

CONTROLLING OFFICER'S REPLY

DEVB(PL)090

(Question Serial No. 1704)

Head: (82) Buildings Department

Subhead (No. & title): (-) Not Specified

Programme: (1) Buildings and Building Works

Controlling Officer: Director of Buildings (YU Tak-cheung)

Director of Bureau: Secretary for Development

Question:

With reference to the written reply (Reply Serial No. DEVB(PL)273) regarding the consultancy study on water seepage in buildings from the Department to the Special Meetings of the Finance Committee last year, it is stated that the Department would “progressively extend the use of the new testing methods to other pilot districts in the third quarter of 2019”. In this connection, would the Government inform this Committee of the following:

- (1) the latest progress of the initiative given that it is not mentioned in its Head of Expenditure;
- (2) the information regarding the pilot programme since 2018, with a breakdown by District Council district in the table below;

District Council district	Number of cases adopting conventional testing methods	Number of cases adopting new testing methods

- (3) the number of cases adopting the five new testing methods as per the consultancy study since 2018; and
- (4) whether the Department has a schedule for general adoption of the new testing methods; if so, of the details; if not, of the reasons.

Asked by: Hon CHAN Hak-kan (LegCo internal reference no.: 17)

Reply:

- (1), (3) & (4) Since the second half of June 2018, the Joint Office (JO) set up by the Food and Environmental Hygiene Department and the Buildings Department (BD) has applied new testing technologies, mainly infrared thermography (IT) and microwave tomography (MT), in three pilot districts (i.e. Central and Western, Kowloon City and Wanchai), where applicable. With the experience gained and data obtained through pilot application of the new testing technologies, JO has since September 2019 extended these new testing technologies to another five pilot districts (i.e. Sham Shui Po, Kwai Tsing, Tuen Mun, Tai Po and the North District). JO is refining the technical guidelines and procedures relating to the use of the new testing technologies and is planning to gradually extend such technologies to other districts. While IT and MT could be effective in investigating seepage through concrete slabs, they could not be effectively applied under some circumstances such as cases involving ceilings with concrete spalling, ceilings with tile finishes and blockage by pipes/building services. In these cases, JO has to resort to conventional testing methods.

Apart from IT and MT, the consultancy study commissioned by BD recommended that new testing methods, such as radar scanning survey (RSS), static pressure test (SPT) and material analysis by micro-spectroscopy inspection (MAMI) may also be applied in JO professional investigation. As at 31 December 2019, the numbers of cases in the eight pilot districts using IT, MT, RSS and SPT were 1 131, 1 131, 1 and 22 respectively. JO has yet to apply MAMI in seepage investigation as JO is now identifying service providers in the market and preparing to commission a consultant to pilot its use.

- (2) As at 31 December 2019, the numbers of cases with conventional testing methods and new testing methods conducted in professional investigation in the eight pilot districts are tabulated as follows –

Districts	Number of cases adopting conventional testing methods	Number of cases adopting new testing methods
Central and Western ⁽¹⁾	67	255
Wan Chai ⁽¹⁾	51	249
Kowloon City ⁽¹⁾	638	394
Sham Shui Po ⁽²⁾	17	77
Kwai Tsing ⁽²⁾	4	61
Tuen Mun ⁽²⁾	17	59
Tai Po ⁽²⁾	3	27
North ⁽²⁾	6	18

Note ⁽¹⁾: New testing methods have been adopted since the second half of June 2018.

Note ⁽²⁾: New testing methods have been adopted since September 2019.