



Answers
on Page 15

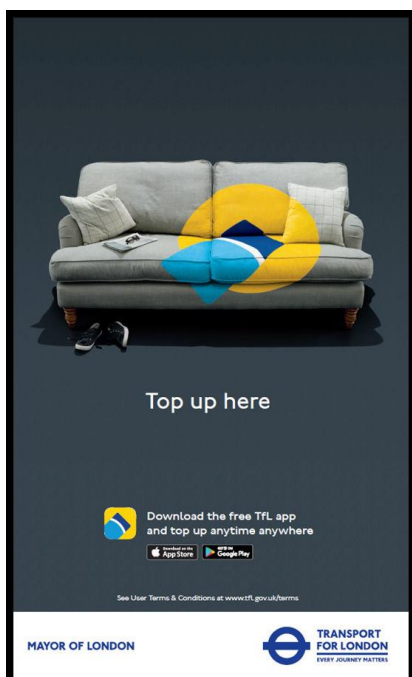


TfL Launch Ticketing App



Wednesday 25 October saw the final stage of the rollout of the Faster Universal Load and TfL Ticketing App functionality, with customers now being able to purchase products directly from the app and then collect them when making a bus journey 30 minutes later.

Now that all of the functions are available to customers, TfL plan to officially launch the Ticketing app from Monday 30 October.



This will include a publicity campaign to promote the use of the app to customers, which will include the poster on the left.

We can also support this by making customers aware of the Ticketing app and the ability to top-up or load products to their Oyster card, in our discussions with them.

Please check [TRUI02](#) for further details of the functions available on the app.

INSIDE THIS EDITION

IN THE NEWS

Pages 2-7 → [Apple Pay](#) → [Stock Ordering](#) → [Currency Change](#) → [TSID Repeat Deactivations](#) →

ASK OLLY!

Pages 8-9 → [Your Letters Answered](#)

SPECIAL FEATURE

Page 10 → [First Line Maintenance and Repeat Failures](#)

CRIMEWATCH

Page 11 → [Return of the Skimmers](#)

[Click here](#)



Many articles now have embedded links allowing iPad or PC users easy access to useful documents and articles. Simply click or touch on each link to activate.

PROJECT UPDATES

Pages 12-15 → [PED Upgrades](#) → [Blocks & Stickers](#) → [LCP3](#) →

AND FINALLY

Page 16 → [Back to GMT](#) → [Looking Ahead to TRUI05](#)

TRIVIA - Pages 1, 3, 5 & 13
[Answers on Page 15](#)

KEY STORIES INSIDE

Page 2

[LONDON POPPY DAY](#)

This year's London Poppy Day takes place on 02 November, so we bring you up to speed with the arrangements for free travel for collectors and how we are helping to process some of the money collected.

Page 3

[DIGITAL RAILCARDS EXPANDED](#)

Following an initial trial, we update you on NR plans to expand the issue of Digital versions of some of their Railcards.

Page 6

[CURRENCY CHANGES](#)

We update you on completion of the most recent phase of works to bring our devices up to date for the recent currency changes, together with details of some further changes on the horizon.

Pages 11

[RETURN OF THE SKIMMERS](#)

In our [Crimewatch](#) feature, we bring you up to date with recent events and what to look out for on our POMs.

Page 14

[TOM & SCU UPGRADES](#)

We update you on recent progress and some revised timescales for planned [Vanguards](#) for these two forthcoming projects.

IN THE NEWS...

APPLEPAY UPDATE

In early November 2017 Apple plans to launch its latest smartphone...
The iPhone X.



One of the innovations planned for this new iPhone will be "Face ID" a facial recognition platform that allows users to log on by looking at the screen instead of using Touch ID (thumb or fingerprint) or by manually entering a PIN to authenticate their identity.

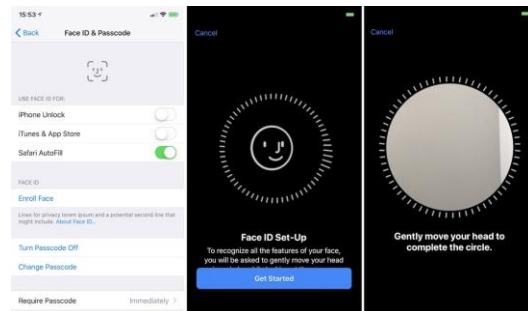


For ApplePay, as for any mobile device being used for contactless payments, the user will need to activate the card that is being used for payment on the device before they touch in or touch out.

This will need to be done before the customer reaches the gate or Passenger Validator.

Similarly if the customer is being checked by a Revenue Control Inspector, they will need to activate the payment card they are using for travel on their mobile device, before presenting the device to the RCI's Revenue Inspection Device (RID) for it to be checked.

Therefore apart from customers looking as if they are about to take a selfie before they reach the gateline or during an on-train inspection, staff should not notice any difference in how the app is used.



Although there are other facial recognition applications available on other platforms, Face ID is expected to be more secure by scanning a users a face with over 30,000 infrared dots to build up a 3D picture of them. The software was developed by the same company who licensed the Kinect technology, which was acquired by Apple in 2013.

LONDON POPPY DAY 2017

As in previous years, London Underground will be supporting this year's British Legion Poppy Day appeal and in particular the London Poppy Day on **Thursday 02 November**.

This will include offering free travel on LU and other TfL services for authorised British Legion collectors on that date.

This is in addition to the existing arrangements between TfL and the Ministry of Defence (MOD), under which armed forces personnel **travelling in full uniform**, can travel free on production of their MOD ID.

On **02 November** free travel will also be available to British Legion collectors who are in possession of the Official Volunteer ID card (as illustrated on the right).



In addition to free travel for the collectors, this year for the first time, agreement has been reached for the British Legion collectors at the stations listed in the table below, to be able to pay in the money they have collected on London Poppy Day via the station's CHD in the secure suite.

ALDGATE	ALDGATE EAST (Main)	BAKER STREET	BANK (Central)
BOND STREET	EUSTON SQUARE	GREAT PORTLAND STREET	HYDE PARK CORNER
KNIGHTSBRIDGE (East)	LEICESTER SQUARE (Northern)	MARBLE ARCH	MOORGATE
NORTH GREENWICH	ST JAMES PARK (Main)	SLOANE SQUARE	STRATFORD (East)
TOTTENHAM COURT ROAD	TOWER HILL	WARREN STREET	

Once processed and counted by the CHD the money will be recorded on the SAF as a Charity Collection, with the same amount being recorded as being transferred to the CHD.

This will then enable the Financial Services Centre (FSC) to calculate the amount paid in across the above stations and then make one payment to the British Legion for all of the money collected as we have done for a number of disaster appeals in the past.

DIGITAL RAILCARD EXTENDED

In [TRU101](#) we outlined the introduction of the first digital NR railcards, with holders of **Network** and **16-25** railcards being able to download their new railcards onto their mobile device, rather than having to carry a physical railcard.

From **Wednesday 25 October 2017**, this initial pilot was extended to also cover two further types of NR railcard; **Two Together** and **Family & Friends**.

The arrangements for these will be basically the same as the railcards already released, with the onus being on the customer to ensure they have sufficient battery power in their device to be able to display the railcards when purchasing a ticket or travelling at a discounted rate.

The only differences with the two further types of digital NR railcard recently introduced is that for both kinds, the railcard allows more than one customer to travel at a discounted rate, but the railcard does not need to be loaded onto each persons mobile device, providing they are travelling together.

Unfortunately over the last couple of weeks, we have been made aware of a couple of customer complaints resulting from digital railcard holders being wrongly advised that they need to be in possession of a physical railcard to have their discount entitlement added or updated on their Oyster card.

Details of all of the new digital railcards will be added to [T&R Book 2](#) and [Book 8](#) when these are updated for the forthcoming January Fares Revision changes.



The NR Railcard discount entitlement **must not** be set on an Oyster card for holders of **Family & Friends**, **Network** or **Two Together** railcards.



Those of you who keep a close eye to stories in the press may have seen some rather premature coverage within the Evening Standard on **Monday 23 October**, concerning plans to change the current Railcard range.

An official announcement of any changes is likely to be made in November as part of the Autumn Budget Statement, part of which will formally announce details of the 2018 NR Fares changes.

We hope to be able to bring you full details of both in the November issue of TRU.

Part 1 (continued from Page 1) – Identifying the station on the front page is harder than normal... so here are a few clues to help you;

1. Opened to the public on Monday 13 November 1933.
2. A competition was held to choose a name for the station.
3. Travelling northbound there are three separate terminals.
4. Originally part of the Metropolitan and Great Central Railway.
5. There are two LU stations serving this town, which was once the headquarters of the RAF Coastal Command... but which one is it?



Ticketing & Revenue
T&R
Trivia

[Answers on Page 15](#)

IN THE NEWS...

ORDER, ORDER!!

For the last 6 months we have suspended the automatic supply of ticket rolls to our stations, pending the introduction of a new design of roll stock and following the discovery that many of our stations had been hugely over supplied.

In [TRU101](#), we featured some stations which based on current ticket issuing rates potentially have many years worth of stock.

Over the last 6 months we have successfully managed to run down the surplus stock at a number of sites by transferring stock to a number of high consumption sites who have been short on ticket stock. However, we still have large volumes of stock at a number of stations.

We are currently arranging for Cubic to collect ticket rolls from around a dozen of the stations which have the largest surpluses and deliver them to sites that will consume this stock quickly. In this way we can ensure that the current stocks are used up before the new design is introduced.

A number of stations have also highlighted large numbers of ticket wallets and registration forms, which until recently were supplied automatically, based on a set percentage of the station's total Oyster card issues.

Since the closure of ticket offices, the volume of Oyster wallets and registration forms being requested / given out has dropped dramatically, leaving stock to accumulate within the secure suite at many locations. As a result we have now suspended further automatic deliveries of both items and they are now only available as 'on request' items. Like all other ticketing consumables, Oyster wallets, Oyster registration forms and ticket rolls can be ordered via a Ticketing Consumables Order on Mi -Apps. Any ad-hoc requests for wallets or registration forms will be fulfilled on the next scheduled delivery date for the station rather than as a special delivery. This may mean that in the worst case scenario there may be a 4-5 week wait for a delivery, if the programmed delivery has just taken place



Need the MiApps link? – [Click here](#) for the guide on how to install it to your iPad.

Please do not ring the Cubic Helpdesk (Auto 1610) regarding any requests for consumables, as they have been instructed to redirect any callers to use their iPad to request the items they need.

One of the big advantages of the electronic ordering process is that we can make changes to redirect requests to the appropriate team very easily, whilst leaving the process to be used by frontline users unchanged. You therefore don't need to worry who the current supplier of an item is.

QBM SCREEN UPDATE

Following the start of the rollout of the new PED on QBMs, it was identified that when certain foreign languages were selected, the text subsequently displayed on the home and certain other screens in a manner that caused the text to flow off the right hand side of the screen, making the end of the message unreadable. The issue was subsequently highlighted to Cubic and was identified as an issue in the QBM base data.

A fix was applied as part of the planned base data update on **Sunday 22 October**. All devices should now display text correctly, regardless of which language is selected.

A further QBM issue was recently highlighted to us by an eagle eyed reader at Southfields. In this case it was found that when preparing the new base data for the upgraded QBM, Cubic had copied details from the Vanguard devices all of which were situated in Zone 1. As a result when devices situated outside of Zone 1 were upgraded later in the programme, the initial options offered on screen were not necessarily appropriate to the station concerned and different to those offered on the other POMs at the station.



This issue is due to be addressed as part of the January Fares Revision changes scheduled to be implemented on **Tuesday 02 January 2018**. QBMs outside Zones 1&2 will then offer Travelcards for the same zonal combinations as the other POMs at the station.

Example



West Kensington uses 14 rolls per year... yet had over 145

ARMED FORCES FREE TRAVEL – THEY MUST BE IN UNIFORM!

The T&R Team continue to receive a number of complaints about stations that have incorrectly allowed free travel to armed forces personnel who are out of uniform.

The most common example was of service personnel simply approaching gateline staff at the start of their journey and stating that their Commanding Officer had given them personal authorisation to travel out of uniform.

This then had the knock-on effect for gateline and Revenue Control staff at the destination station, who had to deal with the issue of irregular travel for a ticketless journey.

The MOD have been clear that it is not the case and have regularly reminded all armed forces personnel of the terms of the agreement and have also asked their staff not to “try the patience of TfL staff”.



The MOD are keen to follow up any instances of irregular travel involving armed forces personnel, which would require details from the offender's MOD90 identification card. These particulars should be recorded on an [irregular travel form](#) along with details of the offence and forwarded to the T&R team as soon as possible.

POLICE FREE TRAVEL – IS IT WARRANTED OR NOT?

It all depends on the definition of the term “Warrant”.

Since 2015 it has been a mandatory requirement for **British Transport Police (London Division)**, **Metropolitan and City of London** officers to use their Police Oyster cards for journeys on London Underground. Officers from all other police forces in the London area that are entitled to free travel on LU, can still use their Police Warrant card.



Below we have produced a useful table showing which police forces are entitled to free travel on London Underground services that outlines whether they must use a **Police Oyster card** or present their **Warrant card** for inspection at the gateline. Certain BTP officers seconded to London Division have been issued with Contractor Oyster cards.

Police Oyster Cards	Contractor Passes	Warrant cards
BRITISH TRANSPORT POLICE (London Area) CITY OF LONDON POLICE METROPOLITAN POLICE	BRITISH TRANSPORT POLICE (Non-London officers seconded to London Division)	BRITISH TRANSPORT POLICE* (Outside London Area) ESSEX KENT SURREY HERTFORDSHIRE THAMES VALLEY
* BTP officers from outside the London area must be on duty as journeys for leisure purposes are not permitted. Gateline staff are required to record details of the officer's name, warrant card number and journey. These details must then be forwarded to the T&R Team who will confirm them with the BTP Professional Standards team.		

Details of all Free travel on London Underground are provided in [Section 10 of T&R Book 8 – Helping Customers](#)

Part 2 – Following on from our coverage of digital Railcards on Page 3...

Q2) Which NR Railcards only allow discounts for the holder?

- | | | | |
|---|----------------------|---|--------------------------|
| A | H.M. Forces Railcard | B | Disabled Person Railcard |
| C | 16-25 Railcard | D | Senior Railcard |

And following on with the same topic...

Q3) Which of the following entitle users to a discount on Oyster PAYG fares

- | | | | |
|---|--------------------------|---|---------------------------|
| A | Annual Gold Card | B | Network Railcard |
| C | Disabled Person Railcard | D | Family & Friends Railcard |

Ticketing & Revenue
T&R
Trivia

[Answers on Page 15](#)

IN THE NEWS...

CURRENCY CHANGES

The last year has been a busy one in terms of getting ready for the introduction of new versions of the £1 coin and polymer £5 and £10 notes and the subsequent withdrawal of the previous versions of the £1 and £5.



This has required Cubic and Scancoin to make a series of separate visits to each device to ensure that our machines were ready to accept the new currency ahead of its introduction and to stop devices accepting the old versions once they were no longer legal tender. The latter was more time critical, as we needed to ensure that MFM's did not dispense any out of date currency to our customers as change or as a refund. With the £1 coin in particular, we had to tread a very careful path in balancing acceptance of both old and new £1 coins whilst both were in circulation.

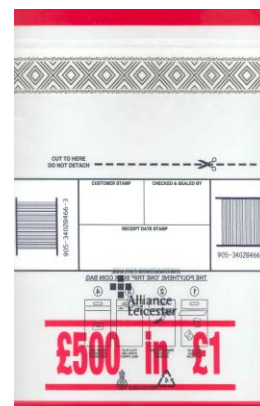
Despite a very aggressive rollout and withdrawal, it was revealed in the final weeks before the old round pound ceased to be legal tender, that there were still potentially many millions of these old coins still in circulation. In reality many of these had probably been stashed away or taken abroad by visitors?

Sunday 15 October saw the culmination of this work, with the final 11 MFM's being updated to reject the old version of the £1 coin on the day that they ceased to be legal tender. We have since received a number of enquiries from stations who have discovered bags with small volumes of old coins tucked away in their safes.



Although they are no longer legal tender, banks will still exchange the older coins and we are still able to bank them. Until 30 November, they should be treated as valid currency and either banked in small amounts (up to £5 maximum) in a counted cash multi-safe bag or remitted in a red £1 bulk coin bag, mixed with new £1 coins to bring the bag up to the correct £500 value.

G4S will continue to process any red bags we remit and separate old and new coins for us until 01 December. Red bags should not be used for bags made up entirely of new £1 coins and similarly the new purple bags must not include any of the old design of coin. Red bags must not be used after 30 November.



Unfortunately although we have a short lull in activities, further changes to POMs and CHDs will be needed. Firstly in spring 2018 when the paper version of the £10 note ceases to be legal tender.



This will initially require a visit to the 98 MFM's with BNR units to prevent them accepting and dispensing the old design of note, followed later on by visits to other MFM's and CHDs to stop them accepting the old paper notes.

After that there are plans to launch a polymer £20 note in 2020, so then the whole process will start again!

Now that the old paper £5 notes and old £1 coins are no longer legal tender, it is a good time to check all POMs to ensure that any locally produced notices to advise customers that a particular machine no longer accepts the old £1 or £5 are removed. As reported in **TRU103**, now all MFM's have been fitted with the new sticker to show what denominations of notes they accept (illustrated above) any locally produced £50 note not accepted notices should also be removed.

In the next TRU we plan to run a further feature on POM appearance to highlight what stickers and signage should be in place.



Denomination	New version Introduced	Old version Withdrawn
£1.00	28 Mar 2017	15 Oct 2017
£5.00	13 Sep 2016	05 May 2017
£10.00	14 Sep 2017	Spring 2018

TSID REPEAT DE-ACTIVATIONS

We have an on-going problem with TSID cards which get locally blacklisted at a station, normally as a result of the user entering the incorrect PIN three times. Under normal circumstances this would lead to the card being globally blacklisted at end of day.



It should then be possible to whitelist and reactivate the card, but in an increasing number of occasions, a number of different circumstances can lead to the same TSID card being repeatedly re-added to the local blacklist by a rogue device at the station or in other cases due to the End of Day synchronisation of local and global blacklists not being completed.

In the worst cases we have had cards repeatedly deactivated over several weeks. Although a long term solution to this problem is still a long way off, the Technical Support team at Cubic have had a lot of success recently, in clearing these cards from local blacklists.

In recent discussions, we were advised that as a temporary work around Cubic plan to undertake a one-off whitelisting of all cards followed by an immediate re-blacklisting of all cards that are not currently active. This would have the effect of clearing all of the local blacklists held by each device. They would then institute a daily load around 04.50 hrs, to force a re-synchronisation of the blacklist file held by each device. This second action should overcome an issue where the global table is not received by certain devices, as since the switch to the later standard end of day time introduced for night tube, the table arrives whilst devices are busy and therefore gets rejected or delayed until after end of day processing has been completed.

In the meantime, problems can be avoided by taking care when entering your PIN. There are a couple of scenarios which frustratingly lead to a regular flow of calls to the TSID Helpline.

- *Don't leave your TSID card lying around. We get regular reports of cards that have been left in the POM Room being picked up and used unsuccessfully by another member of staff attempting to sign on.*
- *Wrong PIN being used, either as a result of changing CHD PIN to a memorable number and then thinking this will change the actual TSID PIN used on the POMs and TOM/SAF, or not using the correct PIN as printed on the carrier letter supplied with each new card. Rather confusingly there is a 4 digit reference number under where the card is stuck, which is used when cards are prepared. This is not a PIN. The actual PIN to be used with the card is actually printed in bold type towards the bottom of the letter.*

In both scenarios, we can easily avoid most cards being deactivated if the user stops and thinks / double checks after the second failed sign-on attempt.

If you are unsure of your PIN, you can ask your employing manager to request for a PIN reminder to be sent to you.

OYSTER CHARITY UPDATE

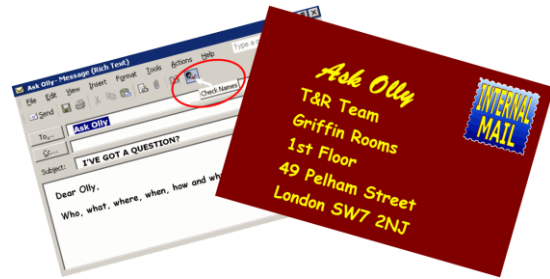
The scheme which allows customers to donate their unwanted Oyster cards at **Kings Cross, Liverpool Street, Heathrow T123 and Heathrow T4** and for us to then donate the Oyster card deposits and remaining PAYG balance to the Railway Children charity has been beset by a number of problems recently.

Staffing changes have made it more difficult to process some of the cards donated through the scheme and we are currently trying to clear quite a backlog of cards to bring us up to date.

Unfortunately further instances of boxes being broken into and cards stolen, has rendered several of the boxes as unusable. Happily we have been able to identify a limited amount of money to maintain / replace these damaged boxes and within the same order are obtaining some additional boxes which are scheduled to be installed within the airport terminal buildings at Heathrow, as part of a joint initiative between Heathrow Airport, London Underground and Railway Children.



Finally on a positive note we are currently checking and collating the records of the cards that have been processed under this scheme over the last 18 months or so and we are planning to be able to make a presentation of the proceeds to Railway Children in time for us to include an update in the **November TRU**.



askolly@tube.tfl.gov.uk

From: [REDACTED]
Sent: 01 October 2017 01:05
To: Ask Olly
Subject: Recent change to the CHD

Hi Olly,

While I love the new ability to sign on while the device is offline, what I do not love so much is that I can no longer sign on by entering my TSID number. I used to use this functionality as it meant I could do other tasks with my TSID card while the CHD is performing a task of its own.

Now it's gone, I'm forced to enter my card, and that slows me down with everything else! While I appreciate it means it can't be used without someone physically taking my card, if I safeguard my TSID and PIN correctly then it shouldn't matter. How come this facility was removed (it feels like a backwards step), and why do the busy stations have the unit that sucks the card, while quieter ones have one they can swipe and continue to use their card? Seems the wrong way around! Could an update be done where it spits the card back out after inserting it instead of keeping it, thus keeping both security AND convenience?

Thanks,

[REDACTED]

Hi [REDACTED]

The recent upgrade of the CHD included new software to overcome some issues we had seen when devices were offline, so staff should now not receive an error message saying they cannot sign on if the connection is temporarily lost. This had previously generated quite a regular flow of calls to the CHD Helpline.

The facility to sign-on without swiping or inserting your TSID card was briefly present on devices due to an error in the previous version of software, this was corrected within the last software release. All devices should now require the card to be either swiped or inserted, depending upon which design of unit the station has.

Although you may find the retention of the card by the CHD slightly inconvenient, it does reinforce the correct procedure of signing onto the POM, performing the service, signing onto the CHD to process the cash and then signing off the CHD to record the transactions on the SAF.

At busier stations it mitigates against the user inadvertently leaving themselves signed on to the CHD whilst going off to do some other task.

Regards

Olly Oyster

Hi [REDACTED]
Thank you for your email.

Any cancelled Oyster cards must be returned to Cubic via the **Surrendered Oyster card bag**, which is despatched from the station via the V&C Transportation Sack.

They should not be placed in the bin as your colleague has suggested.

Regards

Olly Oyster

From: [REDACTED]
Sent: 10 October 2017 11:40
To: Ask Olly
Subject: Surrendered Oyster cards

Hello Olly,

I would like to ask you what is the procedure for when Oyster cards are surrendered by customers at the POMs.

I have been advised that we need to return them to Cubic, but I have also been advised by another colleague that as they are not recycled they are to be binned as Cubic don't want 1000s of Oyster cards being sent to them.

If they are replaced due to be damaged / defaced then we return these cards only as proof is needed. Is this all correct?

Regards

[REDACTED]

From: [REDACTED]
 Sent: 05 October 2017 14:03
 To: Ask Olly
 Subject: WAG paddles

Hi Olly,

My query is quite simply, that as regular fare evaders know it's very easy to push the paddles on the WAGs, but no so easy on normal gates, could Cubic match the effort needed to push normal gates onto the wider gates?

Just a thought!

Regards



Hi [REDACTED]

All of our gates include a "Break Through" feature to avoid the risk of customers being trapped behind a gateline in the event of an emergency where the gates are not opened. It also prevents the risk of customers being trapped in the event of severe overcrowding in a ticket hall.

In response to your question, the break through on a WAG is exactly the same as on a standard E2 gate walkway, but the fact that a WAG has wider paddles means that the force to break through is actually less making it easier to barge through.

The actual settings for each type of gate are;

E2 gate Entry break through force	=	490 Newtons
E2 gate Exit break through force	=	390 Newtons
WAG Entry break through force	=	294 Newtons
WAG Exit break through force	=	234 Newtons
E1 gate Entry break through force	=	490 Newtons
E1 gate Exit break through force	=	390 Newtons
P gate Entry/Exit break through force	=	480 Newtons

The older pneumatic gates have the same setting on exit and entry as they are governed by the air pressure applied to the paddles.

Regards

Olly Oyster

Hi [REDACTED]

Thank you for your email and highlighting this error.

The original item in the [Hot Issues Bulletin](#) correctly displayed the text with the error identified on the rear of the forged JCP cards.

Unfortunately when the item was repeated the following week, the text appears to have been 'auto-corrected' to show the actual text that is shown on the real cards.

For clarification, the fake cards show the text;

"It must be shown on each journey together with the ticket to which it applies whether demanded of not."

The genuine cards have the correct text;

"It must be shown on each journey together with the ticket to which it applies whether demanded or not."

Regards

Olly Oyster



From: [REDACTED]
 Sent: 08 October 2017 07:47
 To: Ask Olly
 Subject: Fake JCP cards

Hi Olly,

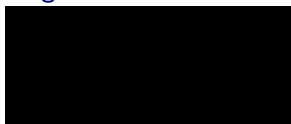
I recently read about the fake JCP cards in circulation. The hot issues bulletin contains the following update

Staff should look specifically for the following error in the text on the reverse of the card, which is highlighted in red;

"It must be shown on each journey together with the ticket to which it applies whether demanded or not. If these conditions are not met the ticket is not valid."

Since this is not very clear, I have a query. Does a card with the statement above, indicate that it is fake, or does it indicate that it is genuine. And what are we specifically supposed to look for. Is it the word 'or' or is it the complete sentence

Regards



SPECIAL FEATURE

FIRST LINE MAINTENANCE & REPEAT FAILURES

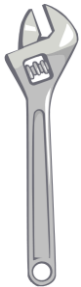
There are some recurring themes in our discussions with station staff and in the phone queries and emails the T&R team receives.

One of the main subject areas is device reliability and the frustrations of a machine failing with the same fault. In several previous editions of TRU (most recently in [TRU99](#)) we have highlighted the need to report faults and how to escalate issues.



Recent and well documented issues with polymer notes on certain MFM's, has highlighted the need to provide some further clarification on who is responsible for dealing with faults when they occur and at what point the same problem occurring on a device warrants greater attention.

The starting point for this is that for the Scancoin CHDs and Gates, POMS and all other Cubic equipment the responsibility for the initial investigation of faults sits with LU operational staff, who must attempt to clear the fault and return the device to service as quickly as possible.



Obviously there will be some occasions and some specific faults, where it may not be possible to rectify the issue and where an engineer may be required to resolve the problem. It will then be necessary to report the fault to Cubic via the Device Monitoring app on the iPad for POM faults or by phone to 1610 for gate and P-Val issues, or to the Scancoin Fault Report Centre on 12261 for CHDs.

When contacting the Cubic helpdesk by phone, the operator is likely to seek confirmation that certain steps have been completed before a job number is issued. A fault reference should always be given to you, even if the issue is successfully cleared by a remote reset of a device.

So what if the device fails again?

If a device fails with exactly the same fault shortly after clearance of the original job by a Cubic technician, you are within your rights to contact the Cubic Help Desk and to ask them to re-open the original job, since the issue has clearly not been satisfactorily resolved.

In cases where the initial clearances have been performed by station staff, e.g. Note or ticket jams, then at what point do you say "enough is enough"?

Here there are often some dilemmas. A number of staff, at a time when funding has been reduced and budgets are stretched, worry about the cost of calling out an engineer on multiple occasions. However, as we have said before, the Revenue Collection Contract (RCC) with Cubic is performance based, so call outs are not charged separately like premises maintenance jobs.



In reality we pay Cubic based on asset performance, so if we don't report a fault, we are paying for full availability of the device even though we aren't getting it.

Another consideration is that it is often easier to fix an issue and keep a gate or POM in service, rather than reporting a fault and having to dump a device and then have it out of service for a period of time. In reality if there is an issue with device it won't rectify itself on its own.



The question here is how many times can a fault be cleared before it is reported? This is particularly relevant in the case of note jams.

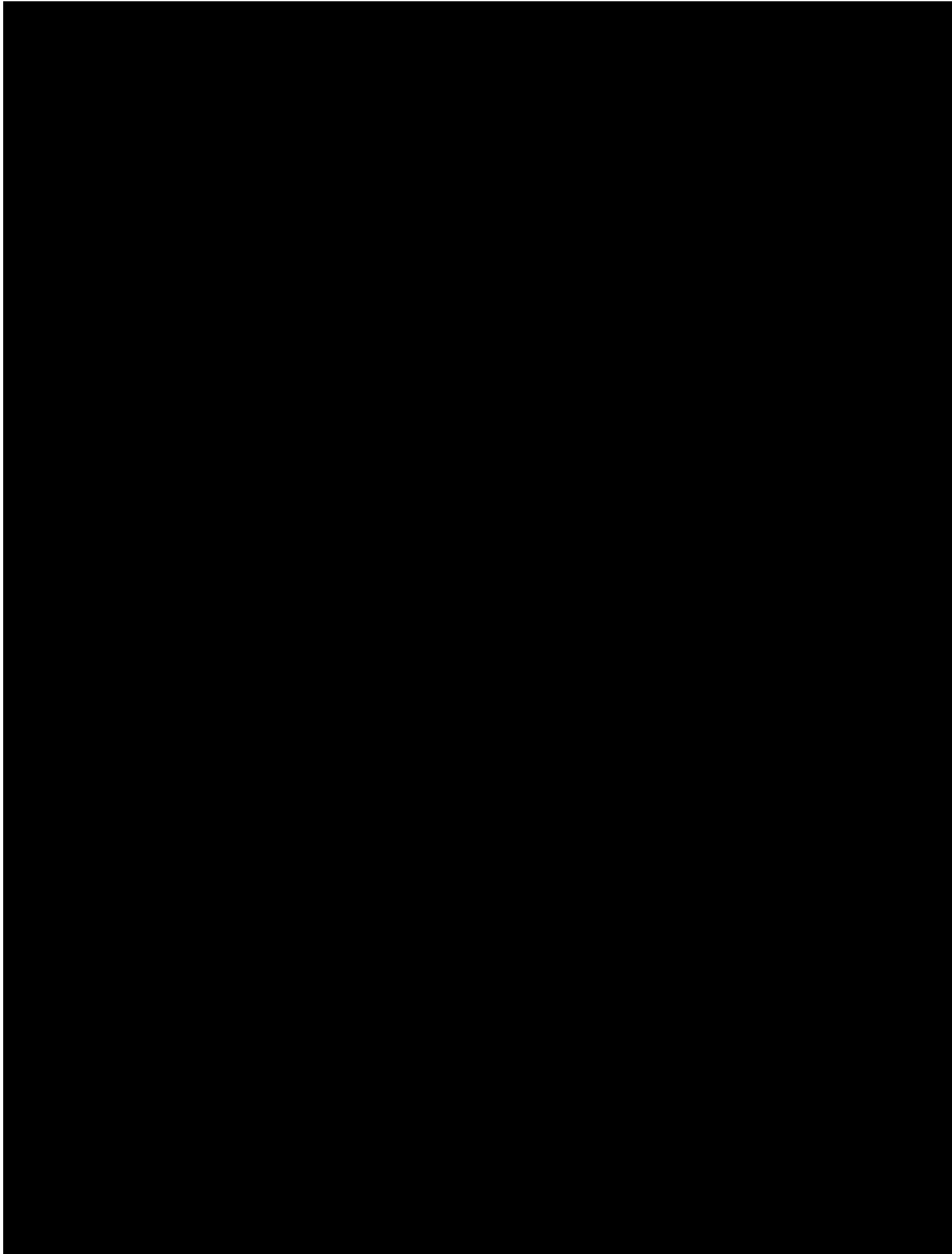
Following recent discussions with Cubic the consensus was that if the fault occurs on a device 3 times during a shift / day it should then be reported to Cubic either via the device monitoring app or by calling Auto 1610. When reporting this type of failure, you will need to emphasise that you are reporting a repeat failure of the device rather than a condition which can probably be cleared by a soft reset or a remote reboot of the device.

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QBM PED NEARS COMPLETION

As we reported in [TRU103](#), we are now rapidly approaching the completion of the final QBMs in the rollout of the new PED. Like the AFMs outlined below, as we reach the end of the programme, we are left with a number of the more tricky devices, some of which could not be completed on previous visits. Most of these being locations where there is little or no space available above the current QBM.

to be able to lift it upwards off its fixings, in order to remove it.

The issue is made slightly more complicated by the actual shape of the QBM casing. Since the device was originally designed to be a free standing unit within the ticket hall, the top of the device slopes down from back to front (as illustrated on the right).



This was largely to prevent customers placing litter and other items on top of it. This means that where the paneling or wall above the device has little or no clearance, the back of the device will be higher than the opening the device is located in, as illustrated in the image above.

These will require a slightly different approach, equipment and a larger installation team to be able to complete.

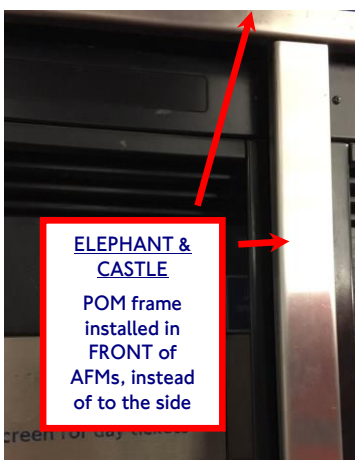
The final QBMs are due to be upgraded during the week commencing Sunday **12 November**, well ahead of the **30 November** deadline for the completion of the replacement of all of the old Chip & PIN units.

During the PED rollout on QBMs we have also been renumbering a majority of the devices from the original series (37-39) into a new numbering range (17-19) previously freed up by the removal of the old FFM's. At the end of the QBM rollout there are likely to be around a dozen devices which will need to be renumbered at a later date.

Some of these are at big sites where the physical number of devices has resulted in certain devices being numbered well outside of the usual numbering convention. These will require a two stage process to initially re-number the offending device and free up the device number for later use by the QBM.

AFM PED UPDATE

Cubic will also shortly be starting work on the upgrade of the last of the final batch of AFMs, which we could not upgrade on the initial visit due to access problems.



These forthcoming revisits will be co-ordinated to ensure that we also have building contractors in attendance to help remove and reinstate panelling and frames that have been installed around the devices concerned; so that Cubic can remove the AFMs to complete the PED upgrade works.

Once the upgrades have been completed, the contractors will reinstate the panelling and frames in a manner that will avoid us having similar problems in the future, should we need to remove or change any of these machines.



The devices / stations that will be included in this short programme are:

Station	AFM	
CANNON STREET	28	29
EAST PUTNEY	29	
ELEPHANT & CASTLE (Northern)	27	28
HOUNSLOW EAST	29	
KINGS CROSS (Tubes)	27	

Station	AFM	
LONDON BRIDGE (Main)	26	29
SHEPHERDS BUSH (Central)	26	28
STRATFORD (East)	12	
TOTTENHAM COURT ROAD	28	29

BLOCKS & STICKERS

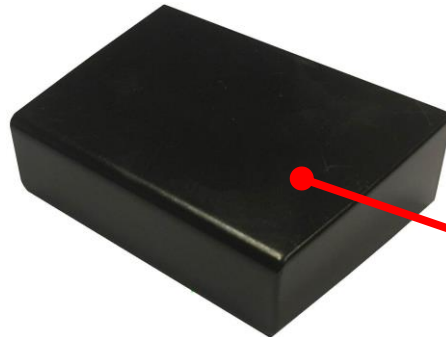
Thank you to all of the stations that have responded to our previous requests for information on devices that are missing their PED infill blocks.

Cubic have responded quickly to most of these and all of the missing blocks reported to us should by now have been replaced.

Unfortunately we are still getting a trickle of further reports, which seem to indicate that a number of blocks that were in place have since disappeared.

In a couple of cases where the loose or missing blocks have been found by staff, there seems to be an issue with the lack of adhesive that was originally applied when the device was upgraded.

If your station still has a POM with a missing PED block, please send an email to [David Nix \(click here\)](#).



It is important to include the device numbers of any POMs which are missing their PED blocks.

We have recently received a further delivery of the bankcard acceptance sticker for devices with the new PED, as illustrated on the left.

If any of your POMs have these bankcard acceptance stickers missing, please send an email to [REDACTED] remembering to include the device numbers for the missing stickers.

Recent station visits have also highlighted a number of POMs which have been upgraded with the new PED, but are still displaying the out of date sticker illustrated on the right.

As a number of these bankcard schemes are no longer accepted, these stickers should be removed and replaced immediately.



LAL MIXIDE PU

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

**Ticketing & Revenue
T&R
Trivia**

(a) RUBS THICK HULL

(b) CLEAN IDOL

(c) WHY A BAD FORMULA

(d) A DARK DOG HOWL

(e) NOT RED CHANNEL

[Answers on Page 15](#)

SCU AND TOM SURVEYS

Following on from our previous TRU coverage of the forthcoming upgrades of the TOM and SCU, the first steps in preparing for the rollout of both devices has started with the start of a programme of site surveys.

These surveys will check and update plans previously completed for the rollout of the Cash Handling Devices (CHD). The main objectives of this exercise is to confirm that the TOM / SAF and SCU are correctly located, as we have a limited opportunity to correct devices that are either in the wrong place or in some cases are missing, when preparatory cabling works are being done.

Whilst carrying out the surveys, we will also be checking a number of other issues including safes, redundant equipment and stock levels.

REVISED TIMESCALES

The TOM upgrade programme will initially start with the upgrade of TOMs located in Visitor Information Centres (VIC) and at **Stanmore**, the only LU station to retain fully functional TOMs for handling Wembley event traffic. These sites need to be completed quickly as their current Chip & PIN equipment will not function after 30 November. These devices will use a slightly different version of software which supports the ticket issuer (THU) and PED, which standard LU TOMs no longer have.

Following deployment to the VICs, it is planned to update all the TOMs used for training at **Ashfield House**, which still have THU and Chip & PIN equipment which is no longer used on LU. This will be closely followed by the deployment of the new TOM hardware and software to the 6 Vanguard LU sites in **early December**.

2 x standard TOM/SAF combinations	EMBANKMENT	EUSTON
2 x TOM/SAF combinations with additional TOMs	HEATHROW T123	LEICESTER SQUARE
2 x complex sites with multiple TOM/SAF combinations	LIVERPOOL STREET	BAKER STREET

The Vanguard is currently scheduled to run until **early February 2018**, when providing no major issues have been identified during Vanguard, we hope to commence the upgrade of other LU TOMs.

Development work for the new touchscreen SCU is progressing, but as this is a radically different version to the existing device, is not as far advanced as the TOM. A further review of the screen design and layout is planned for early November and Cubic are hopeful of being able to deploy the first units as a Vanguard in **March 2018**.

As previously reported, there are some inter dependencies between these two projects and a further programme to upgrade all of our Station Computers to the newer SC3 model which we Vanguarded at several of our stations at the end of 2016. It has now been decided to start the planned TOM vanguard without updating the SCs at the stations listed above.

Priority for deployment of the new SC3 is now a number of our bigger sites, where the level of transactions at busier times appears to be causing the SC to lock-up resulting in a temporary loss of SCU and SAF functions. This has been highlighted as an issue recently at **London Bridge** and **Wembley Park**.

P-GATE DUMP VALVE UPGRADE

Following an initial pilot to replace the dump valves in the ticket halls at **Victoria (District)** and **Baker Street (Bakerloo)**, on **Sunday 29 October** Cubic commenced a programme to replace the dump valves on all remaining devices.

Initially two valves will be replaced per week, but this will ramp up to 5 per week in late November. The programme of work is expected to be completed by mid-February 2018.

As a reminder, the Dump Valve is a piece of equipment mostly located either in the Upper Machine Chamber (UMC) or within the bottom of the SCU cabinet, that causes the air supply to be removed from all of the gates in the event of an Emergency Open activation taking place.

The loss of the air supply (which in normal operation keeps the paddles in the closed position) causes all gates to open and remain open until the air supply has been restored.



LCP3 UPDATE

Since our last update on the long running gate LCP3 project, a new version of gate software has been successfully deployed to a number of Vanguard E1 and E2 gates which were among around 250 devices that were not reporting correctly to our back office monitoring systems. This upgrade means that the gates concerned are now reporting correctly.



Prior to deployment of this new software, these gates were also fitted with new LCP batteries to address an issue with uncontrolled shutdowns on certain devices which had batteries which were in poor condition. On **26 October**, approval was given for the E1 and E2 software to be deployed to all electric gates that have been fitted with the new LCP during November. Cubic plan to load the new software to all E2 gates and WAGs in a single load on the night of **Saturday 11 November**, to take effect from start of traffic on Sunday morning and then to complete all E1 gates in another load on the night of **Saturday 25 November**.

In parallel with this we will shortly be looking to reinstate the LCPs within all of the WAGs at **Heathrow T123** and **Heathrow T4**.

Although all of these gates were originally upgraded as part of the E2 gate LCP upgrade programme, the number of "cold starts" which reset the gate counts back to zero, on the gates at the two stations, caused major issues with customer usage data required to determine payments under contracts between Heathrow Airport and LU.



WIDE AISLE GATE (WAG)

As the issues with gates at other sites have now reduced to an acceptable level, we believe that we can now safely reinstate the LCP3 in all of the Heathrow WAGs. When upgraded these gates will all be fitted with the new batteries.

All of the pneumatic gates at the 3 Vanguard sites, **Liverpool Street (Central)**, **Old Street** and **Tower Hill** have also been upgraded with a new version of software and have had new LCP batteries fitted.

Cubic believe that this version of software has also finally solved the long running issue which from time to time prevented the paddles opening after a successful validation.



P-GATE

Cubic are currently collating performance information on all of the Vanguard pneumatic gates, to compare performance and reliability with standard gates. This will be used in determining whether we are now able to proceed with a rollout of the LCP3 to the remaining stations with pneumatic gates and their associated WAGs.

ANSWERS TO T&R TRIVIA

Pt.1

[Page 1 and 3](#)

WHERE'S WOLLY?



NORTHWOOD HILLS

Q.2

C&D

16-25 and Senior Railcards are valid for holder only

[Page 5](#)

Q.3

A&C

Annual Gold Card and Disabled Person Railcard

[Page 5](#)

[Page 13](#)

Pt.3

LAL MXIDE PU



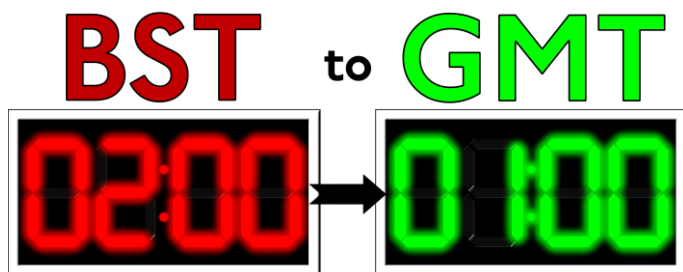
How did you do?

BACK TO GMT

The postponement of publication of this edition of TRU until the very end of October, at least gives us the chance to review the time change that took place in the early hours of **Sunday 29 October**.



This is always a tricky operation in ensuring that all devices have correctly moved forward or backwards to reflect the correct time, but has been made more difficult the last two autumns, by the operation of night tube services on some LU lines.



However, we are pleased to report that the recent switch back from British Summer Time (BST) to Greenwich Mean Time (GMT) went extremely smoothly with only QBM39 at **Hatton Cross** and QBM18 at **Tottenham Court Road** failing to switch to the correct time.

Both devices were quickly identified by Cubic and both devices were taken out of service until the problem was resolved during Sunday morning.

The only other reported issue affected a small number of bus devices in the Epsom area where the base station at the bus garage appears to have gone back to BST after initially switching correctly to GMT. The problem only affected about 6 buses early in the morning and had little impact on customers.

GATES IN “OPEN MODE”

We have been made aware of an increasing number of stations that have reported issues with their gates and in particular the RTD (card readers) during major events or at times of abnormally heavy traffic.

The issue was first seen last year at **Stratford** during some of the first West Ham games at the London Stadium and was eventually identified as occurring when the gates were set to Paddle Open Mode. It appears that since an RTD upgrade at the start of the year, a pattern of validations causes the RTD to lock-up and eventually try to reset itself, which is not really what you want to happen when you are handling thousands of customers.

We believe that the problem is being caused by the RTD processing transactions and adding “credits” to the gate, but the light beams that normally control the paddles failing to record the customers as passing through the walkway.

We have since seen the same issue on all 3 types of gates at various stations including **St John’s Wood**, **Warren Street** and **Old Street**.

Cubic are currently investigating this issue, but until it is resolved, there is a workaround available by setting each gate to No PAC mode from the Service Panel, rather than using the Paddle Open facility on the SCU.

LOOKING AHEAD TO TRU105

We currently plan to publish our next edition of the Ticketing & Revenue Update in late November.

The actual publication date will be dependent on finalisation and approval of the 2018 fares package, as one of our principle features will be an overview of the **January Fares Revision** and associated changes.

TRU105 will also include:

- *Report on the completion of the final PED upgrades*
- *Updates on other T&R projects*
- *A further Oyster Explained feature looking at discounts*
- *Some more of your letters to Olly Oyster*

Plus a selection of our other regular features.

