# THE FUTURE OF TICKETING IS TICKETY-BOO

# Rail ticketing systems are moving into the 21st century. Andrew Mourant looks at some of the latest developments

ost rail travellers experience frustration at having to queue at ticket offices. So it's not surprising that moves by train operators to introduce smart cards and fast ticketing are gathering momentum.

The Government is keen too. Talks about extending smart card usage are well advanced. A catalyst for this has been Transport for London (TfL), which pioneered the Oyster card, and which wants to extend the technology beyond London Underground. Already more than 2.6 million passengers currently use Oyster, making more than three million journeys daily. London mayor Ken Livingstone wants more converts and, as an incentive, TfL is offering some cheaper fares.

TfL says £18m is saved annually by people no longer queuing at ticket machines or gates – Oyster is simply placed on a card reader. There are savings, too, in reducing fraud through counterfeit protection and the ability to hot-list lost or stolen cards.

TfL's sales pitch is that Oyster can store three different travel cards and pre-pay (pay as you go travel); customers can top-up on-line or by phone; and stolen or lost registered cards can be stopped and the value transferred.

But as for extending Oyster to the national rail network, pre-pay is proving a sticking point. 'All train operators accept period travel cards on Oyster,' says Southern's business development manager John Oliver. 'What generally we can't accept is prepay.

'Most national rail stations don't have gates so passengers would have no effective way of making payment. It would be hugely expensive to install gates or validation software.'

Adds Oliver: 'Some years ago, TfL offered to buy the validation equipment if Southern would operate the system. We said we'd try it out on the Croydon-to-London route. We agreed on the price and equipment, but they pulled out.'

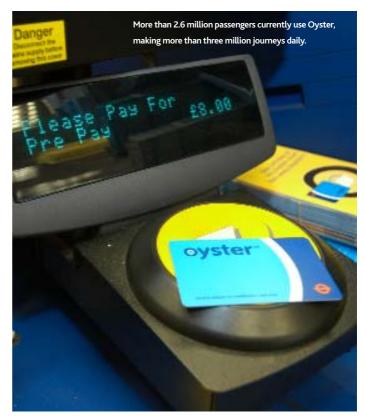
The Government is now involved in evaluating smart cards. Its goal is to have a uniform system within London and beyond, so people can travel on different modes of transport with one ticket. That's being discussed between TfL, the railway companies and the Department for Transport. 'Decisions are not far off,' says Oliver.

One obstacle is that Transys, which is responsible for the

'The Government is now involved in evaluating smart cards. Its goal is to have a uniform system within London and beyond so people can travel on different modes of transport with one ticket' maintenance and performance of ticketing systems on London Underground, owns intellectual property rights to Oyster technology. For Southern, that's an unattractive proposition. It would be happier dealing with ITSO, the Interoperable Transport Smartcard Organisation. ITSO was founded in 1998, following discussions between transport authorities about the lack of suitable standards for smartcard ticketing across the national network.

'ITSO would be publicly available, not dependent on private proprietary software,' says Oliver. 'The Government is considering spending money on converting the Oyster system to accept ITSO cards so that everyone could benefit. We might go with that.' Oyster was phased in over two years from September 2002, which 'ensured success from the outset', according to TfL. It hasn't been without teething troubles. For example, it proved too easy for travellers to walk through an open ticket barrier and forget to 'touch out', or leave without touching the magnetic sensor with their Oyster card. For this oversight, they were penalised by having to pay the maximum fare.

Some customers were also stung by the difference between Oyster season tickets and pre-pay – the first valid on national rail services; the second not. No doubt innocents hit by a fine would welcome seamless travel across the commuter belt.





# SMARTER SYSTEM AND SELF-SERVICE

S marter systems for booking clerks and self-service ticketing for customers have taken root across the UK. After 20 years Aptis, the all-purpose ticket issuing system, is being replaced by speedier systems such as Tribute, Shere SMART /FAST, machines from Scheidt and Bachmann, Fujitsu STAR, and FasTIS.

### TRIBUTE

Developed by British Rail, Tribute has been through several upgrades since it was first introduced in the late 1990s. Users of the system include 'one' railway, which in 2004 began running services on the Greater Anglia franchise.

'We've rolled out the latest version of Tribute in all our ticket offices over the last 18 months,' says 'one' spokesman Peter Meads. 'A major advantage is that it can issue all fares via the PC system.

'With Aptis you could only change data through overnight download. Because Tribute is PCbased, you can do it in real time – it's linked to a single system. 'one' has 65,000 fare flows alone. With Tribute you can also issue train times and seat reservations.'

### SHERE SMART/FAST

Guildford-based Shere includes GNER and Virgin Trains among its rail industry customers. Its SMART system is for use by staff and FAST is a self-service machine using chipand-PIN payment. 'Our controls lead to a lower level of fraud than in overthe-counter transactions,' says Neil Briscoe, Shere's managing director.

Chiltern Railways, another Shere customer, opted for SMART following a 20-week trial at Marylebone station in which the system went head to head with a similar machine from ASCOM. 'We made our decision based on feedback from customers along with staff and technical considerations,' says Keith White, commercial projects manager.

'It's now almost rolled out across the network. It has reduced queues and brought improved ticketing to stations that previously offered only simple product ranges.'

Last year, the first FAST selfservice chip and PIN ticket machines were introduced at Thameslink stations between Bedford and London. 'We had teething problems – things like card rejection – but these have been ironed out with new software,' says project manager Steve McGahren. 'The guide to using them is very straightforward. It takes only a few seconds to get a ticket.'

Shere has installed around 700 self-service machines across the rail network; sales growth more than doubled from 2002-04, rising from £2.1m to £4.4m.

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### SCHEIDT AND BACHMANN

Scheidt and Bachmann, a German company that has expanded rapidly in the UK and Ireland since 2001, is in head-to-head competition with Shere in the self-service ticket market.

The company has installed almost 500 machines and aims to double that next year. National Express Tocs are big customers. 'We can offer a standard Atoc interface that's being continually refined,' says Scheidt and Bachmann's UK representative, David Needham.

### FUJITSU STAR

Merseyrail was the first UK operator to complete the roll-out of STAR (Station Terminals for Advanced Rail Retailing), a ticket issuing system from Fujitsu Services.

Fujitsu has already sold around 1,000 terminals to six train operators. Merseyrail completed the roll-out of STAR in November last year, installing 76 ticket machines at 62 stations. The system is integrated with Rail Journey Information Service (RJIS) and connects to national rail administration and settlement services. It can support retail marketing initiatives such as discount vouchers to tourist attractions.

STAR is designed to cut paperwork so staff can focus on customer service. Support services include training, helpdesk and equipment support. Ingrid van Poelgeest, Merseyrail's customer services director, is a convert.

'There are huge advantages with nonlocal tickets and reservations,' she says. 'Sometimes staff spent ages looking through a huge timetable for the right train and fare. Now we can make up a lot of time. All our stations are linked up. Everyone can get information on things such as disruption or safety rules.'

### FASTIS

If Cubic Transportation Systems has lagged behind its competitors with this system, according to spokesman Matt McInnes that's intentional – it wanted to get the technology right and weigh up the opposition. Two train companies are trying out FasTIS but, says McInnes, 'we aren't at liberty to disclose who they are'.

He's optimistic FasTIS will make its mark. 'We've enduring relationships with the companies involved,' he said. FasTIS is a 'fundamental change' in process from APTIS, which CTS also supplied, designed so that a computer-literate clerk can learn how to use it in half a day.

He says one virtue is flexibility. At a busy commuter station where 90 per cent of early morning fares are returns to London, FasTIS can be set up to dispense tickets automatically with two presses of a button. Moreover it is designed for use within the TfL Oyster system.

It filters masses of data from RJIS into clearer, more user-friendly information and can store all fare tables locally so operators may issue tickets, should communication links fail.

### **AVANTIX MOBILE**

This replacement for Sportis does for conductors what other systems do for booking clerks. Developed by Blazepoint, Avantix is a small and lightweight machine that can also provide timetable information. It incorporates a thermal ticket printer and magnetic card reader for credit card transactions and ticket verification. It can produce either plain printed tickets or magnetic encoded tickets, where barrier control is in operation.

### THETRAINLINE.COM

Created in 1997 by Virgin to meet the growth in customer demand for rail services via telephone and internet, Thetrainline.com began selling online in early 1999.

It claims to give instant access to almost 300 million journey and fare combinations through all TOCs. Customers can see on-screen which fares are valid on which trains. It handles more than 150 million enquiries annually and accounts for 14 per cent of all inter-city ticket sales.