



Guidelines for Provision of Parking Information

Version 1.0

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1. **PURPOSE**

- 1.1 Disseminating real time parking vacancy information (hereinafter referred as **Parking Information (PI)**) of short-term¹ parking spaces will facilitate motorists to locate available parking spaces and thereby helps in reducing unnecessary journeys in search of vacant parking spaces. Hence, this guideline specifies the procedures and requirements for the provision of by the Purchaser (hereinafter referred to as “**the Developer**”) according to the Lease Conditions.
- 1.2 The PI provided by the Developer/Owner to the Transport Department will be disseminated to the public through Transport Department’s website, and mobile application “HKeMobility” to facilitate the development of “Smart Parking” under the Smart City initiative. In addition, the PI would be disseminated at the Government PSI Portal, “Data.gov.hk”, as open data.

2. **GENERAL REQUIREMENTS**

Layout plan for Designated area

- 2.1 According to the Lease Conditions, the authorized person appointed by the Developer shall indicate the location and dimension of the spaces on the General Building Plan, which will form as a designated common area (hereinafter referred to as “**the Designated Area**”) for accommodating the facilities, installations and equipment to provide PI to the Commissioner for Transport (the C for T) for approval.
- 2.2 The spaces of the Designated Area may include the spaces for accommodating the access gate, computer server, and/or other equipment and facilities providing the real-time PI data according to the requirements stipulated in the **paragraphs 3.9 and 3.12** below.
- 2.3 The authorized person shall satisfy himself that the Designated Area should be sufficient for installing, operating and maintaining the facilities, installations

¹ Short-term parking spaces are the parking spaces available for the use of general public or visitors on hourly basis.

and equipment to provide the real-time PI data up the requirements stipulated in the **paragraphs 3.9 and 3.12** below.

- 2.4 According to the Lease Condition, no building works (other than the works allowed in the lease) shall be commenced on the lot until approval for C for T have been obtained.
- 2.5 The Designated Area shall be accessible by the C for T, or agencies appointed by the C for T.
- 2.6 The Designated Area will form part of the common areas of the development under the Deed of Mutual Covenant.

Car Park Layout Plan

- 2.7 The parking spaces by each vehicle types subject to the provision of PI shall be clearly indicated on the Car Park Layout Plan(s).
- 2.8 The parking spaces subject to the provision of PI may cover these short-term parking spaces used by public, bona fide guests, visitors for short-term parking, or ancillary parking spaces and loading/unloading spaces for night-time public parking of commercial vehicles.

3. SUBMISSION OF PI

- 3.1 The Developer or the agencies appointed by the Developer/Owner of the development shall submit both static and real-time PI to C for T.
- 3.2 The submission of PI shall commence before making an application for Certificate of Compliance for the development or **four months** after issuance of the first Occupation Permit, whichever is earlier, or on such other date as may be decided and specified by the C for T.
- 3.3 The Developer and/or Owner of the development shall be responsible for the accuracy and reliability of the data.

Registration

- 3.4 Prior to submission of PI, the Developer or the agencies appointed by the Developer shall register their car parks in Transport Department's recording system.

- 3.5 To register for a car park, the Developer or the agencies appointed by the Developer shall fill in a form which can be downloaded from https://vacancy.hkemobility.gov.hk/general/basic_info_of_car_park.xlsx and then submit the completed form to the email address:-

PARKING-INFORMATION@td.gov.hk.

- 3.6 The Developer or his agencies shall specify in the form the Uniform Resource Locator (URL) of their RESTful² web service for retrieval of the PI data.

Static PI

- 3.7 During car park registration, static information shall be submitted to C for T.
- 3.8 Static information to be provided in respect of the car park before the date as mentioned in **paragraph 3.2** above, and when there are changes, shall include, but not limited to, the following:
- a. Name of the car park;
 - b. Address of the car park;
 - c. Headroom of the car park;
 - d. Operation hour of the car park for public use;
 - e. Layout plan indicating the entrance and exit of the car park;
 - f. Photo of the entrance and exit of the car park; and
 - g. Total number of parking spaces by each vehicle types.

Real-time PI

- 3.9 The Developer or the agencies appointed by the Developer shall establish their own parking vacancy system which is capable of outputting an electronic file containing the Parking Information in JSON format in accordance with the structure specified in **Appendix A** (the electronic file is hereinafter called Parking Information file).
- 3.10 After successful registration, the Developer or the agencies appointed by the Developer shall arrange their own parking vacancy system to submit the Parking Information file.

² Reference on RESTful web service: https://en.wikipedia.org/wiki/Representational_state_transfer and <http://docs.oracle.com/javaee/6/tutorial/doc/gijqy.html>

- 3.11 The Transport Department will automatically retrieve the PI file through the RESTful web service and disseminate the PI through Transport Department's website, mobile application and data.gov.hk. (Remarks: Secure communication using HMAC-SHA256³ message authentication shall be adopted).
- 3.12 The latest PI should be submitted to the Transport Department through the Internet in real-time (at every 2 minutes or less) on a 7 x 24 basis and in JSON format.
- 3.13 The C for T reserves the rights to amend the requirements of this Guidelines from time to time.

³ Reference on HMAC-SHA256: <https://tools.ietf.org/html/rfc2104>

APPENDIX A

A1 Structure of Parking Information File

Field Name	Field Description	Field Type	Length	Mandatory?	Remarks
car_park .eParking_id	An unique key identifier for TD eParking System	varchar	20	Y	Provided by TD
car_park .vehicle_type [*]	Vehicle Type	char	1	Y	P-Cars/Vans, M-Motor Cycles, L-Light Goods Vehicles, H-Heavy Goods Vehicle, C-Coaches/Buses, T-Container Vehicles B-Light Buses
car_park . vehicle_type[*] .service_c ategory[*]	Service Category	varchar	30	Y	hourly, daily, monthly
car_park . vehicle_type[*] .service_c ategory[*].vacancy	Current Vacancy (excluded those vacancies of supported facilities)	varchar	30	Y	
car_park . vehicle_type[*] .service_c ategory[*] .supported_facil ities[*]	Current Supported Facilities	varchar	5	N	EVC-ElectricVehicleCharger, D-Disabilities,

Guidelines for Provision of Parking Information
Version 1.0

					LU-Load and Unloading
car_park . vehicle_type[*] .service_c ategory[*] .supported_facil ities[*].vacancy	Vacancy for Current Supported Facilities	varchar	30	N	
car_park .operator_timesta mp	Timestamp sent from Operator	datetime		Y	YYYYMMDDTHH:MM:SS+08 00, e.g.20151229T10:30:00+0800
car_park .special_annouce ment_en	Predefined Special Announcement (in English) to the public	text		N	Car park special announcement in English (UTF-8)
car_park .special_annouce ment_tc	Predefined Special Announcement (in T. Chinese) to the public	text		N	Car park special announcement in Traditional Chinese (UTF-8)
car_park .special_annouce ment_sc	Predefined Special Announcement (in S. Chinese) to the public	text		N	Car park special announcement in Simplified Chinese (UTF-8)

A sample in JSON format is available at https://vacancy.hkeMobility.gov.hk/general/sample_parking_vacancy_information.json