



以地理資訊系統為基礎的遙距監測系統，裝置了多個操作界面，方便進行資產管理工作。上圖的用戶介面顯示各交通燈的位置和狀況。  
In the GIS-based Remote Monitoring System, multi-operational layers have been implemented to facilitate asset management activities.  
The above user interfaces show the locations and healthiness of various traffic lights.

## 地理資訊遙距監測系統 提升資產管理和操作支援 GIS-based Remote Monitoring System Enhances Asset Management and Operation Support

**為** 提供更優質的操作維修服務及提升機電設備的資產管理，機電署特別為政府約1,800個交通信號燈，以及安裝在香港300多條行人天橋的升降機和自動扶梯，開發了以地理資訊系統為基礎的遙距監測系統。

地理資訊遙距監測系統於2014年年底推出，現時，如交通燈發生故障，我們能實時找出準確的位置，迅速進行維修，此舉有助減少交通燈的故障時間。

我們現正制訂優化計劃，將地理資訊遙距監測系統擴展至部分政府場地的電力配電裝置及行車和行人隧道的水浸警報系統，亦考慮將該遙距監測系統的覆蓋範圍，擴展至機電署負責操作維修的其他重要機電資產，例如消防及空調設備等。

地理資訊遙距監測系統有如一個中央信息中心，會從不同的遙距監測裝置或後端支援系統，例如各個區域交通控制系統，收集相關資產的信息、貼近實時的

狀況和健康情況，並發布統一視圖，使工作人員能夠監察資產設備的操作狀態，進行故障分析，並為相關資產制定更佳的生命周期管理策略。

地理資訊遙距監測系統的獨特設計，讓我們得以最少的人力資源密切監測相關設備的操作情況，以減低故障帶來的影響。

**T**o provide better operation and maintenance services to clients and to improve management of E&M assets, EMSD has developed a Geographic Information System (GIS)-based Remote Monitoring System for around 1,800 traffic signals, and lifts and escalators installed at some 300 footbridges in Hong Kong.

With the launch of the System in late 2014, we can now identify faulty traffic lights at their exact locations in real time. This allows for prompt rectification of problems and thus, reduces the down time of traffic lights in general.

Enhancement plans are being devised to

extend the System to support remote monitoring of other major assets under EMSD's maintenance, such as electrical switchboard installations in some government venues and flooding alarm systems in underpass and subways. Feasibility to extend the System to other major assets under EMSD's maintenance, such as fire services and air-conditioning installations are being explored.

The GIS-based Remote Monitoring System serves as a centralised information hub providing consolidated views of relevant asset information, close-to-real time monitoring of asset conditions and asset healthiness, which can be collected from different remote monitoring units installed in the E&M assets, or backend systems, such as various Area Traffic Control systems, in Hong Kong. Staff members can visualise the asset and equipment status, and perform fault related analysis to formulate a better life cycle management strategy for the associated assets.

The unique design of the System allows close monitoring of the equipment with minimal staff resources and service interruption.