

立法會 *Legislative Council*

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Panel on Transport Meeting on 5 January 2021

Background brief on Free-flow Tolling System for Government Tolled Tunnels and Roads

Purpose

This paper provides background information on the free-flow tolling system ("FFTS") for government tolled tunnels and roads. It also summarizes the major views and concerns expressed by Legislative Council Members on the subject.

Background

2. As stated in the Hong Kong Smart City Blueprint promulgated in December 2017, smart mobility is one of the major components for Hong Kong's development into a smart city. The Government will develop the use of in-vehicle units ("IVUs") for allowing tunnel toll payment without stopping at toll booths as one of the key smart mobility initiatives. According to the Administration, FFTS allows vehicles to pay tolls more efficiently, avoiding disruption to traffic flow arising from the need to stop at toll booths for manual toll payment. In addition, with the implementation of FFTS, the existing toll booths at toll plazas could be removed, potentially freeing up some space for other transport related purposes, such as improvement of existing bus stops.

3. The Civil Engineering and Development Department ("CEDD") commissioned a consultancy study in 2017 on the feasibility of using FFTS at the Tseung Kwan O – Lam Tin Tunnel ("TKO-LTT") and carried out field trials.¹ The study and field trials were substantially completed in mid-2018, recommending a FFTS at TKO-LTT with both Radio Frequency Identification ("RFID") (which requires affixing an RFID chip to the vehicle, i.e. the installation of IVUs), and Automatic Number Plate Recognition ("ANPR").

¹ TKO-LTT is a 3.8-km long dual two-lane carriageway which will provide an alternative route to the Tseung Kwan O Tunnel for coping with the traffic demand arising from the developments in Tseung Kwan O and Kwun Tong districts. Due to geographical restrictions, there is no provision of toll plaza in TKO-LTT.

This project was subsequently withheld following the Administration's decision to waive the tolls of the new TKO-LTT and the Tseung Kwan O Tunnel as announced in the 2019 Policy Address.

Major views and concerns of members

4. Members have expressed views and concerns on the implementation of FFTS at TKO-LTT at the meetings of the Panel on Transport ("the Panel") and the Public Works Subcommittee ("PWSC"). Their major views and concerns are summarized in the ensuing paragraphs.

Operation of the free-flow tolling system

5. At the PWSC meeting on 19 June 2019, members expressed concern about the operation of toll collection through FFTS. They enquired whether sufficient incentives were provided to encourage vehicle owners to acquire IVUs for using the system and whether the Administration had plans to extend FFTS to other government tolled tunnels and roads. In response, the Administration advised that it had planned to retrofit other government tolled tunnels and roads with tolling gantries and the necessary field equipment progressively within two to three years or so after the commissioning of TKO-LTT to enable the phased implementation of FFTS at those tunnels and roads. It was believed that with the gradual extension of FFTS to other government tolled tunnels and roads, more vehicles owners would be attracted to use IVUs expeditiously.

6. Members also enquired about the handling of situation where vehicle owners were wrongly charged by FFTS, and whether a mechanism was in place for vehicle owners to settle disputes about toll payment and to lodge complaints.

7. The Administration responded that once a vehicle had passed through FFTS, payment would be deducted automatically from a pre-registered payment account of the registered vehicle owner. The vehicle owner would be notified of the successful payment through mobile application. Alternatively, vehicle owners could check their payment status and payment history on a dedicated website. For vehicles not affixed with IVUs or when automatic payment was unsuccessful, vehicle owners would receive a toll payment notification for settling payment within a grace period. To allow TD to handle disputes that might arise over toll payment, data of vehicles using FFTS would be stored in the backend system for no longer than necessary. After that period, data would be automatically deleted.

8. Some members were concerned about the additional administrative cost

incurred for TD to follow-up on those payment in arrears. The Administration advised that vehicle owners would be given a grace period to settle payment in arrears, and if payment collection was in vain within the grace period, a surcharge would be imposed on a cost-recovery basis. Such arrangement was similar to the practice currently adopted in Tsing Ma and Tsing Sha Control Areas.

9. Noting that most government tolled tunnels and roads adopted the Autotoll electronic toll collection ("ETC") system ("the Autotoll system"), a member enquired how the operators of other government tolled tunnels and roads would deal with the ETC service contracts signed with Autotoll Limited after FFTS had been extended to those tunnels and roads, and about the arrangements concerned.

10. The Administration advised that the service currently provided through the Autotoll system by operators of government tolled tunnels and roads was believed to have no bearing on the Administration's plan of extending FFTS to those tolled tunnels and roads. According to the Administration's understanding, clauses relating to cessation of service were provided in the service contracts signed between the operators and Autotoll Limited.

11. In response to a member's concern about the interfacing problem between FFTS and other electronic payment system such as Autotoll, the Administration advised that FFTS and Autotoll were two separate systems with no conflict in usage.

12. On members' concern about the cost and usable life of IVUs, the Administration advised that the unit cost of the IVU would be about US\$2 each, and its usable life would be over seven years. The first issue of IVUs to registered vehicle owners would be free-of-charge. Re-issuance of IVUs would be borne by the vehicle owners on a cost-recovery basis.

13. In view that some members of the transport trade, such as minibus and taxi operators had expressed their difficulties in registering a payment account with TD, some members urged the Administration to maintain close dialogue with members of the trade in resolving their difficulties with regard to the operating requirements of FFTS.

Personal data privacy issue

14. Members were concerned about the collection of personal data through FFTS. They enquired whether the toll service provider who was responsible for handling toll collection through FFTS would be allowed to store, retrieve and

manage personal data of vehicle owners.

15. The Administration advised that the data collected under FFTS would only be used for toll collection and toll recovery purposes. TD would handle the relevant data which must be collected, held and used due to the implementation of FFTS in strict compliance with the Personal Data (Privacy) Ordinance (Cap. 486). TD would also make reference to the codes of practice and guidelines issued by the Office of the Privacy Commissioner for Personal Data ("PCPD") to ensure proper handling of the relevant data for protection of privacy. Only authorized government officers and toll service provider staff would be allowed to handle or gain access to the data designated for official duty purpose in the backend computer system of FFTS given actual operational needs. Also, all processes of data access would be recorded in the system. In case of any non-compliance, TD would conduct investigation and might refer the case to relevant law enforcement agencies for follow-up actions as appropriate.

16. The Administration further advised that a preliminary privacy impact assessment ("PIA") on the overall design of IVU had been conducted and that no personal data privacy issue of data in IVUs and field equipment was envisaged. After FFTS had read the data on the IVU affixed to a vehicle using the tunnel, the frontend computer would only collect the data on its Tag ID and Vehicle ID, which did not involve any personal data, and the data would be encrypted. For the backend system of FFTS, it would store names and contact information of account holders for purposes related to toll collection under FFTS such as opening accounts, managing accounts and providing customer services. For TKO-LTT, the Administration had carried out a PIA of the operational flow of FFTS, which involved account management and customer services, and consulted PCPD in order to ensure that the future design would meet the requirements of privacy protection. At the detailed design and construction stages, the Administration would request the contractor to carry out another PIA to further ensure that the system would fulfil the requirements of Cap. 486 and relevant guidelines. During the operation of the backend system, TD would also conduct regular audits to ensure continued compliance with the requirements of Cap. 486 and relevant guidelines.

Re-deployment of toll collectors

17. A member enquired about the arrangement for re-deploying toll collectors to take up other tunnel posts after the implementation of FFTS and whether their remuneration package would be affected after the re-deployment. The Administration responded that TD would set out in the contract of tunnel operators the requirement to arrange re-training for toll collectors so as to enable them to take up other tunnel posts, such as Traffic Officers. In general,

remuneration of such posts would be more favourable than that of toll collectors

Relevant papers

18. A list of relevant papers is in **Appendix**.

Latest developments

19. The Administration will brief the Panel on the proposed implementation of free-flow tolling system at government tolled tunnels and Tsing Sha Control Area at the meeting to be held on 5 January 2021.

Council Business Division 4
Legislative Council Secretariat
29 December 2020

List of relevant papers

Date of meeting	Meeting	Minutes/Paper	LC Paper No.
18.1.2019	Panel on Transport	Administration's paper on Free-flow Tolling System for Tseung Kwan O – Lam Tin Tunnel and other Government Tolled Tunnels and Roads	CB(4)405/18-19(05) https://www.legco.gov.hk/yr18-19/english/panels/tp/papers/tp20190118cb4-405-5-e.pdf
		Administration's response under the agenda item of "Free-flow Tolling System for Tseung Kwan O – Lam Tin Tunnel and other Government Tolled Tunnels and Roads" at the meeting on 18 January 2019	CB(4)980/18-19(01) https://www.legco.gov.hk/yr18-19/english/panels/tp/papers/tp20190118cb4-980-1-e.pdf
		Minutes of meeting	CB(4)1031/18-19 https://www.legco.gov.hk/yr18-19/english/panels/tp/minutes/tp20190118.pdf
19.6.2019	Public Works Subcommittee	Administration's paper on Tseung Kwan O – Lam Tin Tunnel – remaining works	PWSC(2019-20)18 https://www.legco.gov.hk/yr18-19/english/fc/pwsc/papers/p19-18e.pdf
		Minutes of meeting	PWSC291/18-19 https://www.legco.gov.hk/yr18-19/english/fc/pwsc/minutes/pwsc20190619.pdf
25.10.2019*		Administration's letter dated 24 October 2019 explaining the decision to withdraw the agenda item PWSC(2019-20)18 – 823TH – Tseung Kwan O – Lam Tin Tunnel – remaining works	PWSC6/19-20(01) https://www.legco.gov.hk/yr19-20/english/fc/pwsc/papers/pwscpsc-6-1-e.pdf

*Issue date

Date of meeting	Meeting	Minutes/Paper	LC Paper No.
25.10.2019	Panel on Transport	Administration's information paper on Smart Mobility Initiatives Relating to Road Transport	CB(4)1110/18-19(01) https://www.legco.gov.hk/yr18-19/english/panels/tp/papers/tpcb4-1110-1-e.pdf

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