

## LCQ7: Management of public toilets

Following is a question by the Hon Michael Tien and a written reply by the Secretary for Food and Health, Professor Sophia Chan, in the Legislative Council today (October 20):

Question:

At present, there are more than 800 public toilets under the Food and Environmental Hygiene Department (FEHD), with the cleansing services for some 600 odd of them having been outsourced to street cleansing service contractors (contractors), and the hygiene conditions of the public toilets have been criticised from time to time. Regarding the management of public toilets, will the Government inform this Council:

(1) as the direct investigation report published by the Office of The Ombudsman earlier on indicates that there has not been a significant drop over the years in the number of cases in which FEHD issued Default Notices (DNs) to its contractors and deducted their monthly service fees due to their rendering of sub-standard cleansing services, whether FEHD has studied if this situation has reflected that the monitoring system is ineffective; if it has studied and the outcome is in the affirmative, of the reasons for that, and the improvement measures in place (e.g. raising the relevant penalties);

(2) as FEHD is currently enhancing its Contract Management System in order to more effectively collect information such as verbal warnings and DNs issued by its various district offices to contractors, whether FEHD will, when determining the scores for the item of "past performance" of tenderers of cleansing services, increase the weighting assigned to such records of defaults; if so, of the details; if not, the reasons for that;

(3) as FEHD has, since May this year, put on trial a smart toilet system at two public toilets and is now evaluating the system's effectiveness, (i) how FEHD will use the data collected by the system (e.g. the usage of public toilets, environmental parameters, the usage of consumables as well as operating status of electrical and mechanical equipment) to strengthen its monitoring of contractors' performance, and (ii) of the preliminary outcome of FEHD's evaluation of the effectiveness of the system; whether FEHD will apply the system extensively to various public toilets; if so, of the details; if not, the reasons for that; and

(4) given that an Internet of things (IoT)-enabled Smart Toilet Bowl Cleaning System (in which automatic toilet cleaning robots are supplemented with an IoT smart monitoring function and a real-time data-driven cleaning strategy), which was developed by the Electrical and Mechanical Services Department and has won an international award, may improve the hygiene conditions of toilets, whether FEHD will introduce this System to improve the hygiene conditions of public toilets?

Reply:

President,

The Food and Environmental Hygiene Department (FEHD) has been improving the facilities and service of public toilets using a multi-pronged approach and is committed to monitoring their operation and performance as well as stepping up its efforts in public education, with a view to enhancing the overall hygiene and service levels of public toilets.

My reply to the question raised by the Hon Michael Tien is as follows:

(1) To ensure the service quality of cleansing service contractors, the FEHD maintains regular communication with them via verbal contact, phone messages, emails, meetings, etc. to remind them that they must deliver the services in accordance with the contract requirements. Site inspections and surprise checks are also conducted from time to time to better monitor their service performance. If the cleanliness of a public toilet is found to be falling short of the contract requirements, the FEHD will issue a verbal warning to the contractor concerned requiring cleansing to be done to bring the toilet cleanliness to the required level within a specified timeframe (ranging from a minimum of 15 minutes to a maximum of two hours). If the contractor fails to do so, the FEHD will issue a "performance-related" default notice (DN) to the contractor and deduct from the monthly service fee the amount specified in the service contract. The amount of deduction is progressively incremental based on the number of DNs issued to the contractor in a particular month and is subject to annual review.

In order that contractors will improve their service performance more proactively, the FEHD has recently tightened the mechanism for deducting monthly service fees by lowering the threshold for triggering incremental increase of fee deduction from every ten DNs to every five DNs. The revised mechanism is applicable to street cleansing service contracts (including public toilet cleansing and management) tendered since April 1, 2021.

FEHD has strengthened its monitoring of contractors' performance. Most of the contractors, upon receipt of a verbal warning, managed to improve the conditions of public toilets concerned in a timely manner. The number of DNs issued has significantly decreased from 230 in 2019-20 to 106 in 2020-21, and that for the period between April and August 2021 was 47.

(2) Under the FEHD's service contract tendering mechanism, a tenderer's "past performance" forms part of its "technical score". Since April 1, 2019, the FEHD has adjusted the weightings of "price score" and "technical score" by lowering the former from 70 per cent to 50 per cent and raising the latter from 30 per cent to 50 per cent, so as to reflect its emphasis on tenderers' service quality. From then on until the end of August 2021, among all the contracts awarded by the FEHD, about 75 per cent of them were not awarded to the lowest bidders.

Moreover, the criteria for assessing "past performance" has been revised for street cleansing service contracts tendered since April 1, 2021. An example is that in calculating a tenderer's past performance score, comparison will be made between the tenderer's default score and those of

other bidders. Such a revision will enable more effective identification of the merits and demerits of a tenderer's past performance, thereby exerting stronger deterrent effect on contractors with unsatisfactory performance.

(3) The FEHD has been actively exploring the use of technologies in enhancing public toilet service and developed a "smart public toilet system". The system can collect a range of useful data on the operation of public toilets, including their usage (such as visitor flow and occupancy status of toilet compartments/urinals), environmental parameters (such as temperature, humidity and odour), usage of consumables (such as soap, toilet paper, toilet seat sanitisers and hand sanitisers), operating status of electrical and mechanical (E&M) equipment (such as hand dryers and floor fans) and users' feedback, with a view to better monitoring the daily operation of public toilets. Making use of the data collected, FEHD staff can understand the operation and problems of public toilets on a real-time basis (such as consumables not being replenished, odour problem or damaged E&M equipment) and take corresponding follow-up actions. At the same time, the Department can also monitor the performance of contractors, put forward job requirements to the contractors and issue verbal warnings to contractors falling short of the contract requirements. In addition, such data can also serve as a useful reference for refurbishment of public toilets and improvement of toilet facilities (such as the male-to-female toilet compartment ratio or upgrading of hardware) in future.

The FEHD has been piloting for one year the "smart public toilet system" in the Tsim Sha Tsui East Public Transport Interchange Public Toilet and the Southorn Centre Public Toilet in Wan Chai since May 1, 2021. The Department will, having regard to the results of the pilot scheme, consider deploying the system in other public toilets to enhance their management and service quality.

(4) The FEHD has been working closely with the Electrical and Mechanical Services Department (EMSD) to improve various facilities and services, including public toilets, through effective use of technologies. The two departments are making use of the Government-Wide Internet-of-Things (IoT) Network to jointly launch a "smart toilet pilot programme". Installation and testing of the relevant devices at 10 FEHD public toilets over the territory have commenced from the third quarter of 2021 to collect useful information and data (including the usage of public toilets, environmental parameters, the usage of consumables, operating status of E&M equipment and users' feedback) for enhancing the management and service quality of public toilets.

We also note that the EMSD is piloting the IoT-enabled Smart Toilet Bowl Cleaning System in the staff toilet of its headquarters building, whereby automatic toilet cleaning robots are supplemented with artificial intelligence technology to conduct real-time analysis of data on the cleanliness of toilets and automatically clean the toilet in a corresponding mode, thereby improving toilet hygiene and cleanliness. The FEHD and the EMSD will discuss a trial use of the system at suitable public toilets subject to satisfactory results of the pilot scheme.