的基本要求，令升降機保持在安全的狀況。
16. 兩個電梯業商會表示願意向業主提供會員服務範圍的資訊，例如：提供認可承建商名單，方便業主選擇合適維修承建商。
17. 民政事務總署表示，若業內的專業人士能提供淺白易明的資料，協助業主草擬清晰的電梯維修招標文件，及洽談維修服務合約的技巧，民政事務總署樂意將這些資料存放於其大廈管理資源中心，供市民作參考。

#### *增加競爭方面的知識*

18. 鑒於政府以個別行業為基礎的競爭政策，本會促請政府投放更多資源，促進市場競爭。

#### **履行大廈業主責任**

19. 大廈業主有責任確保電梯的維修保養符合安全標準。業主應商議及釐訂長遠的電梯維修保養計劃，並為主要的翻新工程作好預算和儲備，以減輕業主一次過支付龐大款項的負擔。
20. 業主立案法團應以業主利益為大前提，吸取所需資訊與大廈管理公司商討電梯維修的保養。業主立案法團可以從機電署及民政事務總署的地區大廈管理聯絡小組取得有關資訊。增加消費者對電梯維修服務的認識，有助他們提出對服務提供者的要求，從而得到高質素及收費較低而合理的電梯維修服務。

#### **須進一步探討的課題**

21. 使用安全、服務選擇及價錢都是消費者決定選用電梯維修服務的主要考慮因素。本會提出下列建議供有關人士，包括政府部門、業內人士及公眾作詳細考慮。本會明白這些建議涉及的改變，可能需要一些時間，讓各方面就建議的可行性反映意見。

#### **消費者對維修服務費用的疑問**

22. 業主立案法團和大廈管理公司（尤其是前者）都十分關注電梯保養維修費用是否合理。大廈業主要找其他電梯維修公司保養電梯，並非易事，若未能取得到具競爭力的報價，業主難以評估繳付的維修費用是否合理。
23. 相反地，消費者亦要知道採納最平報價可能會引起的問題。報價太低令人懷疑維修承建商是否真的可以提供足夠的專業服務。
24. 就消費者懷疑維修費用過高的投訴，本會認為行業宜慎重探討為公眾提供評定維修費用的服務。這可由商會秘書處委託獨立人士進行。固然，要求服務的業主立案法團須繳付合理費用。上述做法是參考律師行業的訟費評定機制 - 倘若某方不滿律師的訟費，有權要求法庭評定。在目前經濟情況下，獨立的電梯維修顧問服務應有發展空間。

### **行業營運守則**

#### **解決競爭的爭議**

25. 政府一向主張行業自我規管和透過行政措施去確保競爭。在未有公平競爭法的情況下（本會認為長遠應有公平競爭法及公平競爭委員會），香港電梯業協會和註冊電梯營造商聯會，宜共同釐訂行業營運守則，解決行業可能出現的爭議，例如：零件供應和技術資訊方面的問題。
26. 守則應包括確保競爭的條款，若有市場參與者被不合理拒絕供應零件或技術資訊時，可通過仲裁安排解決爭議。機電署作為行業的規管機構，可以促進這方面的發展。

#### **服務費用**

27. 當大廈業主沒法從不同的電梯維修承建商取得到具競爭力的報價時，只有繼續沿用原廠供應商提供的維修服務。行業守則應包括條款勸告會員：
  - 不得利用其市場地位，收取不合理的費用。
  - 當商會秘書處收到大廈業主投訴不能取得具競爭力的維修服務報價時，可委託獨立人士評估維修費用是否合理（參看第 24 段）。

#### **設立儲存電梯操作及保養手冊的資料庫**

28. 香港電梯業協會和機電署對本會建議設立的資料庫的可行性有所保留。機電署認為建議涉及多方面的問題，例如：資料庫需要獲得行業投放資料、資料準確性的責任承擔，及由行業監管者同時提供服務可能出現利益衝突。
29. 本會理解行業及政府的意見，但認為此建議應予以保留作長遠考慮，有待行業就電梯操作及保養手冊達成的協議，能否對行

業的競爭產生正面作用。

## 行業概況

30. 根據《升降機及自動梯(安全)條例》，只有在港註冊升降機及自動梯承建商及工程師合資格執行大廈的電梯維修、測試及檢查工作。截至二零零二年十一月，本港共有四十八家註冊升降機承建商。據本會在一九九九年獲得的資料，本港的電梯總數接近五萬部，其中大約有六千部（約 12%）由非原廠電梯供應商提供維修服務。在二零零一年年底，由非原廠電梯供應商提供維修服務的電梯增加至七千部，約佔全港五萬部電梯的 14%。非原廠電梯維修承建商以保養舊型號電梯的比例較多。現時本港新型號的電梯很多已採用電腦操作。
31. 電梯維修服務合約的費用受多種因素影響，例如：屋苑或大廈的電梯數目、電梯的機齡、以及電梯本身結構的複雜程度(特別是較新款的電梯)。據行內表示，電梯保養維修費用一般是按該電梯當時價值的某個百分比計算。
32. 本會獲得的資料顯示，電梯保養維修年費約佔電梯價值的 7.5%，該百分比與新加坡及台灣相約，但低於日本、較印尼高。
33. 下表列出本會在二零零二年十一月從註冊電梯營造商聯會，獲得在不同年代裝置的電梯的維修保養費用資料。香港電梯業協會認為下表資料的參考性有限，他們認為列表之“過去四十年電梯維修保養費用的資料，其中電梯價格，因規格參差很大，價格未能反映現時與保養費用的比例，保養費所涵括的工作範圍及服務水平亦各異，且資料已過時”。不過，本會認為下列資料可反映維修保養費用在過往數十年的轉變。

	住宅樓宇 (樓層數目)		
	60年代 (少於15層樓)	70年代 (約25層樓)	80-90年代 (超過35層樓)
(a) 電梯價值 (\$)	\$500,000 至 \$600,000	\$600,000 至 \$700,000	\$800,000 至 \$1,000,000
(b) 電梯維修年費 (\$)			
- 由香港電梯業協會會員提供保養	\$36,000	\$37,800	\$65,000 至 \$110,000
- 由註冊電梯營造商聯會會員提供保養	\$26,400	\$31,200	\$45,000 至 \$63,000
(b)/(a) (%)	4.8% - 5.5%	4.8% - 5.8%	6.0% - 9.7%

註：以上數字只供參考。

資料來源：由註冊電梯營造商聯會提供。

## 討論過程

34. 本會早於一九九七年十月就電梯維修服務缺乏選擇和維修承建商難以獲取維修零件等問題，向當時的工商局反映。
35. 工商局認為缺乏競爭不一定反映市場出現違反競爭的行為，可能只純粹反映市場的情況。在工商局作出回應之後，本會作出深入研究，並於一九九九年五月聯同民政事務總署，就此課題舉辦了一個公開研討會。本會在研討會上提出本會的初步研究結果和建議，演辭可在本會網址 <<http://www.consumer.org.hk>> 下載。
36. 其後，本會把整理好的討論文件，分別遞交當時剛成立的競爭政策諮詢委員會、當時的規劃環境地政局，及機電署，作為進一步討論的基礎。文件的內容已包括在本報告內。
37. 本會諮詢行業及政府意見後，修訂原來建議及加添其他意見。本報告結合了各方面的共識，和本會的建議。
38. 就本會所提出有關設立行業守則和資料庫的建議，香港電梯業協會認為在目前市場劇烈競爭環境下，沒有需要訂立守則去處理消費者或行業的投訴。機電署則認為要進一步研究和討論訂立守則的做法，並須得到行業同意。根據《消費者委員會條例》第 4 條，本會的法定職能是鼓勵商業及專業組織制定實務守則，政府亦認為以守則去處理行業競爭事宜，較設立競爭法為佳。本會仍然認為行業宜制訂守則，本會亦願意提供協助。

## 資料來源

39. 本報告的資料來源：
  - 本會收到的意見 - 來自個別大廈業主、業主立案法團、商業機構、非原廠電梯維修承建商(即非電梯製造廠家在港所設之維修服務公司)。
  - 在一九九九年五月研討會上，由電梯使用者及電梯維修承建商提出的課題，以及其後本會與香港電梯業協會和註冊電梯營造商聯會討論的事項。
  - 政府有關決策局或部門(特別是機電署)的回應。
  - 其他地方對電梯維修保養服務市場競爭問題的處理手法。
40. 本會亦應一些電梯供應商及維修承建商邀請參觀他們公司的運作。
41. 本會謹此多謝向我們提供意見的人仕或公司，讓本報告得以完成。

二 二年十二月十一日