



Multi-functional Smart Lampposts: Technical Advisory Ad Hoc Committee 2nd Meeting



10 September 2019





Meeting Agenda

Date: 10 September 2019 (Tuesday)

Time: 9:30 a.m. – 11:30 a.m.

Venue: Conference Room, 15/F Wanchai Tower (followed by a site visit)

Agenda:

1. Confirmation of the Minutes of Last Meeting
2. Update on Recent Development
3. Briefing on Smart Lamppost Applications (Part 1)
4. Q&A
5. Site Visit to Smart Lampposts at Shing Kai Road





Update on Recent Development





Recent Development

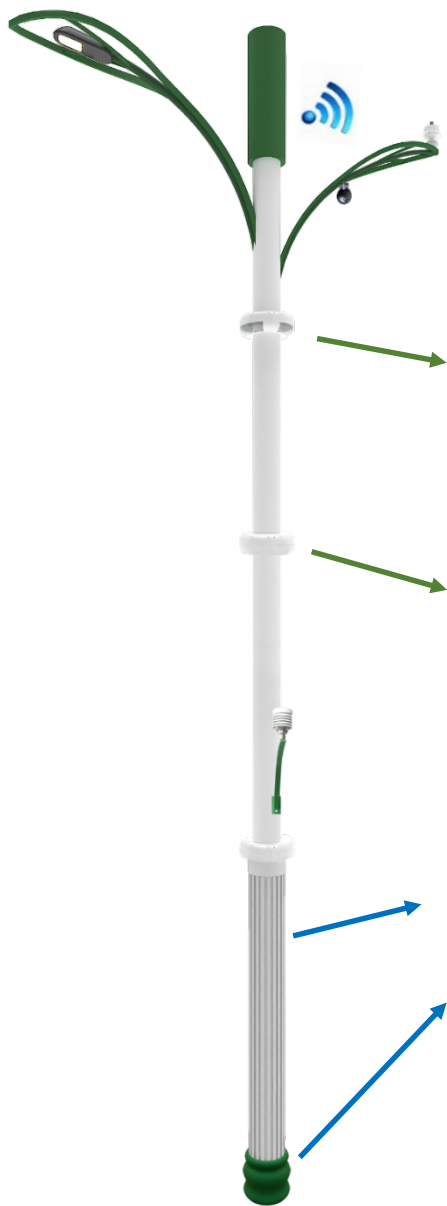
- After public procession at Kwun Tong on 24 August
 - 20 smart lampposts on Sheung Yuet Road were in varying degrees of damage
 - 1 lamppost was torn down; and
 - 19 were forcibly opened with the smart devices therein damaged/dismantled
- Inspection and repair work
 - Basic public lighting services resumed on 27 August





Briefing on Smart Lamppost Applications (Part 1)





Applications of TD and LandsD:

TD:

- ✓ **Panoramic Camera** - to collect real-time traffic data for traffic monitoring and sharing with public (Automatic License Plate Recognition (not activated) and Traffic Snapshot)

TD:

- ✓ **Bluetooth Detector** – to detect journey time and average vehicular speed for sharing traffic information with the public (not activated)

LandsD:

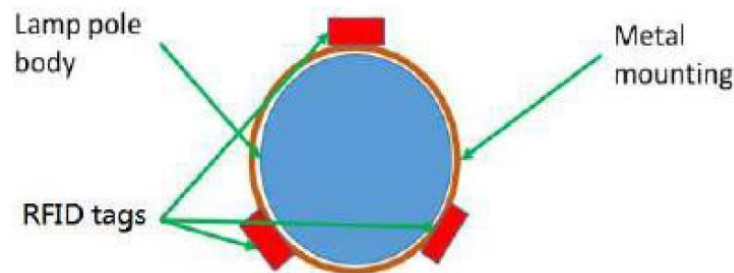
- ✓ **Radio Frequency Identification (RFID) tag** – to provide more accurate positioning services to support the development of related applications by the Government (e.g. to help the visually impaired) and the industry



Lands Department – RFID Tags

Application Overview

- The RFID tag pack consists of 3 passive Ultra-High Frequency (UHF 920-925 MHz) RFID Tags (Standard: ISO18000-6C/ EPC Class1 Gen2).
- They were installed evenly by 120 degrees along circumference of each lamppost base and at height of 0.1 m above ground for those lampposts accessible by pedestrians.



- The passive RFID tags store the corresponding lamppost number and relevant location information in the form of unique EPC code. The information can be remotely retrieved by common RFID readers of users (e.g. smart blind cane) at range up to 10 m for various location-based applications, e.g. for navigation application for visually impaired persons.





Lands Department – RFID Tags

Personal Privacy Protection

- This passive RFID tag does not have any data receiving/ collection function.
- No personal privacy issue exists.





Transport Department - Automatic License Plate Recognition

Application Overview

- Automatic car plate number identification for vehicle classification survey
- Hashed data (SHA-256) as the only output
- Dedicated server for matching with hashed vehicle classification data
- Hashed data will be immediately erased after matching

Implementation Progress

- Field equipment installed (not activated), 2 nos.

Personal Privacy Protection

- Matched data will be erased after matching
- No visual images of license plate number or driver
- No personal privacy issue identified in Privacy Impact Assessment (PIA)

Information Security Technology Measures

- Provisions for system access control, network and communication security, data security
- Security Risk Assessment & Audit (SRAA) will be conducted





Transport Department - Bluetooth Detector

Application Overview

- Detect journey time & average vehicular speed
- Compare partial MAC addresses of Bluetooth devices (between 2 detector locations)

Implementation Progress

- Field equipment installed (not activated), 3 nos. out of 4 nos.

Personal Privacy Protection

- Matched data will be erased after analysis
- No visual images
- No personal privacy issue identified in Privacy Impact Assessment (PIA)

Information Security Technology Measures

- Provisions for system access control, network and communication security, data security
- Security Risk Assessment & Audit (SRAA) will be conducted





Transport Department – Traffic Snapshot Images

Application Overview

- Provide traffic snapshot images for the general public to visualise the latest traffic conditions, via the PSI portal (data.gov.hk), TD's website (www.td.gov.hk) and mobile application (HKeMobility).

Implementation Progress

- Field equipment installed (two cameras have been activated)

Personal Privacy Protection

- Snapshot image of resolution (320 x 240) with no recording.
- No personal privacy issue identified in Privacy Impact Assessment (PIA)

Information Security Technology Measures

- Provisions for system access control, network and communication security, data security
- Security Risk Assessment & Audit (SRAA) conducted





Q & A





Site Visit to Smart Lampposts at Shing Kai Road

