Smart ticketing and smart cities: What does it look like from here?

Mick Davies is Chairman of the Local Authority Smartcard Standards Organisation (LASSeO), a Core Group Member of the Smartcard Networking Forum (SCNF), and joint-Interim Chairman of the new Smarter Services Alliance (SSA). Perhaps more importantly, Mick is also a concessionary travel card holder and frequent public transport and public service user. For *Eurotransport*, Mick takes a look at 'smartness' from the outside – rather than from within.

Smart ticketing has had almost as many false dawns as universal interoperable smartcard schemes and we are frequently led to believe that it will all be radically different tomorrow.

Smart ticketing initiatives are an essential element of smart cities. The Smart Cities & City Regions Partnership Programme from the Department for Transport (DfT) has work streams including delivering a national 'blueprint' for the delivery of smart ticketing and establishing effective collaboration mechanisms between the smart cities and smart ticketing fraternities to enable authorities to capitalise on the knowledge of those who have gone before.

So, smart ticketing is clearly part of a smart city infrastructure, but the transport industry seems to have put the idea of trying to work on multi-application cards to one side while they concentrate on their own smart ticketing issues. Fair enough, you might say, but even so, integrated, multi-operator and multi-modal ticketing seems as far from the finished article as ever. Has progress really been that slow? And if so, why?

It is not all doom and gloom and, although I have heard it suggested that we in the UK are running behind the rest of the world, we are making progress. We are up to our necks in project trials and pilots along with a number of proprietary schemes. Our history is such that, more often than not, the most ambitious schemes end up being scaled-back or kicked into the long grass. All too often, smart projects are championed by an individual and when they move on, doubtlessly buoyed by their success, their project is allowed to drift, rudderless, until it gradually sinks.

We are in danger of drowning in a sea of diversity. Each project brings something to the table but they are almost without fail either local (and therefore only understood by locals) or proprietary (and therefore only understood by a single provider's customers).

I suspect that most transport operators are quite comfortable with the prospect of running their own smart ticketing schemes but balk at the perceived overheads associated with true interoperability. This can be seen by the diversity of our constant stream of smart ticketing initiatives.

'Joe Public' has been marched up the hill of expectations over and over again while the industries concerned have concentrated on technology, the minutiae of franchises, contracts, specifications and structures, and (sometimes enlightened) self-interest. We really need to understand what this looks like to our customers before we can start to understand the benefits and perhaps justify the extra effort required.

Central Government is promoting the concept of smart or smarter cities through the relatively new Smart Cities Forum which first met in late-2013. Their website sets out a wide remit including the potential for businesses to plan efficient routes to transport goods, allowing local authorities to create effective public health services and providing the public with access to real-time data so they can plan their daily activities. The Technology Strategy Board is also investing significantly to create a future cities demonstrator in Glasgow which will show how new integrated services across health, transport, energy and public safety can improve the local economy and increase the quality of life.

We should not forget that we have a history here. The concept of 'smart cities' has certainly been floating around in EU circles for years – Southampton City and University announced that they were the UK's first Smart City in 2009 at the end of a three-year EU project and they are still in the business of using technology to provide smarter services. They were not alone in this project and serious attempts were made to create interoperable systems that could be easily adapted and adopted by others. This was all about providing card-based services and bridged the gap between campus transport and a variety of local services.

Another ever present in the smart services field is Bracknell Forest who were probably the first UK local authority to get seriously into the smartcard business and were the lead authority in the National Smart Card Project. Their e+ card covers all the usual local authority applications and includes libraries, leisure, local discounts, recycling rewards, proof-of-age, organ donors, and most recently a visa-based direct payments service. The only link between this very successful local authority scheme and transport is concessionary travel.

In the Transport corner, we have a wide range of ticketing schemes and, in terms of spread, I suppose we have to start with Oyster in London and the growing number of Oyster-like products popping up all over the place.

Across the country, we really are spoiled for choice. We have initiatives in Norfolk, Cambridgeshire, in the South West, Kent, and a host of other local and city schemes, sometimes led by local authorities. We have regional schemes aimed at wider geographical areas like the South East with the Flexible Ticketing programme (SEFT) which has significant public funding. We have many other ticketing schemes such as Metro in West Yorkshire, who have a large scheme under way to replace their Travelcard, Swift in Coventry which is expected to handle nearly all bus tickets by the end of 2014, The Nexus 'Pop' card from the North East that has links to student cards, an ITSO scheme in Oxford, plans to develop and extend schemes in Greater Manchester and Merseyside, and so on. We also have a host of Pay As You Go schemes – some of which are based on EMV.

I trust you get my point about the number and variety of schemes out there. In my view, if it isn't easy to use, it just isn't smart...so where does the customer figure in all this?

Some of these schemes include national products like ENCTS (the English National Concessionary Travel Scheme), but they mostly have a fiercely local or proprietary flavour. In general terms cards are not interoperable, and customers are left with a huge embarrassment potential. How can an outsider know what is expected of them when they contemplate boarding a bus in Boston or a tram in Tynemouth? Does their Metro card issued in West Yorkshire work on a bus in London? Do they 'tap-in' with it? Will the card reader give them the brush off? Should they 'tap-out' on a tram in Sheffield or Croydon? How up to speed are occasional Oyster users on the vagaries of that system? What happens if they 'tap-in/out' on the cross-over points between the Underground and the Overground? What happens if they don't?

Many otherwise confident travellers find themselves unsure as they are confronted with the variety of products and services when away from their home turf. The whole experience of smart ticketing leaves them smarting and I guess that is not what we are all aiming for.

Of course there are many technical and organisational challenges to be faced but they can only be overcome if we do face them – what seems to be lacking is a cohesive force that can bring all this stuff together. Let's hope that the Smart Cities Forum and the Smart Cities & City Regions Partnership Programme can provide the kind of leadership that we need.

Mick Davies has been in IT for over 40 years – firstly in the public sector and more recently as an independent consultant to the public sector. For the past 12 years Mick has concentrated on 'smart media' where he is well-known for promoting the interests of local government in e-services, e-inclusion, e-money and transport. Mick has been Chairman of LASSeO since its inception and is also Joint Chairman of the fledgling Smarter Services Alliance.