Committee report

SPT

Real Time Passenger Information (RTPI) System – Contract Awards

Committee   Operations

Date of meeting   22 January 2016   **Date of report**   08 January 2016

Report by Assistant Chief Executive (Operations)

1.   Object of report

To recommend the Committee approve:

- the award of the contract for Real Time Passenger Information (RTPI) System Lot 1 – Central System to Trapeze Group UK Limited; and;

- the award of the contract for Real Time Passenger Information (RTPI) System Lot 2 – Content Management System and RTPI Display Maintenance to Vix Technology Ltd

2.   Background

Members may be aware that SPT has supported the Real Time Passenger Information (RTPI) systems currently operating in Glasgow and Ayrshire. The focus of these systems is to disseminate accurate and up to date information to bus users and support delivery of bus priority at traffic signals, in line with the Regional Transport Strategy outcomes. Moreover, there has been resurgence in demand for RTPI at bus stops and increasingly via smartphones, following advances in RTPI system technologies.

The Glasgow BIAS system encompasses circa 300 RTPI displays located across Greater Glasgow. The system also supports a further 30 RTPI screens installed by Glasgow City Council at stops on the Fastlink route. The 11 year old BIAS and RTPI service expired at end of December 2015 and as the system decommissioning progresses the existing BIAS displays are now showing scheduled information only and not real time. Examples of RTPI signs are included for reference in Appendix 1.

In addition, members may recall that in 2011 SPT provided capital support for the introduction of the Ayrshire RTPI system, a joint initiative between SPT, East Ayrshire Council, North Ayrshire Council, South Ayrshire Council and Stagecoach. The Ayrshire system incorporates around 120 electronic RTPI displays located at bus stops on key corridors throughout Ayrshire, again with the contract scheduled to expire in May 2016.

Noting the above and following advances in communications technology, falling data costs and the growing deployment of bus ticket machines with integrated tracking, SPT

reviewed the merits of a regional RTPI system, potentially incorporating the Fastlink, Glasgow and Ayrshire RTPI signs and offering wider deployment.

The review identified that such regional approaches were common across the UK, with opportunities for efficiency and better outcomes for the travelling public in terms of higher quality information provision and greater consistency for journeys across local authority boundaries.

In August 2015, tenders for a Real Time Passenger Information System, to be made available to all 12 local authorities in Strathclyde, were advertised Europe wide by SPT via the OJEU process. Part funding for the RTPI system was identified via the Fastlink project.

3.   **Outline of proposals**

Scope of Works

In terms of system functionality, key requirements of modern RTPI systems typically include the following:

• Designed to operate using available industry open data standards;

• Collection and validation of timetable information from bus operators;

• Receipt of real time vehicle locations from bus operators;

• Generate and provide predictions of bus arrival times to the public at stops via displays;

• Provide a Content Management System (CMS) to format and deliver information to different types of displays;

• Maintenance of real time information displays;

• Provide an Open Data Interface to distribute real time information to other parties, such as Traveline Scotland and NHS, for websites, third party systems (e.g. public transport information displays at QEU Hospital) and mobile apps;

• Support bus priority at traffic signals;

• Provide reporting tools to support management of the real time service.

Procurement Approach

Procurement has been taken forward in 2 Lots that in conjunction will deliver the functions outlined above.

The rationale for procuring 2 separate lots recognises the different specialisms required across the project - Lot 1 provides and supports the specialised RTPI software that forms the core of the system and Lot 2 provides the services to manage and maintain the real time bus information displays at bus stops throughout the Strathclyde area. (see Appendix 2). This modular approach takes advantage of established industry standards

and is increasingly becoming the normal UK practice to achieve best value when procuring large RTPI systems.

The advertisement notice for the Real Time Passenger Information (RTPI) System Lot 1 – Central System and Lot 2 – Content Management System and RTPI Display Maintenance issued via OJEU on 7 August 2015, intimated that through an open tendering exercise, bidders would be considered via a 2 stage process comprising a Selection Stage and a subsequent Award Stage. The use of the 2 stage process ensured that only tenderers who provided satisfactory evidence of their capability progressed to the Award stage and permitted the tenders to be evaluated on a 60/40 Price/Quality basis.

In the tender evaluation Selection Stage, tenderers were not further considered if they failed to meet the minimum standards and levels required. For Lot 1, 7 tenders were received, and following initial assessment 3 failed to meet the minimum standard and 4 progressed to the tender evaluation Award Stage.

For Lot 2, 6 tenders were received and all progressed to the tender evaluation Award Stage following initial assessment.

Those Tenderers which progressed to tender evaluation Award Stage were evaluated on a 60/40 Price/Quality basis to determine the Most Economically Advantageous Tender – MEAT for each Lot. The evaluation was based on the tenderers' rates for implementation of the system and subsequent hosting and operation applied to a fixed scenario which represents SPT's estimate of potential deployment of the system over a 5 year period.

The implementation scenario for Lot 2 includes the provision of spare displays and parts to maintain the required system service level. To reflect this equality across all tenders the spares element of the Lot 2 scenario was equalised at £50,000 for all tenderers.

A summary of the scenarios are shown below.

TENDER EVALUATION SCENARIOS						
	Implementation	2016/17	2017/18	2018/19	2019/20	2020/21
LOT 1		Year 1	Year 2	Year 3	Year 4	Year 5
System set-up	1					
Total bus operators	2	4	8	12	16	20
Total quantity of buses	N/A	1500	2000	2100	2250	2300
Total Open Data capacity	1Gb	1 Gb	1Gb	4Gb	4Gb	4Gb

LOT 2		Year 1	Year 2	Year 3	Year 4	Year 5
CMS system set-up	1					
Convert existing displays	Fastlink + GCC	Ayrshire				
Maintenance service set up	1					
Provision of Spares	£50,000					
Total maintained displays	N/A	500	550	580	610	640

The tender price evaluated was the combined total of implementation and operating costs over a 5 year period. An optional discounted alternative payment profile was also sought and evaluated using the same methodology, whilst reserving SPT's right to not accept any option.

The contract period for both Lots is 5 years, with options to extend up to 10 years. The prices are fixed for the first 5 years with prices for any extended years being subject to change in line with the Consumer Price Index from year 6.

Lot 1 - Central System

The specification of Lot 1 is for a system solution externally hosted by the supplier which will provide the following core functions for use by SPT:

• Data collection from bus operators – i.e. bus schedule and vehicle location;

• Generation and provision of at stop predictions for provision in the industry standard SIRI SM format;

• Open data interface to make the system information available to Subscribers/Requestors such as Traveline;

• Traffic light priority location management and request fulfilment;

• Reporting tools.

The following table outlines the Lot 1 tender assessment results:

Lot 1					
Supplier	Quality score out of 40	Tender value	Price score Out of 60	Total Score	Rank
Trapeze	40.00	£471,869	55.90	95.90	1
Nimbus	30.74	£439,610	60.00	90.74	2
Vix	30.23	£823,650	32.02	62.25	3
Idox Cloud Amber	25.14	£1,040,000	25.36	50.50	4

In addition, a number of optional payment profiles were received for Lot 1. Following consideration, in terms of budget availability and risk, these options were not taken forward.

From assessment of the Lot 1 tenders the offer from Trapeze Group UK Ltd achieves the highest total combined price / quality score and provides the most economically advantageous tender for Lot 1 at a tender value of up to £471,869, which comprises £151,189 capital implementation costs and £320,680 revenue operating costs over the 5 year period.

Lot 2 - Content Management System and RTPI Display Maintenance

The specification of Lot 2 includes the following requirements:

- Provision and external hosting of the Content Management System;

- Integration of the Content Management System with the Central System provided by the Lot 1 Supplier;

- Conversion of existing Glasgow displays (circa 300) that communicate via Private Mobile Radio to GPRS communications compatible with the Content Management System;

- Integration of existing GPRS Fastlink, Glasgow and Ayrshire displays with the Content Management System;

- Provide transition support from existing systems to the new one;

- Provide maintenance and support services on the Content Management System, existing displays and new installed displays across Strathclyde for the contract period.

The following table outlines the Lot 2 tender assessment results:

Supplier	Quality score out of 40	Tender value	Price score out of 60	Total Score	Rank
Vix	33.41	£1,110,207	57.39	90.80	1
RSL	28.72	£1,061,970	60	88.72	2
Nimbus	33.74	£1,572,040	40.53	74.27	3
Cubic	40.00	£2,721,884	23.41	63.41	4
Idox Cloud Amber	24.80	£2,169,850	29.37	54.17	5
JMW	25.59	£2,540,269	25.08	50.67	6

In addition, a number of option payment profiles were received for Lot 2. Following consideration, in terms of budget availability and risk, these options were not taken forward.

Following assessment of the tenders, the offer from Vix Technology Ltd achieves the highest total combined price / quality score and provides the most economically advantageous tender for Lot 2 at a tender value of up to £1,110,207 which comprises £399,758 capital implementation costs and £710,449 revenue operating cost over the 5 year period.

Bus Operator inputs

Alongside the RTPI procurement exercise views were sought from local bus operators on the proposals and on their plans for deployment of Electronic Ticket Machines (ETM) with Automatic Vehicle Tracking (AVL) – a key input to any RTPI system. Feedback confirmed that some operators had already completed fleet wide deployment of ETM's with integrated AVL (e.g. Glasgow City Bus & Stagecoach Western) and that others were in various stages of planning for deployment in 2016 (e.g. First Glasgow and McGill's).

Furthermore, it was recognised that a successful RTPI scheme requires support and commitment from local operators in terms of provision of AVL data and schedules. A number of operators are already committed through participation in the existing Glasgow and Ayrshire RTPI systems. Further commitment has also been secured within the requirements of the Fastlink SQP and will be a requirement for all future SQP's going forward.

Generally, local bus operators are supportive of the regional RTPI system approach and are keen to work in partnership with SPT. SPT will move to establish data sharing agreements with local bus operators for operation with the SPT RTPI system in due course.

Local Authority participation

Views were also sought from local authorities on the proposals and their plans for deployment of RTPI displays. It was confirmed that demand for a system exists and the benefits to the travelling public are clearly recognised. The RTPI system outputs will be made available to all 12 local authorities in Strathclyde, Traveline, appropriate third parties e.g. NHS; shopping centres and SPT managed bus stations and interchanges.

Deployment and ownership of RTPI displays will remain the responsibility of Local Authorities, with SPT providing RTPI information and maintenance support on an agency basis, subject to agreement between SPT and participating local authorities. For example, this would also support current commitments for RTPI deployment on the island of Arran and in Paisley as part of the bus facilities project, subject to approvals.

In relation to the initial system implementation, a 5 year agency agreement has been developed between SPT and GCC for the maintenance and operation of RTPI displays. Significant cost efficiencies and quality improvements are envisaged through the regional RTPI system approach.
Budget for maintenance and operation of the Glasgow RTPI displays will be provided by GCC, subject to approvals. Any award of contract is conditional on the finalisation of the above agreement between GCC and SPT.

Similar discussions are underway in relation to the Ayrshire RTPI system. SPT look forward to further discussions with other local authorities on the deployment and dissemination of RTPI in due course.

4.   Conclusion

Following conclusion of the tender process for the Real Time Passenger Information (RTPI) System Lot 1 – Central System, it is concluded that the Trapeze Group UK Ltd tender submission is the most economically advantageous.

Following conclusion of the tender process for the Real Time Passenger Information (RTPI) System Lot 2 – Content Management System and RTPI Display Maintenance, it is concluded that the Vix Technology Ltd tender submission is the most economically advantageous.

5.   Committee action

The Committee is recommended to:

- approve the award of contract for Real Time Passenger Information (RTPI) System Lot 1 – Central System to Trapeze Group UK Ltd with an estimated combined Capital and Revenue contract value of up to £471,869 over 5 years. The Capital element for 2015/16 and 2016/7 is up to £151,189 with an annual Revenue operating cost ranging from £52,112 up to £72,152 depending on the quantity of bus operators and local authorities connected to the system;

- approve the award of contract for Real Time Passenger Information (RTPI) System Lot 2 – Content Management System and RTPI Display Maintenance to Vix Technology Ltd with an estimated combined Capital and Revenue contract value of up to £1,110,207 over 5 years. The Capital element for 2015/16 and 2016/17 is up to £399,758 with an annual Revenue operating cost ranging from £136,609 up to £151,063 depending on the quantity of bus stop real time information displays connected to the system;

- note the award of contract for Lot 1 and Lot 2, and any future expansion, will be subject to conclusion of agency agreements with local authorities in respect of their associated maintenance costs.

It should be noted that the award of the contract[s] is subject to satisfaction of the requirements of the mandatory standstill period for EU advertised public sector contracts.

6.   Consequences

Policy consequences: *In line with Regional Transport Strategy.*

Legal consequences: *Contracts will be awarded in accordance with the terms and conditions of contract included in the tender documentation.*

Financial consequences: *Of the combined system capital implementation costs of £551,000, £502,000 is to be funded from the current Fastlink budget in 2015/16. A budget bid will be made to fund the remaining £49,000 of capital expenditure detailed within the paper in 2016/17. The award of the contract will be cost neutral from a revenue perspective as all maintenance costs will be funded by local authorities.*

Personnel consequences: *None.*

Equalities consequences: *None.*

Risk consequences: *None.*

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for further information please contact Gordon Dickson, Bus Development Manager on ext 3407

Range of Current RTPI Display Formats

Glasgow

Glasgow

Fastlink

Ayrshire

SPT RTPI System Schematic