PROJECT INITIATION DOCUMENT (PID)

Project Number:1724

Project Title: Real Time Information Refresh

Release (Draft/Final)	Final
Version Number	2.0
Date	21.05.2012
Project Manager	Richard Cooke
Project Sponsor	Paul Walker
Portfolio	Transport and Environment
Directorate	Economic Development
Division	Planning and Sustainability

The appropriate approval must be obtained before for the PID is registered on SharePoint. Please refer to the Gateway Approval process for Gold & Silver projects.

Project Type	Silver
Approved by	

1 PROJECT OUTLINE

This updated G3 outlines the requirement to implement the Real Time Information Refresh project now that a contract has been awarded to JMW Systems Ltd. Approval to spend the allocated funds was subject to the estimated cashable benefits being met. As section 10.3 details, the contract now in place with JMW Systems Ltd facilitates this.

Further to this an SLA is now in place with Go South Coast – one of the major bus operators within Southampton.

Historic Project Outline:

There is a requirement to refresh the existing Real Time Information (RTI) system in order to improve service and significantly reduce revenue costs. Due to the advancement of technology and a more competitive market, systems available now require less input in terms of staffing resources and also will be much cheaper to maintain than the incumbent system. OJEU Tender process has been completed and technical specification is finalised – successful Tenderer identified and cost savings can be achieved as per previous G3 document.

2 STRATEGIC FIT/CHANGE IMPERATIVES

Principal Aims:

Tick one or more of the following:

✓	**To improve efficiency** **Will significantly reduce revenue costs**
✓	**To support a Member led initiative** **Bus Punctuality Task Force (Cllr Fitzhenry)**
	To meet legal, statutory or policy requirements **ie: reasons unconnected with business performance**
	Included in the Corporate Improvement Plan
✓	**Included in a Business Plan** **LTP Commitment**

✓	**To be delivered with council partners**
✓	**Part of a Programme** **LSTF deliverable**

3 STAKEHOLDERS

3.1 Key Stakeholders

Stakeholder: Public Transport Users

Impact: Real Time Passenger Information available to bus users at bus shelters, key transport interchanges, the web and mobile applications. Improved end to end journey times due to bus priority delivered by implementation of new system

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Stakeholder: Commercial Bus Operators

Impact: Extensive fleet management will be available through hosted system. Improved end to end journey times due to bus priority delivered by implementation of new system. Availability of Refreshed RTI system will and development of mobile apps will improve ridership. Operators will contribute towards revenue costs and have agreed in principal to a Service Level Agreement

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Stakeholder: Local Authority (also made available to Hampshire County Council and Portsmouth City Council through joint procurement process)

Impact: Real Time Passenger Information available to bus users at bus shelters, key transport interchanges, the web and mobile applications. Improved end to end journey times due to bus priority delivered by implementation of new system.

Bus data will be available through the content management system which will be of strategic use to Transport Policy and ROMANSE. Availability of reliable citywide RTI will enable the development of mobile applications in partnership with the University.

3.2 Council Wards

Will the project significantly impact upon a particular Ward?

Real Time Information will be delivered citywide.

4 ESTIMATED TIMESCALES

Project Start Date: 01.02.2011 (commencement of scoping exercise)

Project End Date: 05.10.2012 (upon full system acceptance)

5 ESTIMATED TOTAL COST

£500,000

This figure is inclusive of tendering exercise and contingency

6 FUNDING

The capital outlay will be funded through the Integrated Transport element of the Local Transport Plan. £500,000 has been made available over a 2 year period. Section 106 funding has been identified to expand the system in subsequent years. Ongoing revenue will be covered by the reduced existing RTI maintenance budget.

6.1 Funding source

Funding has been allocated through the Integrated Transport element of the Local Transport Plan.

6.2 Internal resource requirements

	Estimated Number of Project Days
Capita Procurement	**15**
Legals	**15**
ROMANSE	**45**
Transport Policy	**90**

7 KEY ACTIONS

- Contract Award
- Joint design Exercise to take place with identified supplier
- Full System Acceptance Testing (FAT)
- Appoint Atkins as Technical Lead as per Option B of original agreement

8 KEY RISKS

- FAT is not completed before estimated project end date

9 OPTIONS APPRAISAL

9.1 Options Investigated

Option Description	Benefits	Costs	Risks
Switch off	Revenue saving as contracts expire	Reputational issues and negative publicity Bus not seen important contributor to change	Relationship with bus operators worsens System needed to facilitate bus priority and growth agenda – threatening journey time reliability which would need to be provided another way.
Do Nothing	System continues to be maintained but when components become life expired they are not replaced. High Revenue Cost Remains	Eventually system will have to be turned off due to obsolesce of component parts	Relationship with bus operators worsens System needed to facilitate bus priority and growth agenda – threatening journey time reliability which would need to be provided another way.
Do minimum	Opportunities for cost saving (e.g. smaller or lower	Eventually system will have to be turned off due to	System needed to facilitate bus priority and growth agenda –

	cost displays) taken up. No expansion unless extra capital and revenue funds secured	obsolesce of component parts & savings will be over a longer period of time	threatening journey time reliability which would need to be provided another way.
Refresh	Changed system architecture identifies migration path and revenue savings – places more emphasis on operators Will be available for all operators	Refreshed system needs to be implemented before existing system turned off. Significantly reduced revenue costs	New architecture will need to be proven Requires Operators to install smart ticket machines Roll out may be delayed due to issues outwith the project
Replacement by traditional system	Full replacement of system based on current architecture will have reduced revenue costs Should be available for all operators	May be more expensive that other options	Roll out may be delayed due to issues outwith the project Potential of limited operator involvement

9.2 Recommended Option

The recommended option is to procure the new system via the supplier identified through the OJEU procurement process. As is demonstrated within this document the revenue cost savings detailed at the scoping stage have been met and the successful Tenderer is fully compliant with the Council's procurement procedure and the technical specification. Procuring this system will allow a complete refresh of the existing system with options to expand on-street infrastructure. This will result in a better service for the bus user, bus

operator and Local Authority. Within the capital spend there will be made available new equipment to replace elements of the incumbent system which are near life expiry.

The scoring matrix found in appendix 18.6 (Instruction to Tender) demonstrates the methodology used to assess each supplier. The scoring panel consisted of 3 individuals with extensive industry experience (2 SCC staff and 1 technical consultant). It is the case that there were 5 compliant Tender bids and the scoring was as follows:

	FINAL TENDER SCORES				
	Demonstration Score (30%)	Bill of Quantities Score (50%)	Tender Return Score (20%)	Total %	
CLEVER DEVICES	26%	19%	20%	65%	4
CONNEXIONZ/HOGIA	30%	24%	20%	74%	2
JMW	20%	50%	20%	90%	1
TRAPEZE	22%	10%	20%	52%	5
VIX ACIS	22%	25%	20%	67%	3

The payment schedule (Appendix 18.7) has stipulated that only 5% of contract value is paid upon contract award. This is followed by a 30% payment upon delivery of system and equipment, 30% upon full Site Acceptance and a final 35% payment once the system has been running for 28 consecutive days. This measure has been put in place to guard against any potential exposure to risk the Authority may be subject to during the delivery stage of project.

Subject to:

a) SLA with Operator(s)

- at least one of the 2 main Southampton Bus Operators to sign SLA back to back with contract award.

b) Revenue cost savings achieved as per section 10.3

project objectives and measures

9.3 Quantity – how much will we do?

The system architecture is based on the functional modules illustrated in the list below:

- Real time Information Sign Infrastructure
- Bus Priority for Junctions
- Wireless communications Infrastructure
- Fixed Communications Infrastructure
- Operator Sub-system

- Local Authority Sub-system
- Bus Sub-system

It is the aspiration of SCC and the stakeholders that each bus operator is fully engaged with the management of their fleet and overall operational management information, with the benefits of the real time data, whilst the travelling public enjoy accurate travel information.

Smaller operators or operators with small fleets may not be able to justify an operator sub-system of their own. In these cases there will be one operator sub-system centrally operated to deal with the services of those smaller operators.

Due to the open nature of the proposed supplier's hosted system there will be an option for bus operators to manage their element of the system from any internet enabled device.

There will be one local authority hosted sub-system which will collate the real time information from each operator's sub-system into an integrated form suitable for delivery to the shared real time information signs.

The system shall have the capacity for expansion to the numerical scale as defined in the column headed below.

Equipment or Sub-system	Current	Future
Buses to be equipped	109	391
Real Time Information Signs	210	290
Junctions with Bus Priority	0	100
Bus Operator	2	20
Third Party Real Time Information Feeds - Incoming	0	30
Third Party Real Time Information Feeds - Outgoing	0	30

9.4 Service / Business Benefits

Bus User – More operators and services will be covered

SCC – Revenue Cost reduction, more functionality of system

Bus Operators – Improved, more intelligent priority

Business – easier flow of people throughout city making it better connected

9.5 Estimated Cashable benefits

Maintenance Costs can be reviewed in detail within the supplier's Bill of Quantities, attached as an appendix.

The annual maintenance cost for the renewed RTI system will be **free of charge** for the initial 12 month period. For the following 48 month period it will be charged at **£41,580 per annum**.

If SCC wishes to extend the contract further after the first 60 months then there are options to do so to a total of 120 months without the need to retender. The maintenance costs are not expected to rise unless more equipment is purchased as can be seen in the supplier's completed Bill of Quantities.

SCC currently pays **£159,500 per annum** towards maintaining their current RTPI system.

These figures exclude the 1FTE equivalent the system will no longer need to operate it – this has been identified in savings elsewhere as part of the future of ROMANSE work.

Invest to Save Period

Based on the accurate cost information outlined above it will take SCC between 4 and 5 years to recover the capital outlay for the new RTI system, with an estimated saving of *£117,920* per annum thereafter.

It should be noted that the ongoing maintenance cost of £159,500 is derived from 4 different contracts, all with different periods remaining, and therefore this figure will reduce as the contracts expire.

This achieves the initial project objective of reducing ongoing revenue costs significantly

9.6 Quality

The project will build on the current system in terms of supplying reliable information on street as well being fed to multi-media applications enabling better information.

The new system will assist the facilitation of bus priority on junctions improving journey time reliability

The system will provide predictions for real time applications from information provided by the operators

10 PROJECT KEY DRIVER

Criteria	**Weighted score** If all 3 criteria are of equal importance, allocate 33 points each for Time, Cost & Quality
TIME (see section 1.2 above)	20
COST (see Appendix 5.1 below)	50
QUALITY (see section 3.4 above)	30

10.1 Risk Quantification and Sensitivity Analysis

Risk	Risk Owner	Probability	Impact on project (H/M/L)	Timing	Mitigation
Financial pressures main system is turned off anyway	John Harvey	Medium	High	2012/2013 budget cycle	None – there is no system.
Operators do not install smartcard readers to vehicles	Paul Walker	Medium	High	By 03/13	Service Level Agreement as system is procured as part of QBP Go-Ahead have signed SLA
Technology is not proved	Paul Walker	Medium	High	By mid 2012	Develop specification with on proven technology
Operators do not sign Service Level Agreement	Paul Walker	Medium	Medium	By 03/13	Only proceed with those operators signed up and use of peer pressure through SHOBOA & TfSH

System does not save costs identified	Paul Walker	Low	High	By 03/13	Ensure spec if developed as has been worked too and keep grasp of costs and project creep.
Interface with CCTV/ROMANSE relocation	Paul Walker	Med	Med	10/12	Work in partnership with this project

11 APPENDIX 5.1 – PROJECT COSTS

12.1 Capital costs

Budget: £500,000	Year 1 Apr 2011 – Mar 31st 2012)	Year 2 (Apr 2012 – Mar 31st 2013)	Year 3 (Apr 2013 –	Subsequent years	Total

			Mar 31st 2014)	**total**	
Project Capital Costs					
Asset costs	£18,095	£343,805	£0	£0	£361,900
External fees (eg Capita, other partners or contractors)	£37,326.41	£27,000	£0	£0	£64,326.41
Internal SCC business fees	£11,000	£20,000	£0	£0	£31,000
Total capital costs	£66,421.41	£390,805	£0	£0	**£457,226.41**

Revenue costs

The annual maintenance cost for the renewed RTI system will be **free of charge** for the initial 12 month period. For the following 48 month period it will be charged at **£41,580 per annum**.

If SCC wishes to extend the contract further after the first 60 months then there are options to do so to a total of 120 months without the need to retender. The maintenance costs are not expected to rise unless more equipment is purchased as can be seen in the supplier's completed Bill of Quantities.

12.2 Project Resources

The total number of days required for the project by Council staff, Capita, other partners or contractors. This section is particularly important to complete when no budget is allocated to the project.

Days	Year 1	Year 2	Year 3		Total
Resource Days					
SCC staff –					
▪ Legal	10	0	0		10
▪ IT Client	0	0	0		0
▪ ROMANSE	60	20	15		95
▪ Transport Policy	90	40	40		170
Capita, other partners or contractors	30	20	0		50
Total Resources Days	190	80	55		**325**

12.3 Contingency

	£	Reason
Project Cost	457,226.41	Capital cost of Tendering Exercise and procurement of new system
Add contingency	42,773.59	Insert reason if more than 10%
TOTAL PROJECT COST	£500,000	

12 Project Definition

12.1 What is 'in' scope

The primary requirement is to put in-place a system which will deliver high quality real time passenger information across Southampton on a scale at least equivalent to the current system:

- Ability to automate the loading of data into the system using the TransXchange format;
- An architecture that enables multiple bus operators to manage their fleet and enter their own data whilst maintaining strict confidentiality between operators;
- Extensive and flexible reporting from the system to support fleet management and improvement of fleet operations, such as punctuality;
- Capacity for expansion of the system well beyond the current numbers of buses and signs, as defined in later sections of this document;
- Significantly lower revenue costs
- Further optional features may be added to the system depending on the costs and availability of funds, and at the discretion of the bus operators and SCC.

The proposed conceptual architecture is based on the functional modules illustrated in the list below:

- Bus Priority for Junctions
- Real time Information Sign Infrastructure
- GPRS / PMR Infrastructure
- Fixed Communications Infrastructure
- Operator Sub-system
- Local Authority Sub-system
- Bus Sub-system

It is the aspiration of SCC and the stakeholders that each bus operator is fully engaged with the management of their fleet and overall operational management information, with the benefits of the real time data, whilst the travelling public enjoy accurate travel information.

There are four distinct steps:

Step 1 – is to bring on board a new sub system to take the positioning data from the operators and to add the calculation of real time facility to a desired level of performance and reconfigure it to support the bus operator engagement now and in the future; and

Step 2 – is a 'menu' of additional functions, features and equipment which can be 'called-off' as and when required and when funding is available.

Step 3 - Decommission old system.

Step 4 - Additional items within the refreshed system, these would be detailed within the full specification.

12.2 What is 'out' of scope

- LSTF Smart card Project or products of
- Installation of Smartcard machines by operators
- Day to day operation of ROMANSE & RTI – Migration only.
- Long term future of ROMANSE

12.3 Project assumptions

- Identified supplier can deliver;
- That a service level agreement is made with operators for delivery as part of overarching Quality Bus Partnership;
- Facility can be procured though HSP or LTP Framework Contract or similar;
- That senior management and administration support the project;
- BSOG is given to operators encouraging migration to smartcard machines

12.4 Constraints

- Scheme planned that existing RTI system is turned off on or earlier than 31st March 2013 to allow migration and revenue savings;
- New system to be in operation by October 2012 in order to coincide with ROMANSE office move

12.5 Method of approach (if applicable)

- Procure system as outlined in the winning Tenderer's Tender Return document (as attached to appendix). Joint Design Phase to follow contract award.

12.6 Project Deliverables

Project Phase/Activity	Deliverable	Acceptance Criteria (if appropriate)	Due Date
Procure Consultants to develop specification	Specification	Client Approval	Late May 2011
OJEU	OJEU Advert		September 2011
Tender Process	Tender Docs	Client Approval	September 2011
Appoint contractor	Contract	Legal sign off (back to back with SLA signing)	May 2012
Mobilisation			June 2012
new sub system Development			May 2012
Operator Service Level Agreement	SLA	Legal Sign off (back to back with contract award)	May 2012
Sub System FAT	FAT Sign off	Client Approval	May 2012
Sub System Roll-Out	Buses on system		August. 2012
Sub System SAT	SAT sign off	Client Approval	October 2012
additional functions, features and equipment	To be agreed at JDE	Client Approval	Summer 2012
Decommission old system	System switched off	Client Approval	October 2012
Additional items	To be Agreed throughout	Client Approval	Summer 2012

13 Project Costs

13.1 Financial Profile of capital spend

	Q1	Q2	Q3	Q4	Total (£)
Financial Year 1 2011 - 2012	4,165.83	24,514.89	15,171.97	22,593	66,443
Financial Year 2 2012 – 2013	116,570	134,665	136,991	3,000	390,783

13.2 Financial Assessment

Assessment	£	Potential factors that could influence project costs
Optimistic	£445,000	Staff costs are less than expected
Pessimistic	£500,000	Staff costs are more than expected
Realistic	£457,226.41	As per costings detailed in the attached Bill of Quantities if staff costs are as predicted the total capital spend of this project including all work to date will be very close to £500,000. C718J.

14 Key Project Milestones

A full Project Plan should be attached as an Appendix.

No.	Milestone	Planned Date	Planned Spend *
1	Procure Consultants to develop specification	Late May 2011	£20,000
2	OJEU	November 2011	£46,000
3	Tender Process Complete	January 2012	£46,000
4	Appoint contractor	May 2012	£93,000
5	Mobilisation	June 2012	£206,000
6	new sub system Development	May 2012 onwards	£206,000
7	Operator Service Level Agreement (signed)	May 2012	£206,000
8	Sub System FAT	Sept 2012	340,000
9	Sub System Roll-Out	Sept 2012	340,000
10	Sub System SAT	October 2012	£457,000
11	additional functions, features and equipment	Late 2012	£457,000
12	Decommission old system	October 2012	£457,000

*Please state how much of the overall budget you plan to have spent at each project milestone.

15 Project Controls and Reporting

Describe the key project management roles in the table below. Attach an organisation chart if appropriate.

Project Board	Name	Accountable for:
Project Owner (Project Sponsor)	Paul Walker	Accountable to their member of the Management Board of Directors for the overall successful delivery of the project
Senior Supplier	Richard Cooke	Accountable to the Project Owner for ensuring the technical soundness of the project approach.
Senior User	Nic Burns	Accountable to the Project Owner for ensuring the needs of end users are met.

Project Team	Name	Accountable for:
Project Manager	Richard Cooke	Accountable to the Project Owner for the overall successful delivery of the project
Work Package Lead 1	Miles Robinson	Accountable to the Project Manager for the delivery of technical specification and delivery

16 Communication Plan

Stakeholder	Purpose of Communication	Medium	Who	When	Support Material	Comments
Passengers	• Information	• Notices & websites	PW/RC and Operators/Romanse	As system hits milestones		
Operators	• Project Work	• Meetings • Emails • Project Board Meetings	PW/RC/Romanse	Daily		
Passenger Focus	• Information	• Project Board Meetings	PW/RC/Romanse	Monthly	Highlight reports	
Highways	• Project Work	• Meetings • Emails • Project Board Meetings	PW/RC/Romanse	Daily		
Consultants	• Project Work	• Meetings • Emails • Project Meetings	PW/RC/Romanse	Daily		
Contractors	• Project Work	• Meetings • Emails • Project Meetings	PW/RC/Romanse	Daily		
Members	• Information	• Briefings and updates	PW/RC	Quarterly		

17 Appendices:

17.1 Project Plan

Attached

17.2 Risk Register

Attached

17.3 Winning Tenderers Bill of Quantities

Attached

17.4 Winning Tenderers Tender Return Document

Attached

17.5 Impact Assessments

Attached

17.6 Project Organisation

Project to be delivered through project board reporting to Bus Punctuality Task Force (BPTF):-

- First South Coast;
- Go-South Coast (Bluestar, Unilink and Wilts & Dorset);
- Black Velvet Travel (Representing independent operators in the City);
- Southampton City Council: Network Management
- Southampton City Council: Transport & Travel
- Southampton City Council: Portfolio Holder (Environment & Transport)
- Consultants to the Council;
- Supplier of the Systems (both emerging and former if not the same)