

COMMUNITY OVERVIEW AND SCRUTINY COMMITTEE

Committee Report

Public

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Title: **A COMPARISON OF LOCAL AUTHORITY 'SMART CARD' SCHEMES**

Report of: **Town Clerk and Chief Executive**

Report reference: **TC/66/02**

Summary:

This report draws together information on a number of 'smart card' schemes which have been developed by local authorities. From the details of these initiatives, some implications for 'smart cards' in Carlisle are drawn out.

Recommendations:

Members consider the report and give direction as to how the review can be concluded.

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1. INTRODUCTION

1.1 Following a presentation to the last committee meeting by John Littleton, chair of the North East Regional Smartcard Consortium, the Committee agreed that a comparison should be made of the North East scheme with the one initiated in Southampton. This report draws together information from the two schemes along with less detailed information from a range of other initiatives to illustrate possible future routes for Carlisle.

2. LOCAL AUTHORITY SMART CARD SCHEMES

1. Table 1 provides a detailed comparison of the smart card schemes in Southampton and the North East.
2. There are several other local authority smart card schemes of note:

○ Bracknell Forest

Bracknell Forest has been operating 'The Edge' SmartCard since the beginning of 2001 and is now at the beginning of a 5-year development programme. Around 2000 cards are currently in circulation in various pilot schemes, mostly in schools. Future plans include use in libraries, transport, leisure centres and as a proof of age card. The card will also be able to be used as an e-purse (to carry small amounts of money) – for example, to pay library fines. Bracknell Forest has adopted a long-term target of 75% of the student and adult population to be using the card. The contract signed with the main provider of the technology (BT) is worth around £3.3 million.

○ Hertfordshire

The 'Herts Smart' card is a travel-based smart card scheme which was under development since 1996 and started operating in 1997. By mid-1999, 30,000 cards were in circulation to those entitled to concessionary fares. To date, the card has only been used for public transport tickets and school meals. Future uses to be added during in the next few years include library cards, parking and leisure facilities.

Table 1: Comparative Information: Southampton and North East

	NorthEast Regional Smartcard Consortium	Southampton
Vision	Citizen-centric card for the region. Improved customer service and social advantages.	Single citizen card inte services across the city.
Timetable	<p>June 2002: Business plans and financial strategy</p> <p>July 2002: Procurement begins</p> <p>September 2003: Roll out of full scheme (1.75 million cards)</p> <p>'Centre of Excellence' to be set up to deal with future development.</p>	<p>Small-scale pilots started</p> <p>April 2002: 50,000 cards etc) rolled out.</p>
Functions	<p>Transport primarily.</p> <p>Other functions to be added by each local authority in the area as they see fit. These are likely to include identification and registration in schools, cashless catering and vending, building access control, library and leisure cards, e-voting, cashless car parking, local retail loyalty schemes, an electronic purse for socially inclusive banking facilities.</p>	<p>Wide range: bus service, libraries, leisure centres,</p> <p>To be added: retail loyalty, banking, buildings access</p> <p>To be explored: access planning, electronic voting, citizens from the local area card.</p>
Infrastructure	On-street and indoor public access points. Customer service points in local authority buildings.	<p>Plans to include portable</p> <p>Users will also be able to use phones and internet.</p>

Costs/Funding	Card free to user. Funding uncertain (estimated at £2million/year to provide 1.75 million cards) (50% anticipated from Government sources, the remainder from the private sector through sponsorship of the card surface)	Card free to user. European Union 5 th Framework scheme. Government's Pathfinder 3 years.
Private Sector Involvement	Transport operators on the Regional Steering Group.	Transport operators. The firms providing the technology etc.
Population/ Area Covered	Large (All local authorities in 4 sub-regions: Tyne and Wear, Northumberland, Durham and Tees Valley)	Relatively small: focused on specific areas
Pilot Details	Integrated travel and schools functions in 4 schools, February 2002	May 2001: first 300 card users November 2001: 3000 University card system: launched
Card Technology and Capacity*	Both contact card and hybrid cards being used in pilot.	MiFare Classic Contactless Transition to hybrid card

* There are four main types of 'smart card': (1) contactless card (2) contact card (3) hybrid card (both contactless and contact) but the two chips cannot 'talk' to each other and (4) combi card – as hybrid but the two can 'talk' to each other. There is, to date, no reliable combi card available.

o **Cornwall**

Cornwall's district, county and island councils are developing and piloting a multi-function smart card for 50,000 residents and visitors. The first cards are being distributed in Spring 2002. Initial coverage will include tourism, carparking, book borrowing, fare concessions, e-transaction authentication and age-limited counter sales. The project was awarded a little over £1 million by the Government and designated as a Pathfinder project.

o **Aberdeen**

This scheme started in March 1999 with 2 pilots, involving 3,500 card users. These pilots covered education, sports and amenities and library membership. Aberdeen won £2 million from the Scottish Modernising Government fund at the end of 2000 to roll out the pilot programme. The scheme is being expanded in the first few months of 2002 to school children and then older people as they renew their travel concession cards. It is planned that the card will be made available to all city residents (220,000) during the next 18 months. As the scheme is developed, it is intended that the card will be used for education (catering, registration), arts and recreation (leisure passes, libraries), transport (bus, taxi, park and ride) and retail (proof of age, loyalty).

o **Others**

In addition to the schemes detailed above, there are a number of local authorities in a similar position to Carlisle, either adopting a 'wait and see' approach or

tentatively considering trials. One instructive example is provided by Aylesbury Vale District Council who are "acting as a focal point in Buckinghamshire" and looking at co-ordinating with the other 4 councils in the county to use a single smart card.

2. COMMENTARY ON THE LOCAL AUTHORITY SMART CARD SCHEMES

1. There are a number of local authority smart card schemes, at various stages of development. Most have similar long-term aims, in that they are intended to provide a 'citizen-centric' card which provides access to many services.
2. It is apparent that the Southampton scheme is at a more advanced stage than the North East scheme – it started earlier and has been successful in attracting funding from the European Union. Southampton is also set to employ a more technologically advanced smart card than is being used in the North East.

3.3 Three key points emerge from the comparison of the various schemes:

- The need for a well-defined, 'captive' group for pilot purposes (often schools or universities) so that the progress of the scheme can be easily assessed;
- The need for one key function to define the initial purpose of the card;
- The need for a 'critical mass' of card-users – this brings economies of scale and is particularly important if the card is to be part-funded from the private sector.

3.4 As groundbreaking schemes, both Southampton and the North East could be considered to be relatively high-risk ventures. In particular, the meeting of future costs for both schemes is by no means certain – members will recall that John Littleton told the Committee that he was hopeful of gaining half the necessary funding (of £2 million/year) from Government sources and expected the remainder to come from sponsorship of the card surface. Clearly, this part of the funding will depend on a number of factors, not least the prevailing economic conditions.

4 CIVIL LIBERTIES

1. Members expressed concerns at the last meeting about the civil liberty implications of smart card schemes. Although all the schemes have clearly been designed so as to comply with the Data Protection Act, it is not clear that they have considered the broader implications of a fully developed smart card scheme. For the present, it is argued that the schemes are 'opt-in' and are aimed at improving services and are, therefore, unlikely to provoke major civil liberty concerns. However, it could be argued that a smart card which is to be used for travel, paying rent, council tax and gaining access to leisure facilities amounts to a *de facto* identification card for citizens of that area. By planning to introduce cards with relatively few uses and then incrementally add new ones, many of the local authority smart card schemes appear to be avoiding tackling directly the civil liberty questions.
2. However, it is clear that smart cards could provoke genuine civil liberty questions since any consideration of a national scheme invariably brings considerable opposition. For example, the recent introduction of smart ID cards for asylum seekers (January 2002), the floating of a smart card passport system and persistent rumours that the Government is considering introducing some form of ID cards for all citizens have all provoked protest from civil liberty groups. The implications of civil liberty concerns for local authority smart card development will be explored further in the final report.

5 IMPLICATIONS FOR CARLISLE

1. It is perhaps worth noting first that the existing smart card development schemes are found within medium-sized urban authorities or at a county-scale or larger. This can be taken to indicate that a sizeable 'critical mass' of population is required for a successful smart card scheme.

5.2 For geographical reasons, neither Southampton or the North East scheme can be considered to provide a simple, comparable model for Carlisle to examine in its consideration of smart cards. Whereas Carlisle forms a small city in a predominantly rural area, the North East scheme covers a large area which is relatively densely populated and the Southampton scheme serves a population twice that of Carlisle and aims to link with other nearby urban centres. Nevertheless, in broad terms, the North East scheme could be considered as a model if Carlisle were to pursue smart cards within a Cumbrian-wide framework whereas Southampton would be more useful as a starting point for a stand-alone Carlisle scheme. Of the other schemes operating, the Cornwall scheme may also be worth considering as a comparator for any Cumbrian scheme.

5.3 As Members are aware, current plans are for 12 000 –15 000 concessionary travel smart cards to be issued to Carlisle's pensioners and disabled residents during 2002/3. This is part of a county-wide initiative (excluding Allerdale) to introduce concessionary fares smart cards. The cards have capacity for one more use (eg Tullie Card) and this could be run as a pilot scheme. However, even with a successful pilot, it is not clear how the scheme could then be extended without significant resource implications. There are strong arguments that pilot schemes should only be operated where a scheme can be extended and scaled-up if the pilot proves to be successful. Given the development of the concessionary fares smart card scheme, it may be worth pursuing any smart card pilot scheme through a County network of authorities.

5.4 There are a number of development schemes for smart cards. It cannot, however, be argued that the technology, infrastructure or schemes themselves are mature. Further, it is possible that there will be some national smart card schemes – for example, there are plans to replace paper passports with smart cards, possibly during the next 5 years. The debate over ID cards has not yet been resolved but again, it is possible that a national system of ID cards could be introduced and that this would make use of smart card technology.

5.5 In taking a 'snap shot' of smart card developments for this report, it is clear that we are entering a period of rapid development in the technical potential of smart cards and, therefore, the policy uses to which they are put. But one of the most important conclusions to be made from considering local authority smart card schemes to date is that the funding required is significant and, in general, uncertain. In particular, the need for a significant proportion of funding to come from the private sector poses a considerable risk - if cities and areas with larger and more concentrated populations than Carlisle may encounter problems finding funding for their smart card schemes, it would seem to be a reasonable assumption that Carlisle itself could have still greater difficulties.

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