

Government's efforts in managing excavation works on public roads

The Audit Commission ("Audit") conducted a review of the Government's efforts in managing excavation works on public roads.

2. According to the Transport Advisory Committee's Report of December 2014, road works were a major cause of road traffic congestion. Under the policy directives of the Development Bureau, the Highways Department ("HyD") coordinates and controls road openings through the issue of excavation permits ("XPs") to the works proponents. HyD issued a total of 21 822 XPs in 2016 and collected XP fees of \$180 million in 2016-2017. In December 2017, HyD deployed 113 staff on controlling road excavation works which formed part of its district and maintenance works programme involving 1 011 staff and expenditure of \$1,433.4 million in 2016-2017.

3. The Committee noted the following findings from the Director of Audit's Report:

- the number of XPs with extension increased by 78% from 727 in 2010 to 1 293 in 2016, and the average extension period also increased by 90% from 48 days to 91 days during the period. Of the 1 061 XPs issued in 2016 which were granted extensions, 517 XPs (49%) were related to government departments. Of the three cases with the longest extension, the Water Supplies Department and the Housing Department were involved in these projects with extension ranged from 446 days to 502 days;
- according to Environment, Transport and Works Bureau Technical Circular (Works) No.17/2004 entitled "Impossibility/Unforeseen Ground Conditions/Utility Interference", project officers should arrange to carry out all necessary site investigations and satisfied themselves that sufficient ground information had been made available prior to commencement and during the detailed design. However, obstruction by existing underground utilities and difficult underground conditions were common grounds for the extension of XP period;
- while HyD required XP applicants to draw up coordinated works plans with other excavation works promoters so as to reduce repeated openings on the same road section, it had not compiled statistics to evaluate the effectiveness of such measures;

Government's efforts in managing excavation works on public roads

- for excavation works at the same location which had not been grouped together, HyD did not require justifications from applicants which had included a time break of three months or more in their works schedules instead of adopting a common trench approach. In these cases, the concerned excavation works were only deferred and there was no reduction in the number of road openings;
- Audit's examination of XPs issued in 2016 revealed that the overall coverage of the Audit Inspection Team of HyD on active permit sites¹ up to December 2017 only reached 43%;
- Audit examined the records of the Excavation Permit Management System² and discovered that:
 - (a) as of November 2017, 4 093 (46%) of 8 909 proposed works plans requiring case coordination plans had remained uncoordinated for over two years;
 - (b) the number of Completion Notices³ ("CNs") rejected by HyD increased from 5 294 in 2011 to 6 191 in 2017;
 - (c) as at December 2017, 2 581 (38%) of the 6 779 rejected CNs pending rectification of the reinstatement works had remained outstanding for over two years;
 - (d) of the 2 019 CN cases under processing as at the end of December 2017, CN inspections and acceptance in respect of 1 297 (64%) cases were overdue by one month on average (five months for the longest overdue case); and

¹ An Audit Inspection Team was established under HyD to inspect XP sites for monitoring compliance with XP conditions.

² HyD implemented a web-based Excavation Permit Management System in 2009 to administer and control road excavation works electronically, and the two Regional Offices (i.e. Urban and New Territories) of HyD are responsible for processing and issuing XPs by the System.

³ When an XP expires or upon receipt of a CN, a CN inspection will be arranged within seven working days to confirm works completion and acceptance of road reinstatement. If the reinstatement does not comply with the relevant requirements/specifications, HyD will reject the permanent reinstatement and request the permittee to rectify the problem.

Government's efforts in managing excavation works on public roads

- (e) as of December 2017, 3 618 site photographs and 2 441 test reports⁴ had not been submitted to HyD, of which 483 (13%) photographs and 771 (32%) test reports had been outstanding for over three years. Of 15 626 site photographs and 7 486 test reports submitted, 4 842 (31%) photographs and 2 523 (34%) test reports had not been reviewed by the Regional Offices of HyD for over three years;
- the number of serious and repeated non-compliance cases being referred to the Enforcement Team ("ET") of HyD increased from 902 in 2013 to 1 446 in 2017;
 - Audit sample checked 10 cases that the Audit Inspection Team referred to ET from 2015 to November 2017, among which five cases were referred through advisory letters three to six days after the inspections conducted by the Audit Inspection Team, and there was a time gap of six to eight days between the inspections of two teams. In this regard, ET could not obtain sufficient evidence of the suspected breaches of section 10T of the Land (Miscellaneous Provisions) Ordinance (Cap. 28) for taking prosecution actions;
 - as of December 2017, there were 18 major utility undertakings ("UUs") installing their utility services beneath public roads. With the continual development and installation of the underground utility facilities, the underground space would be increasingly occupied and utilized, resulting in congestion of underground facilities beneath public roads in some districts. However, there was no standard mechanism to manage space occupation by UUs underneath public roads;
 - according to the land licence condition, for utility installation, detailed alignment and disposition of the system in, on, over, along, across and under any public road or within any future road reserve shall be to the satisfaction of Director of Highways. Audit discovered that:

⁴ Permittees are required to submit site photographs and test reports for HyD to determine whether the standard of their reinstatement works is up to its satisfaction.

Government's efforts in managing excavation works on public roads

- (a) UUs were not required to obtain HyD's consent for their underground utility installations;
 - (b) there was no documented standard on checking of the detailed alignment and disposition of the system;
 - (c) HyD did not require XP applicants to ascertain and confirm whether the related alignment and disposition of the proposed installations would be in conflict with other existing/proposed installations; and
 - (d) the Administration did not maintain as-built records on utility installations beneath public roads/unleased government land;
- while HyD's consultancy study of 2002 confirmed the technical viability of using common utility enclosures ("CUEs")⁵ in new town developments and recommended some pilot schemes in the Kai Tak Development, only two trial CUEs in Yau Ma Tei and Chung Hom Kok were implemented in 2006, and HyD had not consulted the relevant UUs on the selection of locations before constructing the trial CUEs. Up to January 2018, the utilization of the trial CUEs was low and there was no evaluation of the trial results;
 - HyD kept the planning of the proposed trial in the Kai Tak Development in abeyance until August 2009 when the Civil Engineering and Development Department sought HyD's view of putting some pilot CUE facilities to trial in the Kai Tak Development. Subsequently, HyD decided in 2011 not to construct trial CUEs in the Kai Tak Development because of limited benefit; and
 - the possible use of CUEs was revived in August 2017 to support the smart city planning and development in Hong Kong and HyD planned to conduct another consultancy study in 2018 on adopting CUEs in new development areas.

⁵ The different ways of housing underground utility services within single structures are collectively referred to as CUEs. HyD appointed a consultant in March 2002 to conduct a study on the feasibility of implementing CUEs in Hong Kong with an objective of reducing road openings by UUs.

Government's efforts in managing excavation works on public roads

4. The Committee did not hold any public hearing on this subject. Instead, it asked for written responses regarding the measures to improve the management and monitoring of road excavation works; measures to enhance the control of underground utility installation and space occupation; and the implementation of CUEs. The consolidated replies from **Secretary for Development, Director of Highways** and **Director of Lands** are in *Appendix 10*.

5. The Committee wishes to be kept informed of the progress made in implementing the various recommendations made by Audit.