機電工程營運基金 二零一五至一六年報告 Electrical and Mechanical Services Trading Fund Report 2015/16



營運廿載源於心役於人機電未來續創新惠及民 Serving with Care and Innovation 20 Years and Beyond



### 抱負

### Vision

致力提供優質機電工程服務,精益求精,以提升市民的生活質素。

To improve the quality of life for our community through continuous enhancement of our electrical and mechanical engineering services.

### 使命

### Mission

#### 客戶 CUSTOMER

提供優質的工程方案,以滿足客戶的需要。

Providing quality engineering solutions to satisfy our customers' needs

#### 員工 STAFF

建立一支卓越的員工隊伍,並維持和諧的工作環境。

Developing a competent workforce and maintaining a harmonious environment.

#### 部門 ORGANISATION

掌握科技發展和流程改善,以提供更佳服務。

Keeping pace with technology development and process improvement for service enhancement.

# 信念

### **Values**

#### 誠信 INTEGRITY

我們秉持誠信,維持良好道德操守。

We uphold honesty and integrity to embrace an ethical culture.

#### 出色服務 SERVICE EXCELLENCE

我們提供安全可靠、高效率、具成本效益和優質的服務。

We provide safe, reliable, efficient, cost-effective and quality services.

#### 關懷 CARING

我們關懷員工、客戶和市民大眾,並重視環保。

We care for our staff, customers, community and the environment.

#### 以客為本 CUSTOMER FOCUS

為滿足客戶的各種需要,我們盡心竭力,積極提供工程方案, 以贏取客戶的信任和支持。

We focus on the needs of our customers and provide engineering solutions in a proactive and responsible manner to win their trust and support.

#### 承擔 COMMITMENT

我們言行一致,信守承諾。

We do what we promise.





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# 常務委員會 EXECUTIVE BOARD

主席 Chairman -



**韓志強太平紳士 Mr Hon Chi-keung, JP**發展局常任秘書長(工務)
Permanent Secretary for Development (Works)

成員 Members

秘書 Secretary



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Deputy Director/Trading Services, EMSD



**羅肇嫻女士 Ms Lo Siu-han, Cynthia**機電工程署主任秘書
Departmental Secretary, EMSD

\* 章志成太平紳士出任發展局常任秘書長(工務)至2015年4月6日 Mr Wai Chi-sing, JP was Permanent Secretary for Development (Works) up to 6 April 2015



#### 主席 Chairman.

#### 1 陳帆太平紳士

#### Mr Chan Fan, Frank, JP

機電工程營運基金總經理 (機電工程署署長) General Manager, EMSTF (Director of Electrical and Mechanical Services)

#### 成員 Members

#### 2 戴德謙太平紳士

#### Mr Tai Tak-him, JP

機電工程署副署長/營運服務 Deputy Director/Trading Services, EMSD

#### 3 張丙權太平紳士

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機電工程署助理署長/1 Assistant Director/1, EMSD

#### 4 麥家俊先生

#### Mr Mak Ka-chun

機電工程署助理署長/2 Assistant Director/2, EMSD

#### 5 張國輝太平紳士

#### Mr Cheung Kwok-fai, JP

機電工程署助理署長/3 Assistant Director/3, EMSD

#### 6 李碧雲女士

#### Ms Li Pik-wan, Clara

機電工程署財政經理 Finance Manager, EMSD

#### 7 王文剛先生

#### Mr Wong Man-kong

機電工程署員工關係主任 Staff Relations Officer, EMSD

#### 秘書 Secretary ·

#### 8 羅肇嫻女士

#### Ms Lo Siu-han, Cynthia

機電工程署主任秘書 Departmental Secretary, EMSD

- \* 李英明先生出任機電工程署助理署長/2至2016年1月22日 Mr Li Ying-ming, Larry was Assistant Director/2, EMSD up to 22 January 2016
- \* 羅雪芬女士出任機電工程署財政經理至2015年10月11日 Ms Law Suet-fan, Rebecca was Finance Manager, EMSD up to 11 October 2015
- \* 羅福基先生出任機電工程署員工關係主任至2015年7月8日 Mr Law Fuk-ki was Staff Relations Officer, EMSD up to 8 July 2015





#### 營運廿載 共創價值

2016年見證營運基金20周年誌慶。一直以來,營運基金面對市場上很多提供同類型服務公司的競爭,但秉承前人的帶領,有賴同事的拼搏,承蒙客戶的支持,讓我們能走到今天。我們懷着感恩的心,回顧廿年的路,並將當中的點滴,附錄在本報告中《機電工程營運基金20周年紀念特刊》內,讓大家了解我們蛻變求存的故事。

我們近年更致力為客戶節約能源、提升成本效益、和優化資產管理等。廿年來,營運基金整體生產力提升超過30%。我們將成果回饋客戶,緩減服務收費上調對客戶帶來的財務壓力。我們秉持微利營運的方針,讓客戶保留更多資源投放其核心服務,利惠市民。

營運基金的業務雖然穩定,但我們不會安於 現狀。面對市場競爭,我們積極採取措施持續 優化服務,例如建立員工才能矩陣、全面加強 培訓等,提升服務質素,並且靈活運用市場力 量,萬一業務有所流失,營運基金可以將外判 服務轉化內部處理作為緩衝。

# TWO DECADES OF OPERATION AND CO-CREATING VALUE

The year 2016 marks the 20th anniversary of EMSTF. Throughout these years, EMSTF has faced competition from many companies in the market providing similar services. Thanks to the leadership of our predecessors, the hard work of our colleagues and the support of our clients, EMSTF has reached where it is today. We are grateful as we reflect on our path in the past two decades, and have recorded the details of this journey in the Electrical and Mechanical Services Trading Fund 20th Anniversary Commemorative Booklet attached in this report so that readers may know more about the story of our transformation for survival.

Our business has seen steady development in the past two decades. We have made considerable progress in enhancing our service quality and productivity, thus achieving the mission given to EMSTF upon its establishment. Over the years, EMSTF has provided an extensive range of E&M engineering services to government departments and public bodies covering public facilities throughout the territory. Our services touch the everyday life of all in Hong Kong. The value of EMSTF's existence lies in raising the community's quality of life and creating public value. Pursuant to the different sectors of our E&M engineering services, each of our Strategic Business Units (SBUs) has defined its own service values to enable our colleagues to clearly understand the meaning and mission behind their work. Those service values help the SBUs implement their mission, take good care of clients' E&M facilities round the clock, and meet the expectations of our clients and the public through solid performance.

In recent years we have stepped up efforts to help clients save energy, improve cost effectiveness and better manage their E&M assets. Over the past 20 years, EMSTF has raised its overall productivity by over 30%. Thus we are in the position to reduce the magnitude of service charge increases for clients to lessen their financial pressure. We shall continue with our slim-profit model so that clients may save and divert more resources to their core services for the benefit of the public.

Though EMSTF's business is stable, we are not complacent. Faced with market competition, we have deployed proactive initiatives to continuously improve our services, such as developing a Staff Competency Matrix and stepping up training to enhance service quality. We are also making more flexible use of market forces so that in the event of business loss, the outsourced services can be taken in-house again as a buffer.

### 總經理報告

#### GENERAL MANAGER'S REPORT

此外,我們由2013/14年度開始實行的五大策略,即提供優質服務、成為業界典範、建立員工才能與關懷文化、優化知識管理、及持續綠色作業,現已進入第三個年度,在各方面都有可觀進度。

In addition, the five strategies that we embarked upon in 2013/14 are now in the third year of implementation, with good progress in every aspect. The strategies include delivering excellent service, becoming a trade model, building capacity and a caring culture, enhancing knowledge management and sustaining green operation.

#### 靈活創新 優化服務

本地技術人才短缺加上營運成本上升,以及客戶在未來數年需要節約開支,對我們都帶來財務壓力。為此,我們將實施一系列提高生產力的措施,包括引入更多先進科技和加強知識管理工作,並且靈活運用資源,持續貫徹微利營運,與客戶共創公眾價值。

#### 持續發展 以身作則

營運基金在日常運作和客戶服務的每一環節,均十分着重持續發展,提高能源效益。我們把機電署總部大樓打造成節能及環保的「綠色建築」,中 令大樓成為首幢政府建築物獲得「綠建環評既有建築」鉑金級評級,為實踐綠色作業起示範作用。 我們將會優化總部大樓露天廣場,加強綠化,與 市民共同享用這獨特的公共空間。

營運基金亦積極協助客戶節能減排,多年來為客戶節省合共多達16%的耗電量。年內,我們再為客戶建議引進更多高能源效益的機電設備,配合政府新一輪減少5%耗電量的政策。

# FLEXIBILITY AND INNOVATION IN SERVICE IMPROVEMENTS

EMSTF is flexible, innovative and always listens to clients' needs. We also introduce new technologies to bring ground-breaking engineering solutions to clients. During the year, we have begun work to set up a Customer-Centric e-Platform to provide quick updates to clients regarding work progress. This will give better service to clients, and enable members of the public to enjoy higher-quality facilities and services. We shall continue to help clients enhance asset management through obtaining ISO 55001 certification for their E&M assets and promote similar certification initiatives. Meanwhile, we have introduced new technologies such as integrated Building Management System and Building Information Modelling to raise our service standards further. These initiatives are also in line with overall trends to become "smart cities", and to contribute to Hong Kong's development. Also, our Customer Satisfaction Index in this year's Customer Opinion Survey has hit a record high of 6.45 out of 8. We are grateful to clients' support and shall continue to improve our services.

The shortage of local technical workforce, rising operating cost and the pressure on our clients to further cut cost in the next few years will continue to have an impact on our financial situation. To tackle the challenge, we shall implement a series of measures to raise productivity, such as introducing more advanced technologies and enhancing knowledge management, deploying our resources in a more flexible manner, and adhering to our slim-profit model - all with the objective to create public value with our clients.

# SETTING AN EXAMPLE IN SUSTAINABLE DEVELOPMENT

EMSTF attaches great importance to sustainability and enhancing energy efficiency in every aspect of its daily operation and customer service. We have made the EMSD Headquarters Building an energy saving and environmental "green building" which is also the first government building to obtain BEAM Plus Existing Buildings Platinum Rating certification, thus setting an example for other buildings in the community. We shall beautify the environment of our piazza and make it greener, so that the public may share and enjoy this unique public space.

EMSTF has also been assisting clients in their energy saving and carbon reduction programmes, and saved a total of over 16% electricity consumption for clients over the years. During 2015/16, we have made recommendations for clients to introduce more energy-efficient E&M facilities, in line with the Government's policy to save electricity consumption by another 5%.



#### 關懷共濟 培育人才

營運基金除了用心服務客戶之外,也積極推動機電業的發展,培育新血。年內,我們繼續在香港機電業推廣工作小組中擔當協調角色,推動對業界關注的事務,並籌辦多項活動以提升轉覽會,例如由貿易發展局舉辦的「教育及職業博覽會,例如由貿易發展局舉辦的「教育及職業博覽會上,人及有與趣人士入行。營運基金更計劃,仍有與趣人士入行。營運基金更計劃,在未不五年動用超過六億元,培育1000多名機電人才,配合香港的長遠發展。

#### 展望

#### 致謝

營運基金今天的成就得來不易,我謹此向市民、客戶、業界、員工和各持份者衷心致謝,並十分感謝各政策局及政府部門的支持,以及傳媒、立法會議員及公眾人士對我們的持續監察。我們將繼續盡心盡力,服務市民,邁步向前。

7.5. th

機電工程營運基金總經理

# CARING AND COLLABORATIVE, NURTURING TALENT

In addition to serving our clients well, EMSTF also takes the lead in promoting the development of the E&M industry and nurturing new blood. During the year, we continued to play a co-ordinating role in the Hong Kong E&M Trade Promotion Working Group for providing a platform to discuss issues concerned and organise activities to build up the trade's image. With great enthusiasm we also participated in various career expos, including the Education & Careers Expo 2016 organised by the Trade Development Council. At the annual expo this year, and in conjunction with 19 government departments and trade organisations, we used an "E&M Street" approach to promote the E&M trade and various training schemes available in the industry to attract young people and other interested individuals. EMSTF also plans to deploy more than \$600 million over the next five years to train over 1 000 E&M personnel to cater to Hong Kong's long-term development.

#### **PROSPECTS**

Hong Kong's development began accelerating in the 1970s, and today many E&M facilities have become aging assets. Proper maintenance and timely replacement will be particularly important to Hong Kong's sustainable development. Looking ahead, Hong Kong is moving towards becoming a low-carbon, smart city which in turn will bring opportunities and challenges to EMSTF. There will be broader horizons for our development, but with greater responsibilities too. Regardless of what lies ahead, we must not forget the original mission of EMSTF, adhere to our values, and stay committed to our belief in flexibility, innovation, sustainable development, a caring and collaborative culture, as well as a professional and responsible attitude. This will enable us to continuously improve our services and create more public value.

#### **APPRECIATION**

As EMSTF celebrates its hard-earned results today, I wish to express our sincere thanks to the public, our clients, the trades, our staff and all stakeholders. We are also grateful to various policy bureaux and government departments for their support. We thank the media, Legislative Councillors and the public for their unfailing vigilance. We shall continue to strive whole-heartedly to serve the public and forge ahead.

Dans.

Chan Fan, Frank

General Manager, Electrical and Mechanical Services Trading Fund

# 業務回顧與前瞻 OPERATIONS REVIEW AND OUTLOOK

機電工程營運基金在2015/16年度的財務表現達標,符合業務計劃。期間承辦商費用雖不斷上升,但營運基金整體財務表現平穩,總收入為57.64億港元(2014/15年度:54.92億港元),收入回報率為4.8%(2014/15年度:5.3%),與我們以微利營運的方針一致。

The financial results of the Electrical and Mechanical Services Trading Fund in 2015/16 are consistent with our targets in the business plan. Despite rising contractor cost, EMSTF's overall financial performance was steady, with return on revenue (ROR) at 4.8% (2014/15: 5.3%) and total revenue at HK\$5,764 million (2014/15: HK\$5,492 million). This is in line with our slim-profit operating principle.



戴德謙太平紳士 Mr Tai Tak-him, JP 機電工程署副署長/營運服務 Deputy Director/Trading Services, EMSD



#### 整體表現

此外,我們於2015/16年度也更新了關鍵績效指標,以更有效量度我們在各方面的整體表現及進行持續改善。成績亦載於此報告。至於策略業務及企業支援單位的服務匯報,則載於隨後的章節。

#### 2015/16年度重點

我們雖在2016年初流失了機場管理局部分投標項目,但年內整體營業額仍有增長,主要是由於為新落成的客戶場地提供服務,以及服務規模擴大。年內,醫院管理局也開始以新模式將電子醫療儀器及機電服務納入公開投標中,我們努力就此挑戰作好準備。

自2013/14年度以來,我們每年都就推行五年策略計劃的進度作出報告,以落實「透過與客戶的伙伴關係,創造公眾價值利惠市民」這過與這一個,我們欣然報告在這個第三年度,策略指行續有進展,特別是在提供優質服務、建立工才能及持續綠色作業方面,而優化知識管理和成為業界典範方面的進度,也見成果。五大策略環環緊扣,一個策略取得進展,也必帶動其他策略向前發展。

#### 客戶服務水平持續提升

我們已於年內完成由顧問進行的可行性研究, 為推出以顧客為本電子平台方式運作的全面 革新客戶服務中心展開首階段工程。客戶在可 行性研究期間,與我們及顧問分享寶貴意見, 我們深表感謝。首階段工程預料於2017年年底 完成,屆時系統便可在接到客戶報告故障的來 電後自動指派工作,透過流動裝置通知相關員 工。儘管如此,這只是建立新客戶服務中心的 第一步,日後還有幾個階段進行。

另一改善措施是於2015年把每月客戶電話意見 調查的受訪人數,由210人增至460人,務求聽 取更多不同服務範疇的客戶意見。現時,任何 客戶感到「不滿意」的個案,都會立即呈交由總 工程師跟進,個案得到解決後,同事會與其他 策略業務單位分享所得經驗和教訓,以免同類 情況重演。

#### **OVERALL PERFORMANCE**

Furthermore, the Key Performance Indicators (KPIs) have been revised in 2015/16 to better gauge our overall performance in different aspects for continuous improvement, and the KPI results are included in this report. Services Review of our Strategic Business Units (SBUs) and corporate supporting units are set out in the subsequent chapters.

#### **2015/16 HIGHLIGHTS**

Our business volume has expanded mainly due to new venues we served and increase in scale of services, despite losing some tenders from the Airport Authority in early 2016. We also noted the new approach of the Hospital Authority to adopt open tendering for both biomedical equipment and electrical and mechanical services, and we had been working hard to prepare for this challenge.

Since 2013/14, we have reported every year our progress of the five-year strategic plan in achieving the corporate goal of "creating public value for community betterment through partnership with our clients". We are pleased to report in this third year that there was continuous progress in the strategic implementation, most notably in the areas of delivering excellent service, building staff capacity and sustaining green operation. Also seeing progress were initiatives in enhancing knowledge management and becoming a trade model. Indeed, the five strategies are interrelated and advancement in one area would help drive the others forward.

#### **CONTINUOUS CUSTOMER SERVICE ENHANCEMENT**

Following the completion of a feasibility study by a consultant this year, the phase one work of a completely revamped Customer Service Centre (CSC) operating on a Customer-Centric e-Platform has already commenced. We are deeply thankful to our clients for sharing their views with us and our consultant in the feasibility study. Upon the targeted completion of phase one by late 2017, the system would be capable of automatically assigning jobs when fault calls come in, and the staff concerned would be notified in real-time via their mobile devices. That being said, this is only the first step towards building our new CSC, with remaining phases to be done.

A related initiative was expanding the sample size of our monthly telephone survey of clients from 210 to 460 respondents in 2015, thus covering more clients in different service types. Any "unsatisfactory" case is now promptly escalated to the chief engineer for his follow up. The lessons learnt are then shared with other SBUs to prevent recurrence.

# 業務回顧與前瞻 OPERATIONS REVIEW AND OUTLOOK

#### 加強資產管理及承辦商管理

我們不斷努力為客戶加強機電資產管理,我們在將建築信息模擬和資產管理結合方面的創新工作,進展良好且獲業界認同。與此同時,我們也開始以一套在營運基金內部標準統一的方法,為客戶的機電資產重新分類,繼而採用更嚴謹的操作與維修保養程序,並特別着重更換和提升老化資產的工作,以減少故障及提升資產表現。

員工認為最近推行的提升「維修外判合約表現監察系統」在管理我們的承辦商上有效用。我們更善用承辦商表現評核機制,密切監察表現欠佳的承辦商,並敦促其作出改善,同時又可表揚出色的承辦商。我們也以各種途徑向承辦商宣傳安全訊息,提高其安全意識與水平。

#### 提升員工能力及知識管理

年內,我們繼續研訂員工才能矩陣,以找出部門所需才能和培訓需要,從而提升同事的部業工程,與大學運基金的工作範疇極廣,牽涉原先構設的複雜。我們先在2016年年中完成編製專業理想的才能矩陣,然後便建立技術職系的才能矩陣,然後便建立技術職系的才能矩陣,然後便建立技術職系的才能矩陣是一套定義清晰且妥為記錄的才能指標,協助員工程升能力。我們也於2015年9月加強了。 提升能力。我們也於2015年9月加強了時期計劃,讓學員更能把握日常操作所需。

另一範疇是提高對同事在財務和營運方面的匯報。日常事務如事故報告提交、承辦商發票的哲學,必須適時處理。從重要事故中汲取的問款。如與其他策略業務則也應妥為記錄,並與其他策略業務們位分享,促進企業學習和提升質量。此舉與我們區內知識管理、鼓勵分享和促進機構學習的策學和公主,令管理系統中引入利潤中心,令管理所及各個負責利潤中心的同事,更有效監察和控制業務表現。

#### 綠色作業有突破

為協助客戶達到政府所要求的目標,在2015年起的五年內節省5%用電量,我們已為他們構想出更多節能工程方案,特別是優化空調系統能效表現的重新校驗方案。此外,同事也就撥款申請的程序向客戶提供意見,並為客戶準備全面的撥款申請方案。

# STRENGTHEN ASSET MANAGEMENT AND CONTRACTOR MANAGEMENT

We have kept our momentum in helping clients with their E&M asset management (AM). Our innovative development in integrating Building Information Modelling with AM was in good progress and well recognised by the industry. In parallel, we have started re-categorisation of clients' assets with a standardised methodology throughout EMSTF, followed by a more rigorous O&M regime and putting more emphasis on aging asset replacement and retrofitting to reduce faults and enhance asset performance.

The enhanced Performance Monitoring System for Maintenance Contract recently implemented was found useful for staff to manage our contractors. The contractors' appraisal performance system was better utilised, so that unsatisfactory performers can be monitored closely for improvement whilst outstanding contractors are praised. We have also promoted safety to our contractors through various channels to raise their safety awareness and standards.

# STEPPING UP STAFF COMPETENCY AND KNOWLEDGE MANAGEMENT

Meanwhile, we have furthered our work in developing a Staff Competency Matrix which will enhance the professionalism of our colleagues by identifying the departmental competence and training needs. The process is more complicated than it appears, as the variety of our work is extensive and involves numerous engineering disciplines. We have compiled the matrix for professional staff in mid-2016, and the matrix for technical staff is to be followed. When completed, the overall matrix will give a set of better-defined, documented competency objectives for building up staff competency. In addition, we have enhanced our Technician Training Scheme in September 2015 for better equip our trainees for meeting operational needs.

Another area is to raise staff reporting in operational and financial aspect. Operational matters like incident report submission and payment of contractor invoices must be handled in a timely manner. Lessons learnt from major incidents must be well documented and shared with all SBUs for corporate learning and quality enhancement. This is consistent with our strategy to enhance knowledge management, sharing and organisational learning. With the implementation of the profit centres in the financial management system, management can monitor and control business more effectively with delegated staff responsible for profit centre financial performance.

#### **GREEN OPERATION BREAKS NEW GROUND**

To help clients fulfil the 5% electricity saving target over five years from 2015 as required by the Government, we have come up with more energy engineering solutions for them, in particular the retro-commissioning of airconditioning systems to optimise their energy performance. We also managed to prepare a holistic bid and advised clients on the fund bidding process.

綠色作業的另一佳績,就是機電署總部大樓取得 「綠建環評既有建築」的鉑金級認證。作為首幢取 得這項認證的政府既有建築物,我們希望藉此為 其他既有建築物樹立好榜樣。 Another milestone in green operation was that the EMSD Headquarters Building obtained the BEAM Plus Existing Buildings Platinum certification. We hope that, being the first government existing building to receive such certification, our headquarters might set an example for other existing buildings to follow.

#### 客戶科技工作與未來「智能城市」

因應2014年的客戶意見調查,我們十分重視科技應用,並已成立數個由不同總工程師領導的工作小組,專門探討在電力、空調、升降機及自動梯、車輛、消防設施等方面的最新科技,目的過數客戶制訂創新的方案,讓客戶進行環保而智能的操作。工作小組與業界及學界也有定期接觸和交流,包括各種科技及其他工程範疇的知識,如操作及維修保養與安全,並促進業界的長遠發展。

#### 展望與致謝

近年營運基金最大的挑戰,是如何處理承辦商成本持續上升和資產老化的問題,同時要以有限的人手,有效地管理不斷擴大的服務組合,今年也不例外,而這也正是我們五大策略旨在解決的問題。我們也在機電服務方面作好準備,讓香港發展成為低碳及智能城市。

今年適逢機電工程營運基金20周年誌慶,我們在此先向客戶致謝。倘若沒有客戶確實的支持,營運基金根本無法生存。我們現時及以往的員工也同樣重要,有賴他們盡忠職守,努力不懈,群策群力,營運基金才能屢次化危為機,變得更關懷、更靈活。

我們衷心感謝常務委員會的指引和寶貴意見,也 多謝各承辦商及業界的支持。2016年是機電工程 營運基金成立20周年,我們期望看見營運基金的 健康發展。

# TECHNOLOGY FOR CLIENTS AND FUTURE "SMART CITIES"

In response to Customer Opinion Survey 2014, we attach great importance to technology applications. We set up several Working Groups led by chief engineers to explore advance technologies in areas such as electricity, airconditioning, lifts and escalators, vehicles and fire service facilities. The aim is to help clients come up with innovative solutions for green and smart operation. The Working Groups also have regular contact and interaction with the trades and academics, covering technologies and other engineering aspects like operation and maintenance practices, safety as well as the long term development of the trade.

#### **OUTLOOK AND APPRECIATION**

The challenge, as in recent years, remains how to cope with rising contractor cost and aging equipment, and to manage effectively an expanding service portfolio with limited number of staff. This is precisely what our five strategies aim to tackle. We are also preparing from the E&M service side in supporting the community to meet the low-carbon and smart city development.

On this auspicious occasion of EMSTF's 20th anniversary, we must first thank our clients for their unfailing support throughout the years without which EMSTF would not have survived in the first place. Equally important is our current and former staff whose commitment, hard work and team spirit have made it possible for EMSTF to emerge from every crisis with greater care and resilience.

Our heart-felt appreciation also goes to the Executive Board for its guidance and advice. We also thank our contractors and the trades for their support. The year 2016 marks the 20th anniversary of the trading fund, and we look forward to seeing the healthy development of EMSTF.

載德謙

戴德謙

機電工程署副署長/營運服務

honous

Tai Tak-him
Deputy Director/Trading Services, EMSD



#### 建設綠色健康社區

香港擁有七百多萬的龐大人口,而且人口老化問題日益嚴重,維護市民健康已成當務之急。我們決心成為市民及客戶的最強後盾,繼續竭盡所能,為公立醫院及醫療部門提供操作及維修保養服務。

在2015/16年度,我們成功與政府化驗所續簽為期五年的服務水平協議,並投得為醫院管理局(醫管局)18家公立醫院提供生物醫療儀器維修保養服務的兩年合約。與此同時,因應醫管局將自2017年起為轄下醫院及診所的電力、機械、空調和樓宇服務系統、生物醫療工程系統,以及綜合電子系統的操作及維修保養服務作公開招標,我們已展開相關的投標籌備工作。

#### **BUILDING A GREEN AND HEALTHY COMMUNITY**

With a huge population of over seven million and an ever-deteriorating aging problem in Hong Kong, the safeguarding of citizens' health has become a top priority for us. We are determined to be the strongest supporter of our citizens and clients by sparing no efforts in continuing to provide O&M services for public hospitals and healthcare departments.

In 2015/16, we successfully renewed our five-year Service Level Agreement (SLA) with the Government Laboratory and secured a two-year contract from the Hospital Authority (HA) for the maintenance of biomedical equipment at 18 public hospitals. We also started the preparation for the open tender for the O&M services for electrical, mechanical, air-conditioning and building services systems, biomedical engineering systems and general electronics systems at HA's hospitals and clinics from 2017 onwards.

我們一直關注高能源效益技術的最新發展。為減少能源消耗,我們已開始為瑪麗醫院等多家醫院引入無油磁浮式製冷機,取代老化的風冷式製冷機。We always keep an eye on the latest high energy-efficiency technology. To reduce energy consumption, we started replacing aging air-cooled chillers with the new oil-free chillers for hospitals including the Queen Mary Hospital.





服務模式由服務水平協議轉為公開招標,這個轉變對我們來說是項重大挑戰。醫管局是營運基金的最大客戶,我們期望憑藉過去近20年為醫管局提供優質服務的經驗,可讓我們繼續以可靠的醫院工程服務,為市民的健康和福祉作出貢獻。

我們重視每位客戶的意見及建議,因此在2015/16 年度推出嶄新的「客戶探訪計劃」,以了解臨牀醫 護人員在運作上有何需要及期望,從而改善我們 的技術支援和服務。計劃推出後反應正面,我們 會繼續推行和加強這項客戶服務新猷。

年內我們亦協助消防處把救護車設計標準化。經 優化的救護車更能滿足使用者的需求,並可以加 快未來採購時由發出訂單至交付的流程,從而加 快救護車的供應。

在醫療場地推廣能源效益和環保措施是我們另一項重要任務。在2015/16年度,我們進行了「巡視式能源調查」,仔細審視醫管局轄下多家急症醫院的能源使用模式,尋找能源管理機會,為醫管局制訂全面的能源組合方案。我們以全面的綠色作業策略,協助醫管局訂立路線圖,以節省能源成本和減少溫室氣體排放。

Our transition in service model from SLA to open tender had been quite a challenge for us. HA is the largest client of the EMSTF. We have been serving HA for nearly two decades and we are keen to continue delivering reliable hospital engineering services for the health and well-being of the community.

We treasure feedback and suggestions from every client and as such a new "client visit" programme was launched in 2015/16. The objective of this programme was to gain better understanding of the operational requirements and expectations of clinical staff in order to enhance our technical support and services offered to them. The programme was well received and we will continue to roll out and enhance this customer service initiative.

During the year, we also helped the Fire Services Department to standardise the design of its ambulances, so that user needs could be better satisfied, and the enhanced design would speed up the order-to-delivery process in future procurements, shortening the time for supply of ambulances.

Promoting energy efficiency and green initiatives at healthcare premises is another major mission of our team. In 2015/16, we critically reviewed the energy usage patterns in HA's acute hospitals through the "Walk-around Energy Survey" to identify energy management opportunities and developed a comprehensive energy portfolio for HA. By adopting a holistic green operation strategy, we assisted HA in charting a roadmap to achieve energy cost savings and greenhouse gas emission reduction.

# 營運服務 TRADING SERVICES



識及技術水平,薪火相傳。

We conducted on-site training in boiler maintenance at the Queen Elizabeth Hospital to enhance our staff's O&M knowledge and technical capabilities, thereby passing on expertise to younger colleagues.

掌握最新的環保節能技術,及協助客戶採用這些 技術,對提升節能效益至為重要。我們已開始以 新的無油磁浮式製冷機取代老化的風冷式製冷 機。新型製冷機採用最新的節能技術,能有效減 少醫院的能源消耗。為確保新型製冷機能高效運 作,我們邀請海外專家舉行了一系列導師培訓工 作坊,並舉辦多次內部培訓,以助員工掌握最新 的技術和知識。

盡責的員工團隊是我們提供可靠醫療服務的關 鍵。為鼓勵員工,我們安排高級管理人員親自頒 發嘉許信以表揚他們的優秀表現,並會邀請有關 員工與同事分享他們在工作上的成功經驗。

面對未來數年將有更多公立醫院及醫療場地落 成,我們已作出準備,審視自身的資源安排,為 新場地制訂高效可靠的服務計劃。同時,我們也 致力裝備員工,提升其專業知識和技能,務求貫 徹我們團隊的服務信念 - 盡心為醫護人員、病人 及其家屬的福祉服務。

Commitment in mastering the latest green technologies and helping our clients to apply them is essential to the enhancement of energy efficiency. We began the replacement of aged air-cooled chillers with the new oil-free chillers, which employ the latest high energy-efficiency technology, to reduce energy consumption in hospitals. To equip our staff with advanced skills and knowledge to ensure the newly installed oil-free chillers always perform their best, a series of "Train the Trainer" workshops delivered by overseas experts as well as internal trainings were conducted.

A dedicated team of staff is essential to our provision of reliable services to the healthcare sector. We motivated our staff by arranging the senior management staff present appreciation letters to them in person in recognition of their work and by inviting them to share their success stories with colleagues.

With more new public hospitals and healthcare venues to be commissioned in the coming years, we have reviewed our setup and planned for the delivery of effective and reliable services for the new venues. We strive to equip our team with the essential knowledge and expertise, and will remain committed to our service values — serving in the best interest of patients and their families as well as healthcare workers.

#### 體驗醫院前線工作

嘗試代入別人的角色有時的確可以促進溝通,這正是衞生工程部高級工程師梁雪輝先生當初構思「影子工作」計劃時的目的。他表示:「前線員工在員工滿意度調查中提出,希望管理人員能加強與前線員工溝通。」他受此啟發而構思出計劃,並邀請衞生工程部一位總工程師率先參與試驗,為同事樹立榜樣。

該名總工程師於2015年11月25日下午5時至晚上 11時的值班時段,參與兩位監工和一位高級技工 在屯門醫院機房的工作,包括清潔海水冷卻空調 系統的隔濾器、除去當中的甲殼和其他垃圾、檢 查機房設備和接聽呈報故障的電話,從中體驗前 線同事的日常工作和感受他們面對的壓力。

梁先生說:「我們事前已向前線同事介紹這項計劃,並告訴他們這不是演戲,他們可放心把日常工作交給總工程師去做,即使是棘手的工作也不用擔心。|

衛生工程部另有幾位高級工程師和工程師亦先後 參與了「影子工作」計劃,加深了他們對前線工作 的了解,亦加強了與前線員工的溝通。

#### FRONTLINE WORK SHADOWING AT HOSPITALS

Trying to stand in someone else's shoes does help communication sometimes. This is indeed the purpose of the Work Shadowing initiative proposed by Mr Leung Suet-fai, senior engineer of the Health Sector Division. "A comment from frontline staff in the Staff Satisfaction Survey is that professionals should communicate more with them," he said. Inspired, he then developed the concept and invited his chief engineer to be the first to participate in the pilot programme to set an example for other colleagues.

The chief engineer joined the work of two work supervisors and a senior artisan in the plant room at Tuen Mun Hospital on the 5–11 pm shift on 25 November 2015. He cleaned the strainer for the sea water-cooled air-conditioning system, removed the barnacles and other rubbish inside, checked the condition of plant facilities, and took fault calls from clients in the hospital to experience the daily routine of the frontline staff and the pressure they faced.

"We briefed the frontline staff about the programme beforehand and told them it was not a show. They could just assign him any task they perform every day, without having to worry about the difficulty of such work," he said.

A few senior engineers and engineers from the division have also taken part in the work shadowing programme to better understand and communicate with frontline staff.



藉着「影子工作」計劃,我們的工程師(左)有機會在高壓電掣房親身體驗前線員工(右)的日常工作。

Under the Frontline Work Shadowing Programme, our engineer (left) had a chance to experience first-hand the daily routine of a frontline staff (right) in a High Voltage Switch Room.

作為「影子工作」計劃的一部分,工程師(左)在前線員工(右)的協助下為冷卻塔的水樣本進行基本測試。

As part of the Frontline Work Shadowing Programme, our engineer (left) conducted basic testing on a water sample extracted from a cooling tower with the assistance from a frontline staff (right).

# 營運服務 TRADING SERVICES

#### 提升生活質素

前往街市購物是不少香港市民日常生活中不可或 缺的環節。我們的市政服務團隊繼續利用綜合樓 宇管理系統,遙距監測街市內的配電系統、升降 機及自動梯等主要設施的操作狀況,務求為市民 提升該等設施的可用性及可靠性。

我們與食物環境衞生署(食環署)緊密合作,於2015/16年度開始為37個街市更換機齡超過20年的老化升降機及自動梯,並計劃於未來兩年進行更多同類更換工程。鑑於街市設施的使用率極高,我們更換自動梯時會採用適合室外使用的設計,以提升可靠性。我們亦正着手為食環署街市的自動梯申請ISO 55001認證,以加強其資產管理,而認證的籌備工作應會在2016年第三季完成。

#### **ENHANCING OUR QUALITY OF LIFE**

Shopping at municipal markets is many Hong Kong citizens' daily routine. Our municipal services team has continued to use integrated Building Management System (iBMS) to remotely monitor the operating status of key facilities in markets, such as power distribution systems and lifts and escalators, to maximise their availability and reliability for citizens.

Working closely with the Food and Environmental Hygiene Department (FEHD), we have started replacing aged lifts and escalators of over 20 years in 37 markets in 2015/16, with more such replacements planned for the next two years. In view of the heavy usage pattern in markets, the new escalators will be outdoor design for higher reliability. We have also been working on ISO 55001 certification for escalators in FEHD markets to enhance asset management. Preparations for certification should be completed by the third quarter of 2016.

我們把食環署轄下楊屋道街市一部老化的自動梯更換為適合室外使用的設計,以提升其效能。同事正利用平板電腦從綜合樓宇管理系統讀取新自動梯的實時數據。

We replaced an aging escalator with an outdoor design at Yeung Uk Road Market for FEHD to enhance its performance. Our colleague uses his tablet to get real-time data of the new escalator from iBMS.



綜合樓宇管理系統讓同事能取得土瓜灣市政大廈暨政府合署內各個機電系統的實時數據,從而進一步完善系統管理和提升設備的可靠性。 iBMS enables our staff to acquire real-time data of various E&M systems in the To Kwa Wan Market and Government Offices Building, thus ensuring better system management and higher equipment reliability.



至於其他客戶場地,亦陸續應用各種科技。郵政 總局於年內安裝了綜合樓宇管理系統,此舉不但 令設備的可靠性提高,同時亦能節省營運成本。 在能源效益方面,我們試行在香港文化博物館及 中央郵件中心安裝能提高製冷機組能效表現的 裝置,有關裝置可使兩個場地的用電量節省多達 15%。我們計劃日後將綜合樓宇管理系統及製冷 機組優化技術擴展至更多場地,讓市民可享用更 可靠及更具能源效益的設施。

Technology was also applied to other client venues. During the year, iBMS was installed at the General Post Office, leading to higher equipment reliability and operation cost savings for the client. On the energy efficiency front, trial installations to optimise chiller plant performance were carried out at the Hong Kong Heritage Museum and the Central Mail Centre, which could save as much as 15% electricity consumption. Our plan is to extend iBMS and chiller optimisation to many more venues in future, so that the public may enjoy more reliable and energy efficient facilities.







### 營運服務

#### TRADING SERVICES

游泳是本港很受歡迎的消閒活動之一。鑑於外郊曾發生泳客被泳池吸水系統吸住而遇溺的事符是檢視全港公眾泳池的設計,確保安全港公園標準。不過,為了令設施加倍安全釋式們主動建議在其中三個泳池試用安全全釋置,結果證明該系統是有效的額外安全裝置,可令被吸住的泳客或執力可受阻時自動停止改新了令被吸住的泳客或物件。我們已建議作,池設計指引,把安全真空釋放系統納入日數計指引,把安全真空下,我們會與康子之政治,把安全真沒無,我們會與康子之政法。

與此同時,我們為高山劇場新翼提供的舞台燈光操作及維修保養服務,將會納入我們與康文至高的服務水平協議內,以進一步整合我們與康文署及食環署緊陷在。 劇場的服務。我們更與康文署及食環署緊內作,在2015年4月2日晚上11時起的21個小時經 完成更換駱克道數據中心一組老化的製冷機 該數據中心對多項網上服務的運作非常重要,自 該數據中心對多項網上服務的運作非常重要,自 話數數據中心量度,以及多次一絲不苟們的 類別試,加上客戶及承辦商的通力合作,我們的 團隊最終順利並準時完成工程,令客戶十分滿意。 Swimming is one of the popular pastimes in Hong Kong. Learning from overseas incidents where swimmers have been entrapped by the swimming pool water suction system, we initiated a review of the design of all public pools designs in Hong Kong and found that their design complied with local and overseas standards. However, to be doubly safe, we proactively recommended a trial application of the Safety Vacuum Release System (SVRS) to three swimming pools. The trial proved the SVRS to be an effective additional safety device as it could cause tripping of the circulation pump resulting in the release of trapped swimmer or object. We have recommended to revise the pool's design guidelines to include the SVRS in new swimming pools in future. Where appropriate, retrofitting proposals for existing swimming pools would be discussed with the Leisure and Cultural Services Department (LCSD).

At the same time, our O&M services for stage lighting at Ko Shan Theatre New Wing will become part of the Service Level Agreement with LCSD, making our services more seamless for Ko Shan Theatre. With close collaboration with LCSD and FEHD, we replaced an aging chiller plant at the Lockhart Road Data Centre within just 21 hours starting from 11 pm on 2 April 2015. The Data Centre was critical to the operation of many online services such as booking of LCSD recreational facilities and application for liquor licences. With meticulous planning and preparations, attention to detail in measurement and careful simulations, as well as good co-ordination with both clients and contractors, our team completed the task smoothly and on time, to clients' great satisfaction.



我們在香港文化博物館試行安裝能提高製冷系統能效表現的裝置,為客戶節省能源及成本,並為市民帶來難忘的綠色參觀體驗。

We carried out trial installations to optimise chiller plant performance at the Hong Kong Heritage Museum so as to save energy and cost for the client and give the public a more inspiring and greener museum experience.

#### 空調方案具創意

市民可能未必知道,大會堂空調系統曾經在2015年 6月5日因一條海水冷卻喉管損毀,導致空調供應 短暫中斷。

負責大會堂空調系統維修保養事宜的市政工程部工程師王銘鴻先生,迅速與他的團隊及客戶(康文署)合作,在大會堂紀念花園裝設一個臨時製冷機組。在6月6日,該機組已開始運作,讓大會堂的室溫維持在約攝氏25.5度。

王先生説:「我們在36小時內完成所有工作,包括 安裝機組、接駁喉管和鋪設電線。」他的團隊與客 戶攜手處理所有相關事宜,例如安全問題,以及 在大會堂張貼通告讓使用者和訪客知悉空調供應 的情況。期間客戶並沒有收到任何市民的投訴。 我們的團隊能在短時間內為客戶多走一步,提供 應急方案,深獲客戶讚賞。



The public might not be aware that a damaged sea water cooling pipe of the air-conditioning system caused a temporary suspension of air-conditioning at City Hall on 5 June 2015.

Mr Wong Min-hung, Kevin, the subject engineer in the Municipal Sector Division, promptly worked with the client LCSD and his team to install a temporary chiller plant at the City Hall Memorial Garden. By 6 June, the plant was already operating to maintain the venue's temperature at around 25.5 degrees Celsius.

"Everything was done within 36 hours, including installation, pipe connection and cable wiring," said Kevin. The team worked with the client to tackle all related issues like safety, and put up notices at the venue to alert users and visitors to the air-conditioning situation. No complaints were received from the public. The client appreciated the team's extra efforts in providing an interim solution in a short period of time.



為籌備實施都市固體廢物收費,我們的車輛工程 分部最近協助環境保護署(環保署)完成一項為 三個月的試驗計劃,為政府垃圾收集車(垃圾車) 安裝垃圾桶自動點算系統。我們協助為三輛 支裝立圾桶自動點算系統。我們協助為三輛 地裝一套在收集桶上應用射頻識別技術並 統,用作自動點算和記錄相關資料,例如時 所屬樓宇及傾倒次數等。有關數據會實我 所屬樓宇及傾倒次數等。有關數據會 實我 一 安裝自動點算系統不但利便客戶,還能提高市民 減少製造廢物的意識。



To prepare for the implementation of municipal solid waste charging, our Vehicle Engineering Sub-division recently helped the Environmental Protection Department (EPD) complete a three-month trial of an automated bin-counting system installed on government refuse collection vehicles (RCVs). We helped retrofit three RCVs with a system which applied radio frequency identification technology on the collection bins that would automatically count and record information such as buildings to which the bins belonged and the number of bins collected. Data were transferred real-time to the central server that would facilitate the fee charging mechanism in future. We see such work as helping clients and raising awareness of citizens in minimising waste generation.



為協助環保署籌備實施都市固體廢物收費,我們為垃圾桶自動點算系統進行為期三個月的測試。測試期內系統錄得零故障,而測試結果亦令人滿意。

To help EPD prepare for the implementation of municipal solid waste charging, we conducted a pilot test on the automated bin-counting system. The three-month trial had zero fault, and the testing result was satisfactory.

# 營運服務 TRADING SERVICES

#### 讓市民安全安心

我們的工作範疇廣泛,涵蓋與安全和保安相關的服務,包括項目設計與實行、測試和驗收,以及機電系統和設施的操作及維修保養。我們的工作與城市的安全、保安及治安息息相關。

2015/16年度其中一個里程碑,是完成消防處消防 及救護學院的工程。位於將軍澳的消防及救護學 院已於2016年3月由行政長官主持開幕儀式。 們就設計和興建特製的實火模擬事故訓練設施 供機電支援,其中最新安裝的模擬設施包括實物 原大的飛機、船隻及火車實景模型,讓消防員可 在高度像真的環境下接受訓練。我們將於2016年 年底完成學院所有機電設施的接收工作,開始提 供操作及維修保養服務。

#### HAVING A SAFE AND SECURE CITY

Our work covers a wide range of services related to safety and security, from project design and implementation to testing and commissioning and O&M services for E&M systems and facilities. The city's safety and security as well as law and order are all relevant to our work.

A milestone in 2015/16 was the completion of the Fire and Ambulance Services Academy (FASA) of the Fire Services Department for which we provided E&M support to design and build the specialised live fire training simulators. Located at Tseung Kwan O, FASA was opened in March 2016 by the Chief Executive. The latest simulators installed were life-size mock-ups of an aircraft, a ship, a train, etc. to facilitate drills for firefighters in a highly realistic setting. We shall complete the taking up of O&M services for all E&M facilities in the Academy by end of 2016.



位於將軍澳的消防及救護學院設有多項實物原大的實景模型,例如圖中的飛機模型。我們為這些火警模擬事故訓練設施的設計及興建提供機電支援,確保消防員在安全可靠的環境下接受訓練。

Full-size mock-ups such as this aircraft have been installed at the Fire and Ambulance Services Academy located at Tseung Kwan O. The E&M support we provided in designing and building the fire simulators ensures the safety and reliability of training for firefighters.

年內,香港海關為跨境貨櫃車檢測工作購置了兩部流動X光車輛。我們協助客戶安排採購,並為車輛提供日常維修保養服務。另外,香港警務處轄下於友翔道的新油麻地警署於2016年5月起投入服務,我們為該警署提供機電系統操作及維修保養服務。

我們另一項與治安相關的工作,就是為剛翻新並於2015年9月啟用的終審法院大樓提供服務。這歷史悠久的大樓,我們為司法機構在多個系法學文先進的視聽和即時傳譯系統。有關經顯示控制屏,閱覽呈堂營經,並能將法庭的聆訊過程即時讓分大樓內不同地點,更可以進行視像會議,對於其他地點的證人參與。由於大樓受《古大法及古蹟條例》保護,機電設施安裝工作面對極大樓的文物價值不受任何影響。

During the year, the Customs and Excise Department has procured two mobile X-ray vehicles for inspection of cross-border container trucks. We helped the client arrange the procurement and provided ongoing maintenance of the vehicles. For the Hong Kong Police Force, we will take over the new Yau Ma Tei Police Station on Yau Cheung Road, scheduled for opening in May 2016, for O&M services for E&M systems.

Also related to law and order was our work at the newly renovated building of the Court of Final Appeal that began operation in September 2015. In this historic building, we installed for the Judiciary advanced audio-visual and simultaneous interpretation systems in the courtrooms. The system enables viewing of evidence and court documents on touchscreen control panels, supports real-time broadcast of court proceedings at various locations in the building, and video conferencing with witnesses at other locations. As the building was protected by the Antiquities and Monuments Ordinance, installation of E&M facilities was highly challenging, and innovative solutions were deployed to ensure zero impact on the heritage aspects of the building.

我們為新油麻地警署安裝了大型太陽能熱水系統。系統利用太陽輻射產生熱水,並可減省能源支出。 We installed a large-scale solar water heating system at the new Yau Ma Tei Police Station. The system harnesses the heat in solar radiation to produce hot water and saves energy cost.



新油麻地警署內的緊急發電機,是由我們提供操作 及維修保養服務。

We provide O&M services for the emergency generator at the new Yau Ma Tei Police Station.



### 營運服務

#### TRADING SERVICES

年內,我們接收了由前中區政府合署東座和中座翻新而成的律政中心的機電設施,提供操作及維修保養服務。我們也正進行準備工作,於2016/17年度接收設有30多個法庭及先進設施的西九龍法院大樓,為這幢大型建築物的機電設施提供操作及維修保養服務。能為法律相關建築物的設施提供操作及維修保養服務,創造高效舒適的環境,以便法律程序順利執行,讓公眾在法治下享有公義平等,我們十分欣喜。

During the year, we also received the Justice Place, renovated from the former East Wing and Main Wing of Central Government Offices, for O&M services. Preparations are now underway to receive in 2016/17 the West Kowloon Law Courts Building, a major venue with over 30 courtrooms and state-of-the-art facilities, for O&M services. We are happy to have contributed in providing O&M services for the facilities in law-related buildings so as to bring about an efficient and pleasant environment where legal proceedings can be smoothly conducted to uphold justice and equity for the public based on the rule of law.





我們在終審法院安裝的視聽系統,能將法院聆訊即時轉播至大樓內多個地點。同事正於控制室內監察法庭的情況。

The audio-visual systems which we installed in the Court of Final Appeal can provide live broadcast of court hearings at various locations inside the building. Our colleague monitors the courtrooms from the control room.



2015/16年度,我們接收了律政中心的機電設施,由經驗豐富的操作及維修保養團隊提供專業服務。

Our experienced O&M team provides professional services for the Justice Place taken over in 2015/16.

#### 不斷學習 教導後輩

提到傳授技術給年青一輩,孫永良先生是機電署 其中一位好導師。身為一級監工,他帶領14位同 事,負責營運基金所有客戶部門的非道路流動裝 置和運載工具(例如高爾夫球車、剪草機、拖拉 機、鏟車和沙灘運輸車)的維修保養工作。他對被 械設備的興趣濃厚,對同事和承辦商的技術水平 要求也極高。他説:「我們的挑戰是流動運載工具 的市場不斷推陳出新,科技日新月異,我們必須 不斷學習,才能把工作做好。」

當被問及在教導年青同事時有沒有什麼「獨門秘方」,孫先生表示他會讓同事觀摩他的做法,再指導他們兩、三年,同事就可以勝任了;而耐心正是當中的關鍵。

# KEEP LEARNING AND MENTORING YOUNG COLLEAGUES



When it comes to imparting technical skills to the younger generation, Mr Sun Wing-leung is often cited as one of the good mentors in EMSD. As a Work Supervisor I, he supervises about 14 colleagues who handle the maintenance and repair of all EMSTF clients' non-road mobile plants and carriers such as golf carts, lawnmowers, tractors, forklifts and beach carriers. He has a passion for mechanical gadgets, and demands very high technical standards from colleagues and contractors. "Our challenge is that mobile carriers with new technologies develop rapidly in the market. We must keep learning to be able to do the work well." he said.

Does he have a "secret formula" to mentor young colleagues? According to Mr Sun, he will let them observe him doing the work, coach them for two to three years, and they will pick up the skills. Patience is the key.



(左)透過綜合樓宇管理系統,我們在收到大樓的故障或預警信息後,可迅速搶修機電設備。 (右)粉嶺法院大樓是我們設於客戶場地的多個卓越中心之一,營運基金藉此培育員工的專業技能。 (Left) Immediate fault repairs can be carried out once our staff receives alarms or fault reports through iBMS. (Right) Fanling Law Courts Building is one of our Centres of Excellence at client venues for sustaining EMSTF's in-house expertise.

# 營運服務 TRADING SERVICES

#### 配合政府 慳電節流

我們亦不時支援政府推行的其他新猷,例如行政長官在2015年的《施政報告》中提出,以2013/14年度為基線,在未來五個財政年度把政府建築物的用電量減少5%。作為政府建築物機電裝置的能能發展務供應商,我們是協助客戶制訂相應能源策略計劃的最佳人選。我們擬訂了一份清單,列出用電量最高的344幢政府建築物。在環境局類款資助下,我們於年內為清單上首150幢建到省電目標。我們將在下一個財政年度為清單上的另一批建築物進行類似工作。

# HELPING GOVERNMENT SAVE ENERGY AND RESOURCES

From time to time we also support the Government in implementing other pioneering initiatives. A task arising from the Chief Executive's 2015 Policy Address was to save 5% electricity consumption in government buildings in the next five financial years, using 2013/14 as the baseline. Being the maintenance agent of E&M installations for government buildings, we are well positioned to help our clients develop energy strategy plans accordingly. A list of 344 government buildings with the highest electricity consumption was drawn up. Funded by the Environment Bureau, we have conducted energy audits for the top 150 buildings on the list and identified energy management opportunities to achieve the saving target. The coming financial year will see the next batch of buildings on the list going through a similar exercise.

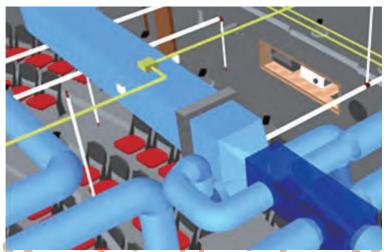
EMSTF has mobilised all its Strategic Business Units, in particular the team that provides E&M operation and maintenance services to government buildings, to help clients achieve the energy saving goal via different types of works. The solutions range from better housekeeping, equipment retrofits, more intelligent operating methods to optimise system performance, to major plant replacements that require long-term investment. New technologies applied include Central Control Monitoring System upgrading to optimise energy efficiency of air-conditioning systems, as well as the use of oil-free chillers, variable speed drives for coolers and split-type units, LED floodlighting and variable voltage variable frequency lift drives with regenerative power, among others.



我們參與「綠建環評社區」先導計劃的經驗,有助我們協助其他政府建築物加入「綠色」及社區友善設施。

Our experience in participating in the BEAM Plus Neighbourhood pilot scheme enables us to help other government buildings plan their "green" and community-friendly features.





我們在機電署總部大樓推行先導計劃,將建築信息模擬技術與資產管理系統結合,以提升建築物操作及維修保養的效率和加強資產管理。圖片顯示我們演講廳的建築信息模擬模型。We launched a pilot project to integrate BIM technology with Asset Management System at the EMSD Headquarters Building to enhance the efficiency of O&M services in buildings and reinforce asset management. The pictures show the BIM model of our Lecture Theatre.



此外,政府內部正推行「0-1-1」計劃,即在2015/16至2017/18三個財政年度內,合共節省2%經常性開支。本着與客戶同甘共苦的精神,我們在服務質素不變的情況下,主動就多項服務水平協議提供一次性減價,讓客戶節省開支。

一如去年提及,我們繼續支持發展局的倡議,探討把建築信息模擬技術應用到建築物操作及維修保養服務上的好處,並嘗試將建築信息模擬技術與資產管理系統結合,以求提升效率。在機電署總部大樓推行的獲獎先導計劃在2015/16年度繼續進行,而我們亦與其他工務部門、公營機構及業界分享經驗。

Also related is the Government's service-wide "0-1-1 Envelope Savings Programme", i.e. a total of 2% recurrent savings over three financial years to be achieved from 2015/16 to 2017/18. In the spirit of supporting our clients through thick and thin, we have offered one-off price reduction in many Service Level Agreements without compromising our service quality, thus helping clients reduce cost.

As reported last year, we continued to support the Development Bureau's initiative to explore the benefits of applying Building Information Modelling (BIM) technology to O&M services in buildings, and attempted to integrate BIM technology with Asset Management (AM) System for greater efficiency. Our award-winning pilot project at EMSD Headquarters Building continued during 2015/16 and we have been sharing experience with other works departments, public organisations and the trade.

### 營運服務

#### TRADING SERVICES

我們亦陸續與其他部門分享「綠建環評」認證工作的經驗。我們在2014/15年度已獲得「綠建環評既有建築」暫定鉑金級評級,並在2016年獲得最終認證。此外,我們已參與「綠建環評社區」先導計劃,邀請社區持份者及機電署同事構思為總部外的露天廣場加入「綠色」及其他社區友善設施。其他部門亦可能有興趣知悉我們參與該項先導計劃的經驗。

Another area where we have been sharing experience with other departments is BEAM Plus certification. We have obtained BEAM Plus Provisional Platinum Rating for Existing Buildings in 2014/15, and we have achieved final certification in 2016. Our experience in participating in the BEAM Plus Neighbourhood pilot scheme, under which we have engaged the community stakeholders and EMSD staff to plan "green" and other community-friendly features in our headquarters piazza, might also be of interest to other departments.



不論我們身在何方,均可透過與綜合樓宇管理系統連接的平板 電腦,實時監測建業中心各個系統的操作狀況。

No matter where we are, the operating status of different systems in the APB Centre can be monitored in real-time via a tablet connected with iBMS.



#### 照亮投票站

投票及點票站必須有足夠燈光,以清楚顯示票站 的位置及讓票站內所有活動得以順利進行。營運 基金負責為選舉事務處所有選舉的投票及點票站 加裝照明設施,以確保票站光線充足。

舉例來說,我們就2015年11月22日舉行的2015年 區議會選舉,在兩個星期內為495個投票及點票 站加裝28 000多個燈泡,而180位同事更在投票當 日進行實地檢測,並提供候命支援服務。另一個 例子是在2016年2月28日舉行的立法會新界東地 方選區補選,我們為154個投票及點票站加裝多 個燈泡。

由於票站通常是由官立學校、體育場地、社區會 堂或鄉公所改裝而成,大多只能在投票日的前一 天才交出場地讓工作人員布置準備,因此進行模 擬票站測試極為重要。此外,在投票日安排足夠 人手候命以處理故障維修工作,也是一項挑戰。

負責立法會補選票站照明工作的工程策劃部工程 師王家強先生表示:「幸得團隊事前的充分準備和 周密協調,當天只收到幾宗故障報告。」

#### LIGHTING UP POLLING STATIONS

Sufficient lighting at polling and counting stations is important to show their locations and ensure the smooth operation of all activities inside the stations. EMSTF is responsible for providing a well-lit environment via additional lighting at polling and counting stations in all elections under the Registration and Electoral Office.

For example, we installed more than 28 000 additional light bulbs within two weeks at 495 polling and counting stations for the 2015 District Council Election held on 22 November 2015. Our 180-member staff team also conducted site inspections and provided stand-by support services on the day. Another example was the Legislative Council (LegCo) New Territories East Geographical Constituency By-election held on 28 February 2016 for which we installed additional lighting at 154 polling and counting stations.

As the stations were typically converted from government schools, sports venues, community halls or village offices, many could be handed over for site work only one day before the polling day. Mock-up station testing was therefore important. Another challenge was providing sufficient stand-by manpower to handle fault repairs on polling day.

"Thanks to the team's thorough preparation and co-ordination, there were only a few fault calls on that day," said Mr Wong Ka-keung, the subject engineer in the Project Division responsible for setting up lighting at the polling and counting stations for the LegCo By-election.



(右)我們在2016年2月28日為立法會補選的各個投票及點票站提供照明裝置候命支援服務,以確保票站在投票日運作暢順。 (Right) We provided stand-by support services for the lighting installations at various polling and counting stations on 28 February 2016 so as to ensure their smooth operation on the polling day of the LegCo By-election.





To support the 2015 District Council Election, we provided temporary lightings at the 495 polling and counting stations which included more than 28 000 energy saving light bulbs within two weeks.

# 營運服務 TRADING SERVICES

#### 路路暢通 全民得益

我們客戶部門的工作涉及香港的海陸空交通服務,而我們在2015/16年度的工作反映了我們為客戶在服務市民方面的進展。

香港國際機場新中場客運廊於2015年12月啟用,我們的機場團隊為有員工駐守中場客運廊的政府部門提供機電設施操作及維修保養服務。中場客運廊提供20個停機位,並利用旅客捷運系統的延伸部分連接至一號客運大樓,每年可處理多達額外1000萬旅客人次。另外,我們也成功取得機場一般抽水系統的操作及維修保養服務合約,並正為助航燈系統維修保養合約的續約事宜作準備。

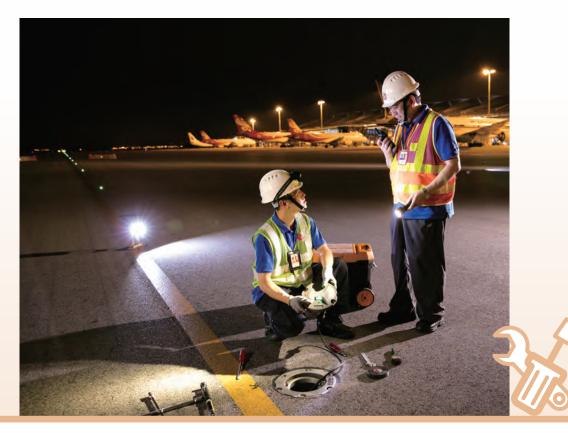
機場團隊也同時服務有員工駐守機場的其他政府 部門,例如民航處。團隊已開始協助該處實施能 源優化系統,包括把設備提升至更節能的型號, 以及改變使用者的操作方法及行為。

#### PROVIDING A SMOOTH JOURNEY FOR ALL

The work of our clients encompasses air, sea and land transport services in Hong Kong and our work in 2015/16 reflected the progress we made for our clients in serving the public.

Our airport team provides O&M services for E&M facilities of the government departments with staff stationed at the new Midfield Concourse of the Hong Kong International Airport opened in December 2015. The Concourse provides 20 parking stands, connects to Terminal 1 via an extension of the Automated People Mover system and can serve up to an additional 10 million passengers every year. We also won the tender to provide O&M services for the airport's general pumping system, and have been preparing the renewal of the maintenance contract for the airfield ground lighting system.

The team also serves other government departments with staff stationed at the airport such as the Civil Aviation Department. We have begun to help it implement an energy optimisation system, involving both equipment upgrades to more energy efficient models as well as bringing about changes in operation practices and behaviour of users.



我們不分畫夜為機場新中場客運廊的滑行道助航燈提供維修保養服務,確保其運作正常。 We work round the clock to provide maintenance services for the airfield ground lighting of the taxiways of the new Midfield Concourse at the airport to ensure its normal operation.



我們協助海事處提升其船隻航行監察服務系統和提供維修保養服務,確保船隻航行及監察工作的效率。

We help the Marine Department upgrade and maintain its Vessel Traffic Services System to ensure efficient vessel navigation and monitoring.

2016年3月開始運作的海事處船隻航行監察服務系統(航監系統),是本港海上交通服務的里程碑。航監系統現已發展至第三代,擁有高性能的電腦網絡、先進的數碼固態雷達,以及設合操作的的影響。 船隻航行監察中心(航監中心)的八台綜合操作新的 服實,使船隻追蹤的的員工作站。系統運用電腦屏幕,使船隻追蹤和項員 援助服務可全部於無紙環境下完成。我們的航監系統 ,他們於2016年農曆新年期間為新的航監系統 及航監中心進行測試和校驗,工作尤為忙碌。我們的角色是協助客戶提升香港水域船隻導航和監察工作的質素。

市民或已注意到,啟德郵輪碼頭日益繁忙,停泊量上升至每年110至120艘。我們的團隊已不斷增加人手,應付需求日增的機電服務。我們喜見郵輪碼頭正逐漸成為旅客到訪香港及亞洲各地的重要門戶。

陸上交通方面,政府於2016年8月接收東區海底隧道(東隧),而我們也一直忙於相關的準備工作。政府接收東隧後,我們負責監察隧道營辦商的機電設施操作及維修保養服務。同時,城門隧道交通管制及監察系統的更換工程亦已完成。

A milestone in sea transport was the commencement of operation of the Marine Department's Vessel Traffic Services (VTS) System in March 2016. The VTS, now in its third generation, comprises a network of powerful computers, sophisticated digital solid state radars and eight integrated operator stations at the new Vessel Traffic Centre (VTC) where vessel tracking and navigational assistance services can be all done on screen in a paperless environment. Our project team that has been helping the client replace and upgrade VTS in the past few years was particularly busy during the Chinese New Year in 2016 with the testing and commissioning of the new VTS System and VTC. Our role was to facilitate the client to enhance the quality of vessel navigation and monitoring in Hong Kong waters.

The public may have noticed that the Kai Tak Cruise Terminal has been getting busier, with the number of cruise calls rising to about 110 to 120 per year. Our team there has been stepping up manpower in order to satisfy the increasing E&M service needs. We are delighted that the Cruise Terminal is becoming an increasingly important gateway for tourists visiting Hong Kong and other places in Asia.

As to land transport, we have been working busily on preparation work related to the takeover of the Eastern Harbour Crossing by the Government in August 2016. After the takeover, we are responsible for monitoring the O&M services provided by the tunnel operator for E&M facilities. Meanwhile, replacement of the Traffic Control and Surveillance System at Shing Mun Tunnels has also been completed.

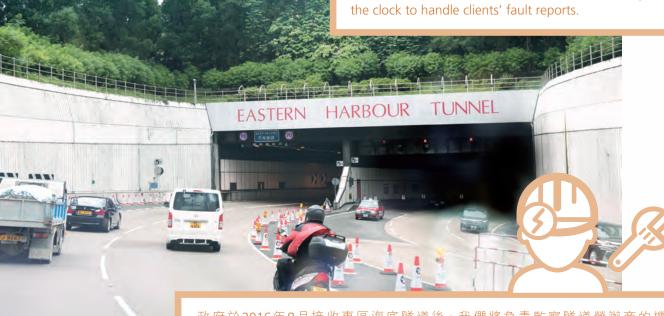
# 營運服務 TRADING SERVICES





我們資訊服務中心的人員提供24小時服務,處理客 戶的故障報告。

Our staff at the Information Services Centre is ready round the clock to handle clients' fault reports.



政府於2016年8月接收東區海底隧道後,我們將負責監察隧道營辦商的機電設施操作及維修保養服務。

After the takeover of the Eastern Harbour Crossing by the Government in August 2016, we would be responsible for monitoring the O&M services for E&M facilities of the tunnel operator.

年內,我們完成了全港交通燈監察系統與地理資訊系統平台結合的工作。同時,全港行人及行車隧光系統、行人及行車隧配監察系統、行人及行車隧配工程。 於系統及所有主要客戶部門總部大樓的配理資訊系統方是經與地理資訊系統結合。有了回地理資訊系統結合。有了便地地理資訊系統結合。有了便使出系統支援的實時遙距監察功能,我們便可更,提地回應客戶的故障報告和進行維修。此外一個設施出現故障時,已結合地理資訊系統的平台就會即時顯示故障位置,以便採取行動。

快將落成的港珠澳大橋是連接內地的陸路運輸新通道。興建中的人工島上的新過境設施,將包括供我們的客戶部門(例如路政署、入境事務處、香港海關、香港警務處、消防處等)使用的各種機電系統。屆時我們的機電操作及維修保養業務範疇將大幅擴大,而我們現時正進行一切必要的準備工作。

During the year, we completed the integration of the city's traffic light monitoring system with the Geographic Information System (GIS) platform. Likewise, the monitoring systems of all footbridge lifts and escalators, pedestrian and vehicle subway pumping systems as well as power distribution systems at headquarters buildings of all major client departments have also been integrated with GIS. The GIS-enabled real-time remote monitoring has made fault response and rectification for clients much faster. Our Information Services Centre is now also more efficient as any facility with a reported fault can be instantly located on the GIS-integrated platform for action.

Also on the horizon is the Hong Kong-Zhuhai-Macao Bridge which will provide a new land transport link to the Mainland. The new boundary crossing facilities on an artificial island being built will include various E&M systems for our client departments, such as the Highways Department, the Immigration Department, the Customs and Excise Department, the Hong Kong Police Force, the Fire Services Department, etc. This would expand our O&M portfolio significantly and we are making all necessary preparations.

#### 保養偏遠地區的雷達站以守護航空 安全

機電工程營運基金為客戶提供的服務有時涉及偏遠地點,例如大欖角機場多普勒天氣雷達站便坐落屯門一個山頂,面向香港國際機場。機場及車輛工程部高級工程師胡偉傑先生的團隊負責其維修保養工作,他表示在他的團隊所負責的雷達站之中,大欖角機場多普勒天氣雷達站已算是較易到達的一個。

大欖角機場多普勒天氣雷達站於2014年落成啟用,安放了香港天文台新的風切變氣象雷達。該雷達可搜集氣象數據,並即時向於機場升降的飛機發出有關風切變的預警,以保障航空安全。胡先生的團隊為雷達站提供定期的維修保養及故障維修服務。由於航班安全十分重要,因此雷達站的任何故障都必須立即修妥。他説:「雷達站在過往兩年運作良好,而我們的團隊也一直24小時隨時候命。」

# TAKING CARE OF RADAR STATIONS IN REMOTE LOCATIONS FOR AVIATION SAFETY

EMSTF's client work sometimes takes us to far-flung locations. The Brothers Point Terminal Doppler Weather Radar (TDWR) Station, for example, sits on a mountain top in Tuen Mun directly facing the Hong Kong International Airport. According to Mr Wu Wai-kit, Eddie, Senior Engineer of the Airport and Vehicle Engineering Division, whose team handles its maintenance and repair, this is already one of the more accessible radar stations serviced by his team.

Commissioned in 2014, the TDWR Station was constructed to house the Hong Kong Observatory's new windshear weather radar, which collects meteorological data and provides timely windshear alerts to flights to and from the airport for safeguarding aviation safety. Mr Wu's team provides regular maintenance and fault repair services for the station. As flight safety is critical, any fault in the station must be repaired immediately. "The station has been operating smoothly in the past two years and our team is on 24-hour stand-by at all times." he said.



雖然大欖角機場多普勒天氣雷達站坐落屯門偏遠的山頂上,但當有需要時,我們都會馬上趕赴現場進行維修。 Although the TDWR Station sits on a remote mountain top in Tuen Mun, we are ready to provide repair services anytime.



我們為香港天文台的大欖角機場多普勒天氣雷達站提供機電設施維修保養服務,保障本港的航空安全。 To ensure aviation safety in Hong Kong, we provide maintenance services for the E&M facilities at the TDWR Station of the Hong Kong Observatory.



服務香港市民並提升他們的生活質素是我們的首要任務。我們以五大策略為行動綱領,引領我們如何為客戶部門提供服務,以及如何向員工、承辦商、自然環境、弱勢社群及全體市民履行我們的社會責任。

適逢營運基金慶祝成立20周年,就讓我們在此 回顧營運基金成立至今,在企業支援及管治工作 方面走過的漫長歷程。早期由不同部別負責的的 過多年來的演變和發展,如今已整合成為一一套 面且不斷改進的企業支援及管治職能,在一名別 理署長的帶領下,由營運基金內其中一個科別 理署長的帶領下,由營運基金內其中一個科別 據目前的策略框架執行,再配合其他單位及不 實」 論予的支援,為部門提供服務。此外,為了更 面反映及監察營運基金的表現,在2015/16年度我 們採用一套新的關鍵績效指標。

以下是2015/16年度的工作重點。

#### 五大策略及企業進展

#### 提供優質服務

為客戶部門提供優質機電工程服務是我們的首要工作。我們在2016年年初已積極籌劃「2016年客戶意見調查」,並廣邀客戶參與。該項調查已於6月22日至8月3日期間進行。根據上一次在2014年進行的同類調查,以8分為滿分計,我們的客戶滿意指數創下6.22分的歷史新高。儘管2016年的調查是在2015/16年度之後進行,但我們欣然報告,客戶滿意指數在2016年再創新高,以8分為滿分計,我們取得6.45分。這也反映了我們在過去兩年不斷改進服務的成果。

與此同時,我們優化了每月客戶電話意見調查的機制,包括增加抽樣訪問的次數由每月210次至460次,同時亦把訪問涵蓋的範圍由維修保養擴大至包括工程策劃,此舉有助我們擴展至接觸更廣闊的客戶層面及搜集更多的意見。

Serving the people of Hong Kong to improve their quality of life is our top priority. Our tool is a framework of five strategies which guides not only how we work for client departments, but also how we discharge our social responsibilities towards our staff, contractors, the environment, the disadvantaged in the community and indeed every citizen of Hong Kong.

As we celebrate EMSTF's 20th anniversary, it is interesting to note the long journey in corporate support and governance work that we have undertaken since the earliest days of EMSTF. What started as dispersed activities like training, communication, quality, safety and IT support, etc., have evolved and progressed over the years to become a coherent set of dynamic corporate support and governance functions grouped under a branch led by an Assistant Director, guided by our current strategic framework, with the support of other units and divisions, to provide services to the department. Moreover, we adopted a set of newly defined Key Performance Indicators in 2015/16, in order to comprehensively reflect and monitor the performance of EMSTF.

This is an update of our endeavours in 2015/16.

# OUR FIVE STRATEGIES AND CORPORATE PROGRESS

#### **Deliver Excellent Service**

Our first duty is to provide excellent E&M engineering services to client departments. As of early 2016, we commenced the preparation for the Customer Opinion Survey (COS) 2016 and soliciting clients' participation in the survey which was conducted between 22 June and 3 August. The previous COS in 2014 achieved a record high Customer Satisfaction Index (CSI) of 6.22 out of 8. Though the 2016 COS was beyond the timeframe of 2015/16, we are delighted to report that it achieved a new record high CSI of 6.45 out of 8, as a result of various improvements we made in the past two years.

Meanwhile, we have enhanced our monthly telephone survey mechanism including an increase of sample size from 210 to 460 cases per month and an extension of coverage from maintenance to project works. The enhanced survey mechanism has helped us broaden our reach to more customers and solicit more comprehensive feedback.

		2015/16	
	關鍵績效指標 Key Performance Indicators	目標 Target	成績 Result
1.	收入回報率(%) Return on Revenue (%)	3.4	4.8
2.	新收入(\$百萬) New Business and Growth of Business (\$M)	145	267.97
3.	客戶滿意指數[以8分為滿分] Customer Satisfaction Index [on an 8-point scale]	_	6.221
4.	年內續訂的服務水平協議(%) Percentage of Service Level Agreement (SLA) Renewed during the Year (%)	95	95.84
5.	每月電話調查客戶滿意度(%) Percentage of Satisfaction Level Based on Monthly Customer Feedback (%)	95	99.14
6.	每名營運基金員工接受訓練的日數 Training Days/Staff (no. of training days per staff for EMSTF)	4.5	4.29 <sup>2</sup>
7.	員工滿意度指數[以10分為滿分] Staff Satisfaction Rating [on a 10-point scale]	_	6.4 <sup>1</sup>
8.	員工建議計劃 Awards for Staff Suggestion Scheme Proposal (no.)	75	134
9.	達到服務水平協議所訂的表現目標(%) Percentage of SLA Service Performance Target Compliance (%)	99	99.84
10.	每千名營運基金員工須呈報的意外宗數(每千人計算) Reportable Accidents per 1 000 EMSTF Staff (no. per 1 000 staff)	5	3.82
11.	違反法例次數 Statutory Non-compliance (no.)	0	0
12.	耗電量(千瓦小時)[機電工程署總部大樓、數據中心及各策略業務單位] Electricity Consumption (kWh) [EMSD Headquarters, Corporate Data Centre and all SBUs]	10 838 767³	10 750 467 <sup>4</sup>

- 2014年調查所得的指數。下一次調查將會在2016/17年度進行。
  - These were the results from the surveys conducted in 2014. The next surveys would be conducted in 2016/17.
- <sup>2</sup> 培訓管理系統正進行提升以記錄所有的員工培訓活動。
  - Training Management System is being upgraded to record all training activities attended by staff.
- 2013/14年度的耗電量扣除客戶使用量。
  - Baseline electricity consumption (exclude client usage) as of FY2013/14.
- 4 正常化後2015/16年度的耗電量扣除客戶使用量。
  - Normalised electricity consumption (exclude client usage) as of FY2015/16.

資訊服務中心是我們與客戶就故障及維修工作進行溝通的主要平台。年內,我們就如何可行性不優化資訊服務中心的服務,完成了一項可行性本究,目標是把中心提升為一個嶄新的「顧客為骨性工作為日後設立的客戶服務中心的以現時的資訊服務中心將比現時的資訊服務中心時以現時的資訊服了中央影響,並大量應用流動資訊科技。有關工中央財政,我們已全面革新中央財政,我們已全面革新中央對助門。這個具備提示功能的中央系統能管理層監察及作出跟進行動。

現時是流動通訊的年代,通訊應用程式不但帶來各種方便,同時也能提高生產力。我們推出一個全新的智能電話流動網上平台,以利便客戶在網上呈報非緊急故障維修事項。我們亦推出一個為「維修外判合約表現監察系統」的流動應用程式,以加強監察承辦商在維修保養工作方面的表現,讓負責有關工程項目的人員能更適時地向客戶匯報工作進度。

品質是優質服務的重要一環。在企業層面上,我們已為營運基金六個策略業務單位和各個企業支援單位的品質管理系統及環境管理系統認證,全面提升至最新的ISO 2015年版本。我們亦會將各單位個別的綜合管理系統合併,整合成單一及更統一的綜合管理系統,當中包含一個ISO 9001系統、一個ISO 14001系統及一個OHSAS 18001系統。有關的合併和過渡工作將分別於2016及2017年完成。

Our Information Services Centre (ISC) is our hub of fault-and-repair communications with clients. We completed a feasibility study during the year to revamp and upgrade the ISC to a higher level where a new Customer Centric e-Platform will provide the backbone for a future Customer Service Centre, a more advanced version of the current ISC, making use of mobile technology. Phased implementation has already begun. Also, we have revamped the Central Complaint Registry to help us respond to and document complaints from clients and the public in one centralised system, with the implementation of bring-up reminder functions to facilitate management monitoring and take follow-up actions.

In this age of mobile communication, applications can boost convenience and productivity. A new mobile web platform on smart phones for reporting non-emergency fault repair cases online was launched, making fault reporting much easier for clients. A mobile application named Performance Monitoring System for Maintenance Contract was also launched to enhance monitoring of maintenance jobs performed by contractors so that project officers can report progress to clients in a more timely manner.

Quality is an integral part of service excellence. At the corporate level, we have adopted a holistic approach in transiting our various Quality Management System and Environmental Management System certifications to the latest ISO 2015 versions for all six Strategic Business Units (SBUs) and Corporate Supporting Units. All our Integrated Management Systems (IMS) for different units will then be merged and converted to become a single, more unified and aligned IMS, comprising one ISO 9001, one ISO 14001 and one OHSAS 18001 system. The merging and transition will be completed in 2016 and 2017 respectively.

#### 企業管理

#### **CORPORATE STEWARDSHIP**





超過200位同事及嘉賓參與「品質及安全日2015」,一同分享和表揚同事在提升服務質素及工作安全方面的經驗和成果。

More than 200 staff members and guests participated in the Quality and Safety Day 2015. We shared and appreciated the contribution of our staff in enhancing quality and safety at work.

在員工層面上,我們繼續邀請同事參加營運基金常設的「品質、環境及生產力推廣計劃」,以提出新的理念,改善服務質素和提升職安健水平。2015年12月,我們舉辦了一年一度的「品質及安全日」。我們就此收到百多份員工建議書,競逐「最佳增值個案服務獎」及「最佳職安健改善個案獎」,而得獎者已於活動當天進行簡報和領獎。

贏得公務員體制的獎項,是營運基金服務優質的證明。年內,營運基金有三位同事獲頒發2015年公務員事務局局長嘉許狀,另有兩個團隊分別在2015年公務員優質服務獎勵計劃的「部門合作獎」及「隊伍獎(一般公共服務)」中奪得獎項。

年內,我們試行把「新工程合約」表格應用於部分合約。我們透過使用新的表格,協助各個策略業務單位採購工程服務。在2016年,我們在機電署總部完成了一項有關融合建築信息模擬技術及資產管理的先導計劃,以加強建築物的資產管理,以及操作和維修保養工作。該項計劃將會在2016/17持續推行。

At the staff level, we have continued to invite new ideas from colleagues to improve quality, occupational safety and health under our ongoing Quality, Environmental and Productivity Promotion Programme. For our annual Quality and Safety Day held in December 2015, over 100 submissions were received from staff competing for the Best Service Delivery Enhancement Award as well as the Best Occupational Health and Safety Enhancement Project Award. Winning entries were showcased and given awards on that day.

Winning civil service awards is a good testimony to EMSTF's service excellence. Three staff members were honoured with the Secretary for the Civil Service's Commendation Awards in 2015, while two EMSTF teams received awards in the Civil Service Outstanding Service Award Scheme 2015 under the "Partnership Award" and "Team Award (General Public Service)" categories respectively.

The New Engineering Contract forms were adopted for some trial contracts in the year. We have assisted various SBUs in procuring engineering services by using the new forms. Subsequent to the completion of a pilot test at EMSD Headquarters in 2016, our pioneering work in applying Building Information Modelling cum Asset Management System to enhance O&M work and asset management in buildings will be continued during 2016/17.







機電署三位優秀同事在2015年獲頒公務員事務局局長嘉許 狀。典禮當日,行政長官梁振英先生與獲獎同事握手道賀 及拍照留念。

Three of our outstanding staff members were awarded the Secretary for the Civil Service's Commendation Awards in 2015. The Chief Executive the Honourable C Y Leung shook hands with the awardees and posed for a photo together.



革新後的機電署網站引入多項新元素,例如流動裝置兼容版本,並榮獲「2015最佳.hk網站獎」的榮譽嘉許。

The revamped EMSD website includes many new features such as the mobile-compatible version and has attained the Honourable Mention in the "Best .hk Website Awards 2015".

機電署網站年內也進行了大革新。已於2015年 11月推出的新網站,更切合流動電話格式及更 易於瀏覽,而版面設計也更加以人為本。新網站 在香港互聯網註冊管理有限公司舉辦的「2015最 佳.hk網站獎」比賽中獲得榮譽嘉許。

成為業界典範

香港公共基建工程持續如火如荼地進行,市場對機電業工人及專業人員的需求甚殷。作為由19家機電機構組成的香港機電業推廣工作小組的領導機構,我們在年內再推出多項機電業推廣及招聘活動,包括參與一連四天假香港會議展覽中心舉行的「教育及職業博覽2016」,以「機電大街」的方式吸引年青人入行。展覽期間舉行的「機電業主題日」也深受求職者歡迎。

The EMSD website also underwent a major revamp during the year. The new site, launched in November 2015, is mobile phone-friendly, easy to navigate and comes with a more people-oriented design. It won the Honourable Mention award in the Hong Kong Internet Registration Corporation Limited "Best .hk Website Awards 2015".

#### **Become a Trade Model**

As public infrastructure continues to boom in Hong Kong, demand for E&M workers and professionals remains high. As the leader of the Hong Kong E&M Trade Promotion Working Group comprising 19 related E&M organisations, we have again spearheaded many promotion and recruitment activities including participation in the four-day Education & Careers Expo 2016 at the Hong Kong Convention and Exhibition Centre, using the "E&M Street" approach to attract young talents to the industry. The Electrical & Mechanical Day held during the Expo also proved popular with job seekers.



在「教育及職業博覽2016」,機電署首次採用「機電大街」的方式,透過一站式的行業展覽及專題講座,向青年人介紹機電業的前景及發展。

In the Education & Careers Expo 2016, EMSD for the first time adopted the "E&M Street" approach, featuring a one-stop industry exhibition and topical seminars, to introduce youngsters to the career prospects and development of the E&M industry.

過去60年,政府技術人才培訓計劃成功培育逾5000名機電業技術人才。新一屆學徒會秉承前人的精神,繼續以專業才能貢獻社會。 In the past 60 years, the Government Apprentice Training Scheme has nurtured more than 5 000 E&M professionals. Our new trainees will continue to uphold the legacy of their predecessors and make contribution to the community through their professionalism.

### 企業管理

#### CORPORATE STEWARDSHIP

為期三天的「『你』想機電探索日」共吸引逾1 200名市民入場參觀,活動讓年青人有機會認識機電署的日常工作,加深對機電業的了解。

The three-day E&M Discovery Day drew more than 1200 visitors, offering youngsters a golden opportunity to gain an insight into our daily work and develop a better understanding of the E&M trade.





2015年是機電署技術人才培訓計劃60周年紀念, 我們藉此機會舉辦一連串慶祝活動,包括在機電 署總部大堂舉行的回顧展覽。我們也透過「教師發 展日」和「『你』想機電探索日」等推廣活動,招募新 血參加見習工程師訓練計劃及技術員訓練計劃。

以營運基金在機電市場的領導地位,我們有責任 在操作及維修保養工作方面採用最佳做法並保 持高安全標準,以及向業界其他人士推廣這些做 法。年內我們為我們的承辦商舉辦了兩場承辦商 研討會,分享最新的安全心得及資訊,並推出流 動電話應用程式,方便承辦商在維修保養期間以 智能電話隨時隨地取得在假天花內進行工程的許 可證。

我們完成檢討部門的《安全及健康手冊》,當中涵蓋業界提供的寶貴意見。我們根據勞工處於2015年年中向業界提出的最新安全要求,加強了針對高空工作的安全措施。

The year 2015 marked the 60th anniversary of EMSD's Apprentice Training Scheme, an occasion for a series of celebration events including a retrospective exhibition at the lobby of EMSD Headquarters. We also leveraged the occasion to recruit new blood to join our Engineering Graduate Training Scheme and Technician Training Scheme, via promotional activities such as Teacher's Day and E&M Discovery Day.

Given EMSTF's leading position in the E&M service market, we have the responsibility to adopt best practices in O&M work and maintain high standards of work safety, as well as to promote these to others in the trade. For our contractors, we held two Contractor Forums in the year to share the latest safety tips and information, and launched a mobile application so that contractors could obtain permit-to-work for ceiling void works anytime anywhere on their smart phones during the maintenance period.

We completed reviewing our Safety and Health Handbook with valuable input from the trade. We enhanced the measures for work-at-height in accordance with the Labour Department's latest requirements introduced to the trade in mid-2015.



我們在年內舉辦了「假如我畫署長」繪畫比賽,讓同事發揮無限創意,並提高他們對部門的歸屬感。圖為冠軍作品。

We organised the "If I Draw 3Ds" drawing competition in 2015. Our staff can give full play to their creativity, and their sense of belonging can also be enhanced. Pictured are the winning pieces.

#### 建立員工才能與關懷文化

建立員工才能固然重要,但營造一個關懷員工的環境,讓同事既能協助營運基金實現業務目標,又可從工作中得到滿足感、促進個人成長和平衡工作與生活,也同樣重要。

年內我們已制訂員工才能矩陣,並於2015年9月 推出經優化的技術員訓練計劃,有關計劃更着重 實務訓練的成效,以切合各個策略業務單位的業 務需要。另一重點工作是在主要客戶場地設立更 多卓越中心,這些中心旨在讓營運基金員工建立 和提升為主要機電系統進行操作及維修保養的專 業技能,並成為其他客戶場地的典範,同時也作 為前線員工及見習人員的實習基地。

為了更緊密維繫員工,年內我們除了舉辦定期活動,例如兩年一度的家庭同樂遊藝會(是次主題與,包括邀請見習技術員投票選出新的見習技術員投票選出新的見習技術員以票選出新的見習技術員大會員工參與「機電署宣傳大使」以選舉,協助提議和揀選適合機電署的全員,以受同事歡迎。另一項新活動是於2015年11月的。第一次會方面,自2016年開始,機電工程署署中的工會的聯席會議由每年舉行一次改為每半年一次。

一如往年,我們繼續委託香港家庭福利會為所有 員工提供輔導服務,而借調往其他部門的機電署 員工也可享用這項服務。同時,我們也舉行各種 有關情緒、精神和身體健康的工作坊,幫助同事 平衡工作與生活,保持身心康健。

#### **Build Capacity and Caring Culture**

Staff capacity building is important, so is fostering a caring environment for our colleagues so that they can help EMSTF achieve its goals while attaining job satisfaction, personal growth and work-life balance.

As we developed the Staff Competency Matrix, an enhanced Technician Training Scheme was also launched in September 2015 with greater emphasis on practical training effectiveness to suit the SBUs' business needs. Another focus was to launch more Centres of Excellence (CoEs) at major client venues. CoEs aim to build up and sharpen in-house O&M expertise of major E&M systems and become trade models for other venues. CoEs also double as onthe-job training ground for frontline staff and trainees.

To better engage staff, a number of new initiatives were introduced, in addition to regular activities like the biennial fun fair with a theme on EMSTF 20th Anniversary for staff involvement. The new initiatives included inviting technician trainees to vote for a new technician trainee uniform design, a departmental Mascot Hunt cum Mascot Survey that invited all staff to help propose and indicate their preferred mascot for EMSD, and an "If I Draw 3Ds" drawing competition, all well received by colleagues. Another new event was the first Enlightenment Forum held in November 2015 which focused on sharing knowledge about tender evaluation and pre-tender preparations with colleagues from all SBUs. As to 11 unions, the Joint Union Meeting with the Director of Electrical and Mechanical Services became a half-yearly instead of an annual event from 2016 onwards.

As in past years, we continued to commission the Hong Kong Family Welfare Society to provide counselling services to all staff. EMSD staff seconded to other departments can also enjoy the service. Meanwhile, various workshops on emotional, mental and physical health were held to help colleagues achieve work-life balance and well-being.

### 企業管理

#### CORPORATE STEWARDSHIP



管理人員及一眾嘉賓共同主持家庭同樂遊藝會的開幕儀式。 Our management staff and guests officiated at the opening ceremony of the fun fair.

流動通訊科技與員工息息相關,為使用輪椅的員工及常以手推車運送貨物和文件的同事通行無阻,我們推出了一項以智能電話操控方式,代替現有的通行證進出總部大樓先導計劃,配合「遙控開門」應用程式,可利用智能電話遙距開啟總部大樓內的部分門鎖,而不影響保安。目前已有約100位機電署員工在流動電話上安裝了應用程式,或到試系統操作。預期現有的出入控制系統會逐步被取代和更新,屆時員工及訪客在總部大樓內出入便會更方便快捷。

#### 優化知識管理

在籌備多時之後,全新的「知識群體網站」已於 2015年8月推出,方便員工建立網上知識分享群 體。新網站的主要特色之一,是設有三個以主題 為本的智庫,分別為工作小組智庫、事故報告智 庫及工程策劃團隊智庫。網站同時具備可讓同事 合作撰寫文件的新功能,使員工協作更為便捷。

為配合部門制訂員工才能矩陣的工作,我們引進和試行一個名為「知識地圖」的全新知識管理工具,以助各策略業務單位及部別確定和編集矩陣之下任何重要的知識需求。「知識地圖」有助員工就具體的操作程序搜尋專門知識,而高層管理人員也可用以制訂人力資源策略。我們已於2015/16年度完成有關的先導計劃,並會於2016/17年度推出更多「知識地圖」。

知識管理對建立員工才能、提高品質和生產力都十分重要,也有助我們記錄和分享知識,以作出正確的決定,並繼續走在工程與管理領域的前端。我們會繼續為員工加強和推廣各種知識群體和知識管理工具。

Mobile technology is relevant to staff engagement. To create a barrier-free environment for staff using wheelchairs and staff frequently transporting goods and documents in trolleys, we have begun a pilot for wireless smart access control system with a "mobile door control" application that can unlock doors in our headquarters building via smart phones, instead of access card, from a distance while maintaining security. Around a hundred EMSD staff members have already installed the application for a system trial, and gradual implementation is expected when the existing access control system is replaced to improve convenience for colleagues and visitors alike.

#### **Enhance Knowledge Management**

After much preparation, a new Knowledge Communities Portal was launched in August 2015 to better facilitate the set-up of virtual knowledge sharing communities. A key feature of the new portal is three theme-based knowledge hubs, namely knowledge hub for working groups, knowledge hub for incident reports and knowledge hub for project teams. The portal also has a new co-authoring function that makes collaboration among staff much easier.

To tie in with EMSD's initiative to develop a Staff Competency Matrix, we introduced a new knowledge management pilot tool called the Knowledge Map (K-map) for all SBUs and divisions to identify and codify any critical knowledge needs under the Matrix. K-maps will be useful to individuals looking for expert knowledge in specific operational processes, and to senior management in planning human resource strategies. The pilot project was completed in 2015/16 and more K-maps would be produced in 2016/17.

Knowledge management is vital to capacity building as well as quality and productivity improvements. It also helps us document and share knowledge, enabling us to make the right decisions and stay at the forefront of the fields of engineering and management. We shall continue to improve and promote our various knowledge communities and knowledge management tools to our staff.



遊藝會當日,總部地下廣場人頭湧湧,同事與親友都樂在其中。

The piazza of our headquarters was packed with colleagues and visitors who all had a blast that day in fun fair.



#### 持續綠色作業

我們的目標,是以可持續發展的方式執行每項工作及與所有持份者溝通。我們為日常運作的不同方面(例如綠色採購及節省電力、用水和用紙等天然資源)訂下各種量化指標,並全部達標。我們近年也一直努力在總部大樓進行多項工作,務求以身作則,於2016年使大樓成為首幢獲得「綠建環評既有建築1.2版」最終鉑金級評級認證的政府大樓。

另外值得一提的是,我們參加了「綠建環評社區」 先導評估,反映我們重視與鄰近社區持份者建立 綠色和諧的關係,有關評估已於2016年完成。此 外,由2016/17年度起,我們開始籌備把總部大樓 與啟德發展區的區域供冷系統連接起來,把我們 的空調系統由目前以獨立的製冷機組操作,改裝 為以區域供冷方式提供空調,屆時可大大節省能 源和減少碳排放,讓營運基金的運作更環保。

#### **Sustain Green Operation**

Our aim is to operate in a sustainable manner in everything we do and in our interactions with all stakeholders. Numerous quantitative targets have been set and achieved in our daily operations such as green procurement and saving natural resources like electricity, water and paper. To lead by example, we have also been working hard on our headquarters building in the past few years with the aim of making it the first government building to obtain BEAM Plus Existing Buildings V1.2 Final Platinum Rating in 2016.

Also worth noting is our participation in the BEAM Plus Neighbourhood pilot-assessment, which was completed in 2016. The pilot assessment underscores the importance we attach to a green, harmonious relationship with stakeholders in our immediate neighbourhood. In a different development, we have started making preparations in 2016/17 to connect our headquarters building to the District Cooling System in Kai Tak Development. This will convert our air-conditioning system from a local chiller plant to that of district cooling supply, thus saving energy and reducing carbon emissions significantly to make our operations more environment-friendly.



知識群體網站的新用戶版面更易於使用,並且新增了更多機電知識區。

The new menu of Knowledge Communities Portal is more userfriendly, and the Portal is enriched with more E&M Knowledge Areas.

為增加機電署總部大樓的綠化面積,我們在大堂設置一幅垂 直室內綠牆。

To increase the greening areas in the EMSD Headquarters Building, we took the initiative to install a vertical indoor "green wall" at the lobby.





## 審計署署長報告 REPORT OF THE DIRECTOR OF AUDIT



香港特別行政區政府 **審 計 署** 

## 獨立審計報告

茲證明我已審核及審計列載於第42至62頁機電工程 營運基金的財務報表,該等財務報表包括於2016年 3月31日的財務狀況表與截至該日止年度的全面收 益表、權益變動表和現金流量表,以及主要會計政策 概要及其他附註解釋資料。

#### 機電工程營運基金總經理就財務報表須承擔 的責任

機電工程營運基金總經理須負責按照《營運基金條例》(第430章)第7(4)條及香港財務報告準則製備真實而中肯的財務報表,及落實其認為必要的內部控制,以使財務報表不存有由於欺詐或錯誤而導致的重大錯誤陳述。

#### 審計師的責任

我的責任是根據我的審計對該等財務報表作出意見。我已按照《營運基金條例》第7(5)條及審計署的審計準則進行審計。這些準則要求我遵守道德規範,並規劃及執行審計,以合理確定財務報表是否不存有任何重大錯誤陳述。

#### **Audit Commission**

The Government of the Hong Kong Special Administrative Region

## INDEPENDENT AUDIT REPORT TO THE LEGISLATIVE COUNCIL

I certify that I have examined and audited the financial statements of the Electrical and Mechanical Services Trading Fund set out on pages 42 to 62, which comprise the statement of financial position as at 31 March 2016, and the statement of comprehensive income, statement of changes in equity and statement of cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

#### **General Manager, Electrical and Mechanical Services Trading Fund's Responsibility for the Financial Statements**

The General Manager, Electrical and Mechanical Services Trading Fund is responsible for the preparation of financial statements that give a true and fair view in accordance with section 7(4) of the Trading Funds Ordinance (Cap. 430) and Hong Kong Financial Reporting Standards, and for such internal control as the General Manager, Electrical and Mechanical Services Trading Fund determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

#### **Auditor's Responsibility**

My responsibility is to express an opinion on these financial statements based on my audit. I conducted my audit in accordance with section 7(5) of the Trading Funds Ordinance and the Audit Commission auditing standards. Those standards require that I comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

#### 審計師的責任(續)

審計涉及執行程序以獲取有關財務報表所載金額及披露資料的審計憑證。所選定的程序取決於審計師的判斷,包括評估由於欺詐或錯誤而導致財務報表存有重大錯誤陳述的風險。在評估該等風險時,審計師考慮與該基金製備真實而中肯的財務報表有關公部控制,以設計適當的審計程序,但並非為對基態內內部控制的效能發表意見。審計亦包括評價機下出稅營運基金總經理所採用的會計政策的合適性及所作出的會計估計的合理性,以及評價財務報表的整體列報方式。

我相信,我所獲得的審計憑證是充足和適當地為我 的審計意見提供基礎。

#### 意見

我認為,該等財務報表已按照香港財務報告準則 真實而中肯地反映機電工程營運基金於2016年3月 31日的狀況及截至該日止年度的運作成果及現金流 量,並已按照《營運基金條例》第7(4)條所規定的方式 妥為製備。

審計署署長 (審計署助理署長劉新和代行)

香港灣仔 告士打道7號 入境事務大樓26樓

審計署

LAU Sun-wo Assistant Director of Audit

for Director of Audit

#### Auditor's Responsibility (Continued)

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation of financial statements that give a true and fair view in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the General Manager, Electrical and Mechanical Services Trading Fund, as well as evaluating the overall presentation of the financial statements.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my audit opinion.

#### **Opinion**

In my opinion, the financial statements give a true and fair view of the state of affairs of the Electrical and Mechanical Services Trading Fund as at 31 March 2016, and of its results of operations and cash flows for the year then ended in accordance with Hong Kong Financial Reporting Standards and have been properly prepared in accordance with the manner provided in section 7(4) of the Trading Funds Ordinance.

Audit Commission 26th Floor Immigration Tower 7 Gloucester Road Wanchai, Hong Kong

2016年9月27日

27 September 2016

## 全面收益表 STATEMENT OF COMPREHENSIVE INCOME

截至2016年3月31日止年度 (以港幣千元位列示) for the year ended 31 March 2016 (Expressed in thousands of Hong Kong dollars)

		附註 Note	2016	2015
<b>營業額</b> 運作成本	<b>Turnover</b> Operating costs	(3) (4)	5,764,171 (5,430,140)	5,491,718 (5,145,459)
<b>運作盈利</b> 其他收入	<b>Profit from operations</b> Other income	(5)	334,031 174,959	346,259 137,481
<b>名義利得税前盈利</b> 名義利得税	<b>Profit before notional profits tax</b> Notional profits tax	(6)	508,990 (82,502)	483,740 (76,603)
<b>年度盈利</b> 其他全面收益	<b>Profit for the year</b> Other comprehensive income		426,488 -	407,137 -
年度總全面收益	Total comprehensive income for the year		426,488	407,137
固定資產回報率	Rate of return on fixed assets	(7)	33.8%	34.6%

第47至62頁的附註為此 財務報表的一部分。 The notes on pages 47 to 62 form part of these financial statements.

## 財務狀況表 STATEMENT OF FINANCIAL POSITION

於2016年3月31日 (以港幣千元位列示) as at 31 March 2016 (Expressed in thousands of Hong Kong dollars)

		附註 Note	2016	2015
非流動資產	Non-current assets			
物業、設備及器材	Property, plant and equipment	(8)	823,030	821,753
無形資產	Intangible assets	(9)	1,125	5,621
外匯基金存款	Placement with the Exchange Fund	(10)	3,000,000	3,000,000
			3,824,155	3,827,374
流動資產	Current assets			
存貨	Inventories		75,746	71,443
外匯基金存款	Placement with the Exchange Fund	(10)	504,982	618,401
應收帳款及預付帳款	Debtors and prepayments	(11)	31,021	49,972
應收關連人士帳款	Amounts due from related parties	(22)	279,234	284,567
銀行存款	Bank deposits		2,260,000	1,388,000
現金及銀行結餘	Cash and bank balances		5,435	2,431
			3,156,418	2,414,814
流動負債	Current liabilities			
客戶訂金	Customers' deposits	(12)	(941,744)	(762,089)
應付帳款	Creditors		(801,986)	(719,124)
應付關連人士帳款	Amounts due to related parties	(22)	(175,622)	(162,580)
僱員福利撥備	Provision for employee benefits	(13)	(68,742)	(61,813)
遞延收入	Deferred revenue	(14)	(833,900)	(610,944)
應付名義利得税	Notional profits tax payable		(35,735)	(34,743)
			(2,857,729)	(2,351,293)
流動資產淨額	Net current assets		298,689	63,521
總資產減去流動負債	Total assets less current liabilities		4,122,844	3,890,895
非流動負債	Non-current liabilities			
遞延税款	Deferred tax	(15)	(12,200)	(11,161)
僱員福利撥備	Provision for employee benefits	(13)	(466,313)	(458,322)
			(478,513)	(469,483)
資產淨額	NET ASSETS		3,644,331	3,421,412

## 財務狀況表(續) STATEMENT OF FINANCIAL POSITION (CONTINUED)

於2016年3月31日 as at 31 March 2016

(以港幣千元位列示) (Expressed in thousands of Hong Kong dollars)

		附註 Note	2016	2015
資本及儲備	CAPITAL AND RESERVES			
營運基金資本	Trading fund capital	(16)	706,600	706,600
保留盈利	Retained earnings	(17)	2,724,487	2,511,243
擬發股息	Proposed dividend	(18)	213,244	203,569
			3,644,331	3,421,412

第47至62頁的附註為此 財務報表的一部分。 The notes on pages 47 to 62 form part of these financial statements.

陳帆 CHAN Fan, Frank

總經理 General Manager,

機電工程營運基金 Electrical and Mechanical Services Trading Fund

2016年9月27日 27 September 2016

## 權益變動表 STATEMENT OF CHANGES IN EQUITY

截至2016年3月31日止年度 (以港幣千元位列示) for the year ended 31 March 2016 (Expressed in thousands of Hong Kong dollars)

		2016	2015
年初結餘 年度總全面收益 年內已付股息	<b>Balance at beginning of year</b> Total comprehensive income for the year Dividend paid during the year	3,421,412 426,488 (203,569)	3,394,451 407,137 (380,176)
年終結餘	Balance at end of year	3,644,331	3,421,412

第47至62頁的附註為此 財務報表的一部分。 The notes on pages 47 to 62 form part of these financial statements.

## 現金流量表 STATEMENT OF CASH FLOWS

截至2016年3月31日止年度 (以港幣千元位列示) for the year ended 31 March 2016 (Expressed in thousands of Hong Kong dollars)

	附註 Note	2016	2015
数建花口机扣点次目	Cook flows from an author activities		
<b>營運項目的現金流量</b> 運作盈利	Cash flows from operating activities Profit from operations	224 024	346,259
折舊及攤銷	Depreciation and amortisation	334,031 35,181	·
	·		33,550
出售物業、設備及器材的收益	Gain on disposal of property, plant and equipment	(165)	(361)
存貨的(增加)/減少	(Increase) / Decrease in inventories	(4,303)	658
應收帳款及預付帳款的 (增加)/減少	(Increase) / Decrease in debtors and prepayments	(639)	1,193
應收關連人士帳款的	Decrease / (Increase) in amounts due from	(323)	.,.55
減少/(增加)	related parties	5,333	(68,822)
客戶訂金的增加	Increase in customers' deposits	179,654	28,943
應付帳款的增加	Increase in creditors	82,862	126,473
應付關連人士帳款的增加	Increase in amounts due to related parties	13,042	5,699
個具福利撥備的增加 個具福利撥備的增加	Increase in provision for employee benefits	14,920	5,099
<b>遞延收入的增加</b>	Increase in deferred revenue	222,956	35,564
已付名義利得税	Notional profits tax paid		· ·
口的石我利特院 ————————————————————————————————————	Notional profits tax paid	(80,471)	(66,266)
來自營運項目的現金淨額	Net cash from operating activities	802,401	443,463
投資項目的現金流量	Cash flows from investing activities		
原有期限超過3個月的銀行	(Increase) / Decrease in bank deposits with original		
存款的(增加)/減少	maturity over three months	(1,100,000)	2,200,000
外匯基金存款的	Decrease / (Increase) in placement with the Exchange		
減少/(増加)	Fund	113,419	(1,091,844)
購置物業、設備及器材以及	Purchase of property, plant and equipment and		(.,,,,
無形資產	intangible assets	(31,962)	(17,973)
出售物業、設備及器材所得	Proceeds from disposal of property, plant and equipment	165	361
已收利息	Interest received	194,550	114,415
(m) () (m) (m) (m) (m) (m) (m) (m) (m) (			
(用於)/來自投資項目的	Net cash (used in) / from	(222.222)	
現金淨額	investing activities	(823,828)	1,204,959
融資項目的現金流量	Cash flows from financing activities		
已付股息	Dividend paid	(203,569)	(380,176)
用於融資項目的現金淨額	Net cash used in financing activities	(203,569)	(380,176)
現金及等同現金的	Net (decrease) / increase in cash and		
(減少)/增加淨額	cash equivalents	(224,996)	1,268,246
現金及等同現金的年初結餘	Cash and cash equivalents at beginning of year	1,390,431	
<b>元业区守凹先亚凹午彻結</b> 跡	Cash and Cash equivalents at beginning of year	1,330,431	122,185
現金及等同現金的年終結餘	Cash and cash equivalents at end of year (19)	1,165,435	1,390,431

第47至62頁的附註為此 財務報表的一部分。 The notes on pages 47 to 62 form part of these financial statements.

(除另有註明外,所有金額均以港幣千元位列示)

(Amounts expressed in thousands of Hong Kong dollars, unless otherwise stated)

#### 1 總論

前立法局在1996年6月26日根據《營運基金條例》 (第430章)第3、4及6條通過決議,在1996年 8月1日成立機電工程營運基金,為客戶提供全 面的機電及電子工程服務、車輛工程服務以及 工程及顧問服務。

政府各決策局、各部門及各自主機構均可自由 選擇採用機電工程營運基金或其他服務機構的 服務,以切合他們部分或全部的機電服務需要。

#### 2 主要會計政策

#### 2.1 符合準則聲明

本財務報表是按照香港公認的會計原則及 所有適用的香港財務報告準則(此詞是統稱,當中包括香港會計師公會頒布的所有 適用的個別香港財務報告準則、香港會計 準則及詮釋)編製。機電工程營運基金所 採納的主要會計政策摘要如下。

#### 2.2 編製財務報表的基礎

本財務報表的編製基礎均以原值成本法計 量。

編製符合香港財務報告準則的財務報表需要管理層作出判斷、估計及假設。該等估計及假設會影響會計政策的應用,以及資產與負債和收入與支出的足數額。該等估計及相關的假設,均按認為合實,則會採用該等估計及假設作為判斷有關資產及負債的帳面值的基礎。估計結果或會與實際價值有所不同。

該等估計及其所依據的假設會作持續檢 討。如修訂會計估計只會影響當年的會計 期,當年的會計期內會確認有關修訂;如 修訂會影響當年及未來的會計期,則會在 當年及未來的會計期內確認有關修訂。

機電工程營運基金在採納會計政策方面並不涉及任何關鍵性的會計判斷。無論對未來作出的假設,或在報告期結束日估計過程中所存在的不明朗因素,皆不足以構成重大風險,導致資產和負債的帳面金額在來年大幅修訂。

#### **GENERAL**

The Electrical and Mechanical Services Trading Fund (EMSTF) was established on 1 August 1996 under the Legislative Council Resolution passed on 26 June 1996 pursuant to sections 3, 4 and 6 of the Trading Funds Ordinance (Cap. 430) to provide comprehensive electrical, mechanical and electronic services, vehicle services, and project and consultancy services to clients.

Government bureaux, departments and autonomous bodies have the freedom to use the services of the EMSTF or to choose alternative service providers to meet part or all of their electrical and mechanical service needs.

#### SIGNIFICANT ACCOUNTING POLICIES

#### **Statement of compliance**

These financial statements have been prepared in accordance with accounting principles generally accepted in Hong Kong and all applicable Hong Kong Financial Reporting Standards (HKFRSs), a collective term which includes all applicable individual Hong Kong Financial Reporting Standards, Hong Kong Accounting Standards (HKASs) and Interpretations issued by the Hong Kong Institute of Certified Public Accountants (HKICPA). A summary of the significant accounting policies adopted by the EMSTF is set out below.

#### Basis of preparation of the financial statements

The measurement basis used in the preparation of these financial statements is historical cost.

The preparation of financial statements in conformity with HKFRSs requires management to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets and liabilities, income and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgements about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

There are no critical accounting judgements involved in the application of the EMSTF's accounting policies. There are also no key assumptions concerning the future, or other key sources of estimation uncertainty at the end of the reporting period, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities in the next year.

#### 2 主要會計政策(續)

#### 2.3 金融資產及金融負債

#### 2.3.1 初始確認

機電工程營運基金會按起初取得資產或引致負債的目的將金融資產及 金融負債作下列分類:貸款及應收 帳款及其他金融負債。

金融資產及金融負債最初按公平值計量;公平值通常相等於成交價,加上因收購金融資產或產生金融負債而直接引致的交易成本。

機電工程營運基金在成為有關金融 工具的合約其中一方之日會確認有 關金融資產及金融負債。

#### 2.3.2 分類

#### 2.3.2.1 貸款及應收帳款

貸款及應收帳款採用實際利率法按攤銷成本值扣除任何減值虧損(如有)列帳(附註2.3.4)。

實際利率法是計算金融資產 或金融負債的攤銷成本值, 以及攤分在有關期間的利息 收入或支出的方法。實際利 率是指可將金融工具在預計 有效期間(或適用的較短期 間)內的預計現金收支,折現 成該金融資產或金融負債的 帳面淨值所適用的貼現率。 機電工程營運基金在計算實 際利率時,會考慮金融工具 的所有合約條款以估計現金 流量,但不會計及日後的信 貸虧損。有關計算包括與實 際利率相關的所有收取自或 支付予合約各方的費用、交 易成本及所有其他溢價或折 讓。

#### **SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)**

#### Financial assets and financial liabilities

#### Initial recognition

The EMSTF classifies its financial assets and financial liabilities into different categories at inception, depending on the purpose for which the assets were acquired or the liabilities were incurred. The categories are loans and receivables and other financial liabilities.

Financial assets and financial liabilities are measured initially at fair value, which normally equals to the transaction prices, plus transaction costs that are directly attributable to the acquisition of the financial asset or issue of the financial liability.

The EMSTF recognises financial assets and financial liabilities on the date it becomes a party to the contractual provisions of the instrument.

#### Categorisation

#### Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market and which the EMSTF has no intention of trading. This category includes debtors, amounts due from related parties, bank deposits, cash and bank balances and placement with the Exchange Fund.

Loans and receivables are carried at amortised cost using the effective interest method less impairment losses, if any (note 2.3.4).

The effective interest method is a method of calculating the amortised cost of a financial asset or a financial liability and of allocating the interest income or interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial instrument or, when appropriate, a shorter period to the net carrying amount of the financial asset or financial liability. When calculating the effective interest rate, the EMSTF estimates cash flows considering all contractual terms of the financial instruments but does not consider future credit losses. The calculation includes all fees paid or received between parties to the contract that are an integral part of the effective interest rate, transaction costs and all other premiums or discounts.

#### 2 主要會計政策(續)

#### 2.3.2.2 其他金融負債

其他金融負債採用實際利率 法按攤銷成本值列帳。

#### 2.3.3 註銷確認

當從金融資產收取現金流量的合約權屆滿時,或當金融資產及其絕大部分風險和回報的擁有權已轉讓時,該金融資產會被註銷確認。

當合約指明的債務被解除、取消或 到期時,該金融負債會被註銷確 認。

#### 2.3.4 金融資產減值

#### 2.4 名義利得税

- 2.4.1 根據《稅務條例》(第112章)機電工程營運基金並無稅務責任,但香港特別行政區政府(政府)要求機電工程營運基金須向政府一般收入支付一筆款項以代替利得稅(即名義利得稅),該款項是根據《稅務條例》的規定所計算。本年度名義利得稅支出包括本期稅款及遞延稅款資產和負債的變動。
- 2.4.2 本期税款為本年度對應課税收入 按報告期結束日已生效或實際有 效的税率計算的預計應付税款, 並包括以往年度應付税款的任何 調整。

#### **SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)**

Other financial liabilities

Other financial liabilities are carried at amortised cost using the effective interest method.

#### Derecognition

A financial asset is derecognised when the contractual rights to receive the cash flows from the financial asset expire, or where the financial asset together with substantially all the risks and rewards of ownership have been transferred.

A financial liability is derecognised when the obligation specified in the contract is discharged or cancelled, or when it expires.

#### Impairment of financial assets

The carrying amount of loans and receivables is reviewed at the end of each reporting period to determine whether there is objective evidence of impairment. If any impairment evidence exists, a loss is recognised in the statement of comprehensive income as the difference between the asset's carrying amount and the present value of estimated future cash flows discounted at the asset's original effective interest rate. If in a subsequent period, the amount of such impairment loss decreases and the decrease can be linked objectively to an event occurring after the impairment loss was recognised, the impairment loss is reversed through the statement of comprehensive income.

#### **Notional profits tax**

The EMSTF has no tax liability under the Inland Revenue Ordinance (Cap.112). However, the Government of the Hong Kong Special Administrative Region (the Government) requires the EMSTF to pay to the General Revenue an amount in lieu of profits tax (i.e. notional profits tax) calculated on the basis of the provisions of the Inland Revenue Ordinance. Notional profits tax expense for the year comprises current tax and movements in deferred tax assets and liabilities.

Current tax is the expected tax payable on the taxable income for the year, using tax rates enacted or substantively enacted at the end of the reporting period, and any adjustment to tax payable in respect of previous years.

#### 2 主要會計政策(續)

2.4.3 遞延稅款資產及負債是因資產及 負債的帳面值與其計稅基準之間 的差異所分別產生的可扣稅及應 課稅的暫時性差異。遞延稅款資 產亦可由尚未使用的稅務虧損及 稅項抵免而產生。

> 所有遞延税款負債及估計未來有足 夠的應課税盈利予以抵銷的遞延税 款資產均予以確認。

> 遞延税款的確認金額是根據資產及 負債的帳面值之預期實現及結算的 方式,以報告期結束日已生效或基 本上已生效的稅率計算。遞延税款 資產及負債不作折現。

> 遞延税款資產的帳面值會在報告期 結束日進行覆檢,為預期不再有足 夠的應課税盈利以實現相關稅務利 益作出相應扣減。被扣減的遞延稅 款資產會在再有足夠的應課稅盈利 時,予以相應回撥。

#### 2.5 物業、設備及器材

於1996年8月1日撥歸機電工程營運基金的物業、設備及器材,最初的成本值是按相等於前立法局所通過設立營運基金的決議中所列的估值入帳。自1996年8月1日起購置的物業、設備及器材均按其購置成本入帳。

以下物業、設備及器材以成本值扣除累計 折舊及任何減值虧損後列出(附註2.7):

- 建築物;以及
- 設備及器材,包括電腦器材、車輛、 傢具及固定裝置和其他器材。

折舊是依直線法按物業、設備及器材成本 值減去其在使用期末的估計剩餘值,在其 預計可使用年期內逐年分期定額註銷。這 些物業、設備及器材的可使用年期如下:

 建築物
 10-35年

 電腦器材
 4-10年

 車輛
 5年

 傢具及固定裝置
 5-7年

 其他器材
 7年

#### **SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)**

Deferred tax assets and liabilities arise from deductible and taxable temporary differences respectively, being the differences between the carrying amounts of assets and liabilities for financial reporting purposes and their tax bases. Deferred tax assets also arise from unused tax losses and unused tax credits.

All deferred tax liabilities, and all deferred tax assets to the extent that it is probable that future taxable profits will be available against which the assets can be utilised, are recognised.

The amount of deferred tax recognised is measured based on the expected manner of realisation or settlement of the carrying amount of the assets and liabilities, using tax rates enacted or substantively enacted at the end of the reporting period. Deferred tax assets and liabilities are not discounted.

The carrying amount of a deferred tax asset is reviewed at the end of each reporting period and is reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow the related tax benefit to be utilised. Any such reduction is reversed to the extent that it becomes probable that sufficient taxable profit will be available.

#### Property, plant and equipment

Property, plant and equipment appropriated to the EMSTF on 1 August 1996 were measured initially at deemed cost equal to the value contained in the Legislative Council Resolution for the setting up of the EMSTF. Property, plant and equipment acquired since 1 August 1996 are capitalised at their costs of acquisition.

The following property, plant and equipment are stated at cost less accumulated depreciation and any impairment losses (note 2.7):

- buildings; and
- plant and equipment, including computer equipment, motor vehicles, furniture and fixtures and other equipment.

Depreciation is calculated to write off the cost of property, plant and equipment, less their estimated residual value, on a straight-line basis over their estimated useful lives as follows:

_	Buildings	10 – 35 years
-	Computer equipment	4 – 10 years
-	Motor vehicles	5 years
-	Furniture and fixtures	5 – 7 years
_	Other equipment	7 years

#### 2 主要會計政策(續)

機電工程營運基金的建築物所在土地,被 視作不折舊的資產。

出售物業、設備及器材的損益以出售所得 淨額與資產的帳面值之間的差額來決定, 並於出售當日在全面收益表內確認。

#### 2.6 無形資產

無形資產包括已購入的電腦軟件牌照及已資本化的電腦軟件程式開發成本值。倘電腦軟件程式在技術上可行,而且機電工程營運基金有足夠資源及有意完成開發工作,有關的開發費用會被資本化。無形資產按成本值扣除累計攤銷及任何減值虧損入帳(附註2.7)。

無形資產的攤銷按資產的估計可用年期(4至10年)以直線法記入全面收益表內。

#### 2.7 固定資產的減值

固定資產(包括物業、設備及器材以及無形資產)的帳面值會在每個報告期結束日進行覆檢,以確定有否出現減值跡象。倘出現減值跡象,每當資產的帳面值高於其可收回數額時,則有關減值虧損會在全面收益表內確認。資產的可收回數額為其公平值減出售成本與使用值兩者中的較高者。

#### 2.8 存貨

存貨是提供服務所需的物料。它們是以成本值或可實現淨值之中較低者列出,成本值是以加權平均成本法計算。所有存貨虧損及撇帳至可實現淨值的虧損會在虧損發生時確認為當期的一項開支。

提供服務時被支用的存貨,其帳面值會於確認其相關收入的同一期間確認為一項開 支。

#### 2.9 等同現金

等同現金指短期及流動性高的投資,這些 投資可隨時轉換為已知數額的現金,在價值上變動的風險低,而在購入時距離到期 日不超過三個月。

#### **SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)**

The land on which the EMSTF's buildings are situated is regarded as a non-depreciating asset.

Gains or losses arising from the disposal of property, plant and equipment are determined as the difference between the net disposal proceeds and the carrying amount of the asset, and are recognised in the statement of comprehensive income on the date of disposal.

#### **Intangible assets**

Intangible assets include acquired computer software licences and capitalised development costs of computer software programmes. Expenditure on development of computer software programmes is capitalised if the programmes are technically feasible and the EMSTF has sufficient resources and the intention to complete development. Intangible assets are stated at cost less accumulated amortisation and any impairment losses (note 2.7).

Amortisation of intangible assets is charged to the statement of comprehensive income on a straight-line basis over the assets' estimated useful lives of 4 to 10 years.

#### Impairment of fixed assets

The carrying amounts of fixed assets, including property, plant and equipment and intangible assets, are reviewed at the end of each reporting period to identify any indication of impairment. If there is an indication of impairment, an impairment loss is recognised in the statement of comprehensive income whenever the carrying amount of an asset exceeds its recoverable amount. The recoverable amount of an asset is the greater of its fair value less costs to sell and value in use.

#### **Inventories**

Inventories are materials to be consumed in the rendering of services. They are stated at the lower of cost and net realisable value, cost being determined using the weighted average cost method. The amount of any write-down of inventories to net realisable value and all losses of inventories are recognised as an expense in the period the write-down or loss occurs.

When inventories are consumed in the rendering of services, the carrying amount of those inventories is recognised as an expense in the period in which the related revenue is recognised.

#### Cash equivalents

Cash equivalents are short-term highly liquid investments that are readily convertible to known amounts of cash and subject to an insignificant risk of changes in value, having been within three months of maturity at acquisition.

#### 2 主要會計政策(續)

#### 2.10僱員福利

機電工程營運基金的僱員包括公務員及合約員工。薪金、約滿酬金及年假開支均在僱員提供有關服務年度內以應計基準確認入帳。就公務員而言,僱員附帶福利開支包括政府給予僱員的退休金及房屋福利,均在僱員提供有關服務年度內支銷。

就按可享退休金條款受聘的公務員的長俸 負債已於付予政府有關附帶福利開支時支 付。就其他員工向強制性中央公積金計劃 的供款於全面收益表中支銷。

#### 2.11收入確認

#### 2.11.1 收入

於指定年期提供議定服務水平的合約收入按有關年期以直線法確認。 至於其他服務合約收入按報告期內已提供的服務佔整體合約服務之百分比確認。

在未來年期提供服務但已收取的費 用則記錄為遞延收入。

#### 2.11.2 利息收入

利息收入採用實際利率法以應計方 式確認。

#### 2.12 外幣換算

年內的外幣交易按交易日的匯率換算為港元。以非港幣為單位的貨幣資產及負債則 按報告期結束日的匯率換算為港元。有關 的兌換損益在全面收益表內確認。

#### 2.13 撥備及或有負債

如機電工程營運基金須就已發生的事件承擔法律或推定責任,而又可能需要付出經濟代價以履行該項責任,機電工程營運基金會在能夠可靠地估計涉及的金額時,為該項在時間上或金額上尚未確定的責任撥備。如金錢的時間價值重大,則會按預計履行該項責任所需開支的現值作出撥備。

若承擔有關責任可能無須付出經濟代價或 是無法可靠地估計涉及的金額,該責任便 會以或有負債的形式披露,除非須付出經 濟代價的可能性極低。至於只能由日後是 否發生某宗或多宗事件才確定會否出現的 或然責任,亦會以或有負債的形式披露, 除非須付出經濟代價的可能性極低。

#### **SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)**

#### **Employee benefits**

The employees of the EMSTF comprise civil servants and contract staff. Salaries, staff gratuities and annual leave entitlements are accrued and recognised as expenditure in the year in which the associated services are rendered by the staff. For civil servants, staff on-costs, including pensions and housing benefits provided to the staff by the Government, are charged as expenditure in the year in which the associated services are rendered.

For civil servants employed on pensionable terms, the pension liabilities of the EMSTF are discharged by reimbursement of the staff on-costs charged by the Government. For other staff, contributions to the Mandatory Provident Fund Scheme are charged to the statement of comprehensive income as incurred.

#### **Revenue recognition**

#### Revenue

Revenue from contracts for provision of services at agreed service level covering a specified period of time is recognised on a straight-line basis over the period concerned. For other service contracts, revenue is recognised based on services performed during the reporting period as a percentage of the total services covered by the contract.

Fees received but related to services to be performed in future periods are recorded as deferred revenue.

#### Interest income

Interest income is recognised as it accrues using the effective interest method.

#### Foreign currency translation

Foreign currency transactions during the year are translated into Hong Kong dollars using the spot exchange rates at the transaction dates. Monetary assets and liabilities denominated in currencies other than Hong Kong dollars are translated into Hong Kong dollars using the closing exchange rate at the end of the reporting period. Exchange gains and losses are recognised in the statement of comprehensive income.

#### **Provisions and contingent liabilities**

Provisions are recognised for liabilities of uncertain timing or amount when the EMSTF has a legal or constructive obligation arising as a result of a past event, it is probable that an outflow of economic benefits will be required to settle the obligation and a reliable estimate can be made. Where the time value of money is material, provisions are stated at the present value of the expenditure expected to settle the obligation.

Where it is not probable that an outflow of economic benefits will be required, or the amount cannot be estimated reliably, the obligation is disclosed as a contingent liability, unless the probability of outflow of economic benefits is remote. Possible obligations, whose existence will only be confirmed by the occurrence or non occurrence of one or more future events, are also disclosed as contingent liabilities unless the probability of outflow of economic benefits is remote.

#### 2 主要會計政策(續)

#### 2.14關連人士

機電工程營運基金是根據《營運基金條例》成立,屬於政府轄下的一個獨立會計單位。本年內在機電工程營運基金的日常業務中,曾與不同的關連人士進行交易,其中包括政府各決策局及部門、營運基金,以及由政府所控制或有重大影響力的財政自主機構。

#### 2.15新訂及經修訂香港財務報告準 則的影響

香港會計師公會已頒布若干新訂或經修訂 的香港財務報告準則,於本會計期生效或 供提前採納。這些發展並沒有為適用於本 財務報表的會計政策帶來任何改變。

機電工程營運基金並沒有採納在本會計期 尚未生效的任何新香港財務報告準則(附 註24)。

#### **SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)**

#### **Related parties**

The EMSTF is a separate accounting entity within the Government established under the Trading Funds Ordinance. During the year, the EMSTF has entered into transactions with various related parties, including government bureaux and departments, trading funds and financially autonomous bodies controlled or significantly influenced by the Government, in the ordinary course of its business.

#### Impact of new and revised HKFRSs

The HKICPA has issued certain new and revised HKFRSs that are first effective or available for early adoption for the current accounting period. There have been no changes to the accounting policies applied in the financial statements for the years presented as a result of these developments.

The EMSTF has not applied any new HKFRSs that are not yet effective for the current accounting period (note 24).

#### 3 營業額

#### **TURNOVER**

		2016	2015
機電及電子工程服務 車輛工程服務 工程及顧問服務 其他	Electrical, mechanical and electronic services Vehicle services Project and consultancy services Others	5,093,199 302,802 343,585 24,585	4,837,861 284,595 348,999 20,263
總額	Total	5,764,171	5,491,718

#### 4 運作成本

#### **OPERATING COSTS**

		2016	2015
員工費用	Staff costs	2,343,943	2,248,926
材料	Materials	450,255	441,600
承辦商費用	Contractors cost	2,347,317	2,168,077
租金及管理費用	Rental and management charges	35,684	29,624
一般運作及行政開支	General operating and administration expenses	216,259	222,736
折舊及攤銷	Depreciation and amortisation	35,181	33,550
審計費用	Audit fees	1,501	946
總額	Total	5,430,140	5,145,459

### 5 其他收入

#### **OTHER INCOME**

		2016	2015
銀行存款的利息收入 外匯基金存款的利息收入	Interest income from bank deposits Interest income from placement with the	8,692	18,993
	Exchange Fund	166,267	118,488
總額	Total	174,959	137,481

### 6 名義利得稅

#### **NOTIONAL PROFITS TAX**

(a) 於全面收益表內扣除的名義利得税如下:

(a) The notional profits tax charged to the statement of comprehensive income represents:

		2016	2015
<b>本期税款</b> 本期名義利得税的撥備	<b>Current tax</b> Provision for notional profits tax for the year	81,463	74,245
<b>遞延税款</b> 暫時性差異的產生	<b>Deferred tax</b> Origination of temporary differences	1,039	2,358
名義利得税	Notional profits tax	82,502	76,603

- (b) 税項支出與會計溢利按適用税率計算的對帳如下:
- (b) The reconciliation between tax expense and accounting profit at applicable tax rates is as follows:

		2016	2015
名義利得税前盈利	Profit before notional profits tax	508,990	483,740
按香港利得税率16.5% (2015:16.5%)所計算出的税款 一次性税務寬減 非課税收入對税款的影響	Tax at Hong Kong profits tax rate of 16.5% (2015: 16.5%) One-off tax reduction Tax effect of non-taxable revenue	83,983 (20) (1,461)	79,817 (20) (3,194)
名義税項支出	Notional tax expense	82,502	76,603

#### 7 固定資產回報率

固定資產回報率是以總全面收益(不包括利息收入和利息支出)除以固定資產平均淨值所得的百分率。固定資產包括物業、設備、器材及無形資產。預期機電工程營運基金可以達到財政司司長定下每年固定資產回報率7.8%(2015:7.8%)的目標。

#### **RATE OF RETURN ON FIXED ASSETS**

The rate of return on fixed assets is calculated as total comprehensive income (excluding interest income and interest expenses) divided by average net fixed assets, and expressed as a percentage. Fixed assets include property, plant and equipment and intangible assets. The EMSTF is expected to meet a target rate of return on fixed assets of 7.8% per year (2015: 7.8%) as determined by the Financial Secretary.

#### 8 物業、設備及器材

#### **PROPERTY, PLANT AND EQUIPMENT**

		土地及建築物	電腦器材	車輛	傢具及 固定裝置 Furniture	其他器材	總值	
		Land and buildings	Computer equipment	Motor vehicles	and fixtures	Other equipment	Total	
成本	Cost							
於2014年4月1日	At 1 April 2014	950,100	65,768	38,388	74,640	39,326	1,168,222	
增加	Additions	_	8,032	5,696	2,184	2,061	17,973	
出售/註銷	Disposals	_	_	(2,821)	_	(2,655)	(5,476)	
於2015年3月31日	At 31 March 2015	950,100	73,800	41,263	76,824	38,732	1,180,719	
於2015年4月1日	At 1 April 2015	950,100	73,800	41,263	76,824	38,732	1,180,719	
增加	Additions	_	17,172	8,865	4,033	1,012	31,082	
出售/註銷	Disposals	-	-	(4,274)	-	(662)	(4,936)	
於2016年3月31日	At 31 March 2016	950,100	90,972	45,854	80,857	39,082	1,206,865	
累計折舊	Accumulated depreciation							
於2014年4月1日	At 1 April 2014	192,441	43,059	33,654	47,076	20,247	336,477	
年度費用	Charge for the year	7,841	6,675	2,458	6,336	4,655	27,965	
出售/註銷回撥	Written back on disposals	-	_	(2,821)	_	(2,655)	(5,476)	
於2015年3月31日	At 31 March 2015	200,282	49,734	33,291	53,412	22,247	358,966	
於2015年4月1日	At 1 April 2015	200,282	49,734	33,291	53,412	22,247	358,966	
年度費用	Charge for the year	7,841	8,669	2,893	6,201	4,201	29,805	
出售/註銷回撥	Written back on disposals	-	-	(4,274)	-	(662)	(4,936)	
於2016年3月31日	At 31 March 2016	208,123	58,403	31,910	59,613	25,786	383,835	
帳面淨值 於2016年3月31日	Net book value At 31 March 2016	741,977	32,569	13,944	21,244	13,296	823,030	
於2015年3月31日	At 31 March 2015	749,818	24,066	7,972	23,412	16,485	821,753	

#### 9 無形資產

#### **INTANGIBLE ASSETS**

電腦軟件牌照 及系統開發成本 Computer software licences and system development costs

		2016	2015
<b>成本</b> 於年初 增加	<b>Cost</b> At beginning of year Additions	48,224 880	48,224 -
於年終	At end of year	49,104	48,224
<b>累計攤銷</b> 於年初 年度費用	Accumulated amortisation At beginning of year	42,603	37,018
・	Charge for the year  At end of year	5,376 47,979	5,585
<b>帳面淨值</b> 於年終	<b>Net book value</b> At end of year	1,125	5,621

#### 10 外匯基金存款

外匯基金存款結餘包括本金30億港元(2015:30億港元)、報告期結束日已存入帳但尚未提取的利息5.050億港元(2015:3.184億港元)。本金存款為期六年(由存款日起計),期內不能提取本金。兩筆數額為22億港元及8億港元的本金將分別於2017年6月及2020年12月到期。

外匯基金存款利息按每年1月釐定的固定息率計算。該息率是外匯基金投資組合過去6年的平均年度投資回報,或3年期外匯基金債券(2016年1月1日起3年期政府債券)在過去一個年度的平均年度收益,兩者取其較高者,下限為0%。2016年固定息率為每年3.3%,2015年為每年5.5%。

#### **PLACEMENT WITH THE EXCHANGE FUND**

The balance of the placement with the Exchange Fund comprised principal sums of HK\$3,000 million (2015: HK\$3,000 million) and interest paid but not yet withdrawn at the end of the reporting period of HK\$505.0 million (2015: HK\$318.4 million). The term of the placement is six years from the dates of placement, during which the principal sums cannot be withdrawn. The two principal sums of HK\$2,200 million and HK\$800 million will mature in June 2017 and December 2020 respectively.

Interest is payable at a fixed rate determined every January. The rate is the average annual investment return of the Exchange Fund's Investment Portfolio for the past six years or the average annual yield of three-year Exchange Fund Notes (three-year Government Bonds with effect from 1 January 2016) for the past year subject to a minimum of zero percent, whichever is the higher. The interest rate has been fixed at 3.3% per annum for the year 2016 and 5.5% per annum for the year 2015.

#### 11 應收帳款及預付帳款

#### **DEBTORS AND PREPAYMENTS**

		2016	2015
應收帳款	Debtors	584	169
預付帳款	Prepayments	650	426
外匯基金存款應計利息	Accrued interest from placement with		
	the Exchange Fund	28,758	49,071
銀行存款應計利息	Accrued interest from bank deposits	1,029	306
總額	Total	31,021	49,972

#### 12 客戶訂金

#### **CUSTOMERS' DEPOSITS**

	2016	2015
從關連人士收取的訂金 Deposits received from related parties 從其他客戶收取的訂金 Deposits received from other customers	941,742 2	762,089 –
總額 Total	941,744	762,089

#### 13 僱員福利撥備

此為在計至報告期結束日就僱員所提供的服務 給予年假及合約僱員約滿酬金的估計負債(另 見附註2.10)。

#### **PROVISION FOR EMPLOYEE BENEFITS**

This represents the estimated liability for employees' annual leave and obligations on contract end gratuities payable to contract staff for services rendered up to the end of the reporting period (also see Note 2.10).

#### 14 遞延收入

指尚未提供服務,但已收取的預繳合約費用。

#### **DEFERRED REVENUE**

This represents contract fees received in advance for which services have not yet been rendered.

		2016	2015
從關連人士收取的預繳合約費用	Contract fees received in advance from related parties	826,690	597,360
從其他客戶收取的預繳合約費用	Contract fees received in advance from other customers	7,210	13,584
總額	Total	833,900	610,944

### 15 遞延稅款

#### **DEFERRED TAX**

以下為在財務狀況表內確認的遞延税款的主要 組成部分以及其在年內的變動: Major components of deferred tax recognised in the statement of financial position and the movements during the year are as follows:

		超逾有關		
		折舊及攤銷的	其他	
		折舊免税額	暫時性差異	合計
		Depreciation		
		allowances in		
		excess of	6.1	
		the related	Other	
		depreciation	temporary	T. ( )
		and amortisation	differences	Total
2014年4月1日結餘	Balance at 1 April 2014	15,226	(6,423)	8,803
於全面收益表扣除	Charged to statement of	,	(-,,	2,222
	comprehensive income	319	2,039	2,358
2015年3月31日結餘	Balance at 31 March 2015	15,545	(4,384)	11,161
2015年4月1日結餘	Balance at 1 April 2015	15,545	(4,384)	11,161
於全面收益表扣除	Charged / (Credited) to			
	statement of			
	comprehensive income	1,581	(542)	1,039
2016年3月31日結餘	Balance at 31 March 2016	17,126	(4,926)	12,200

#### 16 營運基金資本

#### TRADING FUND CAPITAL

此為政府對機電工程營運基金的投資。

This represents the Government's investment in the EMSTF.

#### 17 保留盈利

#### **RETAINED EARNINGS**

		2016	2015
年初結餘 年度總全面收益 擬發股息	Balance at beginning of year Total comprehensive income for the year Proposed dividend	2,511,243 426,488 (213,244)	2,307,675 407,137 (203,569)
年終結餘	Balance at end of year	2,724,487	2,511,243

#### 18 擬發股息

#### **PROPOSED DIVIDEND**

向政府擬發股息是根據年度總全面收益及經財經事務及庫務局局長核准的年度營運計劃裏列出的50%目標派息比率(2015:50%)作出。

The proposed dividend to the Government is based on the total comprehensive income for the year and the dividend payout ratio of 50% (2015: 50%) stated in the annual business plan approved by the Secretary for Financial Services and the Treasury.

### 19 現金及等同現金

#### **CASH AND CASH EQUIVALENTS**

		2016	2015
現金及銀行結餘 銀行存款	Cash and bank balances Bank deposits	5,435 2,260,000	2,431 1,388,000
小計 減:原有期限超過3個月的銀行存款	Sub-total Less: Bank deposits with original maturity over three months	2,265,435 1,100,000	1,390,431
現金及等同現金	Cash and cash equivalents	1,165,435	1,390,431

#### 20 承擔

#### (a) 資本承擔

在2016年3月31日,機電工程營運基金未 有在財務報表中作出撥備的資本承擔如 下:

#### **COMMITMENTS**

#### **Capital commitments**

At 31 March 2016, the EMSTF had capital commitments, so far as not provided for in the financial statements, as follows:

	2016	2015
	rised and contracted for 31,053 rised but not yet contracted for 71,618	17,600 37,752
總額 Total	102,671	55,352

#### (b) 營運租約承擔

在2016年3月31日,根據不可撤銷的土地 及建築物營運租約須於日後支付的最低應 付租金總額為:

#### **Operating lease commitments**

At 31 March 2016, the total future minimum lease payments under the non-cancellable operating leases for land and buildings were payable as follows:

		2016	2015
不超過1年 超過1年但不超過5年	Not later than one year Later than one year but not later	7,757	4,393
ᄹᆚᇪᆝᅮᇋᅵᄹᅺᇪᆿᅮ	than five years	14,506	509
總額	Total	22,263	4,902

#### 21 或有負債

於2016年3月31日,機電工程營運基金就一銀行向若干受益客戶發出的2,031萬港元(2015:2,232萬港元)履約保證書向該銀行提供相應的損害賠償保證,有關客戶為機電工程營運基金的關連人士。

#### **CONTINGENT LIABILITIES**

At 31 March 2016, the EMSTF had provided a bank with counter-indemnity in respect of performance bonds for HK\$20.31 million (2015: HK\$22.32 million) issued by the bank in favour of certain clients who are related parties of the EMSTF.

#### 22 與關連人士的交易

除了在財務報表中另行披露的交易外,在本年度內與關連人士進行的重要交易,可總結如下:

- (a) 向關連人士提供的服務包括機電及電子 工程服務、車輛工程服務和工程及顧問服 務。這些服務帶來收入總額為57.22億港 元(2015:54.51億港元)。這金額已納入附 註3「營業額」內。
- (b) 由關連人士提供的服務包括維修、辦公地方、中央行政及審計。這些服務總額為 9,990萬港元(2015:9,110萬港元)。這金額已納入附註4「運作成本」內。
- (c) 向關連人士購入的固定資產包括裝置工程 及車輛。這些資產的總成本為820萬港元 (2015:570萬港元)。

向關連人士提供的服務,是以成本加成法定價。而由關連人士提供的服務,若有關服務亦有提供予公眾,則以公眾所須付的價格收費, 否則便以收回全部成本的基礎來收費。

#### 23 財務風險管理

#### 23.1 投資政策

機電工程營運基金將現金盈餘投放於金融 工具,包括定期存款及外匯基金存款。根 據機電工程營運基金的政策,所有投放於 金融工具的投資均應保本。

#### 23.2信貸風險

信貸風險指金融工具的其中一方因未能履 行責任而引致另一方蒙受財務損失的風 險。

機電工程營運基金的信貸風險,主要取決於應收帳款、銀行存款及外匯基金存款。

應收帳款主要包括應計利息,其相關的信貸風險極低。為盡量減低信貸風險,所有 定期存款均存於香港的持牌銀行。至於外 匯基金存款,其相關信貸風險亦甚低。

機電工程營運基金的金融資產所須承擔的最高信貸風險相等於其帳面值。

#### **RELATED PARTY TRANSACTIONS**

Apart from those separately disclosed in the financial statements, the other material related party transactions for the year are summarised as follows:

- (a) Services provided to related parties included electrical, mechanical and electronic services; vehicle services; and project and consultancy services. The total revenue derived from these services amounted to HK\$5,722 million (2015: HK\$5,451 million). This amount was included in turnover under note 3.
- (b) Services received from related parties included maintenance, accommodation, central administration and auditing. The total cost incurred on these services amounted to HK\$99.9 million (2015: HK\$91.1 million). This amount was included in operating costs under note 4.
- (c) Acquisition of fixed assets from related parties included fitting out projects and motor vehicles. The total cost of these assets amounted to HK\$8.2 million (2015: HK\$5.7 million).

Services provided to related parties were priced on a cost-plus basis. Services received from related parties were charged at the rates payable by the general public for services which were also available to the public or on a full cost recovery basis for services which were available only to related parties.

#### **FINANCIAL RISK MANAGEMENT**

#### **Investment policy**

Surplus cash is invested in financial instruments including fixed deposits and placement with the Exchange Fund. It is the EMSTF's policy that all investments in financial instruments should be principal-protected.

#### Credit risk

Credit risk is the risk that one party to a financial instrument will fail to discharge an obligation and cause the other party to incur a financial loss.

The EMSTF's credit risk is primarily attributable to debtors, bank deposits and placement with the Exchange Fund.

Debtors include mainly accrued interest and the associated credit risk is minimal. To minimise credit risks, all fixed deposits are placed with licensed banks in Hong Kong. For the placement with the Exchange Fund, the credit risk is considered to be low.

The maximum exposure of the financial assets of the EMSTF to credit risk is equal to their carrying values.

#### 23 財務風險管理(續)

#### 23.3流動資金風險

流動資金風險指一個機構將難以履行與金 融負債相關的責任的風險。

機電工程營運基金採用預計現金流量分析來管理流動資金風險,透過預測所需的現金款額及監察機電工程營運基金的營運資金,確保可以支付所有到期負債及已知的資金需求。

#### 23.4利率風險

利率風險指因市場利率變動而引致虧損的 風險。利率風險可進一步分為公平值利率 風險及現金流量利率風險。

公平值利率風險指金融工具的公平值會因 市場利率變動而波動的風險。由於機電工 程營運基金所有銀行存款均按固定利率計 息,當市場利率上升,這些存款的公平值 便會下跌。不過,由於這些存款均按攤銷 成本值列示,市場利率變動不會影響其帳 面值及機電工程營運基金的盈利和儲備。

現金流量利率風險指金融工具的未來現金 流量會因市場利率變動而波動的風險。機 電工程營運基金無須面對重大的現金流量 利率風險,因為其持有的主要金融工具都 不是浮息金融工具。

#### 23.5貨幣風險

貨幣風險指金融工具的公平值或未來的現 金流量會因匯率變動而波動的風險。

機電工程營運基金沒有重大的貨幣風險, 因為其金融工具絕大部分是以港元為本 位。

#### 23.6其他財務風險

機電工程營運基金因於每年一月釐定的外匯基金存款息率(附註10)的變動而須面對金融風險。於2016年3月31日,假設2015年及2016年的息率增加/減少50個基點(2015:50個基點)而其他因素不變,估計年度盈利及儲備將增加/減少1,460萬港元(2015:1,510萬港元)。

#### FINANCIAL RISK MANAGEMENT (CONTINUED)

#### Liquidity risk

Liquidity risk is the risk that an entity will encounter difficulty in meeting obligations associated with financial liabilities.

The EMSTF employs projected cash flow analysis to manage liquidity risk by forecasting the amount of cash required and monitoring the working capital of the EMSTF to ensure that all liabilities due and known funding requirements could be met.

#### Interest rate risk

Interest rate risk refers to the risk of loss arising from changes in market interest rates. This can be further classified into fair value interest rate risk and cash flow interest rate risk.

Fair value interest rate risk is the risk that the fair value of a financial instrument will fluctuate because of changes in market interest rates. Since all of the EMSTF's bank deposits bear interest at fixed rates, their fair values will fall when market interest rates increase. However, as they are all stated at amortised cost, changes in market interest rates will not affect their carrying amounts and the EMSTF's profit and reserves.

Cash flow interest rate risk is the risk that future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The EMSTF is not exposed to material cash flow interest rate risk because it has no major financial instruments bearing interest at a floating rate.

#### **Currency risk**

Currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates.

The EMSTF does not have significant exposure to currency risk as substantially all of its financial instruments are denominated in Hong Kong dollars.

#### Other financial risk

The EMSTF is exposed to financial risk arising from changes in the interest rate on the placement with the Exchange Fund which is determined every January (Note 10). It was estimated that, as at 31 March 2016, a 50 basis point (2015: 50 basis point) increase / decrease in the interest rates for 2015 and 2016, with all other variables held constant, would increase / decrease the profit for the year and reserves by HK\$14.6 million (2015: HK\$15.1 million).

#### 23 財務風險管理(續)

#### 23.7公平值

在活躍市場交易的金融工具的公平值是根據報告期結束日的市場報價釐定。如沒有該等市場報價,則以現值或其他估值方法以報告期結束日的市況數據評估其公平值。

所有金融工具均以與其公平值相等或相差 不大的金額列於財務狀況表內。

#### 24 已頒布但於截至2016年3月31 日止年度尚未生效的修訂、新 準則及詮釋可能造成的影響

直至本財務報表發出之日,香港會計師公會已頒布多項修訂、新準則及詮釋。該等修訂、新準則及詮釋於截至2016年3月31日止年度尚未生效,亦沒有提前在本財務報表中被採納。當中可能適用於機電工程營運基金的如下:

#### FINANCIAL RISK MANAGEMENT (CONTINUED)

#### Fair values

The fair value of financial instruments traded in active markets is based on quoted market prices at the end of the reporting period. In the absence of such quoted market prices, fair values are estimated using present value or other valuation techniques, using inputs based on market conditions existing at the end of the reporting period.

All financial instruments are stated in the statement of financial position at amounts equal to or not materially different from their fair values.

# POSSIBLE IMPACT OF AMENDMENTS, NEW STANDARDS AND INTERPRETATIONS ISSUED BUT NOT YET EFFECTIVE FOR THE YEAR ENDED 31 MARCH 2016

Up to the date of issue of these financial statements, the HKICPA has issued a number of amendments, new standards and interpretations which are not yet effective for the year ended 31 March 2016 and which have not been early adopted in these financial statements. These include the following which may be relevant to the EMSTF:

在以下日期或之後 開始的會計期間生效 Effective for accounting periods beginning on or after

香港財務報告準則第9號「金融工具」	HKFRS 9, Financial Instruments	2018年1月1日 1 January 2018
香港財務報告準則第15號「來自客戶合約之收入」	HKFRS 15, Revenue from Contracts with Customers	2018年1月1日 1 January 2018
香港財務報告準則第16號「租賃」	HKFRS 16, Leases	2019年1月1日 1 January 2019

機電工程營運基金正就該等修訂、新準則及 詮釋在首次採納期間預期會產生的影響進行評估。直至目前為止,所得結論是採納該等修訂、新準則及詮釋不大可能會對機電工程營運基金的財務報表構成重大影響。

The EMSTF is in the process of making an assessment of what the impact of these amendments, new standards and interpretations is expected to be in the period of initial adoption. So far it has concluded that the adoption of them is unlikely to have a significant impact on the financial statements.

## 鳴謝

## **ACKNOWLEDGMENTS**

在報告製作過程中,承蒙下列部門及機構提供協助,機電工程營運基金特此鳴謝。

The EMSTF would like to express its sincere thanks to the following departments and organisations for their support and cooperation in the course of preparing this report (list in alphabetical order).

Housing Department

香港機場管理局 Airport Authority Hong Kong

建築署 Architectural Services Department

民航處 Civil Aviation Department

律政司 Department of Justice

環境保護署 **Environmental Protection Department** 

食物環境衞生署 Food and Environmental Hygiene Department

政府產業署 Government Property Agency

路政署 Highways Department

香港消防處 Hong Kong Fire Services Department

香港天文台 Hong Kong Observatory

香港警務處 Hong Kong Police Force

香港郵政 Hongkong Post

醫院管理局 Hospital Authority

司法機構 **Judiciary** 

Leisure and Cultural Services Department 康樂及文化事務署

海事處 Marine Department 旅遊事務署 **Tourism Commission** 

運輸署 Transport Department



房屋署

## 機電工程營運基金 20周年紀念短片 EMSTF 20th Anniversary Video

完整版 Full version

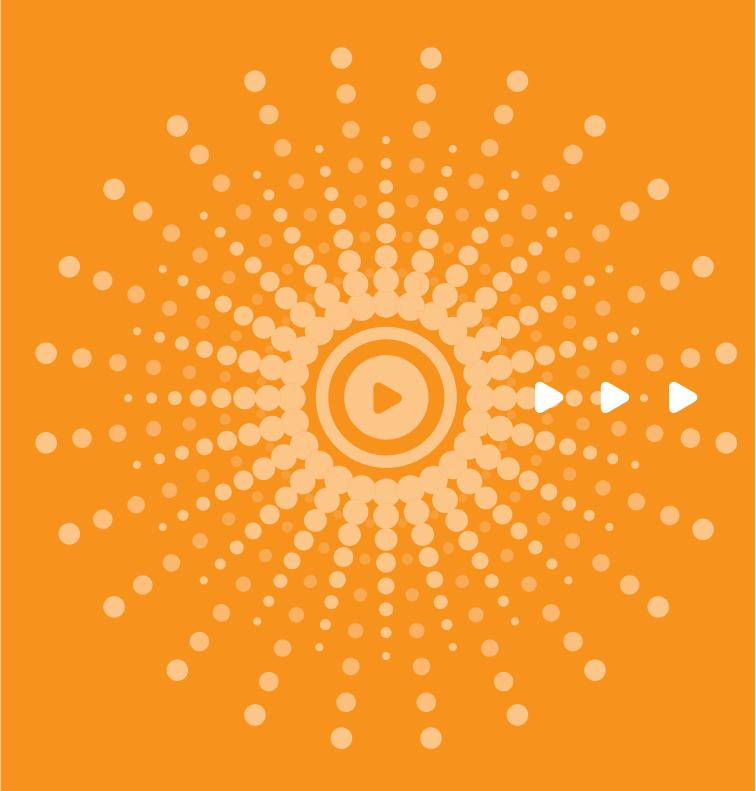


你可透過手機程式WedCam掃描封面的擴增實境代碼,觀看短片。

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> 活動代碼: EMSD Event Code: EMSD









### 機電工程署

香港九龍啟成街3號

### **Electrical and Mechanical Services Department**

3 Kai Shing Street, Kowloon, Hong Kong

網址 Website: www.emsd.gov.hk 電郵 Email: info@emsd.gov.hk



Electrical and Mechanical Services Trading Fund 20th Anniversary Commemorative Booklet



營運廿載 源於心 役於人 機電未來 續創新 惠及民

Serving with Care and Innovation 20 Years and Beyond





政務司司長 於2016年9月15日機電工程營運基金20周年感恩典禮致辭

SPEECH BY THE CHIEF SECRETARY FOR ADMINISTRATION AT EMSTF 20TH ANNIVERSARY THANKSGIVING CEREMONY ON 15 SEPTEMBER 2016

很高興出席機電工程營運基金20周年慶典,祝賀基金邁向 新里程。

我與機電工程營運基金甚有淵源。在九十年代我任職財政科(即現時的庫務局),負責策劃公營服務改革政策,見證營運基金的成立。當時我們引進「營運基金」的概念,是希望針對某些有商業運作性質的公營服務,以更貼近市場的模式營運,加強部門的自主和靈活性,改善工作效率和服務質素。

轉眼間,機電工程營運基金已成立20年。在這20年裏,基金曾經面對業務流失的風險,經歷2003年「沙士」的衝擊,但仍能夠成功協助特區政府舉辦一些重要大事,包括2006年世貿部長會議和2008年奧運馬術項目,也與其他部門合力完成了多項基建項目,包括近年順利投入運作的郵輪碼頭、北大嶼山醫院和消防及救護學院等。自2002年起,各政府部門可自行決定是否繼續使用營運基金的服務,或選用其他服務供應商。這改變雖然進一步引入競爭,但基金憑藉盡責、可靠、專業的一站式服務,已成為客戶部門最信賴的伙伴。

機電營運基金20年來的財務表現一直符合財政司司長所釐定的指標。業務亦一直保持穩步發展,範圍更推展至節能技術等領域。儘管基金的人手編制由1996年的5 000多人調整至2016年約4 300人,但基金總收入在2015/16年度達57億元,較1996/97年度的25億元,增長超過一倍。更令人感到鼓舞的,是基金近年的客戶意見調查,客戶滿意指數達到等於以100分為滿分的81分,這個歷史新高,比基金成立初期高出三成。近年的員工滿意度調查結果,比起1997年時亦提升了20%。這些不同表現數據,反映基金不斷提高生產力及客戶服務的成果,亦顯示出員工上下一心,為業務持續發展而努力。

機電工程營運基金靈活創新,多年來透過持續改善管理策略,不斷提高生產力和服務質素,使公共資源得以有效運用。機電工程署能夠成為第一個政府部門獲得品質、環保和職安綜合管理系統的企業認證,也是首個政府部門贏得香港管理專業協會的「優質管理金獎」,可說實至名歸。另外,機電工程署在工程技術發展方面,先後取得有關機電設施保養技術的專利,以及建造業議會建築信息模擬(簡稱BIM)的創新建造獎,現時正為BIM應用於機電設施保養的相關技術申請專利。



在環保與持續發展方面,機電工程營運基金一直在轄下辦公地方進行設施和系統優化。機電署總部大樓成為首幢政府建築物獲得「綠建環評」鉑金評級,為實踐綠色作業起示範作用。與此同時,基金的專業人員積極協助客戶節能減排,多年來為各政府部門,合共節省多達16%的耗電量。基金今年再為客戶部門建議引入更多高能源效益的機電設備,配合政府新一輪減少5%耗電量的政策。

機電工程營運基金雖然以商業模式運作,但仍以公眾利益 為先。現時政府推行「0-1-1」的財政節約方案,並不包括 營運基金,但機電工程營運基金主動於2016/17年度下調 收費,將提高生產力的成果回饋客戶,讓客戶保留更多資 金加強核心服務。除此之外,基金更計劃在未來五年動用 超過六億元,培育1000多名機電人才,配合香港的長遠 發展。

基金現時聘用超過200名殘疾人士,佔基金全體員工達4%,體現「傷健共融」。我身旁的咖啡店,是基金去年特別騰出空間,讓社會企業經營的,為殘疾人士提供工作機會,協助他們融入社會。由此可見,基金除了專注於業務之外,亦以關懷共濟的精神,致力履行企業社會責任。

機電工程營運基金經過20年的努力, 蜕變成為客戶的可靠 伙伴,不斷改善效率及提升服務質素,達到政府當初建立 營運基金的目的。我期望基金繼續以靈活創新、持續發展 和關懷共濟的信念,為社會的進步共融作出貢獻。

在此祝願機電工程營運基金今後發展更上層樓,各位同事 工作愉快。

今天適逢中秋佳節,祝各位闔家安康,人月兩圓。

## 林鄭月娥 政務司司長



機電工程署署長 於2016年9月15日機電工程營運基金20周年感恩典禮致辭

# SPEECH BY THE DIRECTOR OF ELECTRICAL AND MECHANICAL SERVICES AT EMSTF 20TH ANNIVERSARY THANKSGIVING CEREMONY ON 15 SEPTEMBER 2016

感謝大家在百忙中抽空出席機電工程營運基金20周年感恩 典禮。感謝大家對我們的愛護、支持。感謝張局長,韓秘 書長對我們的信任、指導。特別感謝林鄭司長多年來對我 們的關懷、勉勵。

憑藉前人的帶領,同事們的拼勁,機電工程營運基金能夠 走到今天,我們感恩。回顧當年很多同事都反對推行營運 基金,甚至質疑背後動機。在疑惑不安的陰霾下,我們踏 上逆境求存的旅程。我們的業務組合沒有專營權,亦不 受保護。市場上提供同類服務的公司多的是,物競天擇, 適者生存。從此,我們從個人心態、思維,以至企業文化 都變得不一樣。我們視工作為業務,工作增加變成業務 增長;我們視客戶為伙伴,以專業、謙卑的態度去提供服 務。

經歷多年的洗滌沉澱,我們建立以人為本、以公眾價值為前提的信念。以往,我們也曾以回報率作為營運表現的指標。但我們明白到:如果我們從客戶的錢包多取分毫,客戶就會少了經費,市民大眾就會少了服務。現時,我們採納「微利營運」的方針,讓客戶保留更多資源投放其核心服務,利惠市民。營運基金以微利營運猶如航空母艦在淺水區作業,基金所有人員都必須時刻保持警覺,積極控制成本,持續提升生產力。微利營運雖然有擱淺風險,但我們願意接受挑戰,為社會創造公眾價值。

作為公營部門,追逐盈利從來都不是我們的目的。廿年來,營運基金整體生產力提升超過30%。我們將成果回饋客戶,緩減服務收費上調對客戶帶來的財務壓力。每當客戶出現周轉困難,我們都會靈活應對。當年為奧運馬術比賽提供技術支援,我們在分毫未收的情況下,調動資源全力以赴。當救護車隊因老化影響救援服務,我們不計成本為車隊更新配件,與客戶患難與共。當財政預算案遭遇拉布,我們不但暫緩收費,更退還已收款項,與客戶共渡時艱。

營運基金的存在價值是透過服務,提升市民生活質素。機電服務與市民生活息息相關,涵蓋全港公共設施。因應不同的服務,我們的業務單位有各自的服務信念,讓同事清楚明白服務背後所蘊含的意義和使命,付諸實踐。在醫院產房的同事致力確保醫療設備精準可靠,讓充滿期盼的安安然迎接小生命的來臨;在展覽場館的同事會盡一切努力讓市民在舒適環境下欣賞展品,同時嚴格監控温度、濕度和燈光,確保珍貴的展品不受損害;支援紀律部隊的同事,首要任務是確保所需裝備時刻待命、不容有失。為了不負使命,我們日夜守護機電設備,用行動回應客戶和公眾期望。



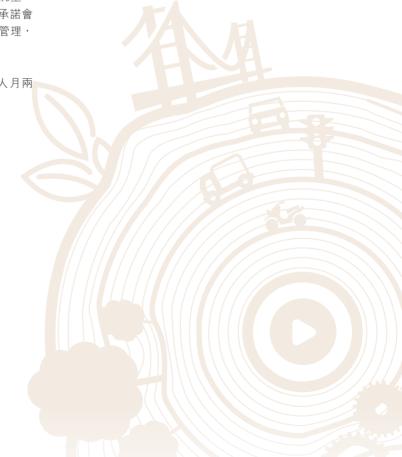
香港自七十年代騰飛,大量基礎建設相繼落成。時至今日,不少機電設備已經年過40。妥善維護及適時更新,對香港的可持續發展尤其重要。展望將來,香港正邁向低碳、智慧型都市進發,為營運基金帶來機遇和挑戰。我們的發揮空間會變得寬廣,但同時肩上的擔子亦變得沉重。但無論如何,我們定必毋忘初衷,緊抱信念。我們承諾會繼續以專業、勇於承擔的態度,持續優化機電資產管理,推動社會發展,延續香江傳奇。

今日適逢中秋佳節,我衷心祝願各位家庭幸福,人月兩 圓!

多謝各位。

#### 陳帆

機電工程署署長 機電工程營運基金總經理



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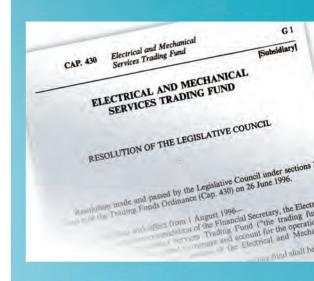
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機電工程營運基金的客戶 EMSTF CLIENTS



## 1996

機電工程營運基金隨着《營運基金條例》於1996年6月通過而成立,以自負盈虧的方式為政府決策局、部門及自主機構提供機電工程服務。

The Electrical and Mechanical Services Trading Fund (EMSTF) was established following the enactment of "Trading Funds Ordinance" in June 1996, to provide E&M services to government bureaux, departments and autonomous bodies on a self-financing basis.

#### 首度20載:里程碑

#### **OUR FIRST 20 YEARS: MILESTONES**

## 1997

由獨立市場調查公司進行首次調查,了解客戶及員工的需要。調查後來成為定期「客戶意見調查」及「員工滿意度調查」,促進提升我們的服務質素。

Commissioned independent market research firms to conduct first survey on clients' and staff's needs. The survey was later developed into regular "Customer Opinion Survey" and "Staff Satisfaction Survey" to facilitate our further service improvement.



1998

成為首個獲得香港服務業生產 力獎的政府部門。

The first government department to win the Hong Kong Award for Services (Productivity).



1999

成為首個獲得ISO 9001品質管理系統企業認證的政府部門。

The first government department to obtain the Corporate Certification for ISO 9001 Quality Management System.



2000

成為首個獲得ISO 14001環境管理系統企業認證的政府部門。

The first government department to obtain the Corporate Certification for ISO 14001 Environmental Management System.

2001

建立「抱負、使命與信念」,以配合長遠策略目標,更適切地反映企業文化,以及為日後的營運和發展提供指引。

Developed Vision, Mission and Values to align with its longerterm strategic goal, better reflect the corporate culture and guide future operation and development.

在職安健管理方面有顯著進步,獲得OHSAS 18001職業健康及安全管理系統認證。

Obtained the OHSAS 18001 Occupational Health and Safety Management System Certification for its significant improvement in occupational health and safety management.

#### 首度20載:里程碑

#### **OUR FIRST 20 YEARS: MILESTONES**

### 2002

全面開放市場,完成自1999年 起逐步與客戶脱鈎。

Opened up market fully after phased untying of customers from 1999.



## 2003

與客戶緊密協作,對抗「沙十」。

Worked closely with clients to combat SARS.



## 2004

成為首個採用嶄新企業管理電 腦系統的政府部門,進一步加 強財務管理、日常營運和客戶 服務。

The first government department to adopt a new Corporate Computer System to further enhance its financial management, daily operation and customer service.



## 2005

遷進九龍灣總部,大樓配以嶄 新設施結合先進環保技術,提 高內部溝通和運作效率。

Relocated to the New Kowloon Bay Headquarters Building equipped with environmental protection technology, enhancing internal communications and operational efficiency.



The first government department to win the Hong Kong Management Association Total Quality Management Gold Award in recognition of its high-quality services.

### 2007

營運基金如期完成深港西部通道 多種機電裝備測試工作,以慶祝 香港回歸祖國十周年。

Commissioned the E&M installations of the Hong Kong-Shenzhen Western Corridor timely to celebrate the 10th anniversary of Hong Kong's return to Chinese sovereignty.



## 2008

為2008北京奧運馬術賽事提供「零瑕疵」項目管理和全面的通訊科技服務。

Supported the Equestrian Events of the 2008 Beijing Olympics with "zero-defect" project management and comprehensive information and communication technology (ICT) services.

## 2009

逾230位營運基金員工為香港東 亞運動會提供專業支援。

Provided engineering support to Hong Kong East Asian Games with more than 230 EMSTF Staff.



## 2010

新小蠔灣數據中心的資訊保安管理系統達到世界標準,取得ISO 27001認證。

Obtained the ISO 27001 certificate for the world-class information security management system of the new Siu Ho Wan Data Centre.

修訂「抱負、使命與信念」宣言,致力提供優質機電工程服務,精益求精,以提升市民的 生活質素。

Revised the Vision, Mission and Values statements with a view to improving the quality of life for the community through continuous enhancement of our E&M engineering services.

### 2011

為水警總區研發的中央指揮系統,贏得「2011香港資訊及通訊科技獎」的全年大獎、最佳公共服務應用大獎及最佳公共服務應用(電子轉化)金獎。

Won the Award of the Year, Best Public Service Application Grand Award and Best Public Service Application (Transformation) Gold Award at the Hong Kong ICT Awards 2011 for the Central Command System developed for the Marine Police.

## 2012

透過成立香港機電業推廣工作小組向年青一代推廣機電行業。

Set up the Hong Kong E&M Trade Promotion Working Group to promote electrical and mechanical engineering career to the young generation.

## 2013

與香港機場管理局共同設計的 跑道燈固定電流調節器測試平 台榮獲專利。

Obtained a patent on the constant current regulator testing platform jointly developed with Airport Authority Hong Kong.



## 2014

成功為不同的機電設備取得ISO 55001資產管理標準認證,加強資產管理的能力。

Obtained the ISO 55001 certificates for various E&M systems to further enhance our asset management competence.



## 2015

取得ISO 50001能源管理系統認證,顯示能源管理工作獲得認可。

Obtained the ISO 50001 Energy Management System Certification for its efforts in energy management.



## 2016

機電署總部大樓獲得香港綠色 建築議會所頒的「綠建環評既有 建築」的最終鉑金級認證,以及 「綠建環評社區」先導評估的鉑 金級認證。

The EMSD Headquarters Building was awarded BEAM Plus Existing Buildings Final Platinum Rating and a Platinum rating for the BEAM Plus Neighbourhood pilotassessment from the Hong Kong Green Building Council Limited.

#### 前機電工程署署長

## FORMER DIRECTORS OF ELECTRICAL AND MECHANICAL SERVICES



傅立新先生 Mr Hugh Phillipson

機電工程署署長 (1993至1998年) Director of Electrical and Mechanical Services (1993—1998)

1993



黎仕海先生 Mr Lai Sze-hoi, Roger

機電工程署署長 (2001至2006年) Director of Electrical and Mechanical Services (2001–2006)

2001

1996年,傅立新先生以時任署長的身分監督機電工程營運基金的成立及當中的過渡工作。他印象最深刻的是機構文化的轉變。當時署方做了大量工作,例如進行培訓和重組架構等,讓員工為轉變作好準備。同事因而變得更加以客為本,並加強與客戶的溝通。

他猶記得員工協會最初對改革感到非常憂慮,各級員工包括專業人員也很抗拒,並有很多激烈的討論。後來政府承諾不會有員工因營運基金的成立而遭遣散,才令員工安心,最終改變態度,令其後各種改革措施得以順利推行,發展至今天的營運基金模式。

傅立新先生表示:「我一直十分欣賞營運基金為香港不同 範疇提供多元化和重要的服務支援。許多同事都盡心竭 力,令改革得以落實。即使以世界等級來看,營運基金確 實是獨一無二的。」

As the department head who oversaw the setting up of EMSTF in 1996 and the transition process, Mr Hugh Phillipson was most impressed by the shift in corporate culture. Much work was done to prepare staff for the change, like training and organisational restructuring. Colleagues became more customer-oriented and there was more communication.

He recalled that staff associations were initially very concerned about the change and there was resistance by staff at all levels, including professionals. Discussion on this issue heated up, but what triggered their eventual change of mind was the Government's undertaking that there would be no redundancy as a result of becoming a trading fund. This gave staff the peace of mind that was essential for the implementation of subsequent change initiatives and developments in the organisation which shaped EMSTF as we know it today.

"I have always been impressed by the great variety and importance of all the work EMSTF does to support Hong Kong in so many ways. Many colleagues gave their best to make the change possible," he said. "It is indeed a unique department, even in world ranking."

黎仕海先生回想在他任內,機電工程營運基金在成本效益和服務質素方面都取得很大進步,而且預留了更多可投放於培訓和機構發展的資源,讓整個營運基金能更好地服務市民。他亦大力推行「品質之旅」,經過三年的努力,營運基金於2006年成為首個贏得香港管理專業協會優質管理獎金獎的政府部門。

營運基金的工作對他個人而言也產生了很大影響。他表示:「我本來對技術工作較有興趣,但營運基金驅使我閱讀更多關於管理的書籍和思考許多管理上的問題,而且很多時須與持不同意見的同事溝通,讓我明白要先了解對方的要求和憂慮,以誠待人,才能展開更好的交流。」

「沙士」期間,黎先生曾向全體同事發出通告,引用「養兵千日,用在一朝」這句成語帶出危難當前,同僚必須繼續盡心服務市民的信息。他表示當年同事日以繼夜為醫院提供服務,盡力為醫院加裝抽氣扇,最終協助醫院順利渡過難關。

Reflecting on his years as Director of Electrical and Mechanical Services, Mr Lai Sze-hoi said EMSTF had made great strides in cost effectiveness and service quality with more resources set aside for investment in training and organisational development, hence enabling EMSTF as a whole to serve the public better. He also promoted EMSTF's "quality journey" with great enthusiasm. After three years of hard work, EMSTF became the first government department to win the Gold Award of the Hong Kong Management Association Quality Award in 2006.

Working at EMSTF had made a significant personal impact on him as well. "I was initially more interested in technical matters, but my duties at EMSTF prompted me to read more widely on the subject of management and think through many management issues. It also gave me plenty of opportunities to talk to colleagues with differing views. The experience made me realise that one must first understand others' wishes and concerns and treat people with sincerity to forge better communication," he said.

"Training an army for a thousand days to use it for one morning," Mr Lai quoted the Chinese idiom in a memo issued to all staff during the SARS epidemic, saying that extensive preparations would eventually pay off. His message was to urge all colleagues to continue serving the public wholeheartedly in the face of a daunting crisis. He recalled that in those days, many colleagues worked hard round the clock to provide services and retrofit ventilation fans for hospitals, which ultimately helped them through the crisis.



何光偉先生 Mr Ho Kwong-wai

機電工程署署長 (2006至2009年) Director of Electrical and Mechanical Services (2006–2009)

2006



陳鴻祥先生 Mr Chan Hung-cheung, Stephen

機電工程署署長 (2009至2011年) Director of Electrical and Mechanical Services (2009–2011)

2009

何光偉先生認為他任內最大的成就,是2008年為北京奧運在港舉辦的馬術項目提供全面的資訊科技服務。為應付這項極具挑戰性的工作,機電工程營運基金成立了內部專責團隊負責長達兩年的籌備工作。賽事最終順利完成,客戶對我們的服務十分滿意,讚揚我們的服務達到「零瑕疵」的水平。

何先生表示:「營運基金的強項是員工富有團隊精神,彼此視作一家人,每次遇到難關也能迎刃而解,即使在『沙士』肆虐期間面對高危情況,仍本着服務市民的精神去完成工作。」他當年也見證了機電署引入營運基金概念初期的「震盪」日子,這段經歷使他深受啟迪:「遇到突變時,必須保持開放態度和靈活思維,才可以應付轉變。」

他憶述退休時,營運基金已運作了十多年,無論服務質素 和財政狀況都已達到目標和預期成效,證明當初轉型的決 定確是明智之舉。

Mr Ho Kwong-wai noted that EMSTF's biggest achievement during his years as Director of Electrical and Mechanical Services was providing comprehensive information technology services to the 2008 Beijing Olympic Equestrian Events held in Hong Kong. To take on this highly challenging task, EMSTF set up a dedicated internal team which worked on the job for two years. The event was successfully completed, and the client was highly satisfied with our services, praising our services as "zero defect".

"The strength of EMSTF is that its people have a great sense of team spirit, working like a family. Together we can resolve any difficulty. Even during the SARS outbreak when the risk was high, we were able to complete our tasks with the spirit of serving the public," he said. Mr Ho also witnessed the days of "turmoil" when the trading fund concept was first introduced, a very inspiring experience for him too. "When there is a sudden change, one must be open-minded and flexible in order to cope with the change," he said.

He recalled that he retired at a time when EMSTF had been operating for more than ten years. At that point EMSTF had already achieved its objectives and intended results in service quality and financial performance, proving that the original decision for the transformation was wise.

在陳鴻祥先生任內,機電工程營運基金的發展相對穩定,故此有空間讓他優化和精簡架構,為長遠發展作好準備。舉例來說,他減少非公務員合約僱員的數目但增加公務員職位,令非公務員合約僱員有更多機會投考公務員職位。他亦倡議善用市場機制,透過將二線工作外判,讓員工能集中處理更高增值的服務。

他表示,營運基金的工作極具挑戰,能磨練自己,令他活得精彩,不枉此生,同時亦令他明白「迎難而上」的意義:面對的困難越多,學到的東西就越多,信心亦更加增強。他亦學會「困難總有解決的辦法」這個道理,所以每當遇到挑戰時,他絕不退縮,只會積極面對。

他指出:「營運基金總能順利應對每項轉變和挑戰,原因 在於同事願意接受轉變,並且明白只有轉變才會帶來進 步,因此他們都敢於迎接每項重大轉變和克服每項挑戰。」

The development of EMSTF was relatively stable during the years when Mr Chan Hung-cheung was Director of Electrical and Mechanical Services, giving him room to fine-tune and streamline the organisation to prepare for longer-term development. For instance, the number of non-civil service contract (NCSC) staff was reduced while the number of civil service (CS) posts was increased, thus creating more opportunities for NCSC staff to apply for CS posts. He also advocated the better use of market mechanism via contracting out work of secondary importance, so that EMSTF staff could focus on higher value-added services.

He recalled that working at EMSTF was very challenging and could train him up and made him feel living a "fulfilled life". EMSTF made him realise what it means to strive hard in the face of difficulties: the more difficulties there are, the more one can learn and raise one's confidence. He also learnt that for any problem, there is always a solution. The insight gave him the courage to tackle challenges upfront with enthusiasm and never run away from them.

"EMSTF has been able to emerge successfully from every change and challenge. The reason is that our colleagues are willing to accept changes. They understand that only changes can bring progress. Therefore, they have the confidence to embrace every major change and beat every challenge," he said.

#### 機電工程營運基金的員工

#### **EMSTF STAFF**

#### 方武先生 Mr Fong Mo



2015年退休的方武先生,於1971年參加前工務司署的學徒訓練計劃,並於1976年被派往機電署前身的「機電處」工作,退休前為管理值班工程師。

他最難忘的經歷是2003年爆發的「沙士」疫症。當時他是機電署進入淘大花園收集塵埃樣本供政府化驗所化驗的三人小組成員之一。當天,他和其他政府部門的同事穿着全套防護衣物在現場工作十多小時。他表示:「在那段日子,連物料供應商也不敢進入醫院,只將貨物放在路口。那時我們與醫護人員的合作非常緊密,互相依賴信任。」回望過去,他仍然十分感謝當年與他並肩作戰,一起對抗「沙士」疫症的同事。

Retired in 2015, Mr Fong Mo joined the Apprentice Training Scheme of the then Public Works Department in 1971 and was posted to the then E&M Office, forerunner of EMSD, in 1976. He was the Shift Charge Engineer before retirement.

His most unforgettable experience is the SARS epidemic in 2003. Mr Fong was one of the three members of an EMSD team that went inside Amoy Gardens to collect dust samples for testing by the Government Laboratory. Clad in full protective gear, he and other government colleagues worked for some ten hours there. "In those days, however, even goods suppliers dared not go inside the hospitals. They would only leave the goods at the road entrance. At that time, we had very close collaboration with the medical staff. We really only had each other to trust and depend on," he recalled. Looking back, Mr Fong is still very grateful to those colleagues who worked side by side with him to fight SARS.

#### 李民正先生 Mr Li Man-ching



李民正先生於1970年參加學徒訓練計劃,並在機電署服務至2013年退休。 他退休前為管理值班工程師。

1996年營運基金成立時雖然風高浪急,但憑藉大家上下一心,最後都能安然 渡過巨變,他為此而很感恩。他表示:「在營運基金進入開放市場初期,為開 拓業務,我開始為醫院管理局(醫管局)提供一站式服務。『沙士』期間,更因 應醫管局的要求,臨時提供建築維修保養、加建、改建及改善工程等服務, 直至2012年才將服務交回醫管局。能為客戶帶來『全盤服務方案』,我也感到 自豪。」

Mr Li Man-ching joined the Apprentice Training Scheme in 1970 and retired from EMSD in 2013. He was the Shift Charge Engineer before retirement.

Mr Li is grateful that though it was an eventful and turbulent time back in 1996 when EMSTF was first established, everyone in EMSTF was united as a team and eventually rode out the storm of change. "During the early stage of EMSTF's full entrance into the open market, I started to provide one-stop services to the Hospital Authority (HA) as a way to explore business opportunities. Temporary building maintenance services as well as addition, alteration and improvement works were also provided at HA's request during SARS until these services were handed over to HA in 2012. I feel proud for being able to deliver 'full-service solutions' to clients," he said.





李家聲先生於1970年參加首屆技工學徒訓練計劃,2002年調往綜合工程部,至2015年退休。他退休前為管理值班工程師。

李先生表示,2014年政府總部(政總)被佔領期間,營運基金同事所展現的使命感令他印象深刻。當年12月1日上午,政總被示威者圍堵,政府和承辦商人員均無法入內上班,行政署長於是宣布政總暫停開放,有關員工當日上午無須返回工作地點。然而,營運基金同事仍然盡力工作,幾經波折終能進入政總操作系統,繼續為身處政總執行緊急職務的政府同事及在該處工作的警務人員,提供所需的空調、機電和屋宇裝備服務。他憶述:「我們更有同事自願在辦公時間前到坐滿示威者的廣場巡視,確保政總的電力設施不會超出供電負荷。」

Mr Lee Kar-sing joined the first Craft Apprentice Training Scheme in 1970. He was posted to the General Engineering Services Division in 2002 and retired in 2015. He was the Shift Charge Engineer before retirement.

Mr Lee said that he was impressed by the commitment shown by EMSTF colleagues when the Central Government Offices (CGO) were occupied in 2014. On the morning of 1 December, due to the blockage of CGO by protesters, both government and contractor staff could not go into CGO for work. The Director of Administration announced that CGO was to be closed temporarily and that the concerned staff were not required to report for duty that morning. However, for the benefit of those government colleagues performing emergency duties and police officers working in CGO, EMSTF colleagues still made great efforts and finally managed to enter CGO to continue operating the air-conditioning, E&M and building services systems there. He recalled, "Some of our colleagues even volunteered to walk around the square filled with sit-in protestors before office hours, with a view to ensuring that CGO's electric power loading was not exceeded."

#### 梁淦章先生 Mr Leung Kam-cheung



梁淦章先生於1983年加入機電署工程策劃部,2016年年初退休。他退休前 為高級工程師。

2008年,梁先生在香港協辦的奧運馬術項目中,負責資訊及通訊科技系統和設施的總體策劃、統籌及操作。他表示:「可能營運基金在2005年為世貿香港部長級會議擔任資訊科技及通訊系統和設施項目管理十分成功,所以再次獲委託參與奧運馬術項目的工作。」事實上,在2006至2008年期間,他長駐香港奧運馬術公司,除了定期向北京奧組委作出匯報外,還經常與奧組委磋商技術細節及工程進度。

Mr Leung Kam-cheung joined the Project Division of EMSD in 1983 and retired in early 2016. He was the Senior Engineer before retirement.

Mr Leung was responsible for the overall planning, co-ordination and operation of information and communication technology systems and facilities for the 2008 Olympic Equestrian Events held in Hong Kong. He said, "EMSTF was successful in providing project management of information technology and communication systems and facilities for the World Trade Organisation Hong Kong Ministerial Conference in 2005. This probably led to EMSTF being entrusted again with the task of participating in the Olympic Equestrian Events." In fact, he was stationed full-time at the Equestrian Company of Hong Kong from 2006 to 2008, reporting regularly to the Beijing Olympic Organising Committee and having frequent discussions on technical details as well as project progress with the Committee.



#### 機電工程營運基金的員工

#### **EMSTF STAFF**

#### 梁德民先生 Mr Leung Tak-man



梁德民先生於1980年參加學徒訓練計劃,至1993年調往啟德機場,1998年轉到赤鱲角新香港國際機場服務至今,現為機電署區域經理/機場工程。

梁先生表示:「在營運基金成立初期,雖然高層管理人員有向員工講解營運基金的概念,但大家並不太清楚其運作模式及這種模式會帶來的轉變詳情。直至實行後,大家才開始發現轉變很大,我們需要有客戶意識,而營運基金亦涉及商業運作元素。後來,營運基金與機場管理局的合作模式有所改變。部分同事為自己變成了判頭而感到不開心,但我們以『客戶伙伴』的概念去改變他們的看法。現在營運基金已運作了20年,同事已經完全適應這種運作模式。」

Mr Leung Tak-man joined the Apprentice Training Scheme in 1980. He was posted to the Kai Tak Airport in 1993, and in 1998 to the new Hong Kong International Airport at Chek Lap Kok where he still works today. He is the Regional Manager/Airport Sector of EMSD.

Mr Leung recalled, "During the early days of EMSTF, though senior management had explained at length the concept of trading fund to staff, nobody was really clear about its operational mode or the detailed changes it would bring. Not until implementation began did we start to realise how enormous the changes were: there had to be customer awareness, and elements of commercial operation were also involved. Later on, the mode of co-operation between EMSTF and the Airport Authority also changed. Some of our teammates were unhappy as they felt that they had become a sub-contractor. However, we tried to change their mindset with the concept of 'partnership with clients'. Now that EMSTF has been operating for 20 years, our colleagues are totally adapted to this kind of operational mode."

#### 馮劍青先生 Mr Fung Kim-ching



馮劍青先生自1971年參加學徒訓練計劃至今,在部門已經服務了45個年頭,現為機電署高級機械督察/車輛。

他坦言,以營運基金模式運作對車輛工程分部的衝擊很大,故此同事在營運基金成立初期,對車輛工程分部能否與市場上的代理商競爭感到非常擔憂,因為車輛工程分部不可像市場上的車輛代理商般,以售賣零件的收入彌補提供車輛維修服務帶來的虧蝕。不過,經過高層管理人員多番努力解釋,同事最終明白「唯一的出路是自我完善、配合改變,與部門共同發展,凡事多走一步。」他表示:「經過上上下下同事的辛勤努力,近年車輛工程分部終於做到收支平衡並錄得微利。」

Mr Fung Kim-ching joined the Apprentice Training Scheme in 1971 and this is his 45th year at the Department. He is the Senior Mechanical Inspector/Vehicle of EMSD.

He frankly said that the Vehicle Engineering Sub-division (VESD) was dealt a heavy blow in the early stage of its transition to a trading fund operation as colleagues were deeply worried about whether VESD could compete against other vehicle dealers in the market. That was because VESD could not, like the vehicle dealers in the market, use the revenue from selling parts and components to compensate for the loss incurred from providing vehicle maintenance services. However, after painstaking effort by the senior management to explain the situation, colleagues eventually realised that "the only way out is to improve ourselves, adapt to changes, grow together with the Department, and always go the extra mile in everything we do." "Today, VESD has finally broken even and managed to make a small profit. This is the outcome of the hard work by all our colleagues at every level," he said.

#### 機電工程營運基金的客戶

#### **EMSTF CLIENTS**

#### 李浩天先生 Mr Lee Hoo-tin

路政署高級工程師/上坡設施 Senior Engineer/PHL, Highways Department



機電工程營運基金為路政署道路工程項目的機電設施提供工程策劃、工程監督、維修保養等服務。李浩天先生印象最深的,是2014年營運基金工程策劃部為路政署的升降機系統工程項目提供的服務。當時,工程策劃部提出優化建議,把原先在每部升降機安裝空調系統的設計,改為安裝同樣舒適但更省電環保的機械通風系統。新設計效果理想,一直沿用至今。

他以「非常滿意和專業」來評價營運基金的服務。他表示:「他們熟悉政府運作和採購程序,而且勇於承擔及事事精益求精,這兩方面的表現均非常突出。我們的工程牽涉很多公眾諮詢工作,他們都竭力盡心提供協助,令我們得以順利完成各項工程。大家是緊密的工作伙伴。」

EMSTF provides project planning, site supervision, maintenance services, etc. for the E&M facilities in the road projects of the Highways Department (HyD). Mr Lee Hoo-tin was most impressed by the services provided by EMSTF's Project Division (PD) for HyD's lift installation projects during 2014. PD's advice was to improve the original design, where each lift would be installed with an air-conditioning system, by replacing it with a mechanical ventilation system that would provide similar comfortable environment for users but more energy-saving and environment-friendly. The new design worked well and is still in use today.

He described EMSTF's services as "highly satisfactory and professional". "They are familiar with the government operation and procurement procedures. They are committed and willing to go the extra mile, and perform really well in both aspects. Our works involve a lot of public consultation, and they make strenuous efforts to assist us so that we can finish our tasks smoothly. We are close working partners," he said.

#### 馬信昌先生 Mr Ma Shun-cheong

消防處救護總區車隊管理組 救護監督

Superintendent, Fleet Management Unit, Ambulance Command, Fire Services Department



營運基金為消防處提供救護車採購及維修保養服務。馬信 昌先生憶述約十年前,救護車機件故障事件引起社會高度 關注。營運基金大力支援消防處,加強救護車的採購及維 修保養服務,使救護車車隊的表現經常維持在最佳狀態, 為市民提供緊急救護服務。近年營運基金更為消防處引進 了救護車的國際標準,以改善本地救護車的設計。這些新 設計的救護車快將投入服務。

馬先生表示:「我對營運基金非常滿意。」他補充:「營運基金團隊具有專業知識,經驗豐富,提供穩健可靠的優質服務。我們之間有緊密而優良的伙伴關係。」

EMSTF provides ambulance procurement and maintenance services to the Fire Services Department (FSD). Mr Ma Shuncheong recalled that about ten years ago, mechanical breakdowns in ambulances caused much concern in the community. EMSTF provided great support to FSD to enhance ambulance procurement and maintenance services so that ambulance fleet performance could always be maintained at an optimal level, in order to provide emergency ambulance services to the public. In recent years, EMSTF has also introduced international standards for ambulances to FSD so as to enhance the design of local ambulances. Ambulances with new designs will soon be operational.

"I am highly satisfied with EMSTF," he said. "With professional expertise and rich experience, the EMSTF team provides reliable and quality services. We have a close and excellent partnership," he added.



#### 機電工程營運基金的客戶

#### **EMSTF CLIENTS**

#### 陳偉杰先生 Mr Chan Wai-kit, Thomas

旅遊事務署高級經理(旅遊)41 Senior Manager (Tourism) 41, Tourism Commission



梁錦沛先生 Mr Leung Kam-pui

建築署總物業事務經理/2 Chief Property Services Manager/2, Architectural Services Department



陳偉杰先生表示,營運基金自2010年開始為啟德郵輪碼頭(郵輪碼頭)提供服務,包括海邊前沿區工程設施、五條乘客登船橋、岸上食水供應與污水收集系統,以及郵輪碼頭大樓內的電子器材和設施的設計工作。自2013年起,營運基金開始為乘客登船橋、各個機電、空調和屋宇裝備系統,以及電子和工程設施,提供操作及維修保養服務。

陳先生認為營運基金同事樂於合作、專業及具有優良的團隊精神。他最難忘的是郵輪碼頭啟用初期,營運基金同事主動協助登船橋運作,特別是當「海洋水手號」在2013年6月首次泊岸時,有賴營運基金同事協助登船橋運作,遊客離船登岸的過程非常暢順。他補充:「我們非常滿意營運基金的服務,他們不但迅速回應客戶的要求,而且每每都能提出具成本效益的方案。營運基金是郵輪碼頭的一個重要『組件』,沒有他們,郵輪碼頭難以運作。」

Mr Chan Wai-kit said that EMSTF had started providing services for the Kai Tak Cruise Terminal (Terminal) since 2010, including the design of seaside apron facilities, the five seaport passenger boarding bridges (SPBBs), onshore fresh water supply and sewerage system as well as electronic equipment and facilities in the terminal building. Starting from 2013, EMSTF began to provide operation and maintenance services for the SPBBs, the various E&M, airconditioning and building services systems as well as electronic and engineering facilities.

Mr Chan said that EMSTF colleagues were highly cooperative, professional and had excellent team spirit. He was most impressed by EMSTF colleagues' proactive assistance in the operation of the SPBBs during the initial operation stage of the Terminal. In particular, it was thanks to the assistance of EMSTF colleagues in operating the bridges that during the inaugural berthing of "Mariner of the Seas" in June 2013, all passengers disembarked very smoothly. "We are very satisfied with EMSTF's services. They respond promptly to our requests and always come up with cost-effective solutions. EMSTF is a vital 'component' of the Terminal. The Terminal can hardly operate without them," he added. 梁錦沛先生表示:「我們很滿意機電工程營運基金的服務。」他指出:「最值得欣賞的是他們提供的一站式服務, 既專業又可靠。」他形容彼此的伙伴關係好比「刀與叉」一 大家需要互相配合才可順利完成工作。

營運基金為建築署的建業中心及其他場地提供機電系統操作及維修保養服務,也為該署物業事務處負責的工程提供全面的機電工程顧問服務。梁先生猶記得在營運基金運作初期,建築署與營運基金的服務協議內容曾出現一些灰色地帶,後來經雙方磋商後達成共識,為日後長遠合作奠下良好基礎。

"We are very satisfied with EMSTF's services," said Mr Leung Kam-pui. "What we appreciate the most is its one-stop, professional and reliable services," he said. He described their partnership as that between "fork and knife" – one needs to complement the other to complete the work successfully.

EMSTF provides O&M services for the E&M systems of the Architectural Services Department (ArchSD) in its APB Centre and other venues. It also provides comprehensive E&M consultancy services for the works undertaken by the Property Services Branch of ArchSD. Mr Leung recalled that during the initial operation stage of EMSTF, there were some grey areas in its service agreement with ArchSD. After discussions made by both parties, a consensus was reached which laid a good foundation for their subsequent long-term co-operation.

#### 溫慧玲女士 Ms Wan Wai-ling, Randa

康樂及文化事務署高級經理 (大會堂)

Senior Manager (City Hall), Leisure and Cultural Services Department



#### 劉楚釗醫生 Dr Lau Chor-chiu

醫院管理局港島東醫院聯網總監 Cluster Chief Executive, Hong Kong East Cluster, Hospital Authority



營運基金為康樂及文化事務署(康文署)轄下各市政文娛設施及圖書館提供電氣、空調、屋宇裝備和電子系統的維修保養服務,也為該署表演場地的燈光及舞台設施提供操作和維修保養服務。多年來,溫慧玲女士先後在伊利沙伯體育館、香港中央圖書館、香港文化中心及香港大會堂與營運基金合作。

要數一件她與營運基金一起經歷而又最深刻的事,應是發生於去年6月的事故。當時政府總部附近一條連接大會堂製冷系統的地下海水喉管破損,令大會堂部分設施的冷氣供應中斷,幸得營運基金同事採取一系列應變措施和提供緊急支援,並於短短兩天內為大會堂找來臨時大型製冷系統應急,使大會堂的服務不受事故影響。溫女士表示:「我對營運基金非常滿意。他們可靠、物有所值、經驗豐富和專業,而且非常了解我們的場地和運作,並能維護我們場地的利益,讓我們能為市民提供更優質的服務。」

EMSTF provides maintenance services for the electrical, air-conditioning, building services and electronic systems at various municipal and cultural facilities as well as libraries under the Leisure and Cultural Services Department (LCSD). It also provides O&M services for lighting and stage facilities in LCSD's performance venues. Over the years, Ms Wan Wai-ling has worked with EMSTF at the Queen Elizabeth Stadium, the Hong Kong Central Library, the Hong Kong Cultural Centre and the City Hall.

The most memorable experience she shared with EMSTF took place in June last year, when an underground sea water pipe near the Central Government Offices for a chiller plant at the City Hall was damaged, causing suspension of air-conditioning supply at some facilities of the venue. Fortunately, thanks to the EMSTF staff who provided a series of contingency measures and emergency support and managed to deploy a large makeshift chiller system for the City Hall within merely two days, services at the City Hall were not affected by the incident. "I am very satisfied with EMSTF. They are reliable, good value for money, experienced and professional. They know our venues and operation very well and always work in the best interest of our venues, so that we can enhance the quality of our services to the public," she said.

營運基金為東區尤德夫人那打素醫院(東區醫院)提供機電、冷氣、電子、屋宇裝備及醫療設備的維修保養及大型工程項目管理服務,雙方多年來合作無間。最教劉楚釗醫生難忘的是「沙士」期間,營運基金與東區醫院同事共同研發出一套供高危護理區使用的獨特負壓通風系統,以減低醫護人員互相傳染的風險。另一「驚險」情節,是當時營運基金緊急為東區醫院建造了醫院管理局第一個備有負壓通風系統的手術室,讓外科部門能為一名懷疑感染「沙士」的病人進行緊急手術。

劉醫生表示:「我們很慶幸能與營運基金這樣具承擔、使命感和理念相似的團隊合作。」他補充:「他們反應很快,總能提供完美的維修保養及工程方案。他們亦是醫院團隊的一員,與我們出生入死,互相信任,我們的合作關係絕不止於一紙服務合約那麼簡單。」

EMSTF provides maintenance services for the E&M, airconditioning, electronic, building services systems and medical equipment as well as project management services for major engineering projects at the Pamela Youde Nethersole Eastern Hospital (PYNEH). Both parties have worked together closely over the years. For Dr Lau Chorchiu, the most unforgettable experience was during the SARS period when EMSTF and PYNEH colleagues jointly developed a unique negative pressure ventilation system to be used in high-risk clinical areas to reduce the risk of crossinfection among medical staff. Another "nerve-wracking" experience was that EMSTF urgently constructed the first operating theatre with negative pressure ventilation system for PYNEH under the Hospital Authority, which enabled the hospital's surgical department to conduct an emergency surgery on a suspected SARS patient.

"We are grateful to have EMSTF as our highly committed partner, with their sense of mission and values similar to ours," he said. "They respond fast, and always provide perfect maintenance and engineering solutions. They are a member of our hospital team, and together we have gone through life-and-death situations. We trust each other. Our partnership goes way beyond a mere service contract," he added.

## 感謝

## **Thank You**



機電工程營運基金在2016年 客戶意見調查中取得佳績,滿意指數再創新高。 謹此衷心感謝客戶的支持及同事的努力。

in the Customer Opinion Survey 2016.
We would like to express our heartfelt thanks for our clients' support and our colleagues' efforts.

請瀏覽網址: www.emsd.gov.hk/EMSTF20 或掃描以下QR代碼, 觀看與機電工程營運基金20周年 相關的資訊。

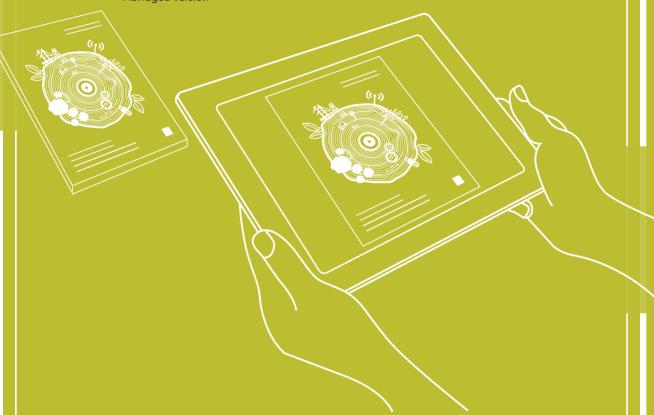
Please visit the website: www.emsd.gov.hk/EMSTF20 or scan the QR code below to view information related to the EMSTF 20th Anniversary.



# 機電工程營運基金 20周年紀念短片

## EMSTF 20th Anniversary Video

精華版 Abridged version



你可透過手機程式WedCam掃描封面的擴增實境代碼,觀看短片。

You can view our video by scanning the AR code on the cover through the mobile app, "WedCam".

> 活動代碼: EMSD Event Code: EMSD





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