## Management of the public lighting system

The Audit Commission ("Audit") conducted a review of the Highways Department's ("HyD") management of the public lighting system.

- 2. As at April 2015, the public lighting system comprised 145 823 road lights, 79 225 special lights and 10 820 traffic bollards. HyD had awarded three contracts to contractors for the management, installation, operation and maintenance of road lights and traffic bollards ("MOM contracts") with a total contract value of \$693 million. HyD had also entered into a Service Level Agreement ("SLA") with the Electrical and Mechanical Services Trading Fund ("EMSTF") of the Electrical and Mechanical Services Department for the maintenance of special lights. HyD required the contractors of MOM contracts and EMSTF to respectively maintain the monthly availability of the road lighting system in the designated contract areas and special lighting system at the levels as specified in the MOM contracts and SLA<sup>1</sup>.
- 3. The Committee noted the following findings from the Director of Audit's Report:
  - HyD had set 51 vehicular routes for night inspections, and the routes to be inspected each night were randomly selected by a computer programme. However, Audit found that as at April 2015, the above vehicular routes only covered 93 391 lighting points (i.e. 64% of the 145 823 lighting points) and did not cover some lighting points on new roads. According to HyD, the random nature of the route selection by computer programme had also led to the uneven coverage. In this connection, there might be a risk of undetected outage or substandard performance of the contractors of the MOM contracts in relation to uninspected lighting points;
  - the contractors of the MOM contracts were paid a monthly lump-sum fee to carry out scheduled maintenance works according to the frequencies stipulated in the MOM contracts. However, as at April 2015, 14 types of scheduled maintenance works had not been carried out in accordance with the stipulated frequencies, with some outstanding for over four years and payments for which had already been made;

According to the MOM contracts, the monthly availability of the road lighting system in the designated contract areas should be maintained at not lower than 99.5%. As stipulated in SLA, the target average equipment availability should be 99.5% on a monthly basis.

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- upon receipt of fault calls, the contractors of the MOM contracts were required to arrive on site and to resume the operation of the road lighting equipment within the time limits specified in the MOM contracts. From June 2014 to May 2015, a contractor had used different commencement point for the time limit contrary to that specified in the MOM contracts; 576 cases of non-compliance with the time limits for responding to fault calls had not been reported;
- EMSTF had subcontracted the maintenance of 58 997 (74%) of general special lights but failed to incorporate some SLA requirements or revised requirements of a new SLA in the subcontracts, such as the 99.5% equipment availability requirement. For 2014-2015, the 99.5% equipment availability was not met;
- in the absence of a laid-down time limit on rectifying faults of general special lights identified during regular patrols, there were 325 cases of delay as at June 2015; and
- as at March 2015, 649 (42%) of the 1 534 approved road lights pending installation had been outstanding for one to three years, with 71 (5%) outstanding for more than three years. Moreover, during the period from 2005-2006 to 2015-2016, the annual quotas of village lighting installation varying from 400 to 2 000 were insufficient to meet village lighting applications. The backlog of waitlisted village lights was 2 693 as at June 2015. In addition, as at October 2015, of the 1 461 approved village lights pending installation, 553 (38%) had been outstanding for more than three years.
- 4. The Committee did not hold any public hearing on this subject. Instead, it asked for written responses regarding the arrangement of entrusting the operation and maintenance of special lights to the Electrical and Mechanical Services Department, the monitoring of the performance of the contractors of the MOM contracts and EMSTF, issues relating to the inspection arrangements and the installation of village lights. The replies from Director of Highways, Director of Electrical and Mechanical Services and Director of Home Affairs are in *Appendices 71 to 72*, *73 and 74* respectively.
- 5. The Committee wishes to be kept informed of the progress made in implementing the various recommendations made by Audit.