AGENDA ITEM 9

BOROUGH OF POOLE

TRANSPORTATION ADVISORY GROUP – THURSDAY 1 JULY 2010

REPORT OF HEAD OF TRANSPORTATION SERVICES

INTELLIGENT TRANSPORT SYSTEMS

PART OF THE PUBLISHED FORWARD PLAN: NO

1. PURPOSE OF REPORT AND POLICY CONTEXT

1.1 To consider proposals for the provision of Intelligent Transport Systems (ITS) within Transportation Services 2010/11 Capital Programme.

1.2 Legislation in the form of The Traffic management Act 2004 and the Climate Change Bill impose a duty on all highway authorities to manage the road network by reducing traffic congestion. This is particularly challenging in respect of dealing with the potential for growth of traffic as a result of projected local population growth.

1.3 It is recognised that major road building no longer offers a solution to this problem, and as a result the emphasis is more on optimising the use of the existing highway. ITS is recognised throughout the country as one of the main ways to achieving this, with the aim of providing reliable journey times through traffic management and up to date road user information.

1.4 The development of ITS was set out in LTP2 and will be included within LTP3.

2. DECISION

It is recommended that the Portfolio Holder be requested to approve:

2.1 the provision of ITS equipment as described in item 4 of this report.

3. BACKGROUND INFORMATION

3.1 The 2010/11 Transportation Capital Programme was approved at the 4 February 2010 TAG meeting. Within the congestion category of the programme was originally a budget of £100,000 for ITS. However as a result of recent reduction in funding announced by Department for Transport, this has been reduced to £50,000

3.2 The Council have invested in electronic equipment for the managing the road network over a number of years. The main features of this are:

1. 58 nos. signalised junctions (57 of which are remotely monitored).

2. 57 nos. signalised pedestrian crossings (46 remotely monitored).

3. 13 nos. signalised toucan crossings (11 remotely monitored)

4. 28 nos. junctions and 17 crossings set up within 10 distinct UTC regions (being in close proximity) such that their operation is linked.

5. 5 nos. electronic variable message signs (VMS) primarily giving the status of Poole lifting bridge but also use for appropriate driver messages in relation to major incidents and road safety advice.

6. 2 nos. electronic VMS signs on strategic road network - Blandford Road North (Upton)(southbound) and Dorset Way (westbound).

7. 11 nos. electronic signs around the Town Centre and Sandbanks showing the number of available parking spaces in the main car parks.

8. Recently installed Urban Traffic Management Control system (UTMC) Cloud Amber which brings together all of the electronic systems to one place such that the whole network can be positively managed in the event of major incidents, both planned and unplanned. Each of the three authorities of Poole, Bournemouth and Dorset has the same system (as provided by Cloud Amber) which enables them to be linked and hence provide consistency and co-ordination across the conurbation. One of the main features is the presentation of traffic information, roadworks, incidents etc on a common web based IT system covering the whole area.

3.3 The future development of ITS systems across the conurbation is set out in a common strategy produced by our partnering consultant Mouchel in 2009. The level of ongoing investment required is significant if all of the potential benefits are to be realised (Reading, Southampton, Bristol etc are examples of this) here in the SE Dorset conurbation. The aim for such an ultimate system would include:

1. network of VMS on strategic routes, giving both urban and inter urban messages

2. CCTV covering the major junctions,

3. a manned Joint Network Control Centre (NCC) covering the whole conurbation, under the direction of a single (or joint) Traffic Manager for the conurbation.

3.4 The level of provision is currently determined by the funding availability from each of the three authorities. This will be initially through Local Transport Plan Capital funding or latterly through SE Dorset contributions associated with major developments. The Joint NCC is currently the number one priority for the strategic element of SE Dorset contributions.

3.5 The joint operation of Poole Bridge and Twin Sails lifting bridges will almost certainly be heavily reliant on linked traffic signals / VMS signs for directing traffic to the appropriate bridge.

3.6 The requirement for investment in ITS is in respect of new installations but also most importantly in upgrades to existing equipment to ensure this remains effective.

4. PROPOSED SCHEME FOR 2010/11

4.1 Upgrade 5 nos. busiest traffic signal junctions to web (IP) based control - in terms of everyday usage and also most significantly business continuity this would allow these locations to be managed remotely via a lap top computer, offering considerable savings on making alternative office based provision and reducing communication costs.

£25,000

4.2 Existing car parks VMS signs. Convert from existing radio communication system (which has reliability and latency issues) to GPRS communication, similar to mobile phone technology.

£15,000

4.3 Existing VMS signs. Convert from existing radio communication system (which has extensive reliability and transmission issues, resulting in these signs being ineffective for several months) to GPRS communication.

£10,000

5. FINANCIAL IMPLICATIONS

5.1 The estimated cost of £50,000 is currently provided for within the approved Transportation Capital Programme.

5.2 Converting the existing VMS signs to GPRS communication will incur an additional revenue cost of approximately £330 per annum for each sign, equating to £6,270 for all 19 signs. This will be offset by reduced maintenance cost (the existing radio system is expensive to maintain), with the remainder being found from existing signals and car parks revenue budgets.

6. LEGAL IMPLICATIONS

6.1 There are no legal implications.

7. RISK MANAGEMENT IMPLICATIONS

7.1 Failure to invest in the existing ITS equipment where it is currently operating unreliably will reduce their effectiveness and lose the confidence of the travelling public. This will also severely limit the ability of the authority to manage the road network in a way which meets legislative and public expectation.

8. EQUALITIES IMPLICATIONS

8.1 There are no equalities implications.

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Background Papers:

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