

**CONTROLLING OFFICER'S REPLY**

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**(Question Serial No. 2049)**

Head: (82) Buildings Department  
Subhead (No. & title): (-) Not Specified  
Programme: (1) Buildings and Building Works  
Controlling Officer: Director of Buildings (CHEUNG Tin-cheung)  
Director of Bureau: Secretary for Development

Question:

The Buildings Department stated that the consultancy study on identifying the source of water seepage in buildings has been completed in 2018, and in June last year the new technological methods for investigation have been tried out in three pilot districts, namely Kowloon City, Wan Chai and Central and Western districts. In this connection, would the Government inform this Committee of the following:

- (1) Since June last year, what is the number of water seepage complaints investigated with the use of new technological methods by the Joint Office for Investigation of Water Seepage Complaints, and the average time taken and cost for each case; among such cases, what is the number of cases where the source of water seepage could not be identified;
- (2) Would the Department consider extending the new testing methods to cover the whole territory? If so, will there be a specific timetable and estimated expenditure?

Asked by: Hon YUNG Hoi-yan (LegCo internal reference no.: 26)

Reply:

- (1) Investigation of water seepage cases is carried out by the Joint Office (JO) set up by the Food and Environmental Hygiene Department and the Buildings Department in three stages. Generally speaking, JO staff would carry out initial investigation of the source of seepage, including coloured water test for drainage pipes. In case the initial investigation cannot identify the source of seepage, professional investigation by outsourced consultants is required.

Since the second half of June 2018, new testing technologies (i.e. infrared thermography (IT) and microwave tomography (MT)) have been adopted by outsourced consultants when conducting professional investigation in three pilot districts (i.e. Kowloon City, Wanchai and Central and Western) as far as practicable. However, in cases whereby these new testing technologies cannot be effectively

applied due to, for example, spalling of concrete ceilings at the locations of water seepage, blockage of pipes and other facilities, the outsourced consultants have to continue to employ the conventional tests.

In 2018, conventional tests including colour water tests for drainage pipes were conducted for 13 650 cases, of which 9 716 cases required professional investigation. Among these 9 716 cases, 92 cases had adopted new testing technologies in the investigation. Of these 92 cases, 56 of them were pilot district cases. Source of seepage in nine of the 56 cases could not be identified by the new testing technologies. While JO does not compile statistics on the cost for investigation of these water seepage cases, taking an ordinary domestic flat with one kitchen and one toilet as an example, the cost for adopting IT and MT for investigation is generally around \$9,000, excluding the staff cost and operating expenditure of JO. JO does not compile statistics on the time taken for carrying out the IT and MT for seepage cases.

- (2) With the experience gained and data obtained through the pilot adoption of the new testing technologies as mentioned above, JO will evaluate the effectiveness of the new testing technologies and refine the technical guidelines and procedures relating to the use of these testing methods. JO will progressively extend the use of IT and MT to other pilot districts in the third quarter of 2019.

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