

April 2008 Concessionary Travel Scheme:

Comments, Concerns, Observations, Questions and Recommendations from the SmartCard Networking Forum (SCNF) and LASSeO

The Local Authority Smartcard Standards e-Organisation (LASSeO) and the SmartCard Networking Forum (SCNF) have studied Bulletin no. 5 from the Department for Transport and have consulted their member stakeholder groups. As Chairs, we have been mandated to express a number of important concerns about the proposals. The membership and subject experts at the Wolverhampton workshops on 2nd May supported this submission.

The political imperative is well understood but many local authorities that are active in smart cards and their industry partners share doubts about the approach being taken. There is great concern that the proposals will distort the already fragile, but growing, citizen card market in England. The proposals could also result in a significant hiatus in the roll-out of citizen card schemes that are already underway and cause significant and costly reworking of schemes already in operation. It is these very schemes that have taken the risks and understand best the operation of smart cards in the hands of local authority residents.

Specifically, the enrolment, registration, data management and card production processes using card management systems (CMS) are well understood by our members. These processes are proposed in Bulletin 5 but not used currently for concessionary travel schemes by most TCAs and little consultation, to date, appears to have taken place with live scheme practitioners in England. With such a large national card issuance planned, we would expect experienced stakeholders involved in photo and smart card issuances to have been consulted. We strongly request DfT to address this by discussion with our two organisations.

A real opportunity to promote the cause of smart multi-application citizen cards will be missed unless some of the identified issues are addressed.

The SCNF and LASSeO together represent the widest community of local government interest in using entitlement card technology in the UK. Members have considerable and mature experience of a wide variety of implementations. They are responsible for maintaining and developing the outputs from the £5.5m invested in the ODPM-sponsored National Smart Card Project. They form the largest body representing local government interests in the field of smartcards and in specifications now widely adopted by the local government smartcard community.

We send an open invitation to talk to us in order to develop a technically correct and operationally robust rollout for April 2008. We are all excited by the proposition of having up to 10m English citizens holding smart cards funded by the taxpayer and can help to present this as an opportunity rather than a threat.

The opportunity for these cards to work reliably in concessionary travel and as service access tokens for residents and their local authority is unmissable. We trust that DfT will note this and work to enhance their credentials with the local government fraternity to achieve a win/win result. Without good co-operation, the risks of an unsuccessful 2008 concessionary card scheme rise substantially.

The following paper sets out the background to this response, the process that the organisations have carried out, a series of concerns, comments, questions and recommendations, and proposals for further discussion and engagement.

Mick Davies - Chair LASSeO
Geoff Doggett - Chair SCNF

7 May 2008

Background

The organisations

The Smart Card Networking Forum is run by Local Government to inspire the spread of excellent local authority smart card schemes. It represents the public sector across the UK and is the senior organisation working in this field being 6 years old and having run 16 major events with nearly 100 presentations. Membership and event participation is free to all public sector personnel involved in smart cards.

By bringing together everyone from interested beginners to experienced practitioners, SCNF helps councils:

- * Research smart card requirements
- * Understand the benefits to citizens
- * Identify total costs and savings
- * Design, set up and run a local scheme.
- * Learn from live projects and schemes
- * Enable best practice procurement

We share knowledge, enthusiasm and experience through the Forum's Members Directory, bulletin board, information-packed presentations, regular events, FAQs, useful links and workshops – with the support of leading experts from the commercial sector.

To date 694 individuals from 347 organisations have joined the Forum.

Full details at www.scnf.org.uk

LASSeO (the Local Authority Smartcard Standards e-Organisation) is the custodian of the specification output from the National Smartcard Project and is charged with maintaining the material in an up-to-date state. As a result of this, LASSeO has recently confirmed the Mifare 4k Smartcard Specification, already in substantial use throughout the local government area, along with specifications for additional services and for a Java-based citizen smartcard. This specification allows for the use of ITSO on a common card in a standard way if the authority requires it.

LASSeO working group activity has most recently been focussed upon those simple data elements that cause local authorities most difficulty in coming to a consensus position. LASSeO guidance on numbering, using finance sector National and International IINs, appended by a further 8 digits and an issue number, reflects and confirms the general pattern of current LA use and provides a basis for future interoperability.

Similarly, guidance has been developed for citizen naming based on current local government use of relevant British Standards.

Present activity is focussing on the use of appropriate British Standards for Addressing and the local government sponsored LLPG and NLPG facilities that all authorities use for internal addressing purposes.

LASSeO and SCNF, interested authorities and advisers have examined the detailed proposals outlined in Annex A to Bulletin 5 and offer detailed observations below.

Coming together

These two separate organisations have different emphases but recognised the need to come together to add weight to the needs of local government in the face of the proposed April 2008 Concessionary Travel project. By jointly presenting our constituents' concerns and needs we hope to improve the prospects of a successful implementation.

The Process undertaken

LASSeO and SCNF became individually aware of DfT Concessionary Travel Scheme Bulletin No. 5 through their membership and each organisation shared its knowledge with the other.

The SCNF commenced a bulletin board discussion using the SCNF website, engaging local authorities, suppliers, and others with a direct knowledge of Citizen Card schemes in the UK. This agenda was driven forward by LASSeO with particular reference to data definitions, interaction with ITSO, etc.

The ensuing material was presented to a LASSeO working group and subsequently to an SCNF Core Group meeting, where it was jointly agreed to focus a planned SCNF concessionary travel workshop to ensure that the workshop members were fully engaged in the issues arising (sometimes by implication) from DfT Bulletin 5. This afternoon workshop followed significant morning sessions on implementing ITSO in a local authority scheme, and the need for numbering, naming and addressing specifications to be based upon British standards.

In the event, the workshop was well attended with 28 participants covering 13 schemes/partnerships along with 10 suppliers. Detailed notes were made throughout the workshop and the SCNF and LASSeO were mandated to prepare and deliver a joint commentary on the proposals as outlined in Bulletin No.5 and to seek a meeting with the DfT.

In addition to this, further technical work has continued to support the concerns felt by the workshop.

Since the workshop contact has been made with the DfT who have encouraged this input.

General concerns

The workshop group understood the need to deliver new cards to eligible citizens by March 2008, but was unsure of how best this could be achieved. The project was thought to be very high risk and there was a general fear that any failure to deliver would be focussed back on the local government community.

There is a widespread feeling that the proposed timescales for ITSO involvement are unrealistic, particularly in the light of decisions that remain unmade, and a lack of understanding in local authorities of the implications of these decisions.

A common reaction from the assembled LA officers was that LAs were being asked to take urgent action to meet potentially under-funded, ill-defined or inappropriate specifications within definite timescales.

This prompted questions such as:

- When will key decisions be made?
- What is the funding basis (current cards issued, population over 60)?
- What level of funding is guaranteed for any early steps such as data gathering?
- Will cards be required to be smart initially and what are the implications if not?
- Would it be appropriate to deliberately set out to implement a flash card scheme in the short term (to meet the announced service deadline) allowing more time to plan and understand a smart card path?
- If smart, will the only solution be predicated on the ITSO model?
- "Stickering" London Freedom Passes (non-ITSO) and how these meet a national specification for bus driver flash card recognition?

There was a clearly expressed view that concessionary travel is one of a key set of services that should sit within a multi-function citizen card. It was felt that the DfT proposals had been developed for single use travel cards and that lip-service was being paid to multi-functionality as an afterthought. Clearly those authorities or partnerships already using smartcards for a variety of purposes have particular concerns. In general these authorities have or will use ITSO in a limited way for transport products. They realise that they could potentially use ITSO for a wider set of services but have made a decision not to do so. They are often using Mifare 4k technology to the national specification recommended by the NSCP and are using the bulk of the card for their own purposes outside of the ITSO environment. Many of them will want to continue to do this. They simply do not need the heavy ITSO infrastructure for many low level activities.

A lack of clarity of understanding around the ITSO environment prompted another series of concerns:

- Will this be one ITSO scheme or many (up to 291)?
- If many, how will the ITSO infrastructure cope with a sudden late and highly peaked demand for membership, accreditation, issuing operator IDs etc?
- What exactly is required to hold an "ITSO shell" on an authority's card?

- Will each participating authority require an ITSO HOPS?
- What would be required of those authorities who already have ITSO-based cards in circulation? Would these be required to abandon their present activity and re-issue cards?
- Who would be required to register, what would need to be accredited, etc.?
- What other obligations does ITSO membership infer?

These issues seem to suggest that a coming together of the present Concessionary travel authorities might make some sense in order to reduce the potential strain on the system. However, in many cases this will also require a significant time to deliver. Again, delivering a stopgap non-smart solution in the short term, issued by whatever arrangements are in place at present, would provide a window to negotiate new service delivery partnerships.

There was also an expressed concern that the whole ITSO environment might not be able to cope with such a sudden influx of active memberships and that legal/contractual/operational issues that have been dragging on for months might be repeated on a grand scale.

The promise that smart cards could provide long overdue auditing of concessionary travel usage – a universal requirement by TCAs to prevent user and operator fraud – will not be deliverable until DfT issue a policy and funding to provide suitable universal on-board readers. The PSSG has recently issued a paper requesting attention to this matter. DfT could, therefore, stand accused of promising an important business process without implementing or funding a solution.

Further areas of interest

There was a considerable interest in trying to ensure that this new application could be made available on existing platforms. This was particularly true where authorities were already using, or had plans to use, smart cards for non-concessionary travel purposes. There was a distinct reluctance to instigate a new database and the suggestion was made that the focus of the specification should be on interface data definitions and not on the back office system. It was reported that data mapping changes would not be allowed to be carried out “on the fly” as has been done in the past within the ITSO environment.

Authorities wished to manage the citizen account within a wider context and to group other concessions with travel. It was suggested that the needs of the elderly and those with disabilities must be factored into card design and it was unclear if this was the case.

It was considered vital that there should be an ability to read any card carrying the application and that data formats should reflect best and current practice.

There was a general concern about any additional infrastructure elements that might be required for the project and how these were to be identified and funded.

There was also a general concern about the availability of the graphical formats being proposed (some parties had access to this draft information whereas others had not), the extent of DfT guidance, the specification, management of space on the card, etc with a particular focus on standards.

Technical issues

As mentioned above, the basic approach was considered to be problematic.

It is not clear why it is necessary to specify the format and content of databases used to produce ITSO cards. There are already ITSO schemes around the country which are running quite smoothly using disparate Card Management Systems (CMS).

Producing ITSO cards requires adherence to the ITSO specification and the use of a certified ITSO personalisation POST. Most cards will therefore be produced by a small number of suitably equipped bureaux who require data to be sent to them in a specified format. For consistency therefore, it is only necessary to devise and publish an XML schema for the transmission of data to bureaux rather than insist on the content and structure of databases themselves.

The specifications for the database outlined in Bulletin 5 are largely based on the EN 1545 standard which was specifically designed for transport schemes. In general, local authority schemes have tried to follow the government strategy enshrined in the e-Government Interoperability Framework (e-GIF) which recommends use of the Government Data Standards Catalogue. The e-GIF also mandates the adoption of XML and the development of XML schemas as the cornerstone of the government's interoperability and integration strategy.

Local authority schemes require rigorous proof-checking and validation procedures as the basis of secure multi-service delivery. These features are therefore built into many of the Card Management Systems currently in use, and the proofs are stored along with citizen data in a central repository. If the DfT insists upon its own database requirements the outcome will be the development of hybrid systems where there is a CMS responsible for registering and holding citizen data, and a second parallel system for Concessionary Cardholders. Data will be stored twice, and in different formats, within these two systems. In such circumstances, an individual changing their address or providing a new photograph will result in two separate systems being updated with all the inherent inefficiency and opportunity for errors.

Local authorities are looking for new ways to deliver authority-wide efficiencies, as endorsed by the Gershon Efficiency Review (Releasing Resources for the Frontline: Independent Review of Public Sector Efficiency). Consolidation of databases is widely seen as one of the most practical ways in which authorities can provide more efficient and cost-effective service delivery.

Implementation of the DfT proposals for database form and content run counter to the strategic thinking of both central and local government and will be seen by all parties as a step backwards in the campaign to streamline service provision.

A number of specific detailed issues arising from the DfT proposals in Bulletin 5 have been considered and some initial observations are set out in Annex A to give an indication of areas for discussion.

Recommendations

- That DfT answer this submission and convene a meeting at the earliest opportunity with representatives of SCNF and LASSeO. It is expected 4-6 subject experts representing both local authority and technical interests could be provided.
- That serious consideration is given to modifying the advice given in Bulletin 5 to provide more accurate and relevant guidance to TCAs wishing to implement smart card schemes. That specific guidance is given to the ITSO issues raised in this submission.
- That DfT become an active sponsor member of SCNF (as ODPM and others have done during specific projects).
- That DfT supports LASSeO in development of acceptable specifications and standards work.

Annex A:

Initial observations on a number of specific technical issues

This annex is intended to provide an indication of a basis for discussion of technical issues.

The appended document: **Specification for the use of Mifare® 4K V2.2** reflects the output from the national project and underpins the majority of local government smartcard implementations using a Mifare® 4k base. It provides a good representation of card formats in use in local government schemes and facilitates co-existence with an ITSO application.

It is strongly suggested that wherever possible this format should be used.

Initial examination of Bulletin 5 gives rise to a number of issues and a few examples are set out below:

- The proposed "Date" format does not appear to follow international or ITSO standard formats.
- The most significant complexity in "Name" conventions is centred on the use of a display name field for those who are known by something other than forename followed by surname. It would be helpful to consider facilities to print this on the card.
- There are existing standards for gender: namely Male, Female, Unknown, and Unspecified. It would be helpful if these could be accommodated in data capture.
- Ethnic origin is an essential field for local authorities and should be collected as part of the basic data set
- Experience to date indicates that storing photographs as database associated files rather than objects in the database is a more risky approach

In addition to this, an exploration at a technical level of the implications of working within the ITSO specification compared with working alongside it would bring considerable benefit to the project and to the local authorities concerned.