

# VOICE LINK

機電  
傳聲

機電工程署  
EMSD



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## Together, We Fight the Virus!

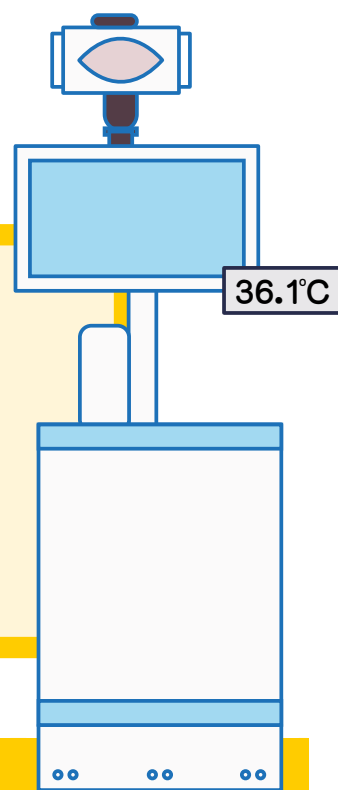


# 攜手抗疫

## Joining Hands in the Fight Against the Epidemic

2019冠狀病毒病在世界各地傳播，令香港社會高度警覺。面對突如其來的挑戰，機電工程署(機電署)立刻啟動應變措施，全力支援各政府部門，共渡時艱。

The spread of Coronavirus Disease 2019 (COVID-19) around the world has put the Hong Kong society on high alert. Facing the sudden challenge, the Electrical and Mechanical Services Department (EMSD) has immediately initiated emergency measures to render full support to various government departments during these difficult times.



### 全力支援醫護

#### Providing Full Support to the Health Sector

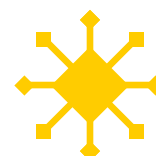
在是次抗疫工作中，我們支援醫院管理局(醫管局)及衛生署，服務全港40間公立醫院及逾百間診所，除了為公共衛生設施進行檢驗、評估、維修保養和提供工程方案外，我們更優先為隔離病房、監察病房、指定診所及急症室等高風險地方的空調和通風系統，以及其他機電設備進行系統評估和加強維護，務使醫護人員及病人在安全的環境下工作和接受治療。此外，我們亦因應客戶需求，加強通風系統的出風量；調校和增設負壓房；設計、建造和安裝空氣過濾系統等，並為衛生署及醫管局在各邊境口岸和醫院調配和裝設紅外線發燒偵測系統。

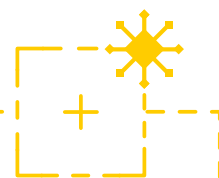
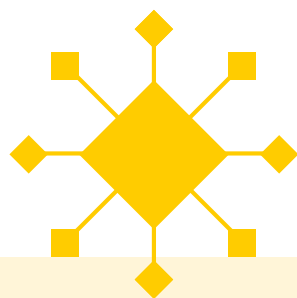
In the ongoing anti-epidemic efforts, we have assisted the Hospital Authority (HA) and the Department of Health (DH) in serving 40 public hospitals and over a hundred of clinics across the territory. In addition to conducting examination, assessment, repair and maintenance works and providing engineering solutions for public healthcare facilities, we have prioritised system evaluation and strengthened the maintenance of air-conditioning and ventilation systems as well as other electrical and mechanical (E&M) equipment in high-risk areas such as isolation wards, surveillance wards, designated clinics and Accident and Emergency Departments to ensure medical staff are working and patients are receiving treatments in a safe environment. Besides, in response to the requests from our clients, we have enhanced the air flow of ventilation systems, adjusted and added negative pressure wards, and undertaken the design, construction and installation of air filtration systems. We have also supported the DH and the HA in the deployment and installation of infrared fever screening systems at border control points and hospitals.



我們為救護車的空調系統更換隔塵網。  
Replacement of air filters for air-conditioning systems on ambulances is carried out by our staff.

我們的工作人員在隔離病房更換高效能空氣微粒子過濾網。  
Our staff are replacing High Efficiency Particulate Arrestance filter in an isolation ward.





抗疫之路從來不易走。我們以現有的人力資源承擔更大的責任和應付更廣的工作範疇；加上公眾與客戶對公共衛生的要求和期望提高，如何做到預防勝於治療確是一大挑戰。儘管如此，面對突發的疫情，機電署也責無旁貸，積極參與各檢疫中心的準備工作，包括協助衛生署在各個檢疫中心的選址為通風系統及其他機電設備進行評估；參與度假村及駿洋邨檢疫中心的建設準備工作；以及為多個檢疫中心的機電設備提供維修服務。

Combating an epidemic is never easy. We have to shoulder greater responsibilities and take up a wider scope of work with the existing staff resources. This, coupled with the ever-increasing demands and expectations of the community and our clients in respect of public health, has posed a great challenge to the work of achieving the goal of "prevention is better than cure". Notwithstanding, in face of the unexpected outbreak, the EMSD is duty bound to play an active role in making preparations for quarantine centres. For instance, we have assisted the DH in conducting assessment of the ventilation systems and other E&M equipment at the prospective sites of quarantine centres, participated in the preparation works to convert holiday villages and Chun Yeung Estate into quarantine centres, and provided maintenance services for the E&M equipment at various quarantine centres.



機電署團隊評估駿洋邨檢疫中心的機電設備。  
The EMSD team conducts assessment of E&M equipment at the Chun Yeung Estate quarantine centre.



機電署人員為柴灣鯉魚門公園度假村檢疫中心進行建設準備工作。  
The EMSD staff conducts preparation works to convert Chai Wan Lei Yue Mun Park and Holiday Village into quarantine centre.





# 攜手抗疫

## Joining Hands in the Fight Against the Epidemic

### 車輛及邊境設施衛生 Hygiene of Vehicles and Border Facilities

除了公共衛生設施需要把關外，確保曾運送病人或接觸過確診個案的車輛清潔衛生同樣重要。我們全面為救護車的空調系統進行深層清潔及消毒，噴灑專門的消毒劑於系統製冷及出風口位置以作消毒，完成後再進行徹底清洗，並在後置空調系統加裝過濾效能更高的空氣過濾網，從而更有效阻隔細菌。由於救護車使用頻繁，我們安排救護站駐場同事加裝空氣過濾網以加快工作進度。此外，對於曾接載感染人士的警務處車輛，以及在確診患者住處附近進行清潔行動的相關部門車輛，我們也會為其空調系統消毒。

Apart from our gate-keeping role in respect of public healthcare facilities, the cleanliness and hygiene of vehicles that have transported patients or come in contact with confirmed cases are equally important. We have carried out comprehensive cleaning and disinfection of the air-conditioning systems on ambulances. We first disinfected the system cooling units and air vents by spraying a special disinfectant, followed by thorough cleaning and installation of additional air filters of higher efficiency in the rear air-conditioning systems to filter germs in a more effective manner. Since ambulances are frequently used, we have arranged for resident staff at ambulance depots to carry out installation of air filters to expedite the work progress. Moreover, for police vehicles that have transported infected people, and other departments' vehicles providing support to the cleaning operations in the vicinity of confirmed patients' homes, we will disinfect their air-conditioning systems.



邊境管制站增設的紅外線發燒偵測系統。  
Additional infrared fever screening systems are set at border control points.



確保邊境設施安全可用及清潔衛生也很重要。因此，我們在短時間內協助檢查並加強保養機場政府貴賓室及港珠澳大橋管制站的空調和通風系統及空氣淨化器，以提供更流通及潔淨的空氣。同時，我們又檢查所有紫外線消毒燈以確保其消毒功能正常，務求降低病毒傳播的風險。

Furthermore, it is important to maintain the safe operation and hygienic conditions of border facilities. We have inspected and enhanced maintenance of air-conditioning and ventilation systems as well as air purifiers at the Government VIP Lounge at the airport and the Hong Kong-Zhuhai-Macao Bridge control point within a short period of time, ensuring better circulation and fresher air. Meanwhile, we have also inspected all UV disinfection lamps to ensure proper functioning, reducing the risk of virus spreading.



我們噴灑消毒劑於救護車(左)及警車(右)出風口位置，以進行消毒。  
We disinfect the air vents by spraying disinfectant for ambulances (left) and police vehicles (right).

## 創新數碼方案 InnoDigital Solutions

因應疫情發展，我們最近在專為促進初創企業及大學把創科方案與政府部門及公營機構的需求進行配對而設的機電創科網上平台上，增設「同心抗疫」專頁，發布一系列支持抗疫的創科願望，並於短時間內收集逾百個方案，當中「移動發燒偵測機器人」是該平台正在物色的解決方案之一。我們期望透過提供創科方案配對平台服務，可向各政府部門提供支援，以回應客戶的需求，共同對抗疫情。

由機電署、醫管局及業界共同設計的「流動組合式－高效能空氣微粒子過濾器」。圖為機電署署長薛永恒先生（左二）、機電署代表及醫管局高級行政經理（工程）源柏樑博士（右二）。

The Mobile Modular High Efficiency Particulate Arrestance Unit is jointly developed by the EMSD, the HA and the trade. Pictured are the Director of Electrical and Mechanical Services, Mr. Alfred Sit (2nd left), EMSD representatives and the Senior Manager (Engineering) of the HA, Dr. Yuen Pak-leung (2nd right).



汲取了嚴重急性呼吸系統綜合症（沙士）的抗疫經驗，我們在對抗2019冠狀病毒病方面作出了更充足的準備，並竭盡全力配合客戶的運作，在與時間競賽之餘，調整應變策略，務求把病毒的威脅減至最低，為客戶及市民大眾提供更優質可靠的服務。



Having learned a lesson from the fight against the Severe Acute Respiratory Syndrome (SARS), we have become better prepared for the COVID-19 epidemic and are committed to supporting our clients' operations. Amid the race against time, we are also constantly adjusting our strategy, striving to minimise the threats posed by the virus and rendering more quality and reliable services to our clients and the general public.



「移動發燒偵測機器人」正進行操作示範。  
Demonstration on the operation of the Mobile Fever Screening Robot is being conducted.

如客戶有創科方面的需求，請與我們的高級工程師林鑫駿先生聯絡（電話：2808 3879）。  
Should you have any request involving I&T, please feel free to contact Mr. Tommy Lam, Senior Engineer, at 2808 3879.



掃描二維碼或登入網址 <https://inno.emsd.gov.hk/tc/together-we-fight-the-virus/index.html>，  
觀看機電創科網上平台的「同心抗疫」專頁。

Scan the QR code or visit the website at <https://inno.emsd.gov.hk/en/together-we-fight-the-virus/index.html>  
to view the special page "Together, We Fight the Virus!" of the E&M InnoPortal.



# 智慧城市 從數碼化開始

## Smart City Starts with Digitisation



機電署持續為客戶提供數碼化機電工程及創新方案，與客戶共同為社會創造最大的公眾價值。我們的數碼化創新方案多次得到業界肯定，屢獲殊榮。另外，為了探索更多數碼化工程解決方案，我們聯同其他政府部門及合作伙伴舉辦創新科技工作坊，與業界專才共同探討應用創新方案的可行性，並進行相關的研發工作。

The EMSD has been providing digitised E&M engineering and innovative solutions to clients and working with them to maximise public value for the society. Our digitised innovative solutions have been recognised by the trade time and again and have won numerous awards. Furthermore, to explore more digitised engineering solutions, we have organised innovation and technology (I&T) workshops in collaboration with other government departments and partners to study the feasibility of applying innovative solutions with trade experts and carry out related research and development (R&D).

## Autodesk香港建築信息模擬設計大獎 Autodesk Hong Kong BIM Awards



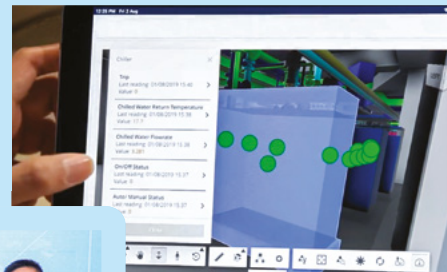
為優化機電設施的維修保養工作流程，我們積極在數個政府部門及非政府機構的場地應用「建築信息模擬－資產管理」(BIM-AM)系統。我們於2019年在BIM-AM試點項目成功應用物聯網技術，成效理想，更在Autodesk香港建築信息模擬設計大獎2019勇奪三個獎項。

榮獲「設計大獎」的建造業零碳天地，是首座符合《建築信息模擬－資產管理標準及指引》(《指引》)並結合BIM-AM和物聯網技術的非政府機構建築物。工程人員可使用流動裝置應用程式，透過無線物聯網傳感器進行遙距監控，並利用射頻識別系統和二維碼掃描進行快速資產定位。工程人員更可透過追查BIM-AM系統內的資產關係，為故障進行遙距診斷，從而提升設施管理的效率。

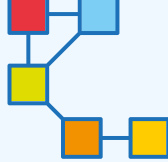
To optimise the maintenance workflow of E&M facilities, we actively adopt the Building Information Modelling-Asset Management (BIM-AM) system in venues of a number of government departments and non-governmental organisations (NGOs). In 2019, our successful application of Internet of Things (IoT) technology in BIM-AM pilot projects yielded satisfactory results, and we were presented with three awards in the Autodesk Hong Kong BIM Awards 2019.

The CIC-Zero Carbon Building, winner of the "BIM Awards", is the first NGO building that complies with the BIM-AM Standards and Guidelines (the Guidelines) and integrates the BIM-AM technology with that of the IoT. By means of a mobile application, engineering personnel are able to carry out remote monitoring via the wireless IoT sensors, and perform quick positioning of assets using the radio-frequency identification system and QR code scanning. They can also conduct remote diagnosis for facility faults by tracking the asset relationship in the BIM-AM system to enhance the efficiency of facility management.

工程人員利用流動裝置應用程式展示建造業零碳天地的機房三維模型。  
Engineering personnel showing the three-dimensional model of plant room in the CIC-Zero Carbon Building by means of a mobile application.



Autodesk香港建築信息模擬設計大獎2019得主機電署及建造業議會團隊與頒獎嘉賓在典禮上合照。  
Pictured are the team of the EMSD and the Construction Industry Council (CIC), award winner of the Autodesk Hong Kong BIM Awards 2019, and the award presenters at the ceremony.



至於獲得「榮譽獎」的機電署客戶服務中心，是首個把《指引》應用於整個建築生命周期的政府場地，從設計、施工以至營運的各個階段均全面採用BIM技術。此外，我們的團隊致力開發和應用BIM-AM技術，自2014年開始一直參與BIM-AM項目研發的機電署電子工程師袁彪洪先生更奪得「Young BIMer of the Year」獎項，肯定了他在促進行業數碼化發展方面的貢獻。

機電署電子工程師袁彪洪先生(右五)勇奪「Young BIMer of the Year」獎項，與團隊成員分享獲獎喜悅。 Mr. Francis Yuen Piu-hung (5th right), Electronics Engineer with the EMSD, receives the “Young BIMer of the Year” award and shares the joyful moment with team members.

掃描以下二維碼或登入網址觀看得獎項目的參賽短片：

Scan the QR codes or visit the websites below to view the video entries of the awarded projects:



建造業零碳天地

CIC-Zero Carbon Building

<https://www.youtube.com/watch?v=QxDqn7YcHW0>

(只提供中文版 Chinese version only)



機電署客戶服務中心

EMSD's CSC

[https://www.youtube.com/watch?v=eLaxl\\_KpEnk](https://www.youtube.com/watch?v=eLaxl_KpEnk)

(只提供中文版 Chinese version only)



## 型建香港第五屆國際BIM大獎賽

## The 5th International BIM Awards by buildingSMART Hong Kong



除上述獎項外，機電署亦榮獲「型建香港第五屆國際BIM大獎－最佳BIM政府部門大獎」。經專業BIM協會型建香港及行業專家評審，引入BIM-AM技術的香港兒童醫院及天水圍醫院項目獲得嘉許。有關項目由機電署與兩所醫院合作，於醫院應用BIM-AM技術，以便維修人員進行機電資產管理，有助提升公共醫療服務。

型建香港第五屆國際BIM大獎賽高峰論壇以「數字城市」為主題，匯聚國內及香港的業界精英，探討BIM及雲技術、人工智能、物聯網、大數據等在建築工程行業的應用，以及建築行業的數碼化轉型和智慧城市的發展。科技發展日新月異，機電署積極與不同界別及部門合作，利用創新技術提升機電資產的表現，期望日後更多客戶部門能應用BIM-AM技術，共同打造香港成為智慧之都。

機電署助理署長/1王錫章先生(中)與機電署代表一同出席型建香港第五屆國際BIM大獎賽高峰論壇，領取「最佳BIM政府部門大獎」。

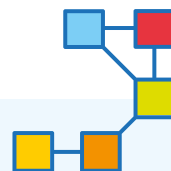
Assistant Director/1 of the EMSD, Mr. Wong Sek-cheung (middle), and EMSD representatives attend bSHK's 5th International BIM Awards Conference to receive the “Best BIM Government Department Award”.

In addition to the above awards, the EMSD also won “The 5th International BIM Awards - the Best BIM Government Department Award” organised by buildingSMART Hong Kong (bSHK), a professional BIM organisation. Reviewed by bSHK and trade experts, the Hong Kong Children's Hospital and Tin Shui Wai Hospital projects to which BIM-AM technology was introduced were recognised. A collaboration between the EMSD and the two hospitals, the projects have applied BIM-AM technology to hospitals to facilitate E&M asset management by maintenance staff, which help enhance public healthcare services.

With “Digital City” as the theme, bSHK's 5th International BIM Awards Conference brought together trade elites from the Mainland and Hong Kong to explore the application of BIM and cloud technologies, artificial intelligence, IoT and big data in the construction engineering industry, as well as discuss the digital transformation of the construction industry and smart city development. With rapid technological advancement, the EMSD actively collaborates with different sectors and departments to enhance the performance of E&M assets through the use of innovative technologies. We hope that more client departments will apply BIM-AM technology in the future in our concerted efforts to build Hong Kong into a smart city.







## 創新及科技日x 傳感器測試平台工作坊 I&T Day x Sensor Hub Workshop

踏入2020年，機電署與香港科技園公司（科技園公司）及政府資訊科技總監辦公室（資科辦）攜手合作，於1月15日在香港科學園舉辦創新及科技日x傳感器測試平台工作坊，為各政府部門及園區公司締造配對平台，探討和交流本港物聯網解決方案及相關技術的發展和應用，同時物色潛在的合作伙伴。

Entering into 2020, the EMSD joined hands with the Hong Kong Science and Technology Parks Corporation (HKSTPC) and the Office of the Government Chief Information Officer (OGCIO) to organise the Innovative Technology Day (I&T Day) x Sensor Hub Workshop at the Hong Kong Science Park (HKSP) on 15 January. The event served as a matching platform for government departments and companies from the HKSP to discuss and exchange views on IoT solutions and the development and application of related technologies in Hong Kong as well as identify potential partners.



超過220名參加者出席工作坊，積極推動本港的創科發展。

The workshop is attended by over 220 participants to actively promote I&T development in Hong Kong.



機電署於工作坊上介紹政府專屬物聯網「政府物聯網」的各項應用，包括進行最佳化機電設備監控及預測性維護、改進防洪監察、停車場管理等，並分享有關傳感器日常應用的經驗和挑戰，以推動政府部門應用物聯網技術。

Besides introducing various applications of the Government dedicated IoT network named Government-wide IoT Network at the workshop, including optimising the monitoring and predictive maintenance of E&M equipment, improving flood monitoring and car park management, etc., the EMSD also shared the experiences and challenges in the daily application of sensors, with a view to promoting the adoption of IoT technology by government departments.

當日各參與機構展示多元化的傳感技術及傳感器應用方案，並介紹如何應用傳感器提升營運效率及服務水平，吸引超過220名來自政府部門、園區公司和科研機構的代表及學術專家出席。

At the event, participating organisations showcased a diversified array of sensor technologies and sensor application solutions, and presented how sensors could be applied to improve operational efficiency and service standards. The workshop attracted an attendance of over 220 representatives from government departments, companies from the HKSP and research institutions as well as academic experts.

歡迎客戶部門提出應用物聯網的需求，我們樂意提供合適的技術支援及物聯網方案，請致電2808 3593與我們的高級工程師陳賀賢先生聯絡。

Client departments are welcome to raise needs for IoT application. We are happy to provide appropriate technical support and IoT solutions. Please contact Mr. Chan Hor-yin, Senior Engineer, at 2808 3593.

創新及科技日x傳感器測試平台工作坊雲集了多個政府部門及機構（包括機電署、科技園公司、資科辦、渠務署及地政總署）的講者和代表，為與會者提供專業意見及交流機會。

The I&T Day x Sensor Hub Workshop brings together speakers and representatives from various government departments and organisations (including the EMSD, the HKSTPC, the OGCI, the Drainage Services Department and the Lands Department) to provide participants with professional advice and opportunities for exchange of ideas.





# 推動預約車輛檢驗電子服務

## Promoting Electronic Services for Vehicle Examination Booking

我們於2019年順利完成政府車輛檢驗中心(驗車中心)的預約控制系統升級工程，成功為運輸署推動電子服務，提升驗車中心的運作效率。與此同時，我們亦為2021年九龍灣和土瓜灣共三間驗車中心的搬遷工作做好準備，讓客戶能把現行的運作系統無縫連結至青衣新驗車中心的系統，利便市民。

為配合青衣新驗車中心落成啟用，我們於2018年年初開始為運輸署的預約控制系統進行更新和升級。除了檢視四個檢驗不同類別車輛的檢驗中心過往的做法，以及劃一其數據處理方法外，我們還完善了記錄方式及工作流程，使驗車記錄得以互聯互通，而運輸署的其他資訊系統日後也可更快捷地獲取驗車結果或報告，為市民提供更便捷的服務。這個新系統還備有一個龐大的中央數據庫，整合各個驗車中心過往的驗車記錄，讓使用者能有效地保存、搜尋和檢索記錄。

With the upgrading of the Core Appointment Booking Control (CABC) System of Government Vehicle Examination Centres (VECs) completed in 2019, we have successfully promoted electronic services for the Transport Department (TD) to boost VECs' operational efficiency. Meanwhile, we have been gearing up for the relocation of three VECs in Kowloon Bay and To Kwa Wan in 2021 to enable our client to seamlessly link its current operation systems to that of the new VEC in Tsing Yi, bringing convenience to members of the public.

To tie in with the commissioning of the new Tsing Yi VEC, we started the updating and upgrading of the CABC System for the TD in early 2018. We have reviewed the past practices and standardised the data handling of the four VECs which are responsible for examination of different types of vehicles, and also optimised their record-keeping processes and workflows. The upgraded CABC system facilitates interconnection and sharing of vehicle examination records, and allows other information systems of the TD to retrieve vehicle examination results or reports more quickly, so that members of the public can enjoy the convenience of using the services concerned. The new system is also equipped with a huge centralised database that consolidates past examination records of VECs for effective storage, search and retrieval by users.

### + 新預約控制系統的好處 Benefits of the New CABC System



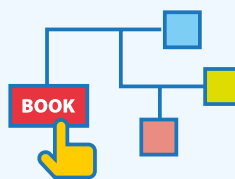
- 四個驗車中心的記錄可以互聯互通  
Facilitate interconnection and sharing of examination records of the four VECs



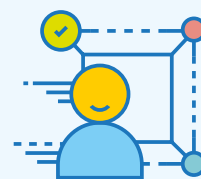
- 提升工作效率及流動性  
Enhance work efficiency and mobility



- 整合報告供檢視或數據分析之用  
Consolidate reports for review or data analysis



- 劃一預約程序和優化車輛檢驗流程  
Standardise booking procedures and optimise the vehicle examination process



- 為用戶提供更便捷、更稱心的體驗  
Provide faster and more satisfying experience for users



## 日以繼夜 搶修設施 Working Relentlessly to Repair Damaged Facilities

2019年下半年，機電署的邊境及運輸工程處經歷了嚴峻的考驗。香港發生連串社會事件，大量公共設施受到破壞，我們的團隊緊守崗位，竭盡所能為市民搶修損毀的交通燈及紅磡海底隧道（紅隧），使有關設施得以在短時間內恢復正常運作。

The Boundary Crossing Facilities and Transport Services Division of the EMSD faced unprecedented challenges in the second half of 2019. Our team remained dedicated under the series of social incidents happened in Hong Kong which resulted in damage to a large number of public facilities, and continued to make strenuous efforts to repair damaged traffic lights and the Cross-Harbour Tunnel (CHT) for members of the public so that such facilities could resume normal operation in a short time.



機電署員工協助運輸署監察全港交通燈的狀況。  
EMSD staff monitoring the operation of traffic lights in Hong Kong for the Transport Department.



我們的維修人員於深夜及凌晨出動，檢查和搶修交通燈。  
Our maintenance staff work at late nights and in early mornings to inspect and urgently repair the traffic lights.

## 路面安全 刻不容緩 Road Safety Comes First



機電署一直協助運輸署監察全港約2 000個設有交通燈的路口的運作情況。受社會事件影響，自去年6月以來，約750個路口的交通燈受到單次或多次破壞，先後約有1 400次的損毀記錄。

由於損毀交通燈的數目龐大，加上部分設施的損毀情況嚴重，為了可於每天早上市民上班的繁忙時間前盡量修復受損的路口交通燈，機電署特別增加維修人員數目至160人，日以繼夜地搶修，特別在深夜及凌晨的數小時內進行檢查、維修及測試，務求盡量減少對市民的影響。

鑑於維修交通燈系統的整個項目涉及多個範疇，政府成立了跨部門小組，包括運輸署、機電署、路政署及香港警務處，以處理交通燈的維修工作。跨部門小組負責統籌維修工作和協調路面的交通安排，並緊密交流最新資訊，使各部門可加快應變及維修工作。在有關部門的努力下，全港所有交通燈已於2019年12月21日恢復運作，市民可安心外出。

The EMSD has been monitoring the operation of around 2 000 traffic light junctions in Hong Kong for the Transport Department (TD). Affected by the social incidents, traffic lights at around 750 road junctions had been damaged once or multiple times since June 2019, with approximately 1 400 damage records in total.

Given the significant number of damaged traffic lights and that some of the facilities were severely damaged, the EMSD particularly expanded the number of its maintenance staff to 160, with a view to restoring as many damaged traffic lights as possible before the morning peak hours. In order to minimise public inconvenience, the urgent repair works were carried out round-the-clock, with inspection, repair and testing work conducted particularly at late night and during the few hours in the early morning.

Since the entire project of restoring the traffic light system involves multiple areas, the Government has formed an inter-departmental task force consisting of the TD, the EMSD, the Highways Department and the Hong Kong Police Force to handle the repair works of traffic lights. The task force not only co-ordinated the repair works and traffic arrangements on roads, but also closely exchanged latest information so that different departments could speed up their contingency and repair works. Thanks to the efforts of relevant departments, all traffic lights in the territory resumed operation on 21 December 2019, allowing members of the public to go out with peace of mind.



機電署人員正維修交通燈的電線。  
EMSD staff repairing the wiring of a traffic light.





## 搶修紅隧 分秒必爭

## Every Minute Counts: Speedy Recovery of the CHT

紅隧的平均每日行車量為11萬架次，是香港最繁忙的行車隧道之一。去年11月，紅隧受到嚴重破壞，需要臨時封閉，導致其餘兩條過海隧道在繁忙時間非常擠塞。

機電署及運輸署人員到紅隧視察時發現，行政大樓及收費廣場均受到大規模破壞，必須進行多項緊急維修，才能再次為市民提供服務。要在短時間內復修相關設施

With an average daily traffic flow of 110 000 vehicles, the CHT is one of the busiest road tunnels in Hong Kong. Last November, the CHT was severely damaged and had to be temporarily closed, resulting in serious traffic congestion in the remaining two road harbour crossings during peak hours.

During inspection of the CHT by staff from the EMSD and the TD, it was found that both the Administration Building and the toll plaza had been extensively damaged. A number of emergency repair works were required before resumption of service. Though restoring the relevant facilities in a short time was an extremely difficult task, to minimise the inconvenience caused to the

public as soon as possible, we swiftly formulated a recovery plan, set up a 24-hour dedicated emergency team immediately for co-ordination and established a notification mechanism. In addition to carrying out repair works and monitoring their progress, we also conducted detailed on-site testing to ensure the smooth and safe operation of all E&M systems and facilities before re-opening. Moreover, through the formation of a multi-disciplinary response team, the EMSD worked closely and co-ordinated with different government departments on manpower, resource and time arrangements, which helped improve the efficiency of the repair works.



復修前的紅隧收費亭。  
Toll booth at the CHT - before restoration.



復修後的紅隧收費亭。  
Toll booth at the CHT - after restoration.

是極為艱巨的任務，但為了盡快減少對市民的不便，我們的工作團隊立即制訂了復修計劃，並即時成立「24小時專責應急小組」進行協調和建立通報機制。我們除了進行復修工作和監察有關工作的進度外，亦仔細進行現場測試，以確保所有機電系統及設施在隧道重開前運作暢順、安全。同時，透過成立跨部門應變小組，機電署與各政府部門在人手、物資及時間的安排方面緊密配合，互相協調，有助提升復修工作的效率。

機電署與各有關部門及業界伙伴通力合作，不分晝夜，以快速的方案購置、更換和恢復七個自動收費系統、所有收費亭的供電及空調系統、車道訊號系統、過高車輛偵測器、交通監察系統顯示屏幕等，並提供充足的手提式八達通機。我們最終在100小時內迅速完成了這項不可能的任務，復修紅隧的相關設施，使隧道於2019年11月27日順利恢復行車。

總括而言，以上經驗讓同事深明靈活工作和部門之間互相協調的重要性，亦有助我們優化風險管理工作，提升服務質素。

With close collaboration with relevant departments and trade partners day and night, we promptly purchased, replaced and repaired seven automatic toll collection systems, the power supply and air-conditioning systems of all the toll booths, lane signalling systems, over-height vehicle detectors, display screens of traffic monitoring systems, etc. and provided adequate portable Octopus readers. We finally completed this impossible mission of restoring relevant facilities of the CHT within 100 hours, enabling the CHT to resume operation on 27 November 2019.

In conclusion, we realised the importance of being flexible at work and co-ordination among departments through the above experience, which also helped us optimise our risk management work and enhance our service quality.



為搶修紅隧而成立的「24小時專責應急小組」。  
The 24-hour dedicated emergency team set up for urgent repair of the CHT.

復修後的紅隧收費廣場設施。  
Restored toll plaza facilities at the CHT.



# 協助深灣洗衣房重開

## Assist in Re-opening of Shum Wan Laundry

機電署於2018年年底受醫院管理局(醫管局)委託，為重開早年關閉的深灣洗衣房而須進行的翻新及改善工程，提供技術支援，使這個每年可清洗超過900萬件衣物的洗衣房於2019年第三季重新投入服務，適時應付醫院因2019冠狀病毒病疫情而增加的洗衣服務需求。

我們協助醫管局更換洗衣房的水管、蒸氣管道和有關設備，整項工程僅花六個月時間完成，以配合隨後一系列的試行運作測試。由於舊有的蒸氣管道老化，部分管道出現滲漏情況，需要更換；此外，有部分舊有管道位於新的洗衣設備上方，也增加了更換工程的難度及複雜性，因為我們須配合管道內石棉的拆除工程及臨時存放安排。最後，我們克服了重重困難，如期完成有關工程，獲得客戶讚賞。同時，我們亦為蒸氣鍋爐安裝了新的傳感器，以監察鍋爐運作時的排放情況。

此外，我們為採購洗衣設備提供技術支援，包括參與標書評審工作和協助驗收洗衣設備。我們亦為醫管局承辦商新安裝的洗衣房機電系統(包括電力、消防及通風設備等)進行驗收，並就系統維修保養配套提供專業意見。

Engaged by the Hospital Authority (HA) at the end of 2018, the EMSD provided technical support for the renovation and improvement works for the re-opening of Shum Wan Laundry that had been closed for a few years, bringing this laundry with annual handling capacity of over nine million pieces of clothing items back to operation in the third quarter of 2019, which timely met the hospitals' increased demand for laundry services due to the outbreak of COVID-19.

We assisted the HA in replacing water pipes, steam pipelines and related equipment at the laundry. The replacement project only took six months to complete, followed by a series of commissioning tests. The old steam pipelines had aged so badly that leaks were found on some pipe sections which had to be replaced. As some of the old pipelines were installed above the new laundry equipment and due to the need to tie in with the removal and temporary storage of the asbestos in these pipelines, the replacement works faced immense difficulty and complexity. Finally, we overcame every challenge and completed the project on schedule, winning appreciation from the client. At the same time, we also installed new sensors for the steam boilers so as to monitor their emissions during operation.

Furthermore, we provided technical support for the procurement of laundry equipment, including participating in tender assessment and assisting in conducting acceptance tests for laundry equipment. We also carried out acceptance tests for the E&M systems, including electrical, fire services and ventilation equipment, etc., newly installed at the laundry by contractors of the HA, and offered professional advice on system maintenance services.



我們為洗衣房內的蒸氣鍋爐提供操作及維修保養服務。We provide operation and maintenance services for the steam boilers at the laundry.

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。

如果您希望我們更新/刪除您的聯絡資料，或您的同事有興趣收取本通訊，歡迎以電郵(ccsd@emsd.gov.hk)通知我們。

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