

70<sup>th</sup>  
周年紀念  
ANNIVERSARY

09.2018

ISSUE 48

# 機電傳聲

# VoiceLink

機電工程署  
EMSD





# 用心服務 同心共創 跨越七十載

## Caring, Serving and Co-creating for 70 Years and Beyond

**機**電工程署（機電署）與香港一起成長，七十年來，憑藉勇於承擔的信念，一直守護香港的電力、氣體、升降機及自動梯、鐵路系統的安全，並執行相關的規管工作。同時，我們為政府部門和公營機構的各種機電設施，提供維修保養服務，確保它們運作暢順、安全和高效。

要邁向服務新里程，機電署將繼續靈活創新，與時並進，積極推行和執行機電安全條例及規管工作，並致力提倡能源效益，促進香港可持續發展。此外，我們亦會運用嶄新科技，為客戶部門提供優質的機電工程服務，以提升市民的生活質素。

今年9月26日，我們在總部大樓地下大堂舉行機電署七十周年典禮，除了邀得財政司司長陳茂波先生蒞臨主禮之外，發展局局長黃偉綸先生、環境局局長黃錦星先生、運輸及房屋局局長陳帆先生、發展局常任秘書長（工務）韓志強先生、機電署署長薛永恒先生及年青的員工代表，與場內嘉賓一同以手勢做出「70」這個數字（如下圖），以啟動典禮儀式，慶祝機電署成立七十周年。



財政司司長陳茂波先生對機電署擔當「創科促成者」這個新角色給予肯定之餘，亦勉勵部門繼續努力，創新求變。

Besides recognising the new role of the EMSD as an "I&T facilitator", the Financial Secretary, Mr. Paul Chan, also encourages the Department to continue its efforts, innovate and change.



財政司司長陳茂波先生（右四）、發展局局長黃偉綸先生（右三）、環境局局長黃錦星先生（左三）、運輸及房屋局局長陳帆先生（右二）、發展局常任秘書長（工務）韓志強先生（左二）、機電署署長薛永恒先生（左四）及年青的員工代表，與場內嘉賓一同以手勢做出「70」這個數字（如下圖），以啟動典禮儀式，慶祝機電署成立七十周年。

The Financial Secretary, Mr. Paul Chan (4th right), Secretary for Development, Mr. Michael Wong (3rd right), Secretary for the Environment, Mr. Wong Kam-sing (3rd left), Secretary for Transport and Housing, Mr. Frank Chan (2nd right), Permanent Secretary for Development (Works), Mr. Hon Chi-keung (2nd left) and Director of Electrical and Mechanical Services, Mr. Alfred Sit (4th left), young staff representatives and guests make the gesture of number "70" (photo at the bottom) to kick off the Ceremony, celebrating the 70th anniversary of the EMSD.

陳茂波先生在致辭時表示，過去七十年，機電署隨著社會變遷而擔當不同角色，既是機電安全的「規管者」、服務的「先驅者」，也是節能的「推動者」。近年，香港經濟繼續多元化發展，當中創新科技（創科）更成為新時代經濟發展的最大驅動力。他對機電署擔當「創科促成者」這個新角色給予肯定之餘，亦勉勵部門繼續努力，創新求變。

機電署署長薛永恒先生感謝出席的嘉賓和各方「同行者」一直以來的信賴和支持，並承諾發揮「創科促成者」的角色，繼續以新思維、新科技，推動香港成為低碳和高智能的城市，同心共創更美好的明天。

機電署本着持續創新的精神，在開拓創科領域上不遺餘力。早前，我們舉辦了「Inno@E&M創新科技挑戰賽」，以培養部門的創新文化，推動創科的應用。在典禮上，陳茂波先生為我們頒發予比賽第一階段意念方案的冠、亞及季軍，而所有優勝隊伍稍後會把其意念在第二階段實踐成為新方案。

### 總部大樓展現新氣象

出席典禮的嘉賓除了參觀「感恩同行70載」互動展覽和「機電·夢飛翔」展覽館，了解機電署七十年來的重要里程碑和不同服務外，亦參觀了總部大樓注入創科元素的最新設施，包括互動學習中心、機電創科專區及客戶服務中心，了解機電署用以培訓卓越機電團隊的新科技、推動和支援初創企業方面的工作，以及在提升客戶服務質素方面的發展。







典禮當日嘉賓雲集，場面熱鬧。

Guests gather at the Ceremony, which is filled with a joyous atmosphere.

The Electrical and Mechanical Services Department (EMSD) has grown and evolved in tandem with the development of Hong Kong in the past 70 years. With our belief in commitment, the EMSD has protected the safety of electricity, gas, lifts and escalators as well as the railway systems, and carried out related regulatory works. At the same time, we provide operation and maintenance services of various electrical and mechanical (E&M) facilities for government departments and public organisations to ensure their smooth, safe and efficient operation.

To move towards a new journey, the EMSD will remain flexible and innovative and keep pace with the times, actively put into effect and implement E&M safety ordinances and regulatory work, as well as striving to promote energy efficiency to facilitate sustainable development in Hong Kong. Besides, we will also employ new technologies to provide quality E&M engineering services for client departments with a view to enhancing people's quality of life.

On 26 September 2018, the EMSD 70th Anniversary Ceremony was held at the lobby on the ground floor of our headquarters building. In addition to having the Financial Secretary, Mr. Paul Chan, as our officiating guest, Secretary for Development, Mr. Michael Wong, Secretary for the Environment, Mr. Wong Kam-sing, Secretary for Transport and

Housing, Mr. Frank Chan, Permanent Secretary for Development (Works), Mr. Hon Chi-keung, representatives from policy bureaux, heads of various government departments, trade representatives and guests from different sectors were also invited to attend the Ceremony, which was filled with a joyous atmosphere.

Speaking at the Ceremony, Mr. Paul Chan noted the different roles played by the EMSD in response to changes in the society over the past 70 years. It has been a "regulator" of E&M safety, a service "pioneer" and a "promoter" in energy saving. In recent years, Hong Kong's economy has continued to diversify, with innovation and technology (I&T) being the biggest economic driver in the new era. Besides recognising the new role of the EMSD as an "I&T facilitator", Mr. Chan also encouraged the Department to continue its efforts, innovate and change.

Mr. Alfred Sit, Director of Electrical and Mechanical Services, thanked all guests and companions for their trust and support over the years. He promised that the EMSD would play the role of "I&T facilitator" to create a low-carbon and smarter Hong Kong with new thinking and new technologies, thereby co-creating a better tomorrow.

陳茂波先生對機電創科專區展示的創新科技項目極感興趣。

Mr. Paul Chan shows great interest in the innovative technology projects presented in the E&M InnoZone.



In the spirit of continuous innovation, the EMSD has spared no effort in the field of I&T development. Earlier on, we organised the Inno@E&M Challenge to cultivate an innovation culture in the Department and promote the application of I&T. At the Ceremony, Mr. Paul Chan presented prizes to the champion, first runner-up and second runner-up of phase one "idea proposal" of the competition, while all the winning teams will realise their ideas into new solutions in phase two later.

## A New Look of the Headquarters Building

Apart from visiting the interactive exhibition "Journey through the Past" and the EMSD Gallery to learn about the important milestones and various services of the EMSD in the past 70 years, guests attending the Ceremony also visited the latest facilities of the headquarters building with I&T elements incorporated, including the Interactive Learning Centre, the E&M InnoZone and the Customer Service Centre. There, the guests were introduced to the new technologies adopted by the EMSD for training an outstanding E&M team, our work in the promotion of and support for start-ups, as well as the development in improving the quality of our customer service.



嘉賓親自試用虛擬實境技術進行維修保養，了解我們引入先進科技的學員技術訓練。

Our guest has a try of the VR technology for maintenance and is introduced to our technical training for trainees with advanced technology.

「感恩同行70載」互動展覽展示機電署七十年來的重要里程碑和貢獻，讓嘉賓重溫香港機電服務的發展。

The interactive exhibition "Journey through the Past" showcases important milestones and contributions of the EMSD in the past 70 years, enabling the guests to revisit the development of E&M services in Hong Kong.







嘉賓深入了解如何應用全息影像系統於培訓。  
Guests have a good understanding on how the Holographic image system is used to facilitate trainings.



「洞穴式自動虛擬環境」令用家有如置身實境，有助學員學習設施的維修及保養技巧。

The "Cave Automatic Virtual Environment" offers users an experience as if they are in the actual setting, facilitating trainees' learning of the skills for the repair and maintenance of facilities.

**互動學習中心：**把創科應用於人才培訓，利用全息影像及三維投影系統讓學員了解不同政府建築物內的機電設施及裝置(包括規格、操作原理及結構圖等技術細節)，同時應用虛擬實境科技編製培訓內容，例如虛擬實境焊接模擬器、啟德郵輪碼頭乘客登船橋的虛擬實境維修保養等，讓學員熟習相關的維修保養工序及安全預防措施。

**機電創科專區：**作為其中一項我們支援創科的措施，我們開設全新的專區，展出十多個由機電署、大學及初創企業共同協作的創科項目，例如檢測機電裝置的航拍機、洞穴式自動虛擬環境、雲端駕駛輔助系統等，以推動機電創科的研發和應用，總部大樓則開放作為機電創科項目的共享試驗場地。

**客戶服務中心：**設置嶄新的「顧客為本電子平台」及其他資訊科技系統，優化客戶服務。該電子平台由機電署自行研發，除了回應客戶對實時工作進度報告的需要外，更可彈性地掛載其他系統，例如地理資訊系統、綜合樓宇管理系統等，把管理客戶機電資產的流程整合和數碼化，大大加強資訊交流和提升工作效率。

歡迎客戶於2018年10月31日前蒞臨參觀以上專區的最新設施。如欲參觀各項設施，請致電 2808 3804 與我們的高級工程師周旭麒先生聯絡。另外，有關機電工程署七十周年的詳細資訊，請瀏覽網址：<http://www.emsd.gov.hk/emsd70>或掃描以下二維碼。

Clients are welcome to visit the latest facilities in the above areas before 31 October 2018. For visit of these facilities, please contact our Senior Engineer, Mr. Yorkie Chow, at 2808 3804. Moreover, please visit the website <http://www.emsd.gov.hk/emsd70> or scan the QR code on the right to view information related to the EMSD 70th Anniversary.



**Interactive Learning Centre:** It applies I&T to talent training. Holographic images and three-dimensional (3D) projection systems are used to facilitate trainees' understanding of the E&M facilities and installations in various government buildings, including technical details such as specifications, operating principles and structural plans, etc. Meanwhile, virtual reality (VR) technology is also applied in the compilation of training content, such as the VR welding simulator and the VR maintenance of the Kai Tak Cruise Terminal Passenger Boarding Bridges, which enable trainees to get familiarised with the relevant maintenance procedures and safety precautionary measures.

**E&M InnoZone:** We are dedicated to co-ordinating measures in support of I&T. The new InnoZone features more than ten I&T projects under the collaboration of the EMSD, universities and start-ups, such as drones for

inspecting E&M installations, Cave Automatic Virtual Environment, and cloud-based fleet management system, etc., to promote the research and development as well as application of I&T in the field of E&M. Our headquarters building is also opened up as a common testing ground for I&T projects on E&M.

**Customer Service Centre:** A new Customer Centric e-Platform (CCeP) and other information technology systems have been set up to optimise customer service. Our self-developed CCeP not only responds to clients' needs for real-time reports on work progress, but also allows for flexible integration with other systems, such as the Geographic Information System and the integrated Building Management System, etc., so as to consolidate and digitise the management process of clients' E&M assets, greatly strengthening exchange of information and improving work efficiency.



財政司司長陳茂波先生參觀客戶服務中心，體驗實時跟進工作進度帶來的便利。

The Financial Secretary, Mr. Paul Chan, visits the Customer Service Centre to experience the convenience brought by real-time follow-up of work progress.



# 共創智慧未來

## Co-creating a Smart Future

**機**電署致力推動創新科技，鼓勵城市創新，以改善市民生活質素。為此，我們將於11月舉辦「共創智慧未來」研討會，邀請海內外的專家和學者分享經驗及研究成果，探討如何利用創新科技加強可持續發展，以達致構建香港成為世界級智慧城市的願景。

「共創智慧未來」研討會定於11月15日在香港科學園舉行，我們會從「智慧生活」、「智慧環境 — 健康、安全和能源」、「智慧環境 — 可持續建築」及「智慧出行」這四個範疇，深入探討機電工程解決方案和法規、能源管理、應對氣候變化、營造創新環境等議題，藉此啟發業界的創新思維，共同打造一個更安全、更環保的智慧香港。

我們邀請了多位海外、內地及本地的專家學者，以及政府、商會、環保組織及機電業的代表出席研討會。主講嘉賓包括中華人民共和國海關總署檢驗司司長孫文康先生、美國能源工程師學會會長Clint Christenson先生、美國麻省理工學院能源倡議組織項目主任 Robert Armstrong教授，以及香港科技園公司董事局主席查毅超博士。

我們會於研討會翌日(11月16日)舉辦技術參觀活動，參加者可參觀WEEE·PARK廢電器電子產品處理及回收設施、廣深港高速鐵路石崗列車停放處的車務控制中心和港珠澳大橋主橋。

是次研討會是慶祝機電署成立七十周年的重點活動之一，我們熱切期待客戶部門和業界踴躍出席。如欲參加或獲取更多資訊，請掃描以下二維碼或瀏覽網頁 [https://www.emsd.gov.hk/tc/emsd\\_symposium/index.html](https://www.emsd.gov.hk/tc/emsd_symposium/index.html)。

The Symposium is one of the activity highlights to celebrate the 70th anniversary of the EMSD. We look forward to welcoming our client departments and the E&M trade. If you wish to participate or get more information, please scan the QR code below or visit the website: [https://www.emsd.gov.hk/en/emsd\\_symposium/index.html](https://www.emsd.gov.hk/en/emsd_symposium/index.html).



The EMSD is committed to promoting innovation and technology, and encouraging urban innovation for the improvement of people's quality of life. To this end, we will organise the EMSD Symposium 2018 with the theme of "Co-creating a Smart Future" in November, where local, Mainland and overseas experts and academics will share their experiences and research results. Discussions will also be made to explore ways of using innovative technologies to enhance sustainable development, and achieve our vision of building Hong Kong as a world-class smart city.

The "Co-creating a Smart Future" Symposium will be held on 15 November at the Hong Kong Science Park. From the perspectives of "Smart Living", "Smart Environment - Health, Safety and Energy", "Smart Environment - Sustainable Building" and "Smart Mobility", topics such as E&M engineering solutions and regulations, energy management, combating climate change, and fostering an environment for innovation will be explored in depth with a view to inspiring innovative thinking in the trade and creating a smart Hong Kong which is safer and greener.

We have invited overseas, Mainland and local experts and academics, as well as representatives from the Government, trade associations, green groups and the E&M industry to the Symposium. Keynote speakers include Mr. Sun Wenkang, Director-General, General Administration of Customs of the People's Republic of China; Mr. Clint Christenson, President of the Association of Energy Engineers, USA; Professor Robert Armstrong, Director of the Massachusetts Institute of Technology Energy Initiative, USA; and Dr. Sunny Chai Ngai-chiu, Chairman of the Board of Directors of the Hong Kong Science and Technology Parks Corporation.

Technical visits will be organised on the next day of the Symposium (16 November). Participants may visit the Waste Electrical and Electronic Equipment (WEEE) Treatment and Recycling Facility at WEEE·PARK, the Operations Control Centre of the Guangzhou-Shenzhen-Hong Kong Express Rail Link – Shek Kong Stabling Sidings, and the Hong Kong-Zhuhai-Macao Bridge Main Bridge.

### 主講嘉賓名單 List of Keynote Speakers:

主題演講 Keynote Session	講者 Speaker
兩地機電安全及能效合作安排 — 成果與展望 Achievements and Way Forward of Mainland / HKSAR Co-operation Arrangement on E&M Safety and Energy Efficiency	中華人民共和國海關總署檢驗司司長孫文康先生 Mr. Sun Wenkang, Director-General, General Administration of Customs of the People's Republic of China
實現卓越的能源管理 Achieving Excellency in Energy Management	美國能源工程師學會會長Clint Christenson 先生 Mr. Clint Christenson, President of the Association of Energy Engineers, USA
應對氣候變化 — 可持續能源的未來發展 Combating Climate Change – Developing a Sustainable Energy Future	美國麻省理工學院能源倡議組織項目主任Robert Armstrong 教授 Professor Robert Armstrong, Director of the Massachusetts Institute of Technology Energy Initiative, USA
營造創新環境 Fostering an Environment for Innovation	香港科技園公司董事局主席查毅超博士 Dr. Sunny Chai Ngai-chiu, Chairman of the Board of Directors of the Hong Kong Science and Technology Parks Corporation

**EMSD**  
**SYMPOSIUM 2018**  
**CO-CREATING A SMART FUTURE**

# 考察大灣區的創科發展

## Greater Bay Area Visits to Study Innovation and Technology Development

**為**加快香港創新與科技(創科)發展的步伐，機電署繼成立創新辦公室、設立網上創新科技協作平台(E&M InnoPortal)，以及舉辦兩次「創新科技日」後，在過去數月先後多次帶領客戶部門、大學學者和業界代表到訪粵港澳大灣區(包括深圳、廣州和東莞)，考察當地創科的最新發展。我們借鑑當地推行不同創科項目的經驗，為我們的客戶部門及機電業界引進合適的創新科技，以推動香港智慧城市的發展。

考察團的成員來自多個客戶部門及其他機構，包括香港機場管理局、海事處、食物環境衛生署、建築署、土木工程拓展署、

政府產業署、政府物流服務署、路政署、環境保護署、運輸署、香港警務處、消防處、懲教署、政府飛行服務隊、醫院管理局、菲臘牙科醫院、衛生署、香港科技大學及機電業界。

考察團參觀了當地多個創科企業和主要創科基地，了解應用於智慧城市的最新科技，包括多功能智慧路燈；物聯網及數據平台的技術和應用；有助提升智能樓宇、升降機及綜合樓宇管理系統的運作及維修效率的數據分析；智能遙距監控系統及視頻分析的技術發展；通過人工智能雲端平台為客戶提供大數據及分



智慧路燈採用窄帶物聯網技術，可因應季節、天氣和環境變化，靈活地調校開關和亮度，使耗電量節省達10至20%，而且還配備無線網絡、電動車輛充電裝置、信息顯示屏等設施，便利市民。

Smart street lamps using narrowband Internet of Things technology allow flexible adjustment of the switch and brightness in response to changes in season, weather and environment, saving up to 10 to 20% of power consumption. The street lamps are also equipped with facilities, such as wireless networks, electric vehicle charging devices and information displays, for the convenience of the public.

析服務；智能光伏發電方案；智能模塊數據中心；自動泊車機械人停車系統；以及最新機械人及機械臂系統的開發及其行業應用等。

考察團亦參加了相關的專題會議，與本地及內地的大學學者和創科團隊就大灣區的創科發展交換意見，並藉此機會推廣我們的E&M InnoPortal，以促進粵港兩地在創科方面的合作。



時任機電署副署長／營運服務戴德謙先生(右一)表示，多元化的考察活動讓客戶部門、機電業界、大學學者和我們的工程師可更了解大灣區在創科方面的最新發展，有助我們把合適的創新技術引進香港，並為業界帶來更多發展機遇。

The then Deputy Director/Trading Services of the EMSD, Mr. Tai Tak-him (1st right), said that the diverse activities of the visits enabled client departments, the E&M industry, academics and our engineers to gain a better understanding of the latest I&T development in the Greater Bay Area, which helped us to introduce appropriate innovative technologies to Hong Kong and bring more development opportunities to the industry.

## 大老山隧道機電設施無縫交接

### Seamless Handover of the E&M Facilities at Tate's Cairn Tunnel

**大**老山隧道的30年專營權已於2018年7月11日屆滿。當日零時，隧道正式由政府接管，成為政府隧道之一。機電署與運輸署緊密合作，為交接提供全力支援，確保移交予政府的機電設施保養良好及運作正常。整個交接過程十分順暢，其間大老山隧道繼續為道路使用者提供安全可靠的交通運輸服務，交通並無受阻。

其實，機電署事前已作出充足準備。早於2016年10月，機電署已着手協助運輸署進行籌備工作、參與跨部門會議、討論交接安排和擬備應變計劃。由於大老山隧道已營運達30年，為確保政府所接收的機電設備和系統狀況良好，我們於交接前數月，便開始監察舊的專營公司和新的承辦商為這些設備和系統進行技術評估。

此外，我們亦於交接前數天點算備件庫存，並為機電設施作最後檢查，確保一切運作良好，順利交接。

未來，我們會繼續為客戶密切監察新承辦商在管理、營運和維修保養方面的表現，並提供專業及技術支援服務。



To speed up the pace of innovation and technology (I&T) development in Hong Kong, the EMSD has set up the Inno-Office, launched the E&M InnoPortal, and organised twice the Innovative Technology Day. In the past few months, we also took the lead in organising several delegations, formed by client departments, academics and trade representatives, to the Guangdong-Hong Kong-Macao Greater Bay Area (including Shenzhen, Guangzhou and Dongguan) so as to gain a better understanding of the latest I&T development there. We drew reference from their experience in taking forward various I&T projects with a view to introducing appropriate innovative technologies for our client departments and the E&M industry to promote the development of smart city in Hong Kong.

Members of the delegations came from various client departments and other organisations, including the Airport Authority Hong Kong, Marine Department, Food and Environmental Hygiene Department, Architectural Services Department, Civil Engineering and Development Department, Government Property Agency, Government Logistics Department, Highways Department, Environmental Protection Department, Transport Department, Hong Kong Police Force, Fire Services Department, Correctional Services Department, Government Flying Service, Hospital

最新的機械人及機械臂技術可應用於工程系統的運作及維修保養，以提升醫院及診所等客戶場地的工作效率。

The latest robot and robotic arm technologies can be applied in the operation and maintenance of engineering systems to enhance the work efficiency of our clients' venues such as hospitals and clinics.



自動泊車機械人停車系統  
Automated puzzle parking system

Authority, the Prince Philip Dental Hospital, Department of Health, the Hong Kong University of Science and Technology, and the E&M trade.

The delegations visited a number of enterprises and key bases of I&T in the Greater Bay Area to learn about the latest technologies that can be applied to smart cities, including multi-functional smart street lamps; technologies and applications of Internet of Things and data platforms; data analysis which helps enhance the operation and maintenance efficiency of smart

buildings, lifts and integrated building management systems; technological development of smart remote monitoring systems and video analytics; big data and analytics services for clients via artificial intelligence cloud platforms; smart photovoltaic power generation solutions; smart modular data centres; automated puzzle parking system; and the latest development of robot and robotic arm systems and their applications in the trade.

The delegations also attended thematic seminars during which they exchanged views on the I&T development in the Greater Bay Area with academics of local and Mainland universities and I&T teams. We also took the opportunity to promote our E&M InnoPortal to foster I&T collaboration between Guangdong and Hong Kong.



考察團深入了解物聯網及數據平台在智慧城市的交通、保安、通訊、環境等範疇的技術和應用，獲益良多。

The delegations gained a deeper understanding of the technologies and applications of the Internet of Things and data platforms in the areas of transportation, security, communications and environment in smart cities, and benefited greatly from the visits.

The Tate's Cairn Tunnel (TCT), with its thirty-year franchise expired on 11 July 2018, was officially taken over by the Government at midnight on that day and became one of the government tunnels. The EMSD worked closely with the Transport Department (TD) and provided full support for the handover to ensure that the electrical and mechanical (E&M) facilities handed over to the Government were well-maintained and functioning properly. The entire handover process went seamlessly and smoothly, during which the traffic of the TCT was unimpeded, and the TCT continued to

provide safe and reliable transportation services for road users.

In fact, the EMSD had prepared well for the handover arrangement beforehand. As early as October 2016, the EMSD assisted TD in the preparatory work, participated in inter-departmental meetings, discussed handover arrangements, and formulated contingency plans. To ensure the E&M equipment and systems of the TCT, which had been in operation for 30 years, taken over by the Government were in good condition, we started to monitor the technical assessment of

these equipment and systems conducted between the old franchisee and the new contractor several months before the handover. Several days prior to the same, we also conducted stocktaking of parts and final inspection of the E&M systems to ensure smooth operation and seamless handover.

In the future, we will continue to help our clients closely monitor the new contractor's performance in management, operation and maintenance, and provide professional and technical support services.



# 「機電・啟航」鼓勵學員盡展抱負

## "E&M Go!" Encourages Fulfilment of Aspirations

為配合香港的長遠發展，機電署早年與業界成立香港機電業推廣工作小組，透過不同渠道招募人才，讓機電業持續穩定地發展。

繼去年舉辦「機電·啟航」迎新典禮後，工作小組今年再接再厲，於9月20日舉行「機電·啟航2018」活動，邀請近660名參與各公私營機構舉辦的機電業技術人才培訓計劃的年青學員及其親友出席，以歡迎學員投身機電行業，鼓勵他們施展抱負，並傳達機電業與時並進、形象專業和前景光明的信息。

政務司司長張建宗先生再次擔任我們的主禮嘉賓。他在致辭時表示，機電業是社會百業的「基本盤」，機電設施在生活之中無處不在，加上基礎建設的推展，機電業實在是機遇處處，而且是推動創科的重要力量。



機電工程署署長薛永恒先生、業界代表與年青學員一同參加以電子競技方式進行的「機電精英盃」問答比賽，場面熱鬧。

Mr. Alfred Sit, Director of Electrical and Mechanical Services, trade representatives and young trainees join together to participate in the "E&M Elite Cup" quiz competition, which is conducted in the form of eSports and filled with an exciting atmosphere.

機電工程署署長薛永恒先生在典禮上透露，機電業早已把創新科技納入行業培訓課程中。他鼓勵機電業的生力軍擁抱新科技，努力裝備自己，把香港打造成為一個可持續發展的智慧城市。

今年，工作小組採用嶄新的電子競技方式，透過「機電業推廣小組」應用程式進行「機電精英盃」問答比賽，讓新學員加深認識機電業的創科元素、就業前景和發展。

政務司司長張建宗先生(左五)、機電工程署署長薛永恒先生(右四)及業界嘉賓主持「機電·啟航」迎新典禮的啟動儀式。

Mr. Matthew Cheung, Chief Secretary for Administration (5th left), Mr. Alfred Sit, Director of Electrical and Mechanical Services (4th right), and guests from the trade officiate at the kick-off of the "E&M Go!" Orientation Ceremony.



To support the long-term development of Hong Kong, the EMSD and the trade have formed the Hong Kong Electrical and Mechanical Trade Promotion Working Group (Working Group) years ago to recruit talents through various channels to enable steady and sustainable development of the E&M industry.

After the "E&M Go!" Orientation Ceremony last year, the Working Group made continued effort this year and organised the "E&M Go! 2018" on 20 September, welcoming about 660 young trainees, who have joined E&M training schemes organised by various public and private organisations, as well as their families. The event aims to encourage the trainees to pursue their aspirations in the E&M trade, and to portray a professional image for the E&M industry which keeps up with the times and offers bright prospects.

Mr. Matthew Cheung, Chief Secretary for Administration, once again served as our officiating guest. Speaking at the orientation ceremony, he pointed out that the E&M industry is the "basic platform" of all sectors of the society. E&M facilities are closely related to people's livelihood. Together with the infrastructure projects being pushed ahead, the E&M industry is filled with opportunities. It is also an important

driving force of innovation and technology development.

Mr. Alfred Sit, Director of Electrical and Mechanical Services, revealed at the ceremony that the E&M industry has already integrated innovative technologies into the training courses. He encouraged the industry's new trainees to embrace novel technologies and strive to equip themselves to develop Hong Kong into a sustainable smart city.

This year, the Working Group adopted the new eSports approach to conduct the "E&M Elite Cup" quiz competition through the "E&M Promotion Group" app, with the aim of enhancing the trainees' awareness of innovation and technology being employed by the E&M industry, as well as the trade's career prospects and development.



一眾嘉賓為參賽隊伍熱烈地打氣。  
Guests cheer the competing teams passionately.





# 推動機電署總部大樓可持續發展

## Promote Sustainable Development of the EMSD Headquarters Building

**機**電署致力推動環保，積極落實可持續發展的工作。過去數年，機電署以身作則，在總部大樓實行了多項節約能源措施，包括應用新能源效益技術、實行優化的內務管理方法，以及減省不必要的能源消耗，成效顯著。在2017至18年度，總部大樓的總用電量較上年度減少了約130萬度電，大約相等於390個住宅用戶全年的平均用電量，達到環境局所訂(以2013至14年度為基礎)每年減少1%的目標。至今年6月，總部大樓所節省的用電量，甚至超越我們所訂(以2013至14年度為基礎)合共節省4%的目標。

總部大樓在正式接駁啟德發展區區域供冷系統後，與使用設有獨立冷卻塔的水冷式空調系統相比，能源效益提高約20%。事實上，區域供冷系統有助改善空氣質素，實現低碳經濟的目標。此外，我們亦與初創企業合作，在總部大樓的空調系統安裝智能風機盤管控制器，以更有效地控制電流來調節所需風速，優化能源使用。

除了利用基建配套設施或新技術來達致節能目標外，我們更養成節能的習慣，在日常生活中實踐節能之道，例如在總部大樓全面實行午飯時間關掉辦公室部分照明設施的安排，並重新調節燈光自動開關感應的閒置時間，以減少電力消耗。為進一步提升能源效益，辦公室、走火通道等地方的傳統燈具亦已更換為發光二極管燈具，其發光效率更佳，使用壽命亦更長。

我們樂意與客戶分享各項節約能源措施，有興趣的客戶請致電3155 4302與高級工程師王志亮先生聯絡。



總部大樓的辦公室、汽車工場、走火通道、洗手間、行車通道等地方的傳統燈具已更換為發光二極管燈具，其使用壽命較長，耗電量亦較低。In the headquarters building, all traditional luminaires in the offices, vehicle workshops, fire escape routes, washrooms, driveways, etc. have been replaced with LED lightings, which have longer service life and lower energy consumption.



區域供冷系統的能源效益較傳統風冷式空調系統高約35%，亦較使用獨立冷卻塔的水冷式空調系統高約20%。The energy efficiency of the district cooling system is about 35% higher than that of the conventional air-cooled air-conditioning system, and about 20% higher than that of the water-cooled air-conditioning system which uses separate cooling towers.

The EMSD is committed to promoting environmental protection and proactively implementing sustainable development. Over the past few years, the EMSD has set an example by implementing at its headquarters building a number of energy conservation measures, including the application of new energy efficiency technologies, implementation of optimised housekeeping practices, and reduction of unnecessary energy consumption. These measures have achieved remarkable results. Compared with the previous year, the total electricity consumption of the headquarters building was reduced by about 1.3 million kWh in 2017-18, which is approximately equivalent to the average annual electricity consumption of 390 residential households. The 1% annual electricity reduction target (2013-14 as base) set by the Environment Bureau has been achieved. As at June this year, the building's accumulative saving in electricity consumption even exceeded our electricity reduction target of 4% (2013-14 as base).

After being connected to the District Cooling System at Kai Tak Development, the headquarters building has achieved an increase of 20% in energy efficiency as compared to using the water-cooled

air-conditioning system equipped with separate cooling towers. In fact, the district cooling system helps improve air quality and achieve the target of low-carbon economy. We also worked with start-ups to install a Fan Coil Unit Energy Saver in the air-conditioning system of the headquarters building for optimisation of energy use by effectively control the voltage to adjust the fan motor speed.

In addition to using ancillary infrastructure or new technologies to achieve energy-saving targets, we have also developed good energy-saving habits in our daily lives, e.g. turning off part of the office lightings during lunchtime and readjustment of the idling time of automatic light sensor switches for reduction of power consumption. To further enhance energy efficiency, all traditional luminaires in the offices and fire escape routes have also been replaced with Light Emitting Diode (LED) lightings, which have better luminous efficiency and longer service life.

We are happy to share with our clients various energy-saving measures. If you are interested, please contact Mr. Wong Chi-leung, Senior Engineer, at 3155 4302.



# 營運基金新架構

## New Organisational Structure of Trading Services

**為**配合營運基金邁向機電2.0服務新里程，我們重新檢視了營運基金各部別的服務範圍，並重組架構，務求為客戶提供一站式、綜合和全面的機電操作、維修保養和項目管理服務。

透過新架構，營運基金將在創新與科技方面持續革新，推行更多數碼化機電工程方案，並深化「以客為本」和區域化運作模式，貫徹以社會利益為依歸的宗旨，創造最大的公眾價值。

新架構將於今年10月1日起實施。新架構下的各部別負責的主要客戶服務範圍包括：

**邊境及運輸工程部：**負責邊境設施工程服務和運輸工程服務兩大範疇。前者主要服務對象為香港機場管理局、民航處、香港海關、政府飛行服務隊及入境事務處，後者主要為運輸署及路政署提供服務。

**保安及車輛工程部：**主要分為港、九和新界三個區域運作，主要客戶包括保安局、懲教署、渠務署、消防處、香港警務處及廉政公署，並為各政府部門提供車輛採購及維修保養服務。

**綜合工程部、衛生工程部及市政工程部：**繼續按目前的服務範圍，為政府合署、法院大樓、醫院、公共文娛及康樂設施等客戶場地提供工程項目策劃、機電設備操作及維修保養服務。

**數碼科技部：**負責推動和統籌創新及數碼化轉型的工作，把握發展創科的機遇，帶領營運基金促進科技應用和創新。

**企業服務部：**負責為企業提供中央支援服務，包括企業規劃、客戶服務、市場推廣、業務支援、品質及流程標準化、安全、職業健康、環境管理、培訓發展、業界聯繫及物料管理和採購。

To move towards a new era of E&M 2.0, the Electrical and Mechanical Services Trading Fund (EMSTF) has re-examined the service scope of various divisions and re-organised our structure to provide one-stop, integrated and comprehensive E&M operation, maintenance and project management services for our client departments.

By adopting the new organisational structure, the EMSTF will continuously innovate in the areas of innovation and technology (I&T), provide more digitised E&M engineering solutions for clients, and intensify our customer-focused and regional operation approach, maximising public value with community interest as our primary goal.

The new organisational structure will take effect on 1 October this year under which each division is responsible for the following scope of services for client departments:

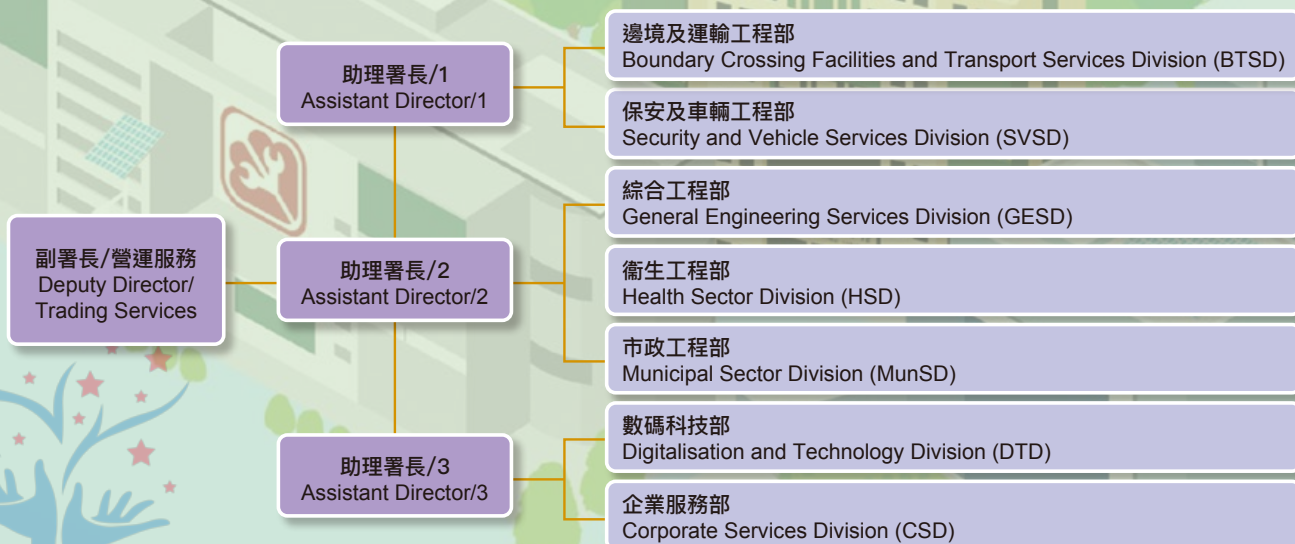
**Boundary Crossing Facilities and Transport Services Division (BTSD):** It is responsible for two categories of services, namely boundary crossing facilities engineering services and transport engineering services. The former serves mainly the Airport Authority Hong Kong, Civil Aviation Department, Customs and Excise Department, Government Flying Service and Immigration Department. The latter mainly provides services to Transport Department and Highways Department.

**Security and Vehicle Services Division:** It mainly operates through three regions, namely Hong Kong Island, Kowloon and the New Territories. Its major clients include Security Bureau, Correctional Services Department, Drainage Services Department, Fire Services Department, Hong Kong Police Force and Independent Commission Against Corruption. It also provides vehicle procurement and maintenance services for various government departments.

**General Engineering Services Division, Health Sector Division and Municipal Sector Division:** They will continue to provide project management, E&M operation and maintenance services for client venues, such as government offices, law court buildings, hospitals, public recreational and leisure facilities in accordance with the current scope of services.

**Digitalisation and Technology Division:** It is responsible for promoting and co-ordinating innovation and digital transformation. It will grasp the opportunities of I&T development, and lead the EMSTF in promoting the application of technology and innovation.

**Corporate Services Division:** It is responsible for providing central support services for our corporate, including corporate planning, customer services, marketing, business support, quality and process standardisation, safety, occupational health, environmental management, training development, trade connections, and stores management and procurement.





# 客戶經理系統

## Client Manager System

在新架構下，各個客戶部門由不同的策略業務單位負責，詳情如下：

Under the new organisational structure, each client department will be handled by different Strategic Business Units (SBUs). Details are as follows:

客戶經理：助理署長/1 Client Manager: Assistant Director/1		
客戶 Clients	負責的策略 業務單位 Responsible SBUs	
1. Airport Authority Hong Kong 香港機場管理局	BTSD	
2. Civil Aviation Department 民航處	BTSD	
3. Correctional Services Department 懲教署	SVSD	
4. Customs and Excise Department 香港海關	BTSD	
5. Drainage Services Department 渠務署	SVSD	
6. Fire Services Department 消防處	SVSD	
7. Government Flying Service 政府飛行服務隊	BTSD	
8. Highways Department 路政署	BTSD	
9. Hong Kong Observatory 香港天文台	BTSD	
10. Hong Kong Police Force 香港警務處	SVSD	
11. Immigration Department 入境事務處	BTSD	
12. Independent Commission Against Corruption 廉政公署	SVSD	
13. Security Bureau 保安局	SVSD	
14. Transport Department 運輸署	BTSD	
15. Vehicles from various departments 來自不同部門的車輛	SVSD	

客戶經理：助理署長/2 Client Manager: Assistant Director/2		
客戶 Clients	負責的策略 業務單位 Responsible SBUs	
1. Agriculture, Fisheries and Conservation Department 漁農自然護理署	GESD	
2. Architectural Services Department 建築署	GESD	
3. Audit Commission 審計署	GESD	
4. Auxiliary Medical Service 醫療輔助隊	GESD	
5. Buildings Department 屋宇署	GESD	
6. Census and Statistics Department 政府統計處	GESD	
7. Chief Executive's Office 行政長官辦公室	GESD	
8. Chief Secretary for Administration's Office 政務司司長辦公室	GESD	
9. Civil Aid Service 民眾安全服務隊	GESD	
10. Civil Engineering and Development Department 土木工程拓展署	GESD	
11. Civil Service Bureau 公務員事務局	GESD	
12. Commerce and Economic Development Bureau 商務及經濟發展局	GESD	
13. Companies Registry 公司註冊處	GESD	
14. Constitutional and Mainland Affairs Bureau 政制及內地事務局	GESD	
15. Department of Health 衛生署	HSD	
16. Department of Justice 律政司	GESD	
17. Development Bureau 發展局	GESD	
18. Education Bureau 教育局	GESD	
19. Electrical and Mechanical Services Department 機電工程署	GESD	
20. Environment Bureau 環境局	GESD	
21. Environmental Protection Department 環境保護署	GESD	
22. Financial Secretary's Office 財政司司長辦公室	GESD	
23. Financial Services and the Treasury Bureau 財經事務及庫務局	GESD	

24. Food and Environmental Hygiene Department 食物環境衛生署	MunSD
25. Food and Health Bureau 食物及衛生局	GESD
26. Government Laboratory 政府化驗所	HSD
27. Government Logistics Department 政府物流服務署	GESD
28. Government Property Agency 政府產業署	GESD
29. Home Affairs Bureau 民政事務局	GESD
30. Home Affairs Department 民政事務總署	GESD
31. Hospital Authority 醫院管理局	HSD
32. Housing Department / Housing Authority 房屋署 / 房屋委員會	GESD
33. Information Services Department 政府新聞處	GESD
34. Inland Revenue Department 稅務局	GESD
35. Innovation and Technology Commission 創新科技署	GESD
36. Intellectual Property Department 知識產權署	GESD
37. Invest Hong Kong 投資推廣署	GESD
38. Joint Secretariat for the Advisory Bodies on Civil Service and Judicial Salaries and Conditions of Service 公務及司法人員薪俸及服務條件諮詢委員會聯合秘書處	GESD
39. Judiciary 司法機構	GESD
40. Labour and Welfare Bureau 勞工及福利局	GESD
41. Labour Department 勞工處	GESD
42. Land Registry 土地註冊處	GESD
43. Lands Department 地政總署	GESD
44. Legal Aid Department 法律援助署	GESD
45. Legislative Council 立法會	GESD
46. Leisure and Cultural Services Department 康樂及文化事務署	MunSD
47. Marine Department 海事處	MunSD
48. Office of the Commissioner of Insurance 保險業監理處	GESD
49. Office of the Government Chief Information Officer 政府資訊科技總監辦公室	GESD
50. Office of the Communications Authority 通訊事務管理局辦公室	GESD
51. Official Receiver's Office 破產管理署	GESD
52. Planning Department 規劃署	GESD
53. Post Office 郵政署	MunSD
54. Radio Television Hong Kong 香港電台	GESD
55. Rating and Valuation Department 差餉物業估價署	GESD
56. Registration and Electoral Office 選舉事務處	GESD
57. Secretariat, Commissioner on Interception of Communications and Surveillance 截取通訊及監察事務專員秘書處	GESD
58. Social Welfare Department 社會福利署	GESD
59. Working Family and Student Financial Assistance Agency 在職家庭及學生資助事務處	GESD
60. Tourism Commission 旅遊事務署	MunSD
61. Trade and Industry Department 工業貿易署	GESD
62. Transport and Housing Bureau 運輸及房屋局	GESD
63. Treasury 庫務署	GESD
64. University Grants Committee Secretariat 大學教育資助委員會秘書處	GESD
65. Water Supplies Department 水務署	GESD
66. The Prince Philip Dental Hospital 菲臘牙科醫院	HSD

如有查詢，歡迎與客戶經理機電署助理署長 / 1 王錫章先生(電話：2808 3847)或機電署助理署長 / 2 張遠芳先生(電話：2808 3603)聯絡。

For enquiries, please contact your client manager Mr. Wong Sek-cheung, Assistant Director/1 of the EMSD, at 2808 3847 or Mr. Cheung Yuen-fong, Assistant Director/2 of the EMSD, at 2808 3603.





署理機電工程署副署長 / 營運服務彭耀雄先生  
Mr. Pang Yiu-hung, Acting Deputy Director/Trading Services of the EMSD

**彭**耀雄先生於2018年9月12日起出任署理機電工程署副署長 / 營運服務，負責領導機電工程營運基金的運作，為客戶部門及機構提供優質、多元化、具成本效益及以客為本的機電工程服務，以提升市民的生活質素。

在新架構下，副署長 / 營運服務轄下的三位助理署長分別管理七個部別，包括邊境及運輸工程部、保安及車輛工程部、綜合工程部、衛生工程部、市政工程部、數碼科技部，以及企業服務部，共同達致更佳的協同效益，使各種工程策劃和機電服務更全面，並根據最新一個五年策略計劃推動營運基金在數碼化和科技方面向前邁進。

**M**r. Pang Yiu-hung has been appointed as the Acting Deputy Director/Trading Services of the EMSD with effect from 12 September 2018. He is responsible for leading the operation of the Electrical and Mechanical Services Trading Fund to provide quality, comprehensive, cost-effective and customer-oriented electrical and mechanical engineering services to client departments and organisations to enhance the quality of life of the community.

Under the new organisational structure, there are three assistant directors under Deputy Director/Trading Services and they are responsible for the management of seven divisions, namely Boundary Crossing Facilities and Transport Services Division, Security and Vehicle Services Division, General Engineering Services Division, Health Sector Division, Municipal Sector Division, Digitalisation and Technology Division, and Corporate Services Division. All the divisions are aiming at better synergy and more comprehensive project and engineering service delivery, as well as paving the way forward for digitisation and technology advancement in accordance with the latest five-year strategic plan of the EMSTF.

您的寶貴意見對我們非常重要！如大家對《機電傳聲》有任何意見或回應，請隨時聯絡我們，讓我們不斷改進。

如果您的同事有興趣收取本通訊及加入郵寄名單，歡迎以電郵（[bssd@emsd.gov.hk](mailto:bssd@emsd.gov.hk)）或傳真（傳真號碼：2882 1574）方式通知我們。

如果您希望我們從郵寄名單中刪除您的名字，或更新您的資料，請透過電郵（[bssd@emsd.gov.hk](mailto:bssd@emsd.gov.hk)）與我們聯絡。

Your opinion is very important to our continuous improvement in VoiceLink! If you have any comments or feedback for the newsletter, please do not hesitate to let us know anytime. If your colleagues are interested in receiving our newsletter and want to subscribe it, feel free to e-mail or fax us at [bssd@emsd.gov.hk](mailto:bssd@emsd.gov.hk) or 2882 1574, and we will add them to our list. In case you wish to remove your name from our newsletter mailing list, or to update your information in the future, please e-mail to [bssd@emsd.gov.hk](mailto:bssd@emsd.gov.hk).

### 機電傳聲

出版：機電工程署 業務發展部

電話：(852) 2333 3762

傳真：(852) 2882 1574

網址：[www.emsd.gov.hk](http://www.emsd.gov.hk)

電郵：[bssd@emsd.gov.hk](mailto:bssd@emsd.gov.hk)

### VoiceLink

Published by: Business Development Division, Electrical and Mechanical Services Department

Telephone: (852) 2333 3762

Facsimile: (852) 2882 1574

Website: [www.emsd.gov.hk](http://www.emsd.gov.hk)

E-mail: [bssd@emsd.gov.hk](mailto:bssd@emsd.gov.hk)

