

**OVERVIEW AND SCRUTINY MANAGEMENT COMMITTEE  
15<sup>TH</sup> JANUARY 2009**

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**REAL TIME PASSENGER INFORMATION SYSTEM****Purpose of Report**

1. To:
  - (i) Update the Committee on progress with the Real Time Passenger Information (RTPI) System following the recruitment of a Project Manager earlier this year and the start up of the RTPI Improvement Project.
  - (ii) Summarise the Project's objectives and report on the progress made since the start of the Project on 3<sup>rd</sup> June 2008.

**Background**

2. The Overview and Scrutiny Management Committee previously received a report on 27<sup>th</sup> March 2008 and noted that the Real Time Bus Information Manager started work on 31<sup>st</sup> March 2008. The development of a Project Team and Action Plan being among her first duties. The Action Plan is attached to this report (**Appendix 1**) which shows in chart form all of the tasks involved, together with expected start and end dates and an assessment of the current progress made against each of the tasks.
3. The Committee appointed the Chairman, Vice Chairman and Mr Chivers to undertake scrutiny of the Action Plan and effectiveness of the appointment of a Manager on system reliability and report back as appropriate.
4. The project has been split into four Workstreams as set out below to differentiate the separate activities and objectives. Some of the Workstreams run in parallel. The Action Plan sets out the scheduling of the tasks and the predicted start and end dates:

**Workstream 1 -** Design a system of performance management devised from information about the risks to RTPI performance and to document the procedures required to manage this system. The system and procedures will cover timetable data changes, equipment failures, regular system maintenance and checks.

**Workstream 2 -** Improve performance against the performance indicators (PIs). To quantify performance, two PIs (see paragraph 5) have been developed. They were designed to represent the two main areas affecting the delivery of information by the system to the public.

**Workstream 3 -** Generate management information.

**Workstream 4 -** Inform the public about system availability and system usage.

## **Main Considerations for the Council**

5. **Workstreams 1 and 3**, concerned with implementing performance management, have been completed and the performance of the system has been measured against the following two PIs since the project commenced at the beginning of June:

(i) **ESD063 - % sign clears acknowledged**

When a bus approaches a stop it establishes a local link via short range telemetry with the sign. The sign should then clear all information about the bus off its display and the acknowledgement is recorded by the system. The process involves virtually all the communication links on the sign and the bus and requires the system data to be correct.

(ii) **ESD064 - % active buses against bus workings**

The number of buses logged into the system can be expressed as a percentage of the total number of buses expected to be operating RTP1 services. In order for buses to be in an active state they must be fitted with working equipment, the driver must enter the correct information into the ticket machine at the start of the journey and the system data should be correct.

6. **Table** below shows the progress of the PIs since the start of the Project. The June figures represent the baseline against which future progress can be measured.

<b>Performance Indicator</b>	<b>June 2008 %</b>	<b>July 2008 %</b>	<b>Aug 2008 %</b>	<b>Sept 2008 %</b>	<b>Oct 2008 %</b>	<b>Nov 2008 %</b>	<b>Dec 2008 % (to 29<sup>th</sup> only)</b>
ESD063 % of sign clears acknowledged	62	63	67	64	50	63	74
ESD064 % of active buses against bus workings	47.9	59.4	67.8	66.0 W&D 70.6 First 41.5	64.3 W&D 70.8 First 26.1	64.1 W&D 71.7 First 18.8	66.6 W&D 73.5 First 22.2

**Notes:**

- The result for the % of active buses against bus workings has been broken down by operator since September but it is important to note that buses may be inactive for a number of different reasons and not all are the fault of the operator.
- Target percentage figures have not yet been developed. There are a number of legitimate reasons why the figures for both targets would not normally be 100%, but targets of 85-90% could be achievable towards the end of the project.

7. **Workstream 2**, concerned with improving performance against the performance indicators, is staged to allow for increased knowledge of the system and insights into the causes of the problems. At the end of each stage, plans for activity within the next stage will be agreed. Additional project tasks can be added into the Action Plan.
8. The Workstream is currently at Stage 2 and this caused performance deterioration around October due to a number of factors. The main reason was remedial works being carried out on the radio masts and the RTPI signs both during and following a major radio base station review. The system's developers and maintainers, Trapeze, employed Key Radio to undertake a review of the radio base stations at a cost to them of £6k. The review took place at the end of October for a period of nearly a week. Key Radio discovered significant issues and Trapeze has estimated that radio problems have probably caused about 75% of the RTPI system problems experienced.
9. Problems were found at all the mast sites and most of the adjustments that were needed were made at the time of the review. As well as the radio mast problems, Key Radio also identified the following major issues:
  - The RTPI signs at stops were not set up correctly and this created serious communications problems between the signs and the buses.
  - A high percentage of the signs were suffering from signal receive problems. This had a detrimental impact on the sign's ability to function effectively and to receive new data, as successful overnight uploads of timetable change information require a very good signal.
  - Antennae at signs needed replacing and most signs needed to be retuned to work with the retuned masts.
  - Some of the newly installed buses in Salisbury and Bath needed retuning.
10. Trapeze has been carrying out an intensive programme of remedial work on the base stations, the signs and the buses. At the end of December, the following progress had been made:
  - **Radio Base Sites** – all the remedial work was completed, with the exception of the need to replace a component at one of the sites.
  - **Signs** – approximately 50% of the remedial work was completed. This work has already had a positive impact on the results to the PI ESD063 - % of sign clears acknowledged.
  - **Buses** - some remedial work has been carried out. A more detailed review of the performance of the radios on the Wilts & Dorset buses will be carried out by one of the inspectors between Christmas and the New Year.

### **Environmental Impact of the Proposal**

11. Maintaining public confidence in the system is important in order to encourage people to make journeys by bus instead of car as envisaged in the Salisbury Transport Plan.

## **Risk Assessment**

12. The following risks have been identified:
- (i) Following the remedial radio work included in Stage 2 of Workstream 2, there may still be minor radio coverage problems affecting some geographical areas. Radio coverage of the overall operational area has been determined to be good, but there may be individual locations where the reception is sufficiently below the general standard to affect operations.
  - (ii) Funding may not be available for a replacement component at one of the radio base stations. It is unclear at the moment whether Trapeze will be asking the Council for a contribution to the cost of this component.
  - (iii) Effective working along the route of the 264 and 265 services is reliant upon First Somerset and Avon using RTPI fitted vehicles at all times. First Somerset and Avon has recently finished building its new refuelling facility at Westbury and has advised the Council that this facility will allow it to keep RTPI fitted vehicles on the route at all times. Written commitment to this is awaited.

## **Financial Implications**

13. The cost of the radio review by Key Radio and the remedial work by Trapeze is being met by Trapeze as part of its responsibilities under the maintenance contract. This represents a substantial commitment of resources by Trapeze that has happened because of the Council's commitment to improving performance with a dedicated Manager.

## **Legal Implications**

14. The work is being carried out under the existing maintenance contract so there are no legal implications to be considered.

## **Options Considered**

15. The possibility of abandoning the RTPI system would result in very substantial financial costs to the Council as a result of its contractual obligations to the bus companies who are partners in the RTPI system. It would also lead to the loss of a potentially valuable resource to the travelling public.
16. The alternative course of pursuing improvement by legal measures against the contractor, Trapeze, is by no means certain of success. This would result in the loss of the good will that is evident from the work carried out to further the project by Trapeze and also by the bus operators.

## **Reasons for Proposal**

17. The approach taken in the Improvement Project is beginning to show benefits. The radio review uncovered the main reasons for poor performance. The recent remedial work is beginning to improve the performance against the PI ESD063 - % sign clears acknowledged. It is expected that the project approach outlined above will continue to result in improving RTPI performance and good system management.

## **Proposal**

18. That:

- (i) The Real Time Passenger Information Improvement Project continues to its next stage in order that the system is able to work effectively and the public gain confidence in Real Time Passenger Information and the bus services.
- (ii) A further report be presented to the Committee at the completion of Stage 2 of Workstream 2, which is scheduled for May 2009.

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**The following unpublished documents have been relied on in the preparation of this Report:**

End of Stage 1 Project Report

Summary of Wiltshire RTPi radio issues found by Key Radio

Summary of RTPi contractual agreements prepared 4<sup>th</sup> September 2008