

## LCQ7: Smart mobility

Following is a question by Dr the Hon Lo Wai-kyok and a written reply by the Secretary for Transport and Housing, Mr Frank Chan Fan, in the Legislative Council today (July 8):

Question:

The Financial Secretary (FS) announced in this financial year's Budget that the Innovation and Technology Bureau would publish the Smart City Blueprint for Hong Kong 2.0 within this year, and that FS had earmarked about \$1 billion for the Smart Traffic Fund (the Fund) to provide funding support for enterprises or organisations to conduct research and application on vehicle-related innovation and technology. Besides, the Transport Department (TD) published in July 2019 a Smart Mobility Roadmap for Hong Kong, putting forward five key objectives of smart mobility initiatives, namely "Safe", "Informative", "Green", "Mobile" and "Accessible". In this connection, will the Government inform this Council:

(1) given that the Government is taking forward pilot projects on automated parking systems in Tsuen Wan, Sham Shui Po, Sheung Wan and Chai Wan, and the Urban Renewal Authority is studying the introduction of underground smart parking systems in Yau Ma Tei and Mong Kok, of the progress of the relevant work, and whether it will expeditiously study the introduction of smart car parks in other districts;

(2) whether it will amend the relevant legislation and land leases to the effect that operators currently renting government land under short-term tenancies to operate public car parks are required to disseminate, before a specified deadline, real-time vacancy information of the car parking spaces of their car parks through "HKeMobility", a mobile application of TD; if so, of the details; if not, the reasons for that;

(3) given that quite a number of new-model vehicles are installed with various driver assistance systems (e.g. Collision Prevention Assist, Lane Keep Assist, Blind Spot Assist alerts, Stability Programme and Automatic Emergency Braking System), whether the Government will allocate funds from the Fund to subsidise vehicle owners to retrofit such systems in various types of existing vehicles in order to enhance road safety; if so, of the details; if not, the reasons for that;

(4) given that various road transport operators (including the operators of franchised buses, red minibuses and residents' buses, as well as the MTR Corporation Limited) have not yet fully opened up the real-time arrival information of their vehicles/trains, whether the Government will draw up a timetable for central dissemination of the relevant information by such operators through "HKeMobility" to facilitate members of the public to travel around; if so, of the details; if not, the reasons for that;

(5) given that in June 2019, TD kick-started the pilot intelligent traffic

signal system project under which sensors were installed at signalised junctions to automatically detect real-time volume of vehicles and pedestrians flows so as to optimise signal time allocation, of the existing locations where intelligent traffic signal systems have been installed, and the effectiveness of such systems in improving the traffic flow so far; whether TD will expedite the installation of intelligent traffic signal systems at various road junctions; and

(6) whether the implementation of the various initiatives to promote smart mobility and the construction of the relevant infrastructure facilities will be incorporated into the planning work for new development areas, so as to expedite the taking forward of smart mobility initiatives; if so, of the details; if not, the reasons for that?

Reply:

President,

The Government is actively taking forward various Smart Mobility initiatives. By leveraging technology, these initiatives will enable more effective management of traffic for the convenience of the commuting public. After consulting the Development Bureau and the Transport Department (TD), my reply to the various parts of Dr the Hon Lo Wai-kwok's question is as follows:

(1) TD is taking forward pilot projects on automated parking systems (APSS) so as to acquire and consolidate experience in building, operating and managing different types of APSS and the associated financial arrangements. This will pave the way for wider application of APSS in public car parks in future.

When identifying sites for the pilot projects, TD takes into consideration such criteria as parking demand, geographical environment, planning restrictions, impact on local traffic, etc. So far, TD has identified sites for four pilot projects. Regarding the pilot project at a short-term tenancy (STT) site in Tsuen Wan, TD has already secured support from the Tsuen Wan District Council, and it is expected that tenders would be invited in mid-2020. As regards the pilot project in Sham Shui Po, TD is assessing its technical feasibility after obtaining support from the Sham Shui Po District Council. For the pilot projects in Sheung Wan and Chai Wan, TD will consult relevant District Councils in due course. In view of various districts' aspirations for APSS, after the commissioning of the APS in Tsuen Wan, TD will conclude its experience and the effectiveness of the APS for consideration of introduction of APSS to other districts.

Separately, the Urban Renewal Authority is conducting its Yau Mong District Study, in which the concepts of Smart City (including Smart Mobility) will be covered. The feasibility of applying such concepts in the redevelopment districts in future would, however, be subject to relevant policies and regulatory control.

(2) Since mid-2018, the Government has incorporated provisions into new STT

agreements of fee-paying public car parks, mandating the operators to provide real-time parking vacancy information and data of their car parks to the Government for dissemination to the public through TD's "HKeMobility" mobile application and the Public Sector Information Portal (data.gov.hk). As at end June 2020, TD disseminated real-time parking vacancy information of some 30 STT fee-paying public car parks.

(3) The Government welcomes the introduction of new driver assistance systems by vehicle manufacturers for various classes of vehicles so as to enhance driving and road safety. After assessing the technical details submitted by vehicle manufacturers in support of their applications for type approval, TD has already approved the installation of some of the systems on relevant vehicles registered in Hong Kong. Currently, the Government has no plan to subsidise vehicle owners to retrofit driver assistance systems in various classes of existing vehicles.

(4) Since August 2019, the New World First Bus Services Limited, the Citybus Limited, the New Lantao Bus Company (1973) Limited and the Mass Transit Railway Corporation Limited (MTRCL) (in respect of Airport Express, Tung Chung Line, West Rail Line and Tseung Kwan O Line, which have relatively lower service frequency) have disseminated real-time information and data of their vehicles/trains through "HKeMobility" and data.gov.hk.

TD is funding the development of the real-time arrival information system for green minibuses (GMBs), and will install positioning devices on around 3 300 GMBs across the territory, so that the public can access the real-time arrival information and data of GMB routes via "HKeMobility" and data.gov.hk. TD targets to launch the real-time arrival information system for GMBs by phases starting from end 2020 for full implementation by 2022. Since the majority of red minibuses (RMBs) do not operate on fixed routes and stops, TD will consider whether to further extend the system to RMBs that operate on fixed routes and stops in the light of the effectiveness of its full implementation on GMBs.

The Government understands that the community expects dissemination of more real-time public transport data and information. TD will continue to actively encourage public transport operators, including MTRCL, the Kowloon Motor Bus Company (1933) Limited and the Long Win Bus Company Limited, to open up more data. MTRCL has responded positively and is working on the details and the implementation schedule. As regards the residents' services, based on TD's understanding, there are currently no operators providing real-time arrival information.

(5) TD launched the Pilot Real-time Adaptive Traffic Signal System in June 2019, and has been installing the system at a total of five selected signalised junctions on Hong Kong Island, Kowloon and the New Territories. Upon the completion of the design and laboratory tests for the system, TD commenced the installation works at the signalised junction of King Cho Road and Lim Cho Street in Lai King in June 2020. Consultation on and installation works at the remaining selected sites will be carried out progressively. When the system formally comes into operation, TD will assess its effectiveness based on the tailback length and waiting time concerned at

the junctions for consideration of extending the project to other suitable road junctions.

(6) As for the on-going projects in New Development Areas (NDAs) and New Town Extensions, the introduction of Smart Mobility elements has already been explored during the planning and design process, with suitable measures adopted in the planning of NDAs, including the use of public transport to serve as the backbone for the community as well as the provision of comprehensive and convenient cycling and pedestrian networks for promoting Smart Mobility.