

# The TICKETING & REVENUE UPDATE

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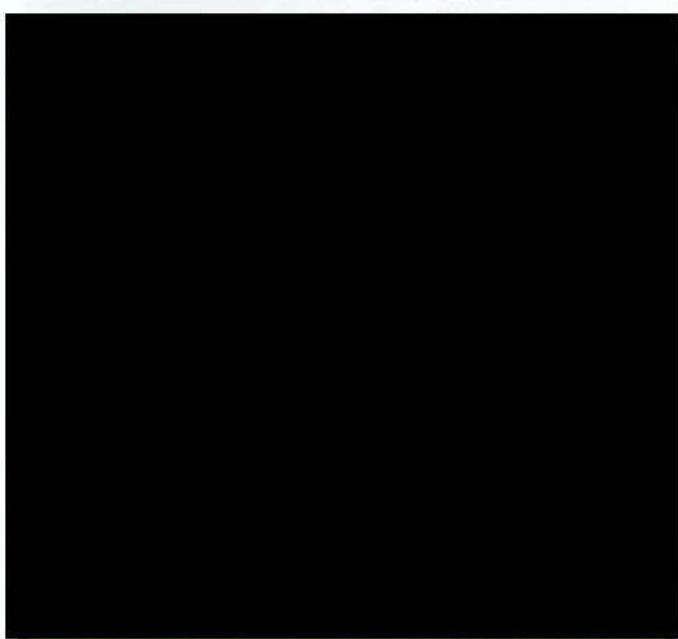
### PROJECT UPDATES

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### AND FINALLY

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## OYSTER CHARITY BOOST



Our partnership with Railway Children charity reached a new milestone recently, with the presentation of a cheque for the most recent proceeds of the Oyster Charity Box scheme.

Further details on the latest presentation appear on Pages 6 & 7 along with details on how our ongoing support is helping the charity perform such a vital role in the areas in which it works.

We also update you on some exciting news about the charity's application to have funds raised under this scheme matched under a Government initiative this autumn.



Looking ahead to September, the other main focuses of this month's edition is to preview the forthcoming Fares Revision and associated changes, which are scheduled to take place on Sunday 06 September.

More details on Pages 2-4.



AUGUST &



## KEY STORIES INSIDE

### Pages 2-4 September Fares Revision Preview

A Fares revision is scheduled for Sunday 06 September and will see a number of changes including withdrawal of cheque acceptance, changes to POM screens, Refund processes and Z1-9W PAYG, Day Travelcard and PAYG charges.

### Page 6 & 7 Helping Railway Children

An update on the Oyster card charity donation scheme, the work of the Railway Children charity and future fundraising activities.

### Page 8 FTA to RCC

We take a look at the implementation of the new contract for the maintenance and support of our ticketing equipment, which commenced on Monday 19 August and the new performance measures.

### Page 9 Day Travelcard Sales

We review the impact on Day Travelcard sales since the January Fares Revision price changes.

### Page 14 Cash Handling Contract Signed

The long procurement process concludes with the signing of a contract for the supply and maintenance of Cash Handling Devices on 02 September.

### Page 15 Night Tube Delayed

Although we provided some detailed information on Night Tube in TRU85, we provide news on a potential issue which may affect NR customers.

## ALSO IN THIS EDITION

TRIVIA – Pages 5, 9, 13 & 15      Answers on Page 19

## SEPTEMBER FARES REVISION



## WATFORD JUNCTION PRICE CHANGES

As is customary at the September fares revision, London Midland who set fares to and from Watford Junction will be revising some of their off peak prices, including the Reduced rate PAYG fare for Z1-9W journeys, the Z1-9W Day Travelcard (Off Peak) and the Off Peak Z1-9W PAYG cap.

Adult PAYG		Child PAYG		Day Travelcard (Off Peak)		Adult PAYG		Child PAYG	
Standard	Reduced	Standard	Reduced	Adult	Child	Daily Price cap Peak	Daily Price cap Off Peak	Peak	Off Peak
£9.20	£6.40	£4.60	£3.20	£17.20	£8.60	£22.40	£17.20	£11.20	£8.60

\*Prices that have changed are shown in red

The change to the PAYG fare to Watford Junction will also mean that the entry and exit charges at Watford Junction will also be increased. The revised prices are shown in the table below and are included in an updated version of T&R Book Appendix I.

## EARLIER DAY TRAVELCARDS

Several stations at the north end of the Metropolitan line have easements to the normal 09.30 start of the Off Peak period to take account of the fact that customers are permitted to travel on the last train departing before 09.30.

As part of the September Fares Revision changes POMs at the affected stations will be changed to allow customers to buy a Day Travelcard (Off Peak) before 09.30.

## PAYG TAKES YOU FURTHER

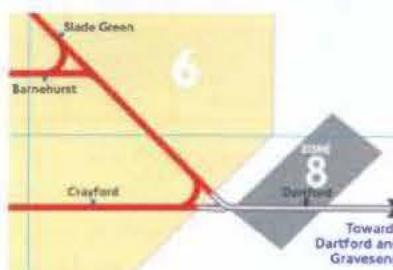
Hot on the heels of last month's announcement of the expansion of PAYG to SouthEastern's Highspeed 1 service between St Pancras International and Stratford International, the September Fares Revision will see a further expansion of PAYG availability, again on South Eastern.



From Sunday 06 September, PAYG will be accepted on SouthEastern services to and from Dartford, a station which is situated at the convergence of three separate routes from London.

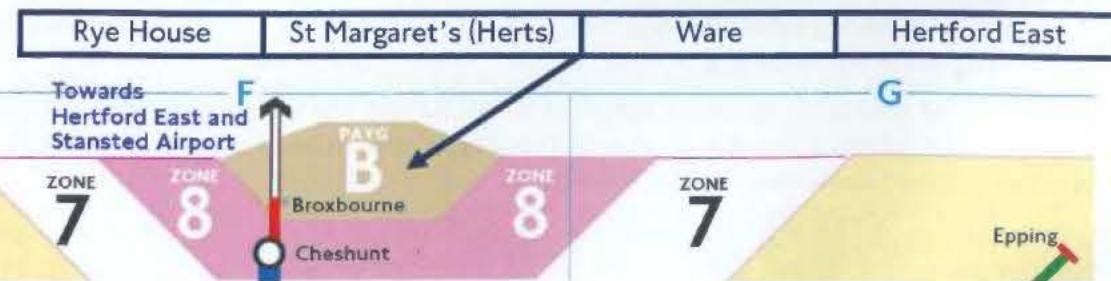
The station will be within Zone 8 (there are no stations within Zone 7 on these routes). Standard PAYG charging and capping rates will apply. Freedom Passes are already accepted on rail services to Dartford and on London Buses serving the town.

The change will be included in a further update to the PAYG map. The new edition (version 11) is now available on the T&R section of the intranet. [http://luintranet.tfl/static/documents/coo/Oyster\\_PAYG\\_map\\_v11.pdf](http://luintranet.tfl/static/documents/coo/Oyster_PAYG_map_v11.pdf)



The September Fares Revision will also include the loading of the fare tables to support testing and implementation of the expansion of PAYG to Abellio Greater Anglia services to Hertford East, currently scheduled for 19 October 2015.

This will see PAYG and Oyster Travelcard season tickets accepted at four further stations north of Broxbourne. These stations (listed below) will be in Zone B, the same zone as Broxbourne.

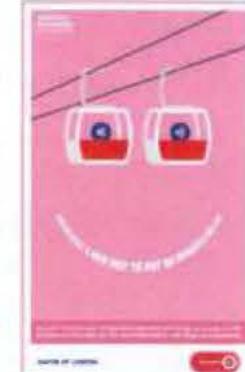


## EMIRATES AIRLINE

There have been two recent changes to ticketing arrangements on the Emirates Airline cable car service between North Greenwich and the Royal Docks.

From Friday 14 August customers can use contactless payment cards to pay for their cable car flight, in the same way as they have previously been able to use Oyster PAYG. Please note that the £3.40 PAYG fare is a non-standard charge and is outside of the Daily and Weekly capping arrangements.

The second change is that since Friday 31 July 2015 Young Visitor discount holders will receive a 50% discount on the standard Adult PAYG fare on the Emirates Airline.



## September 2015 TUESDAY 15 OYSTER AFLOAT!



As we reported in our July edition and following the recent reader upgrade, the planned changes to expand PAYG acceptance to River Services, have now been confirmed as going live on Tuesday 15 September 2015.

Full details of the three River zones and charges applicable were included in TRU 85. Please remember that PAYG journeys on River Services do not count towards Daily or Weekly caps.

## T&R BOOKS AND APPENDICES

As previously reported, for this fares revision we will not be reprinting any of the T&R Books, as the level of changes since the last reprint at the beginning of June has been relatively small.

We have recently introduced a new feature within the weekly Hot Issues Bulletin, to highlight changes that have been introduced, to help identify correct information, where sections of the T&R books have been superseded.

Although the actual books are not being reprinted, a majority of the T&R Book Appendices have recently been updated, with Appendix 1 and Appendix 5 being updated for the fares revision.

The current versions are available on the T&R section of the intranet, or via the link below.

[http://luintranet.tfl/ops\\_maintenance/service\\_support/oyster\\_tickets\\_revenue/611.html](http://luintranet.tfl/ops_maintenance/service_support/oyster_tickets_revenue/611.html)



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Part 1 - Continuing the theme of Oyster PAYG expansion, the planned PAYG extension to Hertford East in October includes St Margaret's (Herts), as distinct from the other St Margaret's on the SWT line between Richmond and Twickenham.



Answers on Page 19

Q1. Which other stations within the PAYG Zones also have a "twin" with the same name elsewhere?

## MANY HAPPY RETURNS!

### Oyster Charity Boxes provide a bumper return for Railway Children charity

Customers donating their unwanted Oyster cards at Heathrow, Liverpool Street and King's Cross, have helped us raise a significant amount of money to help the work undertaken by our nominated charity Railway Children.

The proceeds from cards deposited into the Oyster collection boxes over the last two and a half years, were recently presented to the charity during a cheque presentation at King's Cross.

The cheque for a total of £67,747.91 was presented to [REDACTED] of Railway Children by [REDACTED] from the LU T&R team whilst Dave was in London visiting some of the charity's other partners.

This amount follows previous donations in 2008, 2010 and 2013 and brings the total amount donated under this scheme to £138,523.40 since it was launched in November 2007.

#### THE KEY POINTS



- ▶ Scheme launched in November 2007
- ▶ 4 stations operate the scheme
- ▶ Oyster PAYG balance and card deposit refunded and donated to charity
- ▶ 29,000 cards donated by customers
- ▶ Average amount from each card donated = £4.74
- ▶ Total donated to date = £138,523

The breakdown of the amounts raised through each of the stations participating in the Oyster Charity box scheme since January 2013 are shown in the table below.

Station	Total cards	Average per card	Total donation
Heathrow T123 & T4	3468	£6.83	£23,740.27
King's Cross	4510	£5.57	£25,242.54
Liverpool Street	3568	£5.25	£18,765.10
Total	11546	£5.85	£67,747.91

In accepting our latest donations from the Oyster Card Charity scheme, [REDACTED] of Railway Children said,

*"It is the passion and support of individuals in organisations like London Underground, which really does help Railway Children to make a lasting difference in the lives of these children. We are incredibly grateful for the £68,000 raised this year - a record amount for the Oyster Card scheme - which will help to ensure Railway Children can continue to reach some of the world's most vulnerable children."*



On the page opposite, we provide some further information to illustrate how the money raised through initiatives such as the Oyster card donation scheme and overpayments on POMs, can really help the work of the charity.



[REDACTED] told TRU that "the ongoing support from LU and its staff over the last 7 years has helped Railway Children transform some of the world's busiest and most dangerous train stations, in India, East Africa, as well as here in the UK, to better protect vulnerable children who would be at risk from violent abuse and exploitation".

He added that "although this may seem to be a global problem, small actions really can make a big difference. Just 35p covers the cost of making an information card, carrying life-changing details about how help can be found when it is most needed, which we give to children and young people we believe are at risk of going missing. Family work helping parents and carers of young people who go missing to resolve their problems and make the child's home a safer place costs £20 per hour. An hour session being covered by the proceeds of 4 cards donated under the scheme. The same amount also provides a vulnerable young person with one-to-one support and helps them find somewhere safe to stay".

[REDACTED] also explained that "Since the charity's launch in 1995, Railway Children has helped 205,000 street children in India, more than 54,000 in East Africa, and 204,250 in the UK through its preventative education schools programme." Many people think there isn't an issue in the UK, but the problems that lead to children running away can affect anyone. An estimated 100,000 children run away in the UK every year. One such case is outlined in the case study below.

#### Chantelle's Story...

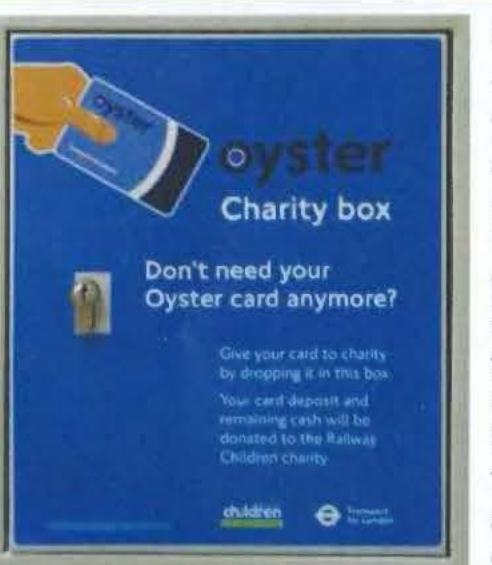
*When our outreach team first found Chantelle on the streets of London, she was just 17 and had already been homeless for over a month. When she ran out of friends' sofas to sleep on, she had no choice but to sleep rough. After the outreach team found Chantelle, they were able to gain her trust and encourage her to visit their centre where she told staff that she was fleeing sexual abuse from a family friend.*

*Chantelle was known to social services, who said they wanted her to return home as they had assessed her previously and decided that she was not in danger. But Chantelle did not want to go back. Staff at the centre were also concerned about the number of different young men she had been staying with while homeless and instead managed to find her a place in a night shelter and then a female-only hostel.*



*During this time, Chantelle started to regularly attend the centre, participating in one-to-one work on relationships and self-esteem, as well as group activities. She was also given support when she felt the time was right to make contact with her family and to help her to get back into education. Chantelle is now in safe accommodation, giving her the space she needs to start thinking in a much more positive way about her future.*

*There are many children and young people like Chantelle in London who run away or are forced to leave homes that have become unbearable through poverty, abuse, violence and neglect. The British Transport Police estimate they find at least 16 vulnerable children and young people on the streets of London every day. For some young people, the streets seem preferable to returning home. But reaching a child as soon as possible is crucial to getting to them before an abuser can.*



#### AND MORE TO COME...!!

That is not the end of our fundraising efforts. Further to our report in TRU84, Railway Children made a successful application under a scheme operated by the Department for International Development (DfID) to have funds raised under the scheme during the autumn, matched by DfID.

We are delighted to be able to confirm that the application has now been approved by DfID, so the proceeds of any cards donated over the three months between 23 October 2015 and 23 January 2016 will be matched by DfID, effectively doubling the value of every card donated by customers.

To support this campaign, we are looking to have posters and public address announcements at the stations concerned, to encourage customers to donate any Oyster cards they no longer need.

## FTA TO RCC - NEW CONTRACT STARTS

Monday 17 August 2015 saw the start of a new contract for the supply and maintenance of ticketing services, under what is known as the Revenue Collection Contract (RCC).



In previous editions of TRU, we reported on the retendering process under a project named Electra. The new contract which replaces the previous Future Ticketing Agreement (FTA) was awarded to our existing contractor Cubic Transportation Services last year.

The contract is for an initial period of 7 years, until 16 August 2022, with the option of a further 3 year extension to 2025.

One of the key elements of the new contract is a schedule which allocates devices into 'Validation' and 'Retail zones' within each station.

As a result, larger stations will be divided into multiple zones, so the impact of 2 gates being out of service on the same gateline, will have a much greater impact on Cubic's device availability performance, than when previously measured on the basis of a whole station, where the greater number of devices would dilute the impact.

The contractor can earn bonuses for exceeding performance targets and will be docked Service Credits where performance falls below certain levels.

Some of the key performance measures of the new contract are set out below.

Device Availability	Target	Bonus	Service credits deducted	Poor Performance
Each Validation zone	98.40%	>98.65%	<98.3%	<94.0%
Each Retail zone	98.40%	>98.65%	<98.3%	<94.0%
Previous target	98.25%	>98.5%	<98.15%	<93.0%
<b>7 Service bonuses per 0.2% above target</b>		<b>7 Service credits per 0.2% below target</b>	<b>50 Service credits deducted per instance</b>	

The contract also defines "Primary Events" as incidents where:

- 60% of POMs in a Retail Zone are unavailable
- Multiple Gates or PVals in a Validation Zone are unavailable and materially affecting customer flows
- A specified number of devices in a zone are unavailable.

Cubic have 4 hours to rectify such events, or face being deducted 6 Service Credits for the first additional hour and a further 3 credits for each hour or part of an hour after that.

## PVAL ISSUE LEADS TO SPIKE IN INCOMPLETE JOURNEYS



It has recently been noted that the number of incomplete PAYG journeys had increased significantly. Subsequent analysis seemed to indicate the bulk of this increase appeared to be amongst customers travelling to / from stations which have PVals rather than gates. The majority of these are NR or DLR stations.

The cause of this has now been traced to a condition that can occur on the PVal due to an internal communication failure between the reader (RTD) and the master module which it links to. This results in the display showing closed, but the amber light being illuminated on the RTD, indicating that validation is possible. This may lead to customers thinking that they have touched in or out, when no validation has actually taken place.

Now that the problem has been identified, Cubic are working to identify a fix. In the meantime, reports are being run to identify customers who may have potentially been overcharged, so that automatic refunds can be applied to their cards.

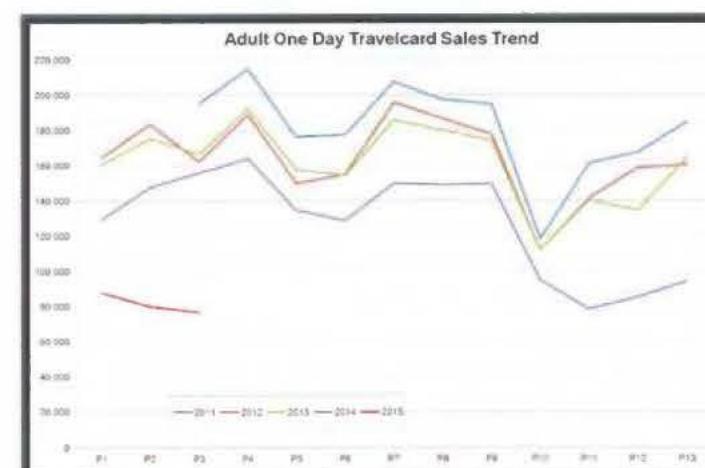
## DAY TRAVELCARD SALES DROP

In several previous editions of TRU we have reported on both the growth of Oyster and over the last year, the progressive growth in the number of journeys made using contactless payment.

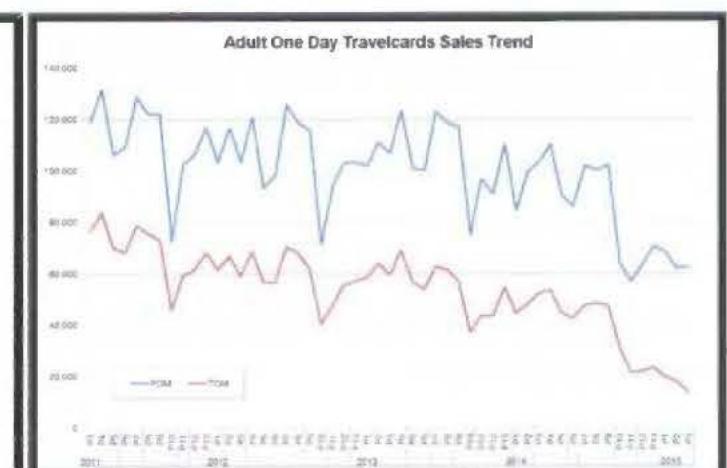
At the same time, since the January Fares Revision there has been a very marked drop in the number of Day Travelcards sold, other than a slight increase in Period 13 which coincided with Easter.

The trend in sales during 2015 compared with the last four years is shown in 'Graph A' below, with the 2015 sales (in red) considerably lower than previous years.

We have also included a second image 'Graph B', representing the split of Day Travelcard issues between POM and TOM sales. Both are clearly in decline, but the recent fall off in sales via the TOM is much more pronounced than that on POMs.



Graph A



Graph B

A large part of this decline is undoubtedly due to a shift towards PAYG, made much more attractive by the current pricing scales for Day Travelcards and the restructuring of daily caps to facilitate the Mayor's promise to provide more flexible ticketing arrangements for part time workers.

The decline in Day Travelcard sales also means that the percentage of sales accounted for by magnetic tickets has also fallen to an all time low, with the majority of transactions on POMs now being Oyster transactions.

## Part 2 – Following on from the theme of Day Travelcard sales...

The September Fares Revision sees the price of the Day Travelcard (off Peak) with the greatest availability (Z1-9W) increase to £17.20.

Q2) So in 2000, how much was the most expensive Off Peak Day Travelcard (covering Zones 1-6D)?

- |          |          |
|----------|----------|
| A £ 5.90 | B £ 7.40 |
| C £ 6.30 | D £ 9.10 |



Answers on Page 19

# SEPTEMBER FARES REVISION



**askolly@tube.tfl.gov.uk**

From: [REDACTED]  
Sent: 01 August 2015 09:48  
To: Ask Olly  
Subject: Bus disruption - Oyster PAYG and Contactless

Hello Olly,

Wonder if you can offer guidance, as today we are accepting bus tickets in Zone one due to bus services being disrupted by a cycle event.

Should we be asking bus PAYG customers to touch in, if they wish to use LU services as to do so would see bus customers charged higher LU fares? My understanding is that every customer with an Oyster/contactless card must touch in and out on LU.

We also get a similar situation when NR customers are diverted between NR London terminals, Oyster PAYG and contactless users are reluctant to touch in and incur additional charges when they have been told by NR that LU will pass them for free.

All the best, Sean



Hi [REDACTED]

Thank you for your email and query.

We did in fact cover the confusion between Bus & Tram Passes and Day Travelcards in TRU 85 (July edition).

The good news is that from the Fares Revision on Sunday 06 September, the POM screens will be changed to make the choice of products a lot clearer to customers. (Further details of this change are included on Page 2 of this edition).

Although it is unlikely to totally eradicate customers making the wrong selection, it will hopefully greatly reduce the volumes of errors you and your colleagues have had to deal with.

Regards

**Olly Oyster**

Hi [REDACTED]

Thank you for your email and query.

When engineering work or events result in PAYG customers having to use an alternative route, they must still touch-in and out as normal and will generally be charged the appropriate fare for the mode/journey they are making. In the case of the current works at London Bridge, gate settings have been changed to treat some journeys that would normally be charged on the TfL + NR farescale, to be charged as wholly NR journeys.

When arrangements are made for Bus customers to use LU, this will generally be restricted to holders of Bus & Tram Season tickets, who once their card has been checked, would need to be allowed through the gateline at either end of their journey, much like holders of NR magnetic tickets when arrangements are in place for us to accept NR tickets.

Hope this answers your query

**Olly Oyster**

From: [REDACTED]  
Sent: 19 August 2015 07:16  
To: Ask Olly  
Subject: One Day Bus & Tram Pass

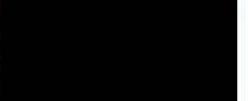
Hi Olly,

I think this question has been asked already, if it has then nothing has been done about it.

When a customer is at the POMs and they are looking at the Travelcard options, they see a ticket 'Bus & Tram'. Now we know that this ticket is a Bus Pass and cannot be used on the Underground, yet the customers don't understand what a tram is, they think it is for the tube. Can we get rid of the TRAM on the POM and the ticket so it only shows BUS PASS?

You can imagine the frustration for customers that have queued for about 10-20 mins to use the machine and now with the closure of the ticket office, will have to queue up again to buy the correct ticket or wait until any SAMFs are available to refund the ticket and then purchase the correct ticket.

Many thanks



From: [REDACTED]  
Sent: 03 August 2015 06:30  
To: Ask Olly  
Subject: The Ticketing & Revenue magazine by email

Dear Olly,

If it's possible, could you send me an email copy of the Ticketing & Revenue Update every month when you publish a new copy.

Thank you

Hi [REDACTED]

Thank you for your email enquiry.

This is not how the Bank Note Recycler should function. If notes are available, the MFM should dispense these as change or when making an Oyster refund.

We have received some similar reports from other stations that have BNR units and have raised this issue with Cubic to investigate. The feeling is that a previous fix which was deployed very early in the rollout of the BNR units, to stop the MFM giving the customer an over generous refund, may now be stopping the unit dispensing notes for certain values of refund.

Within this edition of TRU, we have included an update on MFM change giving on Page 16, at the end of which we have asked stations to report examples of the MFM not dispensing notes, so that Cubic can extract log files from the MFMs concerned. This will hopefully speed up the process of identifying the cause of this.

Regards

**Olly Oyster**

**askolly@tube.tfl.gov.uk**

Hi [REDACTED]

Thank you for your email enquiry.

We have recently expanded the email distribution to include CSAs, now that a lot of staff have access to email via their iPads.

Having checked, it doesn't look as if you have been included within the +CSA Tower Hill Group email group, which is probably why you have not received the recent T&R Update.

It is probably easiest if you speak to your group administrator or Area Manager and ask to be included in the email group. In that way, not only will you receive future editions of the T&R Update, but you will also receive the weekly Hot Issues Bulletin and other communications we send out from time to time.

Regards

**Olly Oyster**

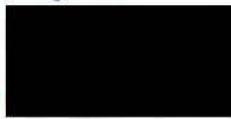
From: [REDACTED]  
Sent: 03 June 2015 11:10  
To: Ask Olly  
Subject: Bank Note Recycler

Hi Olly,

After three days of observation, I put out a job on all three of our MFMs at Oxford Circus. The reason for the jobs was that all three MFMs were giving change in coins, instead of notes from BNR, even though the BNR was full of £5 and £10 notes.

When the Cubic engineer came, I was told that this is how software is designed to work, when coins hoppers have a certain amount of coins in them, it would give change in coins.

Regards



## SPECIAL FEATURE



Royal Parks Foundation  
Half Marathon

### GOING THAT EXTRA MILE!

In Addition to supporting the Railway Children charity through the Oyster Card Charity Donation scheme, this autumn the T&R team will be going the 'extra mile' to support the charity. Well 26 and a bit actually!



On Sunday 11 October, the TRU editorial team of Alan Mundy & David Nix will both be running the 2015 Royal Parks Foundation Half Marathon.

Each will be running 13.2 miles round Hyde Park, Green Park and St James Park, to raise further funds for Railway Children.

They need your support. Please sponsor them (an online link to a donation page will be provided in the Hot Issues Bulletin) or if you see them on the day... simply give them a cheer and a wave!

## SMILE YOU'RE ON CAMERA

Since 26 April 2015, 20 volunteer Revenue Control Inspectors have been participating in a six month trial of a body worn video recording badge, similar to equipment used by a number of Police forces.



## THE KEY POINTS



- ▶ 6 month trial currently underway
- ▶ 20 LU RCIs involved
- ▶ Camera has 150 degree recording angle
- ▶ 8 hour recording capacity
- ▶ 30 seconds pre-recording saved
- ▶ Encrypted recordings securely stored

The badge, similar to the example illustrated above, does not continuously record and has to be activated to record and save images and sound by the person wearing it, should the need arise. When it is activated, the previous 30 seconds will be saved, so the lead up to an incident will not be lost.

Staff who volunteered to participate, were given training in the use of the equipment before the trial commenced and are required to have the camera visible at all times. It must not be hidden from the view of customers. They are also required to advise the customer before activating the recording mechanism.

Apart from providing important evidence of what occurred or what was said during an incident, for any resulting court case, the technology also has an important role in deterring threatening or aggressive behaviour.

Aidan Harris, the Manager of LU's Workplace Violence Unit, told TRU that "*Body worn video is being increasingly adopted by police services, security personnel and civil enforcement officers. It has been shown to increase public reassurance, lessen fear of crime in communities and improve evidence-gathering during incidents. It has also been shown to reduce assaults on those wearing the kit as well as helping to resolve complaints. We've embarked on a 6 month trial within Revenue Control, to allow a thorough evaluation of the kit and to see if these same advantages can be obtained*".

From feedback from trial users, there is already evidence of customers calming down and becoming less volatile and more compliant once the video recording was activated.

During the trial to date, recordings from the badges have already been used in around 8 incidents, 5 of these initially involving abusive language, which once the camera was activated were de-escalated and resolved.

**LAL MXIDE PU** Part 2 – We've mixed up the letters in these station names. Can you work them out?

Ticketing & Revenue  
**T&R**  
Trivia

(a) ASHAMED AGENT      (b) CHEATS FINELY      (c) HAS TEAM      (d) NO CATS ATE      (e) SEE TO CAT

*Is there a connection?  
– You decide.  
Answers on page 19.*

## CASH HANDLING DEVICE CONTRACT SIGNED

After a very long drawn out procurement process, significant progress was made recently with the issuing of a revised specification to both prospective suppliers, covering changes to maintenance and device performance requirements.

Following a short period to allow them to revise their bids, both contractors resubmitted their bids for the contract on **Monday 03 August**.

These were then re-scored by a panel of representatives from interested departments and lead to the identification of a "preferred supplier" and the start of a short period of detailed commercial discussions. Following a 10 day "standstill" during which other bidders were able to make a challenge on our decision, the contract with Scancoin was finally signed on **Wednesday 02 September**.



### THE KEY POINTS



- ▶ Contract awarded to Scancoin
- ▶ Supply and maintenance of 287 devices
- ▶ Two main types of device, larger device with Note Recycler for major stations, smaller for other sites
- ▶ Vanguard scheduled for mid-October at existing 4 CHD trial sites
- ▶ Local staff briefings ahead of installation

## SCAN COIN

We are now hopeful of being able to fairly quickly progress to factory testing of the final solution and the start of a trial of equipment at the existing four stations in mid October. This will involve the replacement of each of the existing units, with production models of the Cash Handling Devices, as the units we are buying are slightly different to the models previously trialled. The basis of their operation and functionality will however remain largely unchanged, other than enhancements in the actual device capacity. The Vanguard will enable us to fine tune settings and review the performance of the devices in stations.

After a 4 week Vanguard, we plan to commence a rollout of the Cash Handling Devices to other stations around the network

Further details on each of the device types to be installed, will be provided in the October edition of TRU.

## NIGHT TUBE DELAYED



Although the ticketing elements for Night Tube have been complete for several months, the recent dispute with Trade Unions regarding rostering and work/life balance has lead to the **12 September** launch date being deferred until later in the autumn.



Linked to the Night Tube changes, it has recently become apparent that a fix which was due to be applied to NR TVMs to resolve the incorrect cancellation of Oyster season tickets if they are presented to the RTD on a TVM between 00.01 and 04.30 hrs, may not now be implemented before the launch.

Cubic have identified a fix to resolve this issue, by not marking any product as having expired until a further 24 hours after the expiry date.

Unfortunately deployment of this fix via a software upgrade to the Cubic Pearl device, which provides the Oyster capability on TVMs, is dependent upon this upgrade going through a full accreditation process with ATOC.

This appears to be taking longer than expected and has been hampered by other changes that the TVM manufacturers have been asked to implement on their devices.

The impact of this is that customers who have a season ticket which is due to expire at 04.30hrs and either attempt to check their PAYG balance or top-up between midnight and 04.29 hrs, find that in doing so their season ticket is cancelled.

As a result if they then attempt to travel by Night Bus or in the future by Night Tube services, they find they are either charged a PAYG fare for a journey that should be free, or find that their card is rejected due to it having insufficient PAYG and no valid season ticket.



If you become aware of this, you should advise the customer to contact the Customer Contact Centre for a refund of the additional PAYG fares they may have been charged.

Full details of the Night Tube ticketing changes were published in **TRU85**.



**Part 4 – And for the final section of our final T&R Trivia challenge this month, we thought we would test your knowledge on Oyster card validity and Penalty Fares.**

**Q3) Under which of these scenarios, would a customer's Oyster card not be valid for the journey they were making?**

A	PAYG – negative balance at start of their journey	B	Season ticket & Zero PAYG – touched-in within zones, but travelled to a station beyond zones covered by ticket
C	Season ticket – entered at station within zones covered, but didn't touch-in	D	PAYG – touched-in but card now has a negative PAYG balance



Answers on Page 19

**Q4) And in which of the above scenarios would the customer be liable to a Penalty Fare when travelling on LU?**

## MFM ISSUES

There has been a lot of recent feedback concerning MFM's change giving, in particular devices not dispensing £2 coins as change or when making refunds. This led to a recent appeal to stations to report such incidents, to enable Cubic to extract logs from the devices concerned. This was to help them ascertain why the device has behaved in this way.

Thanks to a very good response and some excellent information provided by a number of stations, Cubic have extracted sufficient logs and no longer need stations to report such incidents to them.

When the coin handling unit (ECHU) algorithm was changed during an upgrade programme in the first half of the year, the main driver was to get the MFM to use its change reserves more intelligently and thereby reduce the need to refloat and buy in such large volumes of £2 coins. As a result, instead of always dispensing the smallest number of coins to the customer, the MFM now dispenses change and refunds based on what coins are in each of the coin hoppers.

Investigations so far have confirmed that the current ECHU settings mean that the MFM will not dispense any £2 coins, unless the £2 hopper has 10% more coins in it than the £1 coin hopper. The examples below, demonstrate how this currently works on the MFM.



We are currently working with Cubic to see whether the current settings need to be adjusted. However, we believe there is a separate scenario involving devices with a BNR, where coins may be dispensed for a refund, even though notes are available. We would be grateful for any such incidents to be reported to the Cubic Helpdesk (on Auto 1610), so that logs for these devices can also be extracted.

## LCP3 UPGRADE



Plans for the much delayed start of the Vanguard of the new LCP3 on EI type gates were further delayed when a couple of defects were identified during the final stages of testing by Cubic.

The main issue involved the speed that the gate took to display messages on the POD for Oyster PAYG users, information on their card balance and the charge for the current journey did not appear on the POD until after the paddles had opened and in most cases this would have been likely to have appeared after the customer had actually passed through the gate.

Cubic have now rectified this issue and further testing on an updated version of the EI LCP3 software has now been completed, to allow us to progress to the much delayed Vanguard at **Stratford (Mezzanine)** and **Bank (Waterloo & City)** gatelanes in the first week of September. This Vanguard will also see deployment of the new design of service panel on EI type gates. Performance of these gates will be closely monitored before a decision is made to commence the rollout to other EI gatelanes.

This forthcoming rollout will also include WAGs at stations with EI gatelanes, as the previous E2 programme only picked up locations where there were large numbers of E2 gates installed.

A second issue identified during the initial testing on EI gates, was that when child tickets were blocked on a gateline, both the child alarm and the reject ticket alarm tone sounded when a child ticket was detected by a gate. Previously only the reject tone would have sounded. Investigations have since established that this issue is also present in the E2 gates that are fitted with the LCP3 and also in earlier versions of E2 software. We are currently looking for Cubic to rectify this issue across all gate types as soon as possible. For EI gates this will not be until after the start of the EI Vanguard.



The fix for E2 gates will be incorporated within a new software release which will also address a number of other issues that have been identified since the rollout of the LCP3 to E2 gatelanes. This includes resolution of an issue affecting the POD display when gates are left in either Emergency Open or paddle open mode at the time the station goes through its End of Day. It had previously been identified that this resulted in all PODs displaying the red X on both sides, giving the impression that the gate was not working, even though the RTD was in service.

The current workaround is for each gate to be manually reset to the correct direction of operation after End of Day, which is obviously time consuming at larger stations. It will also address an issue which causes some gates not to transmit their transactions from time to time and can result in the gate showing an Error 16 (Transaction store full). This has affected E2 gate performance recently and requires Cubic to cold start the device.

The updated software is scheduled to be tested once work on EI gates has been completed. It is likely that the new version for E2 gates will be released in Mid September to allow a Vanguard on gates at **Blackfriars** and **Liverpool Street (Main)**. Providing no significant issues are identified, it will then be progressively rolled out to the other stations with E2 gatelanes 2 weeks later.

Testing of the final version of LCP software for use on the older Pneumatic Gates is currently underway and will hopefully allow us to commence a further Vanguard on this gate type shortly.

Upgrading of our gates to operate with the new LCP3, will allow each device and reader (RTD) to report its status in real time, rather than by using the previous routing via the station multi-drop. This should greatly assist the planned introduction of a device Monitoring tool on the handheld device used by station staff. Once all gates at a site have been upgraded, the redundant multi-drop will be removed.

## SAF PC UPGRADE

For many months we have been reporting in TRU on progress towards the rollout of the next generation of SAF PCs and the migration of the software onto a Windows 7 operating platform. No sooner had we kicked off the long awaited Vanguard at Liverpool Street (Main) and Victoria (District) than we hit some issues with the integration /coordination with other projects.

For some time, our plan has been to link the SAF PC upgrade with the installation of the final design of KVM switch for the TOM and SAF. This would have enabled both TOM and SAF PCs and a common UPS to fit within a slightly modified SAF cabinet. Two of the chosen SAF Vanguard stations (Charing Cross (Trafalgar Sq) and Regents Park) were specifically selected to test this combined TOM & SAF solution.



There have been delays to the start of the SAF Vanguard, initially due to system testing pressures and the need to complete other changes to the TOM software. This has meant that an interim solution to install the TOM within the POM Room, has been completed at many more stations where the ticket office has closed, than we had originally intended. One other spanner in the works is that the combination of the TOM and SAF PCs within the existing SAF cabinet requires some modifications to the cabinet door (to improve ventilation and air flow) and to provide a spacer inside the unit, both of which are to be delivered under a separate variation. These are not currently ready for implementation.

As part of their ongoing asset refresh programme, Cubic are committed to replacing the TOM PC next year and it has therefore now been agreed that the programme to implement the final TOM/SAF PCs arrangement will be deferred until then. The plan will then be to implement both new TOM and SAF PCs within a modified SAF cabinet, linked by the final version of the KVM switch.

Following the forthcoming Fares Revision, an upgrade of the TOM and SAF software will take place to bring all devices up to the latest version of software that can support deployment of the Windows 7 PC. This will then ensure that all stations have the same software build and the capability of reading ITSO format smartcards. This build has already been Vanguarded at Liverpool Street (Main) and Victoria (District).

Following this software upgrade, the stock of new SAF PCs will be installed in a programme due to commence on 13 September 2015, concentrating initially at stations where the ticket office has already closed and the TOM has been relocated into the POM Room. At ticket offices that are due to close after this date, the relocation of the TOM into the POM room, will include also the replacement of the SAF PC and a modified KVM solution which has been developed by Cubic. Instead of a switchbox and a button to switch between devices, recent installations now have just one button to affect the changeover. The revised configuration will be retrofitted to those sites that had previously been installed with the earlier arrangement. These will then have their current data control switch removed.

We have had feedback from several stations recently, where the blue TOM/SAF sticker has not been provided to explain the use of the KVM switch. If your station does not have this sticker, please advise David Nix or Alan Mundy.

One other SAF related issue to highlight to users is that following the removal of the bulky Dot Matrix printers from POM Rooms, if it is necessary to operate the KVM switch on the instruction of the Cubic Helpdesk, it will not be possible to print onto the TOM receipt printer when using the SAF. This is due to the fact that the SAF PC is not configured to work with the receipt printer.

In the event of a TOM failure, when preparing Transportation Sacks for a collection, it will be necessary to manually compile a COTS form for each sack.

## POD UPGRADE

In TRU85 we outlined plans to upgrade the Passenger Orientated Display (POD) on each of our three types of automatic gate.

A series of workshops were held earlier in the year involving a cross section of station and Revenue Control staff. Feedback from these were subsequently fed to Cubic, who have recently completed an initial technical design study to identify a number of potential options. This has recently been reviewed by interested stakeholders, to provide Cubic with a steer on which way to develop the project. The next stage will see proposals and costings for the changes developed. It looks likely that the solution will involve a coloured screen display of a similar size to the current EI gate POD.

The initial proposals focus on providing customers and staff with a more common display of:

- mode directional information
- status signage
- customer & staff information on reject tickets/cards
- Oyster PAYG charges and balance
- reject and monitored ticket indications.



## MORE WAGS ON THE WAY



In TRU83 we reported on plans to install a further batch of WAGs at 74 stations, the majority of which do not currently have a WAG. We are pleased to report that following a delay in obtaining the final approval for the project, the last funding hurdle has been cleared and orders for the manufacture and installation of the gates have been placed.

Unfortunately the delay has meant some slippage in the original timescales and due to the long lead times for manufacture, it is now likely that the first stations will not receive their WAGs until early in 2016, with the installation programme continuing on through to the end of 2016.

The new WAGs should be installed already fitted with the new LCP3 and the modified gate lid mechanism which is currently being trialled on the E2 gates on the King's Cross (Western) gateline.

**ANSWERS TO  
T&R TRIVIA**

Part 1

Q.1 – We found 10, although a couple are stretching the point!  
Richmond (London/Nth Yorks), Rainham (Essex/Kent), Hayes & Harlington/Hayes (Kent),  
Ashford (Middx/Kent), Sudbury Hill or Town/Sudbury (Suffolk), Stratford (London)/Stratford  
Upon Avon, Bromley North or South/Bromley by Bow, Northfields/Northfield  
(Birmingham), Welling (Kent)/Welwyn Garden City, Lee/Leigh (Kent).

Part 2

Q.2    C    £ 6.30

Part 3

LAL MXIDE PU

Is there a connection? – Yes - They all contain the word "East"

(a) Dagenham East    (b) East Finchley    (c) East Ham    (d) East Acton    (e) Eastcote

Part 4

Q.3    A    Negative PAYG at start of journey	Q.4    A    Is the only scenario where liability to a Penalty Fare exists
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**How did you do?**

## NEXT ISSUE

The next edition of **TRU** is scheduled to appear towards the end of October.

In addition to our usual regular features and news, we plan to include:

- Detailed coverage of the Cash handling Device Vanguard and details of the devices due to be installed at other stations from this autumn
- Review of the September fares Revision – what went well, and what went not so well!
- Further update on the SAF, Gate LCP3 upgrade programmes

Plus a further selection of your letters and emails to **Ask Olly** and updates on other T&R projects currently underway or in planning.

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