

## SLIGHT THAW IN JANUARY

Normally our November issue (which features the main details of the annual January Fares Revision) carries a lead article covering the public announcement of the next year's fares package when it is unveiled by the Mayor of London.



This year things are a little different as there will be no major announcement, due to the new Mayor Sadiq Khan's election pledge of a "freeze on fares" during his term in office.

However, as we previously reported in TRU95, the fact that some fares are not set by TfL and elements of through fares to NR destinations are also determined by the relevant train operators (TOCs), means that in reality, rather than a complete freeze in January, there will be a "slight thaw" with a number of fares including Travelcard prices increasing. A vast majority of the fares that are set by TfL will remain unchanged.

## JANUARY FARES REVISION

Further details of the main changes taking place on 02 January are included within our January Fares Revision Preview on Pages 4 - 6 of this edition. We have tried to separate this preview into two sections, the first covering items that are "frozen" – not changing, the second covering products and fares that will be changing.

Full details and a comprehensive summary of the new fares will be included within the *2017 Fares Revision Circular* which is due for publication in early December.

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### KEY STORIES INSIDE

#### Page 2 SUMMER IS OVER

We report on the recent time change, with the end of British Summer Time and look at what went well and what didn't go completely to plan.

#### Page 12 BANKCARD ACCEPTANCE

In celebration of the start of a new chapter in the history of bankcard payments on LU, we take a very quick look back over recent history, to see how things have changed.

#### Page 13 PED UPGRADE

We mark the start of a Vanguard of the new PIN Entry Device (PED) and update you on progress with the installation of further units on AFMs and MFM, in the coming weeks.

#### Page 14 POLYMER NOTE PROBLEMS

The introduction of the new polymer £5 note has caused a few headaches for staff at stations with MFM fitted with a Bank Note Acceptor (BNA). We give an update on the issue and what is being done to resolve the problem.

#### Page 17 CARD READER UPDATES

It is all change on the card reader front with changes being made to reduce card clash and to pave the way for on system testing of the Faster Universal Load (FUL) facility and the new TfL ticketing app.

#### Page 20 SKIMMERS ARE BACK!

Our *Crimewatch* feature returns to update you on the latest developments on the topic of card skimming devices on POMs.

*Reading on iPad or PC? – Many articles now have embedded links to allow easy access to useful reference documents.*

*Simply click or touch on each link to activate.*



# In the news...In the news...In the news

## BST TO GMT TIME CHANGE – What went well / What ‘not so’ well

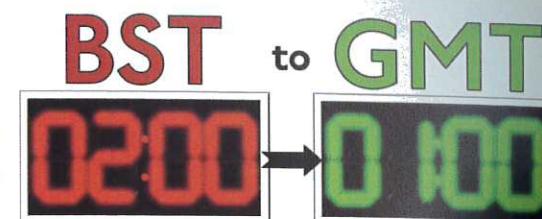
The clocks went back by one hour on Sunday 30 October, the first time change since we started operating through the night services on some lines. Overall the change went very smoothly...

 ...although we did have issues on Sunday mornings with a number of QBMs failing to update their clocks correctly. This resulted in 8 QBMs requiring a Cubic engineer to attend to rectify the issue.

The devices concerned were Bermondsey QBM39, Finsbury Park QBM19, Oxford Circus QBM19, Stockwell QBM39, Swiss Cottage QBM39, Westminster QBM19 and Tottenham Court Road QBMs 17 & 18.

On Monday 31 October, further issues were identified on 4 gates and the MFM at St James Park, which were found not to have the correct time on them.

The gate issue resulted in a number of customers appearing to have much longer journey times than they had actually taken and in a number of cases where they had exceeded the maximum journey time, this then resulted in the customer being charged for two incomplete journeys.



These issues were addressed by the download of new tables to these devices on the Monday night, so they were functioning correctly for start of traffic on Tuesday 01 November.

## ALL CHANGE ON - OVERGROUND

From Sunday 13 November 2016, the responsibility for the operation of the London Overground concession will transfer from London Overground Rail Operations Limited (LOROL) to a new operator Arriva Trains London.



Trains will continue to carry the existing London Overground livery and will continue to operate under the Overground banner. However, we must no longer use any references to LOROL.

Any references within the T&R Books and appendices will be changed in the update pack which is scheduled for publication in conjunction with the forthcoming January Fares Revision.

## ... AND IT'S ALL CHANGE ON - ATOC

In another recent name change, the Association of Train Operating Companies (ATOC) who represent the interest of the various rail operators across the country have been rebranded under the title Rail Delivery Group, to better reflect some of the services such as National Rail Enquiries that they provide for the National Rail network.

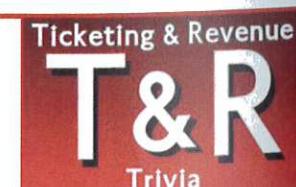
## Rail Delivery Group

**Part I** – Linked to our lead article on the January Fares Revision and the concept of a “fares freeze”

**Q1)** Over the last 5 years between 2011 and 2016, how much has the cost of the Zone 1&2 PAYG cap increased?

A It hasn't increased      B + £1.50

C + £2.00      D + £0.80



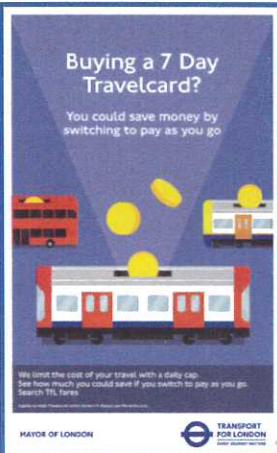
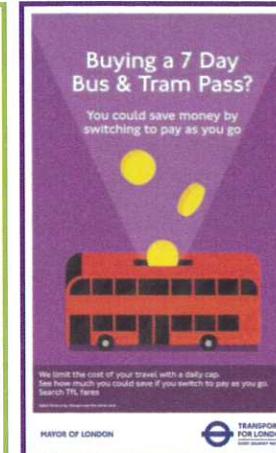
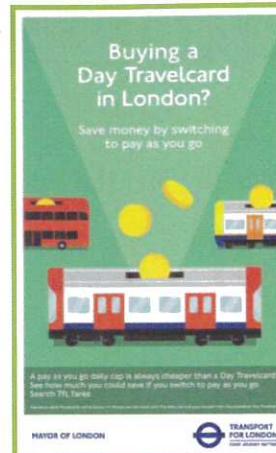
Answers on Page 19

## PAYG PUBLICITY CAMPAIGN

On Monday 17 October 2016 TfL launched a publicity campaign to promote the use of PAYG and the benefits of capping to customers who are currently buying Day Travelcards or 7 Day products and are probably overpaying for their journeys by doing so.

The campaign supported by City Hall covers a variety of different media, including; radio adverts, targeted emails and social network groups.

Since the end of October you may have seen the posters illustrated above, which have been appearing on poster sites at LU stations. You can support this message by promoting PAYG as the best value option to customers where this may apply.



## TICKETING E-FORMS UPDATED

To assist the Financial Services Centre (FSC) to improve their back office processes, the Missed Collection Notification and Change Delivery E-forms have been updated to also enable our colleagues in other TfL modes to utilise these forms. The following changes been made to these two E-forms;

- Addition of “Business Unit” field – which will default to LU (London Underground)
- Removal of “Contact Number” field

Additionally on the Missed Collection Notification E-form

- Changed Date field to “Date of Missed Collection” – to allow users to enter the date of the missed collection
- Addition of “Notification Type” field
- Removal of “Name of the Area Manager/DSM advised” field

We have also taken the opportunity to update the Ticketing Consumable E-form with the following changes;

- Consumable list updated
- Both no of items required and quantity on hand will be shown on the email
- User will be able to enter “0” in “No of item required” field to cancel automatic replenishment of items supplied by Cubic

## SOHL UPDATES

We have now established a process for fortnightly updates of the user database for the Staff Oyster Help Line (SOHL) facility and details of which staff have been added will be published in the weekly *Hot Issues Bulletin*.

New users will be added based on the date that their TSID card was issued and the relevant cut-off date will be shown within the Hot Issues article.

For some while we have been attempting to get a number of long running defects within the SOHL facility resolved and we are pleased to report that we are close to an upgrade which will resolve the following issues:

Information not given on cards with a valid discount entitlement

Information not given on cards which have previously held a discount, but which has now expired

Incorrect PAYG balance if card has a negative balance

Standardisation of log-in, so that all staff now use their Employee Number, rather than RCIs using a badge number. The existing RCI log-in option will be removed



Implementation of these fixes is currently planned for the end of November, but is subject to final confirmation.

# JANUARY FARES REVISION

## NOT CHANGING

As a result of the "freeze" on most fares set directly by TfL, the following prices and fares will not change on 02 January 2017.

## BUS & TRAM FARES

Bus and Tram fares will remain unchanged at the 2016 prices. An adult PAYG Bus journey will continue to cost £1.50, but since the introduction of the new Bus Hopper fare in September, this now also allows a second journey to be made without further charge, if it is started within 60 minutes of the start of the first journey. The Day Bus & Tram PAYG cap remains unchanged at £4.50 and the both versions of the Day Bus & Tram Pass will remain at £5.00.

ADULT BUS & TRAM PASSES		
7 DAY	MONTH	ANNUAL
21.20	£81.50	£848.00

Prices of Bus & Tram Passes will also be unchanged, as shown in the table shown on the left.

## PAYG FARES

PAYG fares for journeys on LU and other TfL operated rail services will remain unchanged at the current 2016 prices.

The PAYG charge for any journey within Zone 1 stays at £2.40 regardless of the time of day it is undertaken. PAYG charges for journeys covering Zone 1&2 will continue to be £2.90 when charged at the Standard PAYG rate and £2.40 when charged at the reduced rate.

The cost of a Zone 1-6 journey from central London to Heathrow, will stay at £5.10 or £3.10 if travelling off-peak at the Reduced PAYG rate.

Child PAYG rates for TfL journeys will also be unchanged.

## LU SINGLE & RETURN FARES

ZONES	Adult / 16+	
	2016	2017
1	£4.90	£4.90
1+2	£4.90	£4.90
1-3	£4.90	£4.90
1-4	£5.90	£5.90
1-5	£5.90	£5.90
1-6	£6.00	£6.00

Like PAYG, the cost of Single and Return tickets for journeys on LU will also remain unchanged.

Single journeys within Zones 1-3 remain at the 2016 price of £4.90, whilst longer journeys covering Zone 1-5 and to Zone 6, stay at £5.90 and £6 respectively.

PAYG will continue to offer customers better value, with a saving £2.50 on a journey wholly within Zone 1 and savings of £3.10 and £2.90 respectively, for journeys made off peak between Zones 1-4 and Zones 1-6 respectively.

**PREVIEW**

## FARES REVISION THE KEY POINTS



- Most fares set by TfL are frozen
- Season tickets increase by a maximum of 1.9%
- Adult, Child and Group Day Travelcard Fares will increase
- Entry and Exit charges increase by 5p - 20p

## CHANGING

### TRAVELCARD SEASON TICKET PRICES

The prices of Travelcards will increase by an average of 1.8%, as these prices are covered by the Travelcard agreement with the Train Operating Companies. The overall increase is close to the 1.9% limit imposed on rail operators, linked to the July 2016 Retail Price Index (RPI).

The cost of the Weekly (Monday – Sunday) PAYG Cap for contactless users will also increase in line with the corresponding 7 Day Travelcard prices, as shown in the table to the right.

ZONES	ADULT 7 Day T/Card & Weekly Cap		
	2016	2017	Increase
I+2	£32.40	£33.00	1.85%
I-3	£38.00	£38.70	1.84%
I-4	£46.50	£47.30	1.72%
I-5	£55.20	£56.20	1.81%
I-6	£59.10	£60.20	1.86%
2-3, 3-4, 4-5, 5-6	£24.30	£24.70	1.65%
2-4, 3-5, 4-6	£26.80	£27.30	1.87%
2-5, 3-6	£32.20	£32.80	1.86%
2-6	£40.50	£41.20	1.73%

### DAY TRAVELCARD PRICES

ZONES	ADULT DAY TRAVELCARD (ANYTIME)		ADULT DAY TRAVELCARD (OFF PEAK)	
	2016	2017	2016	2017
I+2				
I-4	£12.10	£12.30		
I-6	£17.20	£17.50	£12.10	£12.30
I-9	£21.70	£22.10	£12.90	£13.10

As the prices of Day Travelcards are also subject to agreement with the TOCs, both the Anytime Day Travelcard and the Day Travelcard (Off Peak) will also increase, as shown in the table to the left.

The Zone I-4 Anytime and ZI-6 Off Peak both increase by 20p.

ZONES	ADULT All Day Cap		
	2016	2017	Increase
I+2	£6.50	£6.60	1.54%
I-3	£7.60	£7.70	1.32%
I-4	£9.30	£9.50	2.15%
I-5	£11.00	£11.20	1.82%
I-6	£11.80	£12.00	1.69%

### DAILY PRICE CAPS

The corresponding Daily Price Caps will also increase by either 10p or 20p as shown in the table to the right. The highest percentage increase being for the ZI-4 Cap at 2.15%.

### PAYG CHARGES FOR NR JOURNEYS

The charges for rail journeys that are charged on the NR PAYG scale which are set by the TOCs rather than by TfL will also increase, as shown below. As the NR element of journeys involving NR travel are rising, through journeys charged on the TfL+NR scale will also increase as shown in the table below.

ZONES	NR Standard rate		NR Reduced rate		TfL + NR Standard		TfL + NR Reduced	
	2016	2017	2016	2017	2016	2017	2016	2017
I	£2.50	£2.60	£2.00	£2.10	£4.10	£4.20	£3.50	£3.60
I+2	£2.70	£2.80	£2.20	£2.30	£4.30	£4.40	£3.70	£3.80
I-3	£3.40	£3.50	£2.50	£2.60	£5.00	£5.10	£4.00	£4.10
I-4	£3.90	£4.00	£2.80	£2.90	£5.50	£5.60	£4.30	£4.40
I-5	£5.00	£5.10	£3.20	£3.30	£6.60	£6.70	£4.70	£4.80
I-6	£6.10	£6.20	£3.80	£3.90	£7.70	£7.80	£5.30	£5.40

In this edition we have only provided a few examples of Adult fares. Full details of all of the new 2017 fares and charges will be included within the *2017 Fares Revision Circular*.

# In the news...In the news... JANUARY FARES REVISION

PREVIEW

## TOM MENU CHANGES

As part of the fares revision changes, Cubic will also be making a number of changes to menus and options on the TOM to bring these up to date and remove a number of options that are no longer needed.

Unfortunately, as has been the case with a number of recent projects, a couple of the changes we had requested have proved more difficult to implement, as some of the information was found to have been hard coded into the software rather than in a data table. As a result, these elements have been deferred and will now be picked up in the next available TOM software upgrade in 2017.



The changes that are definitely going ahead are as follows:

- Remove **GBP Equivalents** option from **Counted Bag** menus (No longer accept Euros)
- Remove **Cash and Cheque**, **Invalid Currency** and **Bank Card Slips** options from **Uncounted Bag** menus
- Remove **Bus RPI Receipts**, **Bus Unpaid Fares Notice** and **Fares Collected** options from **Miscellaneous Transactions** menu
- Add two additional options for use by Visitor Information Centre staff to **Miscellaneous Transactions** menu

A further change which we had requested, was found to be hardcoded into the TOM software and will therefore be picked up within a software change in 2017;

- Remove **Emergency TSID card**, **Retained bank Card** and **Withdrawn Invalid Currency** options from **Other Bag** menu

## ANNUAL GOLDCARD RENEWALS

### Gold Record Card

15JULY10	12MTHS TRAVELCARD	STD
14JULY11	Y1234567	H
15JULY10	050108344072	£1904.000

NOT VALID FOR TRAVEL

Not a receipt. Terms and conditions - see over

The run-up to the January Fares Revision also sees a spike in the purchase and renewal of annual season tickets. This year customers will not be able to purchase annual tickets from LU stations, since ticket offices have now closed and functionality to purchase annuals have not been added to POMs.

If asked about options for buying an annual ticket by a customer, you should advise them to make their purchase online via the TfL website.

Customers who do make online purchases will need to have the Gold Card discount entitlement added to their Oyster cards by a TSID card or CSID holder, on production of their Gold record card. Customers who have not received the record card should be advised to contact the Customer Contact Centre to request this.

The Procedures for setting the NR Railcard discount entitlement onto an Oyster card, for holders of an Annual Gold Card are included in T&R Book 2, Sections 4.1 and 4.4



## WEST HARROW OSI BROUGHT FORWARD

The new Out of Station Interchange (OSI) at West Harrow, which we referred to in our Oyster Explained feature in TRU95, has been delivered early.

Rather than waiting until 02 January, Cubic identified an opportunity to deliver this early as part of a base data upgrade on Sunday 13 November, to ease the work load for January.

This will hopefully alleviate some of the issues previously identified with customers needing to change from one platform to the other.

...In the news...In the news...

## SOUTH EASTERN LAUNCH KEY CARD



From Monday 05 December, South Eastern will become the latest of the London area Train Operating Companies (TOCs) to launch its own branded ITSO smartcard under the 'the Key' banner. From this date South Eastern customers will be able to obtain one of these new cards and then load a season ticket either online or at a TVM at stations situated outside of the London zones. Unlike Oyster, these cards will only hold season ticket products (including Travelcards) and do not support the equivalent of our pay as you go (PAYG) travel option.

South Eastern are aiming the new card at their customers who currently buy magnetic 7 Day, monthly and longer period tickets, as like Oyster the ITSO format of card is reusable and is considerably more durable than the paper magnetic seasons. As such it is an option that can be recommended to NR customers from outside of London, whose magnetic tickets often fail to work our gates.

A number of other London area TOCs already offer their own brand of ITSO cards, details of which are shown in T&R Book 8 Section 6.4.

Providing the customer has loaded a season ticket covering the appropriate zones, ITSO format cards can be used on LU services and at LU stations served by NR trains. The Tri-reader' RTD on our gates and validators is capable of reading ITSO cards along with Oyster and contactless formats.

## BARCODED TICKETS

From time to time we get queries from stations served by NR services concerning the validity and acceptance of barcoded tickets on mobile devices.

We have recently had a flurry of correspondence from stations at the north end of the Metropolitan line, following a sudden surge in customers arriving at stations with barcode tickers that could not be accepted by gates or checked for validity by our staff.

Way back in TRU42 (June 2010), we carried a feature on the introduction of barcode scanners on the gates at Marylebone NR as part of an initiative by Chiltern Railways.

At the time, it was made clear that Chiltern would only be using this form of ticketing for journeys from Chiltern stations to/from Marylebone and that these tickets, unlike magnetic tickets, would not be valid on LU train services or at stations managed by LU. We were therefore very surprised to hear of the sudden appearance of 'Point to Point' tickets to stations such as Rickmansworth, appearing in barcode format on customers' phones.

Subsequent investigations have established that the tickets concerned, were not actually issued by Chiltern, but by the online supplier Trainline.

It would appear they had mistakenly applied a rule that all tickets to destinations served by Chiltern should be issued in barcode format, rather than customers collecting a magnetic ticket from a TVM at the start of their journey.

Chiltern have now addressed this issue and arranged for all of the LU managed stations on the Metropolitan line to be removed from the list of barcode ticketing destinations.



Chiltern Railways

trainline



Procedures for Barcode ticketing on non-LU services are covered in T&R Book 6, Section 5.1.

# In the news...In the news...

## FAILED CARD PORTAL LAUNCHED

Further to our coverage in TRU92 & 94 and after a couple of false starts, a new iPad application to assist with dealing with customers with failed Oyster cards is due to be launched with the first batch of 170 users from Monday 21 November.

The launch had previously been delayed whilst we clarified some issues around the activation of user accounts, how we deal with extended periods of non-use and deactivation of accounts of staff leaving LU or transferring to non-station roles.

TSID card holders who have completed the '*My role in privacy and data protection*' E Zone module will receive an email containing a user name and password and details of how to access the app and activate their account. It is important that this is acted upon straight away, as the temporary password is only valid for 24 hours. If the account isn't activated within this period, it will be necessary to use the "reset password" link on the log in page. Any attempt to log in with an expired password, is likely to result in the account being disabled.



Users also need to be aware that if they do not access the portal for a period of 90 days, the account will become locked, in a similar way to your One London/email log-in. It is therefore important to access the Failed Card Portal on a regular basis and certainly before a period of annual leave. The system is being configured with a reminder being emailed to any users that have not accessed the portal for 65 days or 80 days.

TSID card holders who haven't already completed the E Zone module can do so by following the link below:

<https://tfl.kallidus.com/TFL/LMS/SCORMPackages/65c5c69b-a46b-44c9-b248-8b42fcac9f32/index.htm>

Finally, it should be remembered that use of the Failed Card Portal is very much a 'last resort' option.

If a customer reports that their Oyster card is not working, the first option should always be to advise them to purchase a new Oyster card, add PAYG and then link their old and new cards online or via the Customer Contact Centre to have the products from their old card transferred onto the replacement.

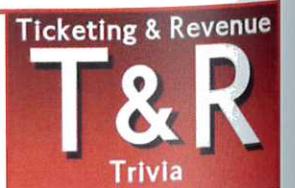
In cases where the card is only failing intermittently or where the customer's card includes a Bus & Tram season ticket, it is possible to replace the card using the copy card functionality on the TOM, without inconveniencing the customer through having to buy a new card.

Please also remember that we do not replace cards at our stations that have been broken or defaced. In such cases the customer would need to be referred to the Customer Contact Centre.

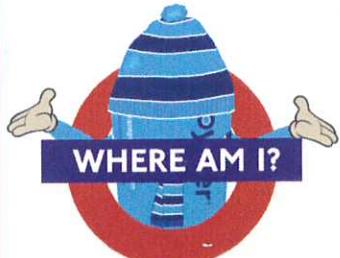
**Part 2 – Below are 5 clues to a station Olly has visited this month. Guess the station after the first clue and award yourself 5 points, 4 points if you require the second clue and so on until after the 5th and last clue you get just 1 point.**

Answers on Page 19

If you still haven't guessed after all 5 clues then it is "Nil Point".



Pts	I'm at a station which...
5	opened on 06 June 1915 during the Great War and is Grade II listed
4	due to the above, was the first station to be entirely staffed by women
3	was one of the first LU stations built specifically to use escalators
2	in the 2014 film "Paddington" was the fictional 'Westbourne Oak' station.
1	serves one line and is located in Zone 2



# ...In the news...In the news...

## COLLECTION MATTERS

We are still getting a large number of instances where a security collection is missed but staff at the affected stations are not completing the Notification of Missed Collection form on the iPad. In the last 4 week period, out of 209 missed collections, 66 of these (31.5%) were not correctly reported by stations.

Please note completion of a Station Log Book entry or an email does not populate the missed collection report that is used for monitoring G4S performance and the relevant payments. It also results in unnecessary emails being sent to stations to clarify whether a service took place or not.

Some changes are being made to the notification form, as we have a number of instances where events have been reported the following day or from another station, which have resulted in wrong information appearing in the reports received by the Financial Services Centre.

To counter this, when the changes are implemented, the form will no longer 'auto populate' the date and location fields. Instead users will need to input the relevant date and the station where the collection has been missed. The missed collection notification also needs to be completed on any occasion that the collection process is not fully completed (e.g. when not all items are collected).

As reported in TRU95, a problem that has happened several times in a couple of areas is the G4S custodian refusing to wait for the CHD to fill a second collection sack. If this occurs, it must be reported as a partial collection via the iPad notification, using the comments section to explain what was collected and which items were not. To assist we have included a table below to indicate when a notification needs to be completed.



Event	Action to be taken
All items collected	No Action Required
No collection made	Missed Collection Notification
No collection but change delivered	Missed Collection Notification confirming change delivered
Only notes collected from CHD	Missed Collection Notification - Partial collection
Only coin and V&C items collected	* Add a note in the comments field
Second cash sack not collected from CHD	Missed Collection Notification - confirm recovery successful
Recovery Collection completed	Missed Collection Notification - confirm recovery successful
Missed Recovery Collection	Missed Collection Notification
Need for additional collection	Contact T&R team

At stations where we have collection once a week or only fortnightly, if G4S fail to attend or are turned away, due to no access being available (e.g. due to a temporary station closure) they will automatically reschedule a further visit using the "Recovery window" two days later.

It has recently become apparent that if the collection is only partially completed, (e.g. due to the CHD being unavailable or the custodian not being able to sign on) then a recovery will not automatically be triggered. In such circumstances, the CSM or Area Manager must request a re-visit via the T&R team by email, providing us with a breakdown of what is in the CHD from the machine contents printout and details of other items (e.g. number of bulk coin bags) that need to be picked up. It is probably easiest to send an image of the CHD contents printout.

Please also remember that where a recovery collection is due, a further missed collection notification must also be completed on the day of the recovery collection to confirm whether the recovery collection was successfully completed or not.



- Finally just a couple of final reminders **that a collection can still be made by G4S even if;**
- no TSID card holder is available
- the custodian arrives outside the contractual time window
- the SAF is not working. In this case we would revert to the old paper system

## THE KEY POINTS



- ▶ Need to know when collections are due
- ▶ Complete a Missed Collection Notification for any missed or partially completed collection
- ▶ Complete a further notification to confirm whether a recovery collection took place or not
- ▶ Requests for additional visits to empty CHD sent via CSM to T&R Team



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

From: [REDACTED]  
Sent: 20 October 2016 14:43  
To: Ask Olly  
Subject: Additional frames or fares posters

Hello Olly,

As part of the FfFS changes, some stations had additional frames for the fare charts installed. However, no posters were sent and getting hold of them is difficult and incurs costs. We have had an empty frame ever since the remedial works were done.

Can you confirm if the database has been updated so we get the correct number of posters?

Is it also possible to have the posters in a format that we can request reprint to the plotter from the poster department?

Many thanks

[REDACTED]

Hi [REDACTED]

Thank you for your email and query.

I think the reason that you were unable to void the 'Same Station Exit' on the customer's card was the fact that they had used a Bus after this happened. There are restrictions within the software that prevent voiding of events, after another PAYG event has taken place. This also would prevent the customer being able to resume their original journey at another station without further charge (as described in our Oyster Explained feature in last month's T&R Update).

Hope this explains why you were unable to assist the customer. In such circumstances they would need to contact the Customer Contact Centre to obtain the necessary refund.

Regards

*Olly Oyster*

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

Hi [REDACTED]

Thank you for your email and question.

This is a topic that has come up quite a bit since the new design of POM screen was introduced. Although children under 11 are entitled to free travel on LU services, only holders of a 5-10 Zip card are entitled to travel free on National Rail.

As a result if customers are selecting a destination that includes travel on NR they would need to purchase a ticket for the child.

Following feedback from station staff changes were made to the POM screens for buying child tickets, so that the rules around when a ticket is needed for a child is explained earlier in the transaction. Previously this message only appeared when the customer reached the final payments screen.

Regards

*Olly Oyster*

From: [REDACTED]  
Sent: 12 October 2016 12:48  
To: Ask Olly  
Subject: Time Out

Dear Olly,

Since the introduction of the CHD, when entering data onto the SAF, if your SAF screen doesn't have a button pressed for more than 5 minutes, you are required to sign on again. The issue is that the CHD retains your TSID card whilst the CHD is in use meaning you have to exit the CHD, sign on to the SAF and then reinsert your TSID card into the CHD. Not only frustrating but time consuming when you are servicing/floating/fixing errors on POMs.

We once had the ability to set our own 'Time Out' option on the SAF, but it is now set to 5 minutes. Can we request an extension to 15 minutes or more? This would help somewhat for us.

For example, to service all 4 MFM's and 7 AFM's & 2 QBM's at Euston, float, top up Oysters, enter all cash into CHD and enter data onto SAF, it currently takes around 2 to 3 hours depending on other faults found (regularly) during the course of servicing and is extended when you have to move from CHD to SAF and back again constantly signing back on.

Yours eagerly,

[REDACTED]

Hi [REDACTED]

During station works over the last year, a number of stations have had the poster frames that contained their Fares Poster either removed or changed. As these poster are produced individually for each site, the process of obtaining a replacement is quite slow and expensive.

Requests for additional or replacement Fares Posters can be made via the T&R section of the Intranet or via the link pasted below:

[http://luintranet.tfl/static/documents/coo/Fares\\_Poster\\_request\\_form\\_v1.pdf](http://luintranet.tfl/static/documents/coo/Fares_Poster_request_form_v1.pdf)

Cubic will be supplying new fares posters to all stations for the Fares Revision on 02 January, so any stations that have changed their requirements need to advise the T&R team as soon as possible and no later than the end of November, so that the details supplied to Cubic can be updated.

As the replacement of fares posters is so close, we are advising stations against ordering additional copies of the current version as these are not likely to warrant the cost, for the short period they will be on display.

Regards

*Olly Oyster*

From: [REDACTED]  
Sent: 13 November 2016 22:18  
To: Ask Olly  
Subject: Same Station Exits

Hi Olly,

I tried to void a Same Station Exit (they were charged a minimum rather than maximum fare suggesting they spent 2-30 minutes in the station) that a customer had incurred as a result of a signal failure causing a line suspension.

The POM wouldn't allow me to carry out any PAYG Operations. Note even the TOM would permit it. The customer had only used a bus since incurring the SSE. Is there anything I missed?

Kind regards,

[REDACTED]

From: [REDACTED]  
Sent: 28 October 2016 17:58  
To: Ask Olly  
Subject: Child tickets

Hi Olly

I was wondering why the POMs are selling tickets for kids under 11 when they are meant to be free on the tube? If a customer buys a ticket for an adult and there is an option to add a child and choose the age the POM automatically gave them the child fare but if they are a tourist and no one is around to help, they will buy the ticket and surely that's not fair.

I only realised the problem recently as I was helping tourists and having worked in ticket office before I always told them the under 10 didn't need a ticket. That option on the machine should either disappear or the price should be altered once the adult buy a ticket for themselves

Thanks in advance.

[REDACTED]

The secure time out on the TOM/SAF is configured at 15 minutes, with the screen switching off after a further 15 minutes of inactivity. This change was made to remove the facility for staff to set their time out at zero, which effectively meant they would never be automatically signed off.

The CHD also has a time out function, which will sign a user off after 5 minutes of inactivity. This has been set to avoid the risk of staff walking away from a device and forgetting to sign-off.

When servicing multiple devices in the manner you describe, it would be necessary to sign-off the CHD after completing a deposit of cash from the first POM, to then be able to sign-on to the next POM and then sign on to the CHD again to process the cash from the second device. It should not be necessary to have to sign-on to the SAF again, unless more than 15 minutes elapses between input of the POM service confirmation and cash transfer on the SAF and completing the input for the second device.

Although it may seem frustrating to have to sign-on multiple times, the process does enforce the correct manner of working and avoid the risk of devices being inadvertently left in a signed-on condition.

Regards

*Olly Oyster*

# SPECIAL FEATURE

## A POTTED HISTORY OF BANKCARD ACCEPTANCE

To mark the start of the Vanguard of the new style Chip & PIN unit (or PED as it is officially known) as outlined in our update on [Page 13](#), and the latest chapter in the development of bankcard acceptance, we thought it would be a good time to look back at the recent history of bank card acceptance on LU.



Going back to the start of the UTS Project in 1987, the new TOM had no facility to take card payments. At this time we only accepted credit cards using carbonated sales vouchers and a card imprinter which put an impression of the card onto the voucher.

Bankcards were only accepted for the purchase of monthly and longer period season tickets

The first steps in processing transactions electronically, were taken in the early 1990s, with the introduction of Barclays PDQ device, initially at **Marylebone** for NR ticket sales and subsequently at **Northfields** and the other stations at the western end of the Piccadilly line.

The introduction of these new terminals, although still separate to the TOM, allowed automatic authorisation of transactions rather than the member of staff having to ring for an authorisation code to be recorded on the sales voucher.

The new system was soon expanded to all other stations, as it was more secure and quicker, since payments were processed automatically at end of day. Under the previous system the transaction was not processed until the sales voucher was processed by the cash office and if the voucher was lost, incomplete or incorrect, there was a very high chance that LU would not receive any money for the transaction.

The new technology also allowed us to make two major steps forward in terms of card acceptance:

- 1. The ability to accept debit cards such as Switch and Visa Connect cards, the use of which was expanding rapidly.*
- 2. The ability to process bankcard payments for a much larger range of tickets. Significantly the change in policy to allow cards to be used to buy 7 Day tickets paved the way for a huge increase in card payments, mainly at the expense of cheques.*

It was not until after the signing of the original Prestige PFI contract in 1998, that bankcard acceptance was introduced on POMs with the introduction of card acceptance on the MFM and the introduction of the QBM (a bankcard only device) and an upgrade of the TOM integrating bankcard sales into the device and allowing us to withdraw the stand alone PDQ machines.



When first introduced on the MFM, customer's cards were taken inside the device for reading and processing. This introduced two new issues; the risk of customers cards being stuck inside the device due to a fault or not being removed by the customer and the need to retain and store cards that had been retained by the device as a result of a request by the bank or card issuer during the authorisation process.



Subsequent device upgrades and the development of Chip & PIN technology saw the replacement of the first generation of card readers on the MFM and the rollout of new Chip & PIN units to all TOMs and MFMs. Our ability to accept card payments was subsequently extended by the gradual replacement of the cash only FFM with the more versatile AFM which could also take bankcard payments.

Over the years since, the volume and percentage of sales made using bankcards have steadily climbed and movement of sales particularly Oyster top-ups from ticket offices to POMs has accelerated this.

As we have reported in several recent editions of TRU, the use of contactless payments for travel on LU is steadily growing. However for the vast numbers of customers who still want to make purchases from our POMs using a bankcard, the new design of PED currently being deployed will be a further chapter in the bankcard acceptance story.

# PROJECT UPDATES

## POM PED UPGRADE UNDERWAY

A big step towards the implementation of the new design of Chip & PIN unit (PED) on our POMs eventually took place on the night of **Wednesday 26 October** with the upgrading of the first MFM at **Embankment**. This had been delayed by a week whilst we waited for final approval of the new back office processing arrangements for the card transactions. Unfortunately this change of date happened too late for us to correct the PED upgrade article which we included in **TRU95**, which showed the original planned date as Thursday 20 October.

Unfortunately the first installation didn't go entirely to plan and Cubic were unable to complete the replacement of the coin validator, or fit a blanking block into the space previously occupied by the green throat of the old Chip & PIN unit. The old MFM PED (**fig 1**), the installation at Embankment (**fig 2**) and what the new MFM PED should look like (**fig 3**) are shown below.

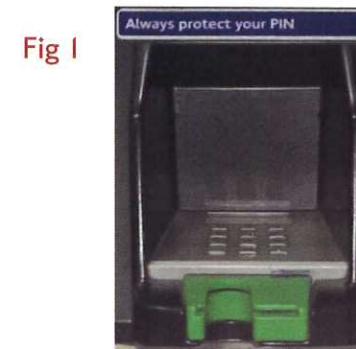


Fig 1



Fig 2



Fig 3

However, on the night the biggest problem was the inability to connect the new PED on the MFM to the new bankcard processing system, which prevented the MFM from being in card acceptance mode at start of traffic the following morning. The problem was eventually traced as being due to an error in the format of the message sent from the device to the new Bank Card Processor (BCP), which caused it to not be recognised and therefore prevented communication being established with the MFM at Embankment. The device was returned to full service at around 17.00 on **Thursday 27 October**.

Station	Device	
EMBANKMENT	MFM 30	AFM 28
EUSTON	MFM 32	MFM 33
KINGS CROSS (Tubes)	MFM 32	MFM 33
LIVERPOOL (C&H)	MFM 30	AFM 24
STREET (Main)	MFM 32	MFM 33
OXFORD CIRCUS	MFM 30	MFM 32
ST JAMES PARK (Main)	MFM 32	

Following this initial installation, the Vanguard was then extended to a further 8 devices over the first two weeks of November. Initially with 2 MFMs at **Liverpool Street (Main)** on the night of **Thursday 03 November** and then 2 MFMs at each of the following; **Kings Cross (Tubes)**, **Oxford Circus** and **Euston** during the week commencing Monday 07 November.

Further MFMs at **St James Park** and **Liverpool Street (C&H)** are due to be added to the Vanguard. The full list of 111 MFMs involved in the PED Vanguard is shown in the table above:

The Vanguard of the new PED on the AFM is scheduled to start during week commencing **Sunday 13 November** and will initially cover the first 3 AFMs shown in the table above. As can be seen, we have focussed on AFMs at stations which are also included in the MFM PED Vanguard, to try and provide a consistent look to POMs for customers. It will also reduce the number of sites which need to be configured on the new bankcard processing platform, before the main rollout gets underway in the New Year.

We had hoped to include the training devices at **Ashfield House** within both the AFM and MFM Vanguards, so that staff attending training there, would see the new equipment that will be rolled out. Upgrade work has been deferred until early 2017 whilst we finalise the way that the equipment will be connected to allow dummy authorisations during training.

As the new design of PED is considerably different to the previous unit, the card acceptance sticker which displays the logos of the card schemes we accept has been redesigned (as shown on the right).



Please insert your card with the chip facing up

# PROJECT UPDATES

## POLYMER NOTES – A right screw-up!

As the number of the new £5 polymer notes in circulation increases we have had a steady flow of reports from stations with MFM fitted with Bank Note Acceptor (BNA) units indicating high levels of note jams and in particular notes are getting jammed on entry to the vault.

We have also received feedback that a large proportion of the notes which have successfully reached the note vault, were severely creased when removed during servicing.



Subsequent investigation by Cubic, based on some observations by a number of staff, that the problem was potentially linked to the way that the note was inserted into the device by the customer, have now established the cause of this issue.

The cause has been traced to the window within the new £5 note, as illustrated on the right.

The problem occurs after the note has been inserted with the clear pane first and when after validation the note is being transferred to the note vault. A photocell which is used to detect the passage of the note shines through the clear pane in the note and reacts as if it has seen a very short note pass by it.



This seems to result in the flap on the note fault closing prematurely and the note becoming jammed, as illustrated above left.

It has been confirmed through extensive testing that this does not happen if the note is inserted with the Queen's head or Winston Churchill's head first and the hologram window towards the customer.

Some staff who have suffered this type of jam have been confused as they have not seen any failed sale or kept cash indicated on the MFM. In most cases this is because the customer's transaction has been successfully completed and they will have received their top-up or tickets.

The problem occurs at the end of the transaction when the device attempts to transfer the notes from the note escrow, where they are initially held, into the actual vault.

As a short term fix, staff assisting customers at POMs can play a valuable part in avoiding note jams, by encouraging customers to insert any polymer notes that they are using as described shown in image to the right.

In the longer term Cubic will be undertaking a modification to each of the devices to cure the problem. We are hoping to commence the rollout of this modification to all devices with BNA units from Wednesday 23 November.

This will require an engineer visit to each location with a laptop. This will only take around 15 minutes per machine and will be undertaken between 10.00 and 16.00 hours to minimise the time devices are not in full service. We are hopefully that all devices will have been upgraded by mid-December.



**INSERT NOTE INTO MFM WITH QUEEN'S OR CHURCHILL'S HEAD AT LEADING EDGE**



Please note that the 99 MFM fitted with **Bank Note Recyclers** do not appear to be affected by this defect.

# PROJECT UPDATES

## AFM SOFTWARE UPGRADE

As we reported in TRU95, the Vanguard of a new version of software for the AFM began on Tuesday 01 November, with the upgrade of the first two devices at St James Park and Embankment, followed by a further 30 devices over the next five nights.

This marks the first service release to fix defects that have been raised since previous project related upgrades took place.

As previously reported, the main driver for this release is a change to the way that the AFM copes with the downloading of large files when a fares revision takes place, as in the past a significant number of devices have failed and have had to be restarted to complete the table loading process. It is therefore important that this fix is delivered before the process of loading new tables in readiness for the January Fares Revision begins in December.

Following a two week Vanguard the full rollout to all other AFMs is scheduled to begin on Sunday 20 November, initially with a further 20 devices and then continuing at a rate of 50 AFMs per night, 6 nights per week, until the final AFMs are upgraded on the night of Friday 02 December. No upgrades will take place on Saturday nights and those scheduled for Friday night will take place at stations that are not served by night tube services.

In addition to the fix for handling large tables mentioned above, the software release also includes a change to allow the maximum bankcard transaction limit to be more easily changed and fixes for a number of other issues listed below. A number of these address niggly problems which from time to time prevent some AFMs from accepting coins.

The other main changes included within this software release are:-

- Improved capability to handle large tables when being upgraded for fares revisions and screen changes etc.
- Ability to configure a higher limit for bankcard transactions (current limit will remain unchanged for the time being).
- A fix for an issue that causes the AFM not to accept coins, without showing any error codes.
- A fix that addresses a previous issue where the yellow lever at the top of the coin validator failed to return to the correct position and required a reset to be performed.
- A fix for another CHU issue which currently prevents the coin blocker re-opening after the cancel button is used and results in error 142 being shown.
- A fix to prevent AFMs occasionally reporting errors '113' and '120'

Once upgraded, devices will initially have their bankcard transaction limit maintained at the current figure of £650. However, as reported within our [Fares Revision Preview](#) on Pages 4-6, we are hoping that following the completion of the upgrading of all MFM and AFMs, we will be able to make a small increase to the current limit on these devices, as part of the forthcoming January Fares Revision changes.

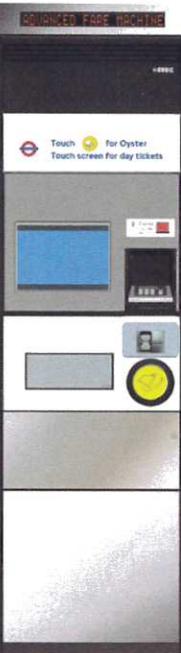
## GETTING READY FOR THE NEW £1 COIN



The new Eagle validators being fitted as part of the MFM PED upgrade programme are ready to accept the new £1 coin being introduced in spring 2017. We had hoped that AFMs would also be picked up as part of the AFM PED rollout, when this commences. Unfortunately, the complexity of the work that needs to be undertaken on the AFM, means that Cubic may not be able to include the validator replacement within the same visit.

This coupled with the fact that the planned start of the AFM PED rollout in January, being a lot later than originally planned, means that if we relied on the PED rollout to also implement this change, we would have not been able to update all devices before the new coinage enters circulation. The alternative strategy now being adopted is for separate Cubic engineering teams to start from the end of the planned AFM PED programme and work backwards towards the start of the programme until they meet the PED implementation teams working from the beginning of the programme.

In a further programme of work Scancoin will also be making visits to all CHDs to modify the coin sorting mechanism on the devices. On both POMs and CHDs both the new and old designs of the one pound coin will be stored together.



# PROJECT UPDATES

## LCP3 UPGRADE

We are pleased to report that a new version of E2 gate software has been developed, which includes a fix to clear the "Ticket soon to expire" message from the gate POD once the customer concerned has passed through the gate.



We are looking to deploy this new software during the week commencing **Sunday 20 November**, to gates at **Cannon Street, Embankment and Sloane Square**, which will be updated from the trial software they have been operating with since early September, to the latest production version.

Later the same week, the Vanguard will be expanded with the upgrading of the E2 gates and WAGs at **Stratford**. This will mean that all gates at the station will then have the very latest gate software.

This will be followed by the expansion to two further sites, **Kings X (Northern)** and **Tottenham Court Road**, where gates will be upgraded from the current standard E2 LCP software to the latest version.

The main changes for these sites will be the fix for the POD message clearing, as outlined above and a change which will reduce the frequency of gates having to be cold-started and the internal transaction counters reset.

Once these Vanguard sites have been upgraded, all being well, we will be able to approve the start of a rollout to other sites with E2 gates with the LCP3. These will be remotely upgraded to the new software between **11 and 25 January 2017**.

Currently we have just under 500 E2 gates that have the LCP3 fitted and these and any further E2 gates or WAGs installed as part of the WAG programme, will need to be remotely upgraded in the New Year. Further details will be sent to stations concerned nearer the time.

In parallel with the update of the E2 gates that already have the new LCP fitted, we were due to start the long awaited hardware upgrade for E1 gates, to fit them with the LCP3 and a new service panel.

This rollout was due to start with **London Bridge** and **Canary Wharf** during the week commencing **Sunday 13 November**, to allow all the installation teams to be trained whilst working together at the same site, before they are dispersed across different sites in the subsequent weeks of the programme.



Unfortunately due to the potential impact on the forthcoming FTP4 upgrade (as covered on Page 17) and the change freeze ahead of the January Fares Revision, a decision has now been made to defer the start of the E1 Gate LCP upgrades until the second week of January 2017.



As previously reported, monitoring of gates will be added to the device monitoring app as each station is completed.



For pneumatic gates, there has been less progress, although a new version of LCP software has been loaded to the two trial gates at **Green Park** since **Wednesday 02 November** to address problems which Cubic believe have been caused by fluctuations in the power supply feeding them.

A further upgrade to these two gates is scheduled to take place before Christmas to address another issue affecting the gate paddles and the beams that detect customers passing through.

Once Cubic are confident that they have a version of software for pneumatic gates we plan to restart a formal Vanguard involving all of the gates on a particular gateline.

It is likely that this will initially be at a smaller station than Green Park, but at the time of publication locations had not yet been confirmed.

**UPDATE!**

# PROJECT UPDATES

## READER CHANGES

Following its initial implementation on the card readers (RTDs) on the gates at **St James Park** in July, a trial to extend the length of time that the RTD is activated to read a card, was extended on the RTDs at 9 other LU stations from **Sunday 23 October**.

Like the recent public address campaign featured in TRU95, this trial is aimed at reducing the level of card clash problems caused by wallets containing more than one card being presented to the RTD.

At present the RTD may read and process the first Oyster or contactless payment card it detects, which may not be the card that the customer actually wants to use. This leads to instances of incomplete journeys on two different cards.



**ST JAMES'S PARK**

By activating the RTD for a slightly longer period of time, the RTD has more chance of detecting any other cards that may be in the same wallet or card holder. If this does happen, the card should be rejected with reject code "71" (multiple cards) being displayed. Whilst this change may lead to slightly more cards being rejected, it should significantly reduce instances of customers being wrongly charged as a result of the wrong card being read by the reader.

The other stations which are now operating with this extended read time on their RTDs are:-

CHARING CROSS	LEICESTER SQUARE	TOTTENHAM COURT ROAD
GREEN PARK	OXFORD CIRCUS	VAUXHALL
KINGS CROSS (Northern)	PICCADILLY CIRCUS	VICTORIA

## FTP4 VANGUARD

As we reported in TRU95, in our feature on the forthcoming Vanguard of a new TfL app and the Faster Universal Load (FUL) facility, prior to the Vanguard and on system testing taking place, it is necessary for Cubic to upgrade both the Station Computer (SC) and each of the readers at the Vanguard stations.

The first LU stations due to go live were, **St James Park, Euston and North Greenwich**. All 3 stations had their SCs upgraded on **04 November**, but the reader upgrade was only completed at **St James Park**. The delay in upgrading gate readers was due to the late discovery of an issue during testing. A further batch of LU stations were upgraded on **Sunday 13 November**, again with only the SC initially being updated. The revised plan should see the gate readers at all of these sites being remotely upgraded by **Friday 18 November**. This reader upgrade also contains a fix to reduce instances of POD code "99" (Transaction timeout) being displayed.

The upgrade of the SCs at all other sites commenced on **Monday 14 November** and will now continue until **Tuesday 22 November**, with most LU sites having been completed by **19 November**, with the latter part of the rollout focusing on NR locations.



**LAL MXIDE PU**

Part 3 – We've mixed up the letters in these station names. Can you work them out?

Clue – Stations connected with things found in a church.

(a)

**SCORCH IN RAGS**

**GLEAN**

(b)

**PELT ME**

(c)

**SNARE SPONGER**

(d)

**T & R**  
Trivia

**LET EACH WHIP**

# PROJECT UPDATES

## CASH HANDLING DEVICE UPDATE

Following completion of the Cash Handling Device (CHD) rollout, we have had a few on-going problems with CHDs, mainly around the inability of users to be able to sign on to the CHD.

We have seen periods where during an update of the user file held on the device, users attempting to sign on have received an error message saying "No user registered". Typically after 20-30 minutes the same user is then able to sign on without any problems.



Unfortunately an attempt by Scancoin to address this issue during week commencing 31 October, resulted in some unexpected changes to the Main menu screen and the disappearance of the change PIN option at around 45 stations where Scancoin had loaded their latest software upgrade before the problem was highlighted. This mainly affected stations at the east end of the District, north end of the Metropolitan and west end of the Central lines.



A further change to address these problems was subsequently tested on the CHD at Temple on Friday 04 November, before being rolled out to the other affected stations.

Unfortunately due to issues within the operating system software, it has not been possible to restore all of the options on the main menu back to their original positions.

The main impact of this is that the Change PIN button is now at the top of the right hand column and the Operator View option now in its place (bottom left).

Scancoin are planning to rollout this software progressively to other sites but for the remaining stations this will be done with prior notice and details will be communicated in advance via email and the weekly *Hot Issues Bulletin* (HIB).

Scancoin are continuing to investigate possible improvements to the coin sorter mechanism to alleviate an issue that has caused certain 50p coins to end up in the £2 hopper.

It is likely that this modification will be undertaken in conjunction with an engineer visit to complete the final changes in readiness for the CHDs to be able to accept the new version of the £1 coin, when introduced in spring 2017.

Finally to try and reduce the current volume of calls to the Scancoin Fault Reporting line (Auto 12261), we are currently investigating changing the method of ordering consumables for the CHD. Currently receipt rolls, collection sacks and the pouches used by the 'slimline note accepter' are supplied by Scancoin on receipt of a request via their fault report centre.

We are now hoping to add the ordering of these items to the list of items that can be ordered via the IPad. This should make it easier for users, as most T&R related items will be available from one source. Further details of the implementation of this change will be communicated once these have been finalised.



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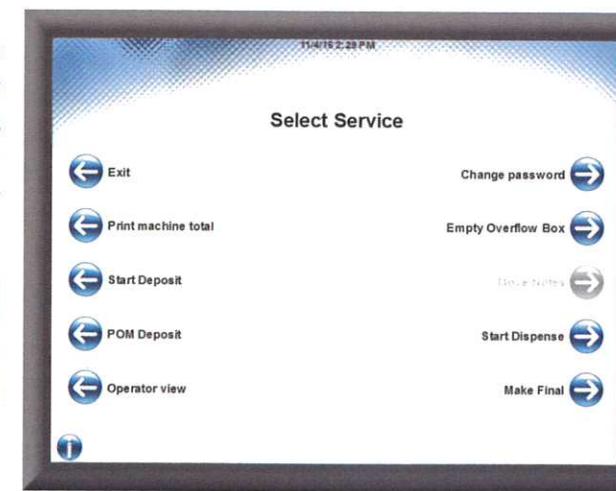
- Send an email to:



## SC3 UPGRADE

Further to the

# PROJECT UPDATES

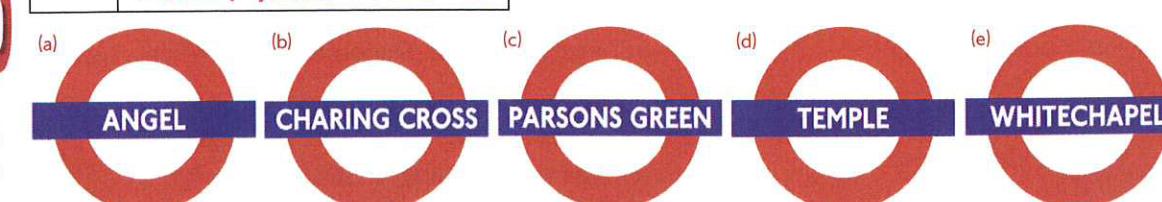


## ANSWERS TO T&R TRIVIA

Pt.3 **LAL MIXIDE PU**

(a) ANGEL (b) CHARING CROSS (c) PARSONS GREEN

(d) TEMPLE (e) WHITECHAPEL



Pt.1 A Surprisingly the cost has actually gone down. The current All Day Cap is -£1.50 cheaper than the 2011 Peak cap and -£0.10 less than the 2011 Off Peak cap.

**How did you do?**

**WHERE'S  
WOLLY?**



# CRIMEWATCH

