Smart and Integrated Ticketing Update

Purpose

1. To update on progress towards Smart and Integrated Ticketing for the West of England area.

Vision for Smart and Integrated Ticketing

2. Smart and integrated ticketing forms a core element of the vision within the Joint Local Transport Plan 3 (JLTP3) for a high quality public transport network. The ultimate goal is for a West of England wide, multi-operator, smart ticket that gives passengers free choice as to the form of public transport they take or operator they use and rewards them for regular use by charging the lowest price available for the journey they make. Achieving this goal would deliver reduced journey times and improved service reliability whilst enhancing the overall image of public transport. In turn this would significantly increase the attractiveness and use of public transport and contribute to sustained reduction in traffic congestion and carbon use.

3. Over the longer term such “tickets” could ideally be used for other transactions for public services including leisure uses.

Background

4. In order to achieve the vision various technology improvements are required. In late 2009 the Department for Transport made a grant award of £2.2m to progress smartcard initiatives in the West of England. The spending plans for this grant award were reported to the Joint Transport Executive Committee in February 2010 and these were subsequently endorsed by the Department for Transport (DfT). At the meeting on 18 March 2010 the Joint Transport Executive Committee approved the proposed governance, scope and objectives of the Integrated Transport Smartcard Organisation (ITSO) project.

5. At the inaugural meeting of the Smartcard Project Board in April 2010 it was recognised that the aspirations of the West of England authorities for smartcard initiatives could not be met simply through this initial DfT funded project. To date the emphasis has been on the necessary systems and equipment which form the building blocks of any future smart ticketing scheme, and this is where resources have been focused. However, the remit of the Programme Board includes wider transport smartcard initiatives as well as overseeing this initial project. Once this phase of work is completed the authorities will be better placed to understand a development path towards the JLTP3 vision.

Back Office System (HOPS) Delivery

6. The West of England authorities commissioned the ITSO Smartcard Back Office System (HOPS) from ACT Ltd and the contract is hosted with South
Gloucestershire Council. ITSO is the national standard for ticketing data exchange enabling multi-operator ticketing to be delivered. The HOPS has been ‘live’ for several months and West of England’s data migration from the Government’s temporary HOPS has been completed by ACT.

7. In September 2011 the authorities completed the legal contract with South West Smart Application Limited (SWSAL) for third party access to the HOPS and have refined their own support arrangements to ensure all external users are supported as required. The contract enables up to 30 users of the West of England HOPS, substantially improving the business case for local authorities and smaller operators to receive HOPS services in meeting the Government’s smart aspirations. This also saves the West of England authorities money as their own costs are shared.

8. To date, three major operators in the South West have gone live through the SW HOPS. These are Western Greyhound (Cornwall), Thamesdown Transport (Swindon) and Yellow Buses (Bournemouth).

9. A number of local authorities are still using ITSO Services Ltd for their HOPS. However, they have been given notice that this service will cease in 2012. These authorities have been made aware that the SW HOPS may be able to meet their future needs, and if any take up this offer it will serve to reduce the overall costs of the HOPS for existing users.

Card Management System (CMS) Delivery

10. The authorities have now also completed the legal contract with SWSAL for third party access to the Customer Management System (CMS) package. The CMS is the software which manages the individual cardholders’ data and integrating this with the HOPS will provide the authorities with detailed information on the operation of the English National Concessionary Travel Scheme (ENCTS). This will also control the Web access for new smartcard issuing. The authorities will use the CMS to manage data such as ENCTS and other planned smart product data e.g. Bath Rider. Again, the authorities are allowing additional South West authority and bus operator partners to pay to use the CMS, saving the authorities money.

11. The three authorities in the West of England who do not currently use the ACT CMS (S Gloucestershire, Bath & NE Somerset and N Somerset) have now committed to migrating their concessionary smartcard holder databases across from other proprietary CMS’s to the ACT CMS in order to take advantage of the future efficiency savings arising from a common shared CMS.

Electronic Ticket Machine (ETM) Procurement

12. Following an initial unsuccessful tender exercise, the authorities worked with SWSAL who undertook a re-tendering in July/August this year, following which a new Framework Contract was let with a single supplier, Ticketer. As a Framework Contract, any South West local authority or operator will be able to procure ETMs directly from the suppliers. Local bus operators have been offered the choice between a low-cost 5-year rental option or a grant of a lesser value toward the cost of ETMs from an alternative supplier if that better meets the needs of the operator.

13. Additionally, Bath & North East Somerset, on behalf of the authorities and in partnership with First, was successful in securing £400,000 from SWSAL to assist
with equipping a further 620 buses in the West of England area to ITSO operational ETMs. This will enable the delivery of new interoperable products in partnership with the University of Bath and the introduction of an E-Purse for the West of England. Delivery is underway and negotiations with First are in progress, with a target for completion of Spring 2012.

14. In parallel, work is ongoing to support the future conversion of the proprietary non-ITSO scheme operated by the University of the West of England (UWE), the University of Bristol on the U-Link network, Wessex Connect on their City Council contracts, and the City Council on its Portway and Long Ashton P&R services. Moving this scheme to an ITSO platform will enable this to interact with wider smartcard initiatives. The first priority is to create new unified multi journey and season ticket products for the all three of the P&R services by mid 2012. A key objective of this initiative is to significantly reduce peak hour transaction times by transferring the renewal and adding of value to these products off the bus onto the internet and on-site vending machines. Boarding times will also be significantly reduced by the replacement of ticket punching with smartcard reading.

15. SWSAL has been successful in securing Government funding through the Local Sustainable Transport Fund towards additional ticket machines, additional HOPS functionality and the extension of the E-purse throughout the South West, as well as to run pilot smartcard schemes with Community Rail and Community Transport providers. Work on these initiatives will be rolled out over the coming months.

First

16. First Bus is working with other partners in exploring the prospect of using contactless bank card technology for smart ticketing purposes. Currently this is being developed as Europay Mastercard Visa and is becoming a front-runner in terms of future technology. The technology would be “touch-in, touch-out” and allow capping of daily/weekly travel costs. There are a number of risks associated with this technology which are being examined.

17. First is also exploring a voluntary “Greater Bristol” multi-operator ticket and has held an initial meeting to gauge interest with other bus operators in the West of England area.

Summary

18. • Despite a challenging programme, and some slippage resulting from technical and organisational issues, the West of England authorities have now made the HOPS available to third party authorities.
• The authorities continue to work in partnership with SWSAL, ITSO and other stakeholders to ensure the delivery of a platform capable of sustaining a stable and affordable migration to ITSO throughout the South West.
• The ETM tender was re-issued by SWSAL, a new framework contract has been let between SWSAL and Ticketer and a contract formed between Bristol and Ticketer.
• The first ETMs have been ordered from Ticketer and all smaller operators in the West of England area have been approached and invited to take up the offer of new ETMs on low rental terms, or a grant towards ETMs from an alternative supplier. The authorities remain on track to equip the first tranche of operators within 2011.
The award of £400,000 is very welcome and will allow the authorities to deliver an E-Purse as a first step in wider smart ticketing towards the aspirations set out in the JLTP3.

**Conclusion on progress**

19. Significant progress has been made in recent months in establishing the operating conditions for smartcards to be developed and rolled out across the West of England. The authorities have worked closely together to deliver the back office capability and equip buses with the ticket machines required to meet the current Government standards for smartcard technology. A number of pilot initiatives are either already or soon to be in place which, whilst not delivering the complete vision for smart and integrated ticketing, do begin to establish a culture of cashless payment for public transport within the sub-region. By mid-2012 tens of thousands of people will be using cashless ticketing to purchase bus travel. The authorities are watching the development of new technologies closely with a view to determining the best course of action over the coming months, as well as encouraging all local operators towards constructive discussions on multi-operator ticketing.

**Environmental Impact Assessment**

20. Smart ticketing will increase the attractiveness of bus services and consequent modal shift from car to bus will improve air quality and reduce carbon emissions.

**Risk**

21. A risk assessment related to the delivery of the Smartcard Programme has been undertaken and this is managed through the Programme Board.

**Resources (financial and personnel)**

22. Aside from officer time, work to date on the smartcard programme has been funded through grant awards from the Department for Transport and SWSAL. Resources for wider smartcard activities will be identified as part of the project definition and initiation process through the agreed governance arrangements for the smartcard programme.

**Equalities Implications**

23. There are no specific implications arising from this report.

**Recommendation**

24. That Members note the progress towards the vision of smart and integrated ticketing and in particular the advantages of the SWSAL led approach to the provision of additional services alongside the HOPS.

**Appendices**

Appendix 1: Programme Plan
Local Government (Access to Information) Act 1985
Background Papers:
None
## Developing ITSO Smartcard Use in the West of England: Programme Plan

### a) Governance & Reporting
- **Tasks:**
  - Programme Board Meetings
  - Reporting to ITEC (E Monitoring Report, IDI Progress Report)
  - Regs to DT
  - Meetings of SWASAL
  - Budget Monitoring & Updating
  - Risk Register Monitoring & Updating
- **Status:**
  - PM
  - PM
  - PM
  - PM
  - PM
  - PM

### b) Technical Platform Programme
- **Tasks:**
  - Host Operate Processing System (HOPS)
    - Install and Configure HOPS
    - HOPS Line
    - Preparation and Migration of Existing UA Data from ITSO Services Ltd
    - Smartcard Card Registration Noted to AWS/HOPS
    - HOPS Launch Event
    - Acceptance Testing
    - Finalise HOPS Agreement between UA
    - HOPS Supplier Liaison & GIS Contact Support Activity
    - HOPS Available & promoted for wider Use
    - Action List & Worked Strategy Implemented
  - HOPS Reinforcement Modules
    - Complete Specification
    - Implementations
  - Continuance Management System (CMS)
    - Install, Configure & Test ACT OMS to UA Partners
    - Staff Training & CMS Law
    - Preparation and Migration of Existing UA Data
    - CMS Supplier Liaison & GIS Contact Support Activity
    - Smartcard Pieno POST Integration with CMS
    - Regular Report Outputs Defined & Set Up
    - Roll Out of Ticking & E-Purse Strategy Phases
  - OMS 1. Core Platform Products & E-Purse
    - Phase 1.1: Core Platform Products & E-Purse
    - Phase 2. Additional Ticking Products
  - ITSO Authority
    - ITSO Licences & Membership Documentation for UA Partners
    - ITSO Product Payments & Product Documentation for UA Partners
    - ITSO Technical Documentation for UA Partners
    - ITSO Technical Liaison with OPG & UA Partners
- **Status:**
  - TM
  - TM
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### c) On/Vehicle Roll Out Programme
- **Tasks:**
  - Original Electronic Ticket Machine / Depot Infrastructure Procurement
    - Meeting with Minor Operators to Access Requirements
    - Complete Original OGU Tender Specification
    - Original OGU Tender Process
    - Assessment & Award Phase
  - New Electronic Ticket Machine Procurement
    - Identify Minor Operators Requirements
    - New OGU Tender Specification
    - SWASAL OGU Tender Processes to completed Framework Award
    - Award & Contract Process
    - Bus Installation, Testing, FAT & DAT
    - CMS Integration Testing
    - CMS Product Testing
    - Equipment Maintenance & Ongoing OPG Contract Usage Activity
  - UME Migration
    - Migration plan agreed
    - UME scheme migration
- **Status:**
  - TM
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### d) Product Delivery Programme
- **Tasks:**
  - MultiModal Ticking & E-Purse Strategy
    - High Level Scoping Work
    - UA Discussions on Options
    - Produce Part 1: Bus / Rail / Ferry Ticking Strategy
    - Produce Part 2: Other Small Applications Strategy
    - Produce Part 3: E-Purse & Street Travel Rights Strategy
  - MultiModal Ticking & E-Purse PPE Delivery
    - PPE for Full Strategy (Parts 1, 2 & 3)
    - PPE Delivery
- **Status:**
  - PS
  - PS
  - PS
  - PS
  - PS
  - PS

### e) Efficiency Programme
- **Tasks:**
  - Finalise SWASAL Agreement for OPG / Authority HOPS and/or CMS Usage
  - Support SWASAL User Agreement for HOPS and/or CMS Usage
  - Work with SWASAL to Encourage Migration to Smart Systems
  - Support WML UA to Encourage Migration to Smart Systems
  - Support WML Area partners to Encourage Migration to Smart Systems
- **Status:**
  - PS
  - PS
  - PS
  - PS

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**PRM:** Programme Manager - Pat Davis  
**PS:** Project Support - Andrew Seabrooke / SWASAL / Similar  
**PM:** Project Manager - Peter Walker  
**TM:** Technical Manager - Ed Hopkins  
**TS:** Technical Support