London Underground



Issue 152 - April 2024 Ticketing & Revenue Update



MARCH FARES REVISION

What went well? What not so well?





As we traditionally do in the TRU following a fares revision, it's time to look back at how this year's main fares revision on Sunday 03 March went.



WHAT WENT WELL

Following the pattern of recent fares revision, it was another revision that generally went very smoothly, with no issues being reported on any LU devices following the change.

There were issues on a number of TVMs at a number of London Overground and Elizabeth line stations, which failed to pick up revised tables for changes to magnetic ticket prices, but these were quickly addressed by Cubic allowing the fares revision to be signed off as successfully completed on Tuesday 05 March.

This was a considerable achievement given the very short timescales for completing the changes and the very late confirmation of some of the data.

Although the fares change on devices went well, the 03 March changes weren't without problems.



WHAT DIDN'T GO SO WELL – I) NEW FARES POSTERS

We again had a couple of locations who lost or disposed of their new Fares Posters before the implementation date, after a lot of effort was put in by Cubic and their sub-contractors to get these delivered to stations ready for the fares revision.

WHAT DIDN'T GO SO WELL – 2) PENALTY FARE SIGNAGE

The major area of failure was around the implementation of the change of the TfL Penalty Fare from £80 to £100.

Despite assurances that we had been given, it quickly became apparent that a large number of Penalty fares notices had not been updated.

Although the current standard for gates was that all PODs should have a sticker which did not contain the amount of the Penalty Fare, an assumption was made that all gates had this version of the sticker.

This was true of the older Pneumatic and the El type gates, as these had been fitted with the new E2 gate PODs during recent upgrades. It turned out that the stations with newer E2 gatelines and WAGs installed at all stations across the network had never had their Penalty fare stickers updated to remove the amount.



£100 penalty fare or prosecution

if you pass this point and fail to show on demand a the smartcard or other travel authority valid for the whole

It has turned out to be a similar situation with Passenger Validators too with a number of those being found to have stickers quoting the old amount. It appears these had also been overlooked.

Since 03 March colleagues in the TfL Customer Experience team have arranged a reprint of the gate stickers and have engaged a sub-contractor to visit stations to remove any stickers showing the £80 amount and install the current version.

Given the number of stations and gates involved (we currently have over I,I50 E2 / WAG walkways on LU) this task is going to take a while to fully compete.



LOOKING AHEAD TO THE JUNE FARES REVISION



With one completed fares revision behind us, it is quickly time to look forward to the next one!

The next Fares Revision is scheduled to take place on Sunday 09 June and as in recent years, the date has been pushed back from the traditional date in May due to the later delivery of this year's main revision at the beginning of March, rather than in January.

Again, due to the short gap between March and June, the scope is somewhat reduced from some previous years where significant changes have been implemented mid-year.

The most significant item will see changes to the prices of NR only Single / Return tickets that are sold from POMs at stations served directly by NR and of through tickets from LU stations to NR destinations.

All the prices of these were increased by various train operators in March, but we had insufficient time to update these magnetic ticket prices in addition to the changes to Season ticket and PAYG fares.

Since 03 March, prices of tickets sold from LU devices will in many cases have been lower than the same ticket bought at an NR TVM. The changes due to be implemented in June will therefore bring us back into line with fares charged elsewhere.



JUNE FARES REVISION

As a result of these fare changes there will be a new version of the Staff fares lists covering journeys to NR destinations, which should be available just before the fares revision in early June.

Other changes due to be implemented include:

- An update to POMs to fix an issue which has allowed multiple discounted tickets to be purchased when a 26-30 Railcard discount is selected.

 Currently it is possible to select and purchase up to 19 discounted tickets in one transaction, as the maximum purchase quantities had not been correctly set for this particular railcard.

 For other railcard types maximum quantities are applied before payment can be made.
- ➤ A change will be made to TVMs at the RSLU stations on the Bakerloo line and Richmond branch of the District line, to ensure that the Contactless pop-up message only appears when both the origin and destination stations for a selected journey are within the area that contactless can currently be used.
 - At these stations it is possible to buy tickets for journeys starting at another station, whereas LU POMs only sell tickets starting at the station the device is at.



As a result, there is a risk that a customer may be shown a message about using contactless which cannot be used for the whole journey.

In preparation for delivery of the second and third stages of Project Oval later this year, Cubic will be adding base data for a further batch of stations planned to be covered within Phases 2A and 2B of the project.

We will also be making some further improvements to POM screens as outlined on Page 4.

TRUNEWS

POM SCREEN CHANGES

As part of the recent March Fares Revision, a couple of minor changes have been made to POM screens.

The first of these was to standardize the wording between screens, which over the years had seen LU described as either London Underground or Tube.





Following a review of screen text these have now generally been standardised to use the term 'Tube' throughout.

The second change which was part of the March Fares Revision scope, but which was delivered early by Cubic in January 2024, saw a change to the arrows on payment screens which point toward the card reader (PED). This was done in readiness for the planned replacement of the current PED later this year.

Further POM screen changes are planned as part of the forthcoming June Fares Revision, to try to address two issues which have been fed back to us by staff at a number of stations.



RECEIPTS

We have previously tried to highlight the 'receipt' button to customers, but there are still occasions where a customer fails to select this and then wants a receipt after the sale has been completed.

Unfortunately, POMs are unable to print a receipt for a transaction once it has been completed.



To try and avoid this, from Sunday 09 June, an additional step will be introduced in the process to get the customer to confirm whether they want a receipt or not before they can proceed to payment.

BUS & TRAM PASSES



This is a product which continually seems to cause confusion, particularly among visitors to London.

The term 'tram' is not well understood, and it is not uncommon for customers to select Bus & Tram thinking that this also includes travel on LU.

We have previously tried pop-up information boxes to highlight that this is not valid on rail services with limited success, so from Sunday 09 June, we will be adding an icon of a bus to the Bus & Tram Pass button to try and differentiate between this and the selection of products available on rail, which have the roundel and NR crowsfoot symbols.

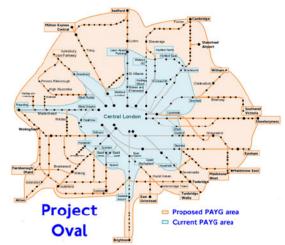




PROJECT OVAL

We still await final confirmation of the implementation of the phase I of Project Oval, which will see the extension of contactless payment for PAYG journeys to around 5I stations beyond the current zonal area. The first phase was originally scheduled to be delivered in December 2023, but has been delayed and now cannot be implemented before the June Fares Revision.

Preparatory work is underway for the following phases which will see further batches of NR stations enabled for contactless payment and as part of the forthcoming Fares Revision, base data will be loaded for these stations.



PHASE I STATIONS						
Chiltern	LNWR	C2C	South Western			
Beaconsfield	Apsley	Basildon	Ashford (Surrey)			
Denham	Berkhamsted	Benfleet	Datchet			
Denham Golf Club	Bletchley	Chalkwell	Egham			
Gerrards Cross	Bricket Wood	East Tilbury	Kempton Park			
High Wycombe	Cheddington	Laindon	Shepperton			
Seer Green & Jordans	Garston	Leigh on Sea	Staines			
Thameslink	Hemel Hempstead	Pitsea	Sunbury			
Bat & Ball	How Wood	Shoeburyness	Sunnymeads			
Dunton Green	Kings Langley	Southend Central	Upper Halliford			
Eynsford	Leighton Buzzard	Southend East	Virginia Water			
Otford	Park Street	Stanford Le Hope	Windsor & Eton Riversid			
Sevenoaks	St Albans Abbey	Thorpe Bay	Wraysbury			
Shoreham	Tring	Tilbury Town				
	Watford North	West Horndon				
		Westcliff				

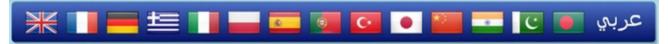
LOST IN TRANSLATION

Our POM screens currently offer customers the option to select 19 different languages and whenever POM screen text changes, it is necessary to get the revised wording translated into each of these languages.

The updating of the non-English screens generally tends to take place a few months after each fares revision, to allow the correction of any errors and for the final text to be supplied to the professional translators used by TfL.



During the intervening period, the text that is awaiting translation will generally appear in English until the revised translations are implemented.



It has recently come to light that following several recent POM screen changes, text changes for the last couple of fares revisions have not been completed.

Cubic have now collated all of the required changes into a file which has been supplied to TfL to allow these to be translated in the next couple of months.

TRUNEWS

COLLECTION MATTERS

Over the last year we have made big steps towards reducing the number of missed cash collections from a low point in December 2022 when we had 76 missed services in a single week, to two recent weeks in March when we only had 8 missed services in each week.



There is still scope for further improvement and ultimately reducing the number of collections that are missed due to errors by LU, will save us money. One of the targets in the year ahead is to eliminate instances of G4S attending but reporting "nothing to collect".

Collection frequencies for all stations were reviewed earlier this year, so the timing of a visit should mean that there is a reasonable amount of cash for the custodian to collect.

However, one of the most common failings is where TSID card holders have serviced POMs and deposited money into the CHD, but then failed to move the notes into the collection sack ready for collection.

At the completion of servicing activities, the member of staff is required to move notes on the CHD. As part of the new CHD software now being rolled out a pop-up reminder to the user to transfer notes to the sack will appear.



Two other sources of missed services that we need to eliminate are:

1) No TSID Card Holder Available

Since the CHD was introduced around 8 years ago, there has been no requirement for a TSID card holder to be present for a collection to take place.

As long as a member of staff is able to give the custodian access to the secure suite, they should be able to log on to the CHD and collect the note sack from the device. They would obviously not be able to collect items from the safe, but as the bulk of cash will be in the note sack, it at least means that the majority of money is collected.

2) CHD Fault

We have had a number of collections missed due to error messages being displayed on the CHD screen. In some cases these errors could be simply cleared by a TSID card holder using the 'Resolve' option on the device.

However, even if this does not work and it is necessary to request a Pay Complete engineer to attend, it does not necessarily mean that the custodian will not be able to sign on and collect the note sack.

We have seen a couple of occasions where the custodian has been turned away due to a coin unit fault or a jam in the note handling part of the device, which may have prevented further notes being deposited, but should not prevent a collection taking place.



One further cause of missed collections at outer London stations is where the custodian arrives but is unable to locate the member of staff on duty, possibly due to them undertaking other duties such as station checks.

Some sites had suggested the use of a Help Point for the custodian to alert staff, but an initial attempt to get staff from the G4S Harlow branch to use this method highlighted that at a number of our stations the Help Point does not connect directly to the station office at the station.

As an alternative we are in discussions with G4S to identify locations where a Help Point could be used to alert staff, whilst at others we would look to provide a contact number for the custodian to ring.

Once implemented, this should hopefully avoid instances of non-collection slips being left when staff were unaware that the custodian had attended.



NR PAPER TICKETS

The format of some tickets issued for travel on national rail is changing. Following a recent update, the appearance of barcode tickets issued on paper roll stock by certain devices on Greater Anglia will now be issued on plain white ticket stock, rather than the normal orange ticket stock.

Standard orange ticket stock will continue to be used by other existing systems.

Controls are in place to prevent a ticket from being issued in this format where it is not allowed (e.g. a London area Travelcard or cross-London journey).

The revised stock will have the same visual information as a magstripe ticket, but with a 2D barcode on the right-hand side for inspection purposes and to permit access through NR gates fitted with barcode readers.

The reverse of the white ticket stock includes reference to the National Rail Conditions of Travel and (optionally) an ID barcode.

greateranglia





One of the benefits of using white paper means that a ticket can be recycled after it has been used for travel.

Although not valid for LU journeys, they may be seen at Stratford where Greater Anglia services serve the station and at Liverpool Street where inter-availability between LU and NR services means that NR ticket holders can use the Central line to travel between Stratford and Liverpool Street.

INTER-AVAILABILITY

The above item is a good lead into a reminder that there are other areas of the network, where inter-availability of tickets between NR and LU means that NR customers can travel on our services and similarly LU ticket holders can use a TOC operated service.

Unfortunately, from time to time these arrangements may be overlooked and new members of staff are not made aware of these historical arrangements.

This often then leads to complaints from customers who are aware of the inter-availability and are refused travel or are told that their ticket is not valid.

In most cases gates are set to accept NR tickets for these journeys, but at stations like Kings Cross, where gate acceptance potentially led to customers travelling to locations that their ticket was not valid, gates will reject these valid tickets and we rely on staff visually inspecting the ticket and checking the journey the customer is making.



So, a NR customer can use LU services between Finsbury Park and Kings Cross or Old Street / Moorgate but cannot alight at intermediate stations not served by NR (e.g Holloway Road).

Full details can be found on the intranet document by clicking here.

TRUNEWS

TIMES UP FOR 2024 FREEDOM PASSES!



The process of renewing Freedom Passes that were due to expire on 31 March 2024 should have now been completed and although an extension was agreed to allow customers who had not received their new permit to travel, these arrangements are due to finish on Thursday 02 May.



FreedomPass

From this date any customers whose Freedom Pass does not work the gates must be asked to use another method of payment for their journey.

- Visually check both the Freedom Pass and the reject code.
- Allow the customer to travel / complete their journey if it would otherwise be valid.







...And this gives us the opportunity to drop-in a timely reminder to everyone, that any customers using any expired or defective Oyster card or contactless payment device that are rejected by the gates, <u>must</u> be advised to use an alternative payment method, ticket or a different Oyster card if they wish to make their journey, until their replacement product arrives, or their issue is resolved.



As staff are unlikely to know or determine all reasons or scenarios for the rejection, staff <u>must</u> <u>not</u> allow the customer onto the network unless they have a valid payment method.

This includes all defective or lost / stolen free travel Oyster cards, including Staff, Police, Contractor and Freedom Passes. Any customer travelling without a valid ticket may be reported for a travel irregularity for which they may be subject to a Penalty Fare or face prosecution.

NR STAFF TRAVELCARD RENEWAL

April is the time of year that NR Staff Travel reissue the NR Staff Travel Card to eligible staff and their dependents.

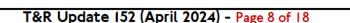
This naturally leads to a spike in the number of requests from holders to have the Privilege discount on their Oyster card updated for another year.

To avoid errors and the risk of the customers discount being removed if set incorrectly, please remember the following:



- Check that the card does not carry an endorsement indicating validity on NR only if so do not attempt to set any discount on the Oyster card.
- For staff members, the Priv All discount should be set. For partners, the Priv All N discount should be set as they are not entitled to purchase season tickets.
- ➤ When updating the Privilege discount, make sure both the new expiry date is entered and the Photocard field is updated with the new NR Staff Travel Card number.
- Ensure that the expiry date for the discount has been set correctly.

If the customer has previously had the Privilege discount entitlements set on their Oyster card, then they do not need to present a completed and authorised application form, to get their discount updated.





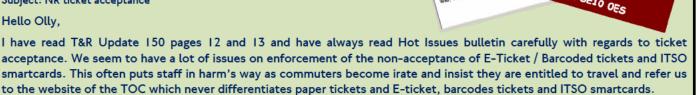
From:

Sent: 03 March 2024 11:53

To: Ask Ollv

Subject: NR ticket acceptance

Hello Olly,



On page 13 there is a statement that question is straightforward, but the enforcement or enforceability is not so straightforward. In view of the danger it poses to staff regarding assaults from customers my question then is what are we supposed to do? Let everyone through as we cannot validate or verify their tickets or risk an assault to staff members.

We have this instances on the rise and very frequently too.

Best regards

Our current agreements with other Train Operators are that during engineering works we will accept Oyster, valid ITSO Travelcards and magnetic tickets, but as we do not have the facility to validate barcode tickets or ITSO products that would not normally be valid on LU services, we will not accept these.

We have recently raised this with Southeastern whose customers are sometimes directed to use Embankment during weekend engineering works at Charing Cross or Cannon Street and have asked them to clarify to their customers that LU cannot accept barcode format tickets or non-Travelcard products on ITSO cards.

We definitely should not be letting customers through the gateline with invalid tickets as it will cause problems for colleagues at their destination when they are unable to exit and will then unlikely be willing to pay the additional fare due.

Regards

Olly Oyster

Sent: 29 March 2024 07:15

To: Ask Olly

Subject: Journey Resolution Enquiry

Good morning,

A few days ago, we all received an email from our CSM about refunding passengers that have had issues with their Oyster or Debit cards. That email had a bulletin sent from T&R saying that we can only adjust a payment if:

- a) we knew there was an incident in a specific station that made impossible for the passenger to touch in or out, or
- if the passenger wrongly touched out with an Oyster card and had a valid paper ticket.

I'm asked my CSSs and CSMs about a doubt, but nobody could give me a precise answer to my two doubts.

- 1. What should we do if the passenger says he touched in with a debit card and touched out with an Oyster? We normally ask the passenger to enter again and touch out with the debit card he/she used for touching in and we then remove the maximum fare charge from the Oyster card. Is it right what we were doing?
- 2. What should we do when a passenger has more than one mission touch? I normally do not make any arrangement if the passenger doesn't look honest, but we sometimes have to deal with passengers that do not know how our system works and, by mistake, they miss to touch in or out. Can we use our discretion in some cases in which we know it has been an involuntary mistake?

We try to provide an excellent customer service at any moment, but on the other side we do not want to break any company rules so, could you please help us with these doubts?

Thank you very much for your kind help.







Hi

In terms of incomplete PAYG journeys on Oyster, there have only ever been two valid reasons for staff to resolve a journey at less than the maximum fare, these being:

- A known incident that prevented the customer validating
- A customer error at the location concerned (e.g touching in or out with Oyster when using another method of payment for their travel)

In both cases the incomplete journey must have occurred within the last 48 hours.

In relation to your specific questions below, in example I, that would be an acceptable reason for removing the exit validation, although as we cannot view the journey history of the debit card, we would need to trust that the customer had actually used that card to touch-in. With a magnetic ticket you can actually see the validity of the ticket they were travelling on, so it is much more clear-cut. If there is doubt the customer should be advised to contact the Customer Contact Centre or use their online account to request the resolution of their journey.

Not quite clear on your second query as to what the scenario is? If the mistake is obvious and within the last 48 hours it probably falls within the criteria above. However, we do see issues with journeys that have taken place on other operators services being incorrectly resolved, when the customer should have been referred to the Customer Contact Centre.

Hope this is of help. If you want to clarify point 2 a little, we may be able to answer that a bit more specifically.

Regards

Olly Oyster

From:

Sent: 05 March 2024 15:46

To: Ask Olly

Subject: NR Railcard Discounts

Hi Olly,

Has TFL got any contact with NR and their app discount department?

When customers require us to set a NR discount it is now an app on their phone. The font for the serial number is tiny. Every time I ask a customer to enlarge their screen size so I can read it more easily it goes to a QR code and is no use.

Could we ask them to enlarge their font size or at least the last few numbers that we require to be entered on the POM to be enlarged?

Regards

Hi

Thank you for your email and for highlighting this issue.

It is something a couple of colleagues have raised previously and we have raised with the Rail Delivery Group or are responsible for the Railcard schemes.

They have confirmed that the Railcard number **0** on the digital railcard should be in size 10 font type. They have asked if we can flag up any further examples that are seen with very small railcard numbers and identify who the issuer of the Railcard was, so they can check this with the various issuers.

The Issuer details are to the right of the holders name as in the example on the right \odot .

Any that are issued by RDG themselves should say 'online' and should be size 10 font type. There are a few other issuers including Trainline who may issue railcards with smaller fonts.

Any further information you can provide will hopefully narrow down the source of the problem.

As our colleagues need to be able to read this number in order to add discounts to customers Oyster cards we have enquired whether the font size could be increased at some point in the future.

Regards

Olly Oyster



CHD UPGRADES

Although there have been on-going delays to the programme to upgrade all of our Cash Handling Devices (CHDs) with new software to install new Windows 10 PCs, two programmes affecting CHDs have recently been completed.

£30k CASH SACK LIMIT

As previously reported in TRUI50, following an update to the cash collection contract with G4S, all of the CHDs have now been updated to implement a new £30k limit to the value of notes which can be moved into one cash collection sack.

This change was largely completed remotely by Pay Complete, without the need for engineers to visit each site. This replaced the previous £20k limit and should mean that on occasions when cash levels exceed £20k due to missed services, it will no longer be necessary to transfer notes into a second sack as was previously the case.



4G MIGRATION

Following the on-going issues which had delayed the planned start of the rollout of the CHD software upgrade and concerns over the poor support provided by Capita, it was agreed to migrate as many of the 64 devices originally connected via fixed line connections onto modems, like all other devices.

Our expectation had been that this would allow a majority of devices to use 4G, but that we would be left with a small number where the mobile signal was not strong enough to sustain data transmissions from the CHD. Fortunately, in the end the improved modems and the use of signal boosters at several sites allowed Pay Complete to move all 64 devices onto 4G modem connections.



This now means that we have a consistent system for transmitting data to / from all devices and also means that Pay Complete can now remotely access all devices to resolve faults and download smaller software updates, as they have recently done for the change to the sack limit (as outlined above).

CHD SOFTWARE UPGRADE GETS GREEN LIGHT

After many months of delays, we have finally received the 'green light' to start the rollout of the updated CHD software and replacement PCs across the rest of the network.



After initial Vanguards at Stratford and Waterloo, we had extended the Vanguard to include all stations at the east end of the Central line in early December 2023.

Although this had gone well and we have had no real issues with the new software or PCs since, we were forced to postpone further upgrades whilst issues around the security of the fixed line connections to the new CHD back-office were resolved.





CHD SOFTWARE UPGRADE GETS GREEN LIGHT



The migration of all devices to 4G connections, as outlined on the previous page has removed the main obstacles and as a result the first three waves of upgrades are scheduled to commence from Monday I5 April, initially with stations at the northern end of the Metropolitan line, then followed by the north end of the Jubilee line. In addition to new software and new Windows I0 PCs, Pay Complete will also be loading new note sets onto the upgraded devices, in readiness for the introduction of the new King Charles III notes, which are to be introduced later this year.

Once upgraded, the CHDs will be connected to a new back-office, which will initial run in parallel with the existing back-office system which other devices will be connected to until they are in turn migrated onto the new software. The programme aims to upgrade about 20 CHDs per week over a period of 13 weeks. The final devices should be completed by the end of July, and we remain hopeful that we may complete more devices per day than currently scheduled, once engineers are more familiar with the upgrade process.

During this rollout period, Pay Complete resources are likely to be extremely stretched, so there may be some occasions where their response times for normal maintenance calls may be a little longer than we are used to.

GETTING READY FOR KING CHARLES III BANKNOTES

As outlined in TRU151, the Bank of England (BoE) will release a new set of banknotes in the summer, the first notes to carry an image of King Charles III.



In preparation, Cubic have started a Vanguard of a note set containing all of the new designs of notes on both the MFM and TVM note handling units. The new note set was remotely loaded onto all 3 MFMs at Stratford on the night of Monday 08 April, whilst a Cubic engineer attended the station on Tuesday 09 April to load the new note set onto the 2 TVMs in the Mezzanine ticket hall.

This allowed Cubic and the TfL T&D testing team to undertake a limited amount of onsite testing with sample notes supplied by the BoE.

This Vanguard was then extended to a further 34 MFMs via a remote upgrade on the night of Tuesday 09 April. This is the first time that we have been able to remotely update the MFM since the new Pay Complete note handling units were deployed. Previously such an upgrade would have required an engineer visit to upload the new note set from a laptop. Unfortunately, the updating of our TVMs will still require an engineer visit to each device to load the new file.

The MFM and TVM Vanguards are to run for 4 weeks and will be monitored to ensure that there has been no detrimental effect on the acceptance of the current designs. As there are no King Charles notes yet in circulation, it will take wait until the summer to fully verify acceptance.

However, tests undertaken by Cubic at their test facility and at Stratford have indicated satisfactory acceptance of both new and old design of notes. The plan is then to deploy the new note sets to all other MFMs and TVMs in advance of the new notes coming into circulation.

Unlikely previous note changes, where the old-style paper notes were quickly phased out, it is likely that both designs of note will be in circulation for some time.

A separate upgrade is being undertaken by Pay Complete to allow our cash Handling Devices to process the new design of note. This will start in conjunction with the rollout of the new CHD software and replacement PCs.

POM UPGRADES

We have recently had a spate of POM software upgrades, to bring devices up to date and implement changes to the handling of 'special days' by each device.

MFM SOFTWARE ROLLOUT

As outlined in TRUI5I, following an initial Vanguard on around 32 MFMs, approval was given to this being rolled out to all other MFMs from Monday II March.

40 Devices were then remotely upgraded each night, with the new software taking effect at start of traffic the following morning.

The final MFMs were completed on the night of Tuesday 19 March, bringing this rollout to a successful conclusion.



AFM SOFTWARE

Slightly behind the MFM is a similar software upgrade for our AFMs. This was deployed as a Vanguard to a total of 64 AFMs at the stations listed below, over three nights between Monday II March and Wednesday I3 March.

This represents just over 105 of the current AFM fleet, which is our normal target for a Vanguard.



BAKER STREET (Bakerloo)	DAGENHAM HEATHWAY	EUSTON	Intelligent travel made real
HAMMERSMITH D&P	KINGS CROSS (Northern)	OXFORD CIRCUS	QUEENSWAY
STRATFORD	TOWER HILL	VICTORIA	WILLESDEN GREEN

At the time of writing, the 4-week Vanguard period Is coming to an end and once reviewed, it is expected that approval would then be given to deploy this version of AFM software to all of the other AFMs.

Like the MFM, deployment will be done remotely overnight, but will take slightly longer to complete, due to the larger number of devices to be updated. The plan is to deploy the new software to 40 AFMs per night over a period of I2 nights.

QBM SOFTWARE

A similar software upgrade is also required for the QBM, but due to the very small number of these devices remaining in operation, it was agreed that all 20 of the devices could be updated with the new software in one go.

This was done, rather than the normal process of having a Vanguard on around 10% of devices before rolling out to other devices at a later date. The small total number of QBMs makes a Vanguard of only 2 machines pretty pointless.

All of the QBMs, with the exception of 2 mothballed devices in the closed Kings Cross (Pentonville Rd) ticket hall, were successfully remotely updated with the new software on the night of Tuesday 09 April, with the new software taking effect from start of traffic the following morning.



This is likely to be the final update of the QBMs before they are withdrawn from service later this year.



TVM SOFTWARE

The final one of this batch of software upgrades, for the TVM is currently undergoing testing by Cubic and is expected to be ready to go out on Vanguard in mid-May.

This will incorporate the changes already applied to the other types of POM.

MORE TO COME

Since deployment of the new software, Cubic have identified instances of devices reporting errors after the completion of End of Day processes.

These self-clear within a few seconds and have no real impact on the device.

The issue will be resolved in a future software release, but the rollout programme will continue as the benefits of the upgrade outweigh the minor impacts of these errors briefly appearing.

Further software changes will follow in conjunction with the on-going FEDS programme outlined on Page 14.



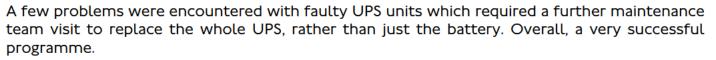
AFM UPS BATTERY REPLACEMENT

Another upgrade programme which has recently been successfully completed, is the programme to replace the batteries within the Uninterruptible Power Supply units (UPS) on each of our AFMs.

As previously explained, this piece of equipment, like that on the TOM and MFM, ensures that, it will shut down in a controlled manner in the event of a loss of power to the device.

Cubic engineers undertook this programme on day shifts during a fairly aggressive rollout programme covering a period of 6 weeks.

Generally, this went very smoothly, despite our on-going staff shortages on a number of areas, with a vast majority of AFMs being completed on the scheduled date.



SECURING OF GATE LIDS AND SCU CABINETS



Another timely reminder we want to deliver this month is of the need to secure the lids of E2 gates, WAG stanchions and SCU cabinets after use. This prevents unauthorised access to the components within them and also to ensure that injuries do not occur due to snagging or trapping.

It is also important to emphasise the need to inspect all gates and SCU cabinets to ensure that they are securely closed and locked as part of their standard station checks.

Any gates or SCU cabinets which cannot be locked <u>must</u> be reported to the Cubic Helpdesk on Auto 1610.



FEDs POM VANGUARD

Further to our last update in TRU151, there have been some slight changes in the plans to deploy the first elements of the Front End Device Security (or FEDS) changes.

STATION COMPUTER & SCU UPGRADES

Following the initial Vanguard, the planned start of the rollout of changes to the Station Computer (SC) and Station Control Unit (SCU) was delayed with a number of non-LU sites being upgraded first and engineer resource issues delaying the start of the LU deployment until the second week of April. It had originally planned to start the SC and SCU rollout in parallel with the sites chosen for the POM Watchdog vanguard (below), but in the end the SC and SCU element at these sites was postponed until later in the rollout.





The good news is that the rollout is now underway, with the SC at each site being prepared ready for a remote update of its software the following evening and each SCU being swapped out for a device that has been preloaded with the new FEDs software. During this process we are hoping that the SCU layout and preloaded gateline settings will be correctly set up and would ask station colleagues to check this once the upgrade has taken place. Please flag any issues with the T&R team so that we can raise these with Cubic and get the issue rectified.

One of the main benefits of this upgrade is that it should address an on-going issue we have had since the new SCU was rolled out, whereby at times the ability for the Cubic Tech Support team to remotely access a device is lost.

This has prevented them being able to remotely check the display and settings, correct items that have been configured wrongly and remotely update devices. As a result, it has been necessary to send a maintenance idea to site to reset the SCU to make it remotely 'discoverable' again.

Hopefully after the upgrade it should be a lot easier to check and resolve issues on the SCU.

POM WATCHDOG UPGRADE

The second workstream of the FEDS programme involves the installation of a small device called a POM Watchdog on each POM.

As we reported in TRU151, the Vanguard of this change covering 12 sites listed below, started on Monday 18 March, with all AFMs, MFMs and TVMs, being fitted with the new device.

ALDGATE EAST	ALDGATE	BAKER STREET	BARBICAN
ELEPHANT & CASTLE	EUSTON SQUARE	FARRINGDON	GT PORTLAND ST
LAMBETH NORTH	LIVERPOOL STREET	MOORGATE	TOWER HILL

The four-week Vanguard period has just finished, and performance of these devices is currently being reviewed by Cubic to ensure that they have not been any issues since the upgrades were completed. All being well we will then be given the green light to commence the rollout of the POM watchdog to other LU POMs from Monday 13 May.

As with the Vanguard, the work will be scheduled to be completed during traffic hours to minimise disruption to customers and staff. Providing a TSID card holder is available to witness the device whilst the upgrade is taking place, it should not be necessary to dump and empty the device for this particular upgrade.

Full details and specific upgrade dates will be sent to the areas concerned the week before the work is scheduled to take place.

WAG UPGRADE

In TRU151, we predicted the forthcoming completion of two gate upgrade programmes, which we were expecting to be finished by the end of March.



→ Towards the end of March, we were approaching the conclusion of the programme to replace the motors and paddles on all of our WAGs with new lightweight paddles and ruggedised motors.

However, as often seems to happen with projects, just as the "chequered flag" was being unfurled, we had to make an "urgent pit-stop"!

The halt in the programme followed a couple of incidents where paddles had been damaged and had broken off.

There was an initial concern that there may be an underlying issue with the new paddles or their fixings and as a precaution, Cubic halted further installations whilst this was investigated further.



→ Fortunately, the inspections that have taken place at a number of stations over the last few weeks have confirmed that there is no inherent problem with the new paddles and that the examples that had failed, appeared to have been the subject of severe mistreatment by customers.

The upgrade programme has therefore resumed and as we are fairly near the end, is now scheduled to be completed by the end of the April.

All LU WAGs will then have been upgraded with the exception of a small number of non-standard weather-proof gates installed in ticket halls serving the Elizabeth line, which are not covered by this upgrade.

WAG BREAKTHROUGH FORCE

In a completely separate piece of work also affecting WAGs, there has been some on-going discussions between Cubic and TfL regarding the breakthrough force on these gates. This feature is designed to allow customers to escape through the gate in the event of a crush situation.

As outlined in previous editions of TRU, although the setting on WAGs should be the same as other gates, in reality the length of the paddles means that less force needs to be applied to a WAG paddle for the breakthrough to take effect.



Investigations subsequently established the settings on WAGs were not as set out in the Revenue Collection Contract (RCC) and since then work has been undertaken to see if the breakthrough force can be increased to meet the contractual requirements without any detrimental impact on customers.

A Vanguard of increasing the force required to breakthrough a WAG to this contractual level, is scheduled to be undertaken on the WAGs at two stations: Vauxhall and Canada Water.



These two sites were previously used to test a small increase in the breakthrough force a number of months ago, but this had little impact.

These devices will be monitored to determine whether the change has any impact on the device and in particular on the motors and gears.



EI LIGHT BEAMS

Better news on the gate upgrade front was the completion of the programme to replace the light beams which monitor customer movements through the walkways on all of our EI type gates.

This programme was completed on Thursday 14 March with the final Gates at Seven Sisters, followed a week later by the upgrade of the single El Gate at our Ashfield House training Centre.



BARCODE TICKETING

We are pleased to report that since our last article on this topic, considerable progress has been made towards the supply of barcode reading equipment for LU staff at locations where NR platforms are within our gateline, as an interim solution until we can eventually get barcode readers installed and integrated on our gates. Barcode tickets have become an increasing problem, as TOCs continue to move away from magnetic stripe ticketing.

An initial pilot covering IO sites and funded by the Department for Transport (DfT) and Rail Delivery Group (RDG) has been agreed and we have recently reviewed submissions from three potential suppliers who already provide equipment to other Train Operating Companies (TOCs) around the country. This does mean that we will be able to benefit from a solution that has already been extensively tested within the industry.

The successful provider is due to be confirmed shortly and it is hoped that we will be able to commence the trial of this equipment towards the end of May. The I0 sites selected will be split into two batches of 5 to ease the implementation and allow the T&R team to support the deployment more easily.



The solution selected, involves the use of a small handheld barcode scanner (as in the image below/left/right) which will display a coloured response when a barcode ticket is scanned.

- Green Indicates that the ticket is valid and has been accepted
- Amber Indicates that the ticket requires further checking (e.g. a concession ticket where a supporting railcard is required)
- Red Indicates the barcode as being invalid.

This unit is linked by Bluetooth to a mobile phone, which provides the user with more detailed information on the ticket if required.

The device also allows the user to flag rejected tickets to the RDG back-office, so details of any rejected ticket will be recorded and during the trial will hopefully provide us with information both on the number of valid barcode tickets used, but also on instances of tickets being presented that are not valid at the station.

Apart from checking the validity of a barcode, the system also ensures that use of a ticket is recorded and prevents both multiple use of a ticket or the customer being able to subsequently claim a refund on an unscanned ticket.

A number of "train the trainer" sessions will be held prior to the delivery of the equipment and there will be additional support provided at the sites following "go-live" to help staff become familiar with the equipment and its use. Full details will be supplied to the stations involved once we have confirmed start dates for the deployment.

...AND FINALLY!

GATELINE SETTINGS FOR EVENTS IN APRIL 2024



We rarely talk about items we missed, but this month there were a couple of note that we had wanted to include, but the delay in receiving information for other important topics meant

that they quickly became old news by the time we were ready to publish.

The main one was the 44th London Marathon sponsored by TCS, which took place on Sunday 21 April.

As with previous London Marathons, TfL provided free travel along the route for runners and organisers on London Underground, London Overground, Docklands Light Railway, Elizabeth line and Bus and Tram services.

In order to support stations with gatelines that would see heavy customer throughput, Auto-completion and Auto continuation settings were set at a total of 49 stations, which included I4 on National Rail.



Since 1348, 23 April has seen St George celebrated as the patron saint of England. This date marks the anniversary of his execution in AD303 by the Romans for refusing to renounce his Christianity. Until the 18th century St George's Day was celebrated as a public holiday in much the same way that St Patrick's Day (Ireland) and St Andrew's Day (Scotland) are today, but fell out of favour and stopped being observed by many. However, support is growing for this to be reinstated as a national day in England. Oh... and spoiler alert... it is not known if he even existed... if he did, he lived in modern day Turkey... and never actually visited England!

For these settings to work correctly, it requires all stations that open their gates for crowd-control reasons, to ensure that they all remain powered up and then encourage customers to touch in / out on readers as they pass through.

This ensures they pay the correct fare and captures at least one journey's data for the start / return journey if they were unable to touch in / out on the other.

The other event was St George's Day (Tuesday 23 April), which was celebrated on Sunday 21 April in Trafalgar Square and for some reason we haven't covered before, despite the fact it has been celebrated for the past I7 years in London and is a date that in recent years has grown in popularity nationally.

Gateline settings for this event were in place at Charing Cross, Embankment and Leicester Square.

LOOKING AHEAD TO TRUI53

TRU153 is expected to be published in May / June, when we plan to provide you with updates on:

- Further information on planned changes to the MFM
- Further update on Project Oval
- Update on forthcoming fare revisions
- Update on the CHD upgrade
- Update on other projects going on around the network

We also intend to include more of your questions sent in to Ask Olly, plus a selection of our other features.



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