

**TLB029**

**CONTROLLING OFFICER'S REPLY**

**(Question Serial No. 2378)**

Head: (60) Highways Department  
Subhead (No. & title): (-) Not Specified  
Programme: (2) District and Maintenance Works  
Controlling Officer: Director of Highways (YAU Kwok-ting)  
Director of Bureau: Secretary for Transport and Logistics

Question:

One of the responsibilities of the Highways Department (HyD) is the maintenance of all public roads, including highway structures, government road tunnels, road furniture etc. The estimated expenditure on road maintenance this year is approximately \$660 million. There is an item under HyD required special attention in 2024-25 concerning HyD strives to make use of innovative technologies and digitalise the work flow to enhance efficiency. Will the Government advise this Committee, how will the Government make use of innovative technologies and digitalise the work flow to enhance efficiency on maintenance of public road? What measures will the Government take to improve the public road surface condition?

Asked by: Hon SHANG Hailong (LegCo internal reference no.: 25)

Reply:

The Highways Department (HyD) has been striving to make use of innovative technologies and digitalise the work flow on maintenance of public road with a view to enhancing efficiency and improving the services provided to the public. The HyD has implemented a digitalised Road Maintenance Monitoring System since the end of 2022 to digitalise the inspection and supervision procedures. The HyD staff can therefore manage the road inspection and maintenance works carried out by its road maintenance contractors more efficiently. The data collected by the new system can also provide information on the road condition which facilitates HyD for better planning of the road maintenance works. The system is currently used in six road maintenance contracts and is planned to put forward its use to the remaining three existing contracts of the same type in order to achieve the target on digitalising most inspection and supervision procedures in all road maintenance contracts in 2024.

In mid-2024, the HyD will also start using artificial intelligence technology to automatically detect road defects (such as discolouration of road markings, cracks on road surfaces etc.) through analysing the photos of road surfaces collected during inspections so that appropriate maintenance works can be arranged as soon as possible. In addition, the HyD will continue to use small unmanned aircraft to inspect road structures that are difficult to reach (including

bridges, tunnels, etc.) and the condition of the slopes in order to enhance the efficiency and safety of inspections.

The HyD engaged road maintenance contractors for carrying out maintenance and repair works for public roads and ancillary road facilities within its purview. The contractors carry out road inspections regularly, and arrange appropriate maintenance works when identified road defects or received defect reports in order to keep the road network in a safe and serviceable condition. Apart from arranging immediate maintenance works for road defects that might cause safety concerns, the HyD would also arrange road resurfacing or reconstruction works of a larger scale in a timely manner to further improve the overall road condition. At the same time, the HyD has also been kept conducting researches and testings for more durable and environmentally friendly pavement materials for public roads.

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