

Legislative Council Panel on Transport

Area Traffic Control Systems for Tai Po and North Districts

PURPOSE

At the Panel meeting held on 16 March 2001, Members noted from the paper on “Application of IT to Transport Department” Government’s plan to extend the Area Traffic Control (ATC) systems to cover all New Towns in phases from 2001. Whilst noting that the system would first be extended to Tai Po and North Districts, Members requested for further details on the project. This paper provides Members with supplementary information.

BACKGROUND

2. The ATC systems were first introduced in Kowloon in 1977 and then progressively extended to Hong Kong Island, Tsuen Wan and Sha Tin New Towns. Our experience so far proves that ATC systems significantly enhance the effective management of traffic signal controlled junctions by reducing journey time, delay and number of stops for motorists.

3. The rapid developments in Tai Po and North Districts in recent years have resulted in significant increases in traffic and transport demands. According to the latest Annual Traffic Census, the two districts have experienced increases in daily traffic flow from 1992 to 1999 in the order of 34% to 60%. The introduction of ATC systems will enhance effective use of the available road space by reducing the number of vehicle stops and journey time.

4. At present, the two districts have a large number of signalised junctions. These are expected to increase from the present 113 to about 120 junctions by 2003. With the use of the ATC system, all traffic signal controllers will be connected to a central computer to be

installed in the ATC Control Centre in Tsuen Wan. Through this central monitoring and control, the system will enable:

- central adjustment of traffic signal timings to suit the actual traffic conditions and hence minimise delays to motorists;
- better co-ordination of the operation of the traffic signals to minimise the number of vehicle stops at signals; and
- identification of defective traffic signals within seconds for speedy repair.

5. The proposed CCTV system will enable the traffic operators in the ATC control room to monitor the traffic conditions and to identify any traffic related incidents on the road so that quick remedial actions can be taken. The CCTV cameras will be installed at key roadside locations and linked to the ATC Control Centre of the Transport Department and to the Police Traffic Control Centre.

6. Based on our experience in other districts, we expect that the ATC system, on full implementation, will be able to reduce the journey time, delay and number of stops by an average of about 30%, 50% and 40% respectively.

PROPOSAL

7. We propose to implement the ATC systems for Tai Po and North Districts, at an estimated cost of \$101 million.

8. The scope of the project comprises: -

- (a) installation of 120 traffic signal controllers at road junctions in Tai Po and North Districts;
- (b) installation of a central computer control system in the Transport Department's ATC Control Centre in Tsuen Wan;

- (c) installation of vehicle detectors to enable the ATC systems to tap real-time traffic conditions on the road;
- (d) installation of 30 CCTV cameras to provide real-time visual traffic information;
- (e) installation of additional CCTV control/monitor equipment at the Police's Traffic Control Centre and the Transport Department's Emergency Traffic Coordination Centre; and
- (f) installations for the acquisition of telecommunication services.

9. Subject to funding approval, we plan to start the installation works in November 2001 for completion in November 2003.

PUBLIC CONSULTATION

10. We consulted the Traffic and Transport Committee (TTC) of the Tai Po District Council and the TTC of the North District Council on 16 November 2000 and 20 November 2000 respectively on the proposed works. Both TTCs expressed strong support for the project.

THE WAY FORWARD

11. We plan to consult the Public Works Sub-Committee on 4 April 2001 and will seek the approval of the Finance Committee on 27 April 2001 on funding for implementation of the project.

ADVICE SOUGHT

12. Members are invited to provide comments on the project.

Transport Bureau
March 2001