

ticketing & revenue update

March 2020

For the attention of Station and Revenue Control Staff

Issue
124



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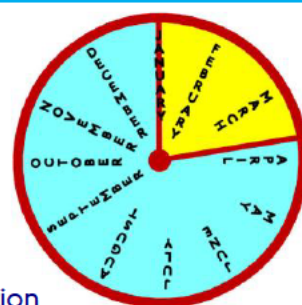
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CHANGE, CHANGE, CHANGE!

We are only three months into 2020, but in the world of Ticketing & Revenue we have already seen the implementation of a number of significant changes.

Following the January Fares Revision, we have already seen the expansion of the range of bankcards accepted by our POMs, with the extension to cover the acceptance of the Diners Card and Discover brands and the introduction of the new polymer version of the £20 note.



2020 so far...

DISCOVER & DINERS CARDS

£20 POLYMER NOTES

OYSTER CARD FEE

OYSTER CHARITY DONATION

In the last month we have also seen the implementation of the change of the Oyster card deposit to a non-refundable card fee and the launch of an additional facility on POMs, which now allows customers to donate the residual value of an unwanted Oyster card to the Railway Children charity as outlined on Pages 2 & 3.

It is probably fair to say that there has been a fair amount of feedback from stations regarding the introduction of a £5 card fee on new Oyster cards issued since 23 February. Most of this has been around the lack of information regarding this change to new and existing customers.

Although the T&R team are responsible for communicating changes of this nature to our colleagues within LU station operations, we rely on other parts of the business to undertake the wider communication of changes to our customers. Without doubt they have not supported us well in regard to this recent change.

Following some useful feedback from various stations, we have highlighted some of the deficiencies in customer messaging and in response to this we are looking to make some changes to POM screens, as outlined on Page 4.



During the current coronavirus pandemic, the T&R team will continue to provide support to station teams, but due to the need to minimise travelling and work differently, there may be changes to our services. Please see Page 4 for further details.

KEY STORIES INSIDE

Pages 2+3 [OYSTER CHARITY DONATION](#)

We update you on the recent launch of a facility for customers to help support the Railway Children charity.

Page 6 [POM SCREEN CHANGES](#)

We outline some of the recent changes to POM screens.

Page 7 [2019 / 20 PRIORITIES](#)

This month we turn our attention to the subject of ticketless travel.

Pages 10+11 [MFM BNA / BNR REPLACEMENT](#)

We take a look at recent progress and the start of a Vanguard of the new Suzohapp note handler.

Page 14 [SCU UPGRADE](#)

We review progress as we approach the completion of the rollout programme.

Written and compiled by

CHARITY DONATION VIA POMS IS HERE!!

Sunday 05 March saw the eagerly awaited start of a Vanguard of a new facility on POMs, that offers customers who no longer require their Oyster card the option to donate the residual value (the PAYG balance plus the card deposit where appropriate) to the Railway Children charity, rather than taking a cash refund.

As outlined in our Project Update feature within [TRU123](#), the Vanguard saw the facility added to all of the MFM's at Canary Wharf, Paddington, Stratford and Victoria, plus the two LU TVM's in the Stratford (Mezzanine) ticket hall.

End to end testing of the facility then took place on Wednesday 11 March, when a number of the Vanguard sites were visited with representatives from Cubic and the charity, to undertake transactions, to allow us to then follow these through into the back office accounts.

All went extremely well, with 25 previously donated cards being refunded through this new option. Afterwards, Dave Ellis from Railway Children told TRU:



"London Underground have been an incredibly valuable supporter of Railway Children for well over a decade and the Oyster card donation scheme has always been of such value in raising essential funds and awareness.

This innovative expansion of the project will literally change the lives of thousands of children who quite simply, would otherwise be completely alone and vulnerable on the streets, both here in the UK and overseas in India and East Africa.

The process of donating the value of an unwanted Oyster card to Railway Children has now been made so incredibly simple, accessible and customer friendly at machines. It now means thousands of customers will be able to help make a real difference in the lives of vulnerable children in a matter of seconds!!!

When you consider that just £6 will allow us to feed a child in India three meals a day for a week, £11 could buy a new set of clothes for a child in Africa and £20 could fund an hour of support work for a UK runaway child and their family, the difference London Underground customers will now be able to make to the lives of children and young people becomes incredibly apparent. This takes what has always been such an incredibly valuable scheme and means of raising essential funds, throughout the London Underground network.

We really are so excited and incredibly grateful to LU and to Cubic for the development of this project and all the customers who either have, or will now have a simple way to help change the life of a child"

During the two week Vanguard, the new scheme was promoted to customers by a poster (illustrated below) produced by Railway Children.

The initial use of the facility saw a total of 146 cards refunded to charity in week one and a further 59 card in the second week, as shown in the table below.

CHARITY REFUNDS	PAYG REFUNDS		DEPOSIT REFUNDS		TOTAL VALUE
	Count	Value	Count	Value	
08 to 14 March 2020	146	£422.85	86	£426.00	£848.85
15 to 21 March 2020	59	£116.16	30	£150.00	£266.16
Column Totals	205	£539.01	116	£576.00	£1,115.01



The above figures are slightly distorted by;

1. the cards refunded during our testing in week 1
2. the current coronavirus restrictions in place in London that saw a reduction in customers using the network during the second week.

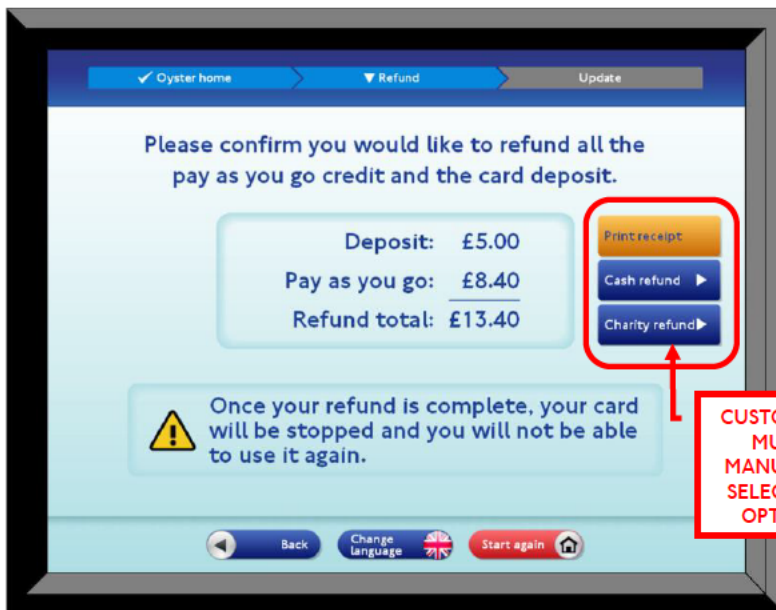




CHARITY DONATION VIA POMS IS HERE!! continued....

The next stage of implementation saw this facility extended to all other MFM and to the small number of LU TVMs, as part of a base data load during engineering hours on Saturday 21 March, which then saw the facility available from the start of traffic on Sunday 22 March.

One concern raised during the Vanguard was the possibility of customers accidentally donating their refund to charity and then complaining to staff. This was an issue that we tried to cover off during development and customers will have to select the donation to charity button and then confirm their intention to donate to charity, as illustrated in the two screens below.



All of the money donated via this initiative will be collated and paid to the Railway Children as a bulk amount, in a similar way to the existing POM overpayment and Oyster charity box schemes.

We were hoping to accompany the extension of the charity donation facility across the network with a high profile launch to customers using various marketing channels.

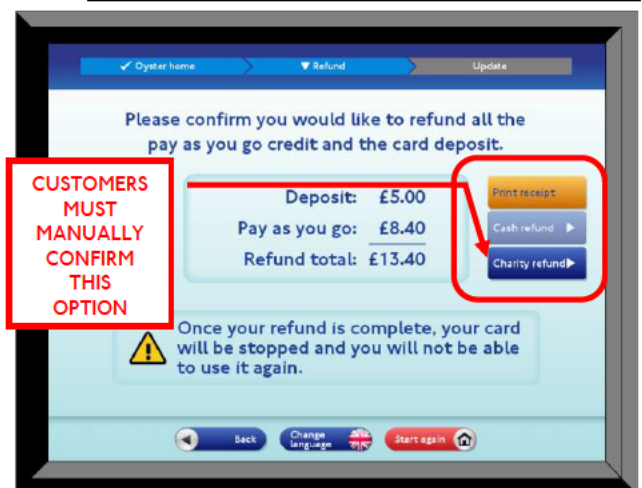
However, the current coronavirus crisis and the reduced numbers of customers using the network, mean that it is not the right time to do this. We are therefore leaving the public launch of this facility until a later date. As ever, we will provide details of this and how stations can participate, when the time is right.

In the meantime, the facility will be available to any customers using our POMs to refund an Oyster card.

THE KEY POINTS



- ▶ Customers will need to surrender and cancel their card to make a refund to charity
- ▶ Normal POM refund rules apply
- ▶ For cards issued after 23/02, the charity will only receive the PAYG balance
- ▶ The facility is also available if the device is in 'card only', 'exact money only' or has insufficient change to offer cash refunds
- ▶ If donation to charity is selected, the customer needs to confirm this and is reminded that their card will be cancelled
- ▶ Donations cannot be reversed and customers will not be able to get a refund of their donation
- ▶ The facility will not be available on RSLU TVMs.



Part 1 – The term UTS (Underground Ticketing System) is widely and badly misused by many staff when referring to LU ticketing equipment and facilities... *as it no longer exists!* UTS operated for 11 years before being replaced by Prestige and then others...

Q1) ...but in which years was UTS in existence on LU?

A 1969 to 1980

B 1971 to 1982

C 1987 to 1998

D 1992 to 2003

Ticketing & Revenue
T&R
Trivia

Answers on [Page 15](#)

T&R ISSUES DURING CORONAVIRUS PANDEMIC

During this difficult time the T&R Team are continuing to support our station staff colleagues, but following the recent closure of 14 Pier Walk, the building in which we are normally based, our ability to provide normal services may be impacted.

Until further notice the helpline telephone numbers for TSID, CSID and CHD issues will not be available, so we are asking staff to use email instead, to outline their issue and provide a contact number so we can get back to you.



TSID Issues	CSID Issues	CHD Issues (not faults)

The building closure will impact on a couple of particular areas of the services we provide:

- TSID card issues** – cards for a number of newly qualified staff have been prepared, but we are currently unable to distribute these to the areas concerned. We will be unable to issue further new or replacement cards for the time being. We do however have a contingency plan if any particular areas are impacted by a shortage of TSID card holders.
- PIN reminders** – we are unable to issue PIN reminders to TSID, CSID or RID users.
- RID replacements / exchanges** – we are unable to replace defective RIDs until further notice.



Some other areas that are affected by the current crisis:

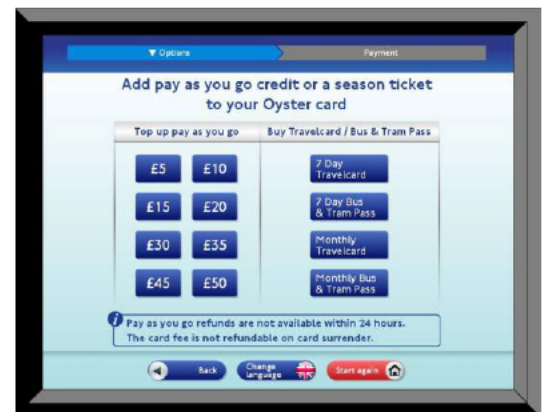
- Change deliveries to stations** – from the week commencing Monday 30 March all deliveries of change to stations will be cancelled. Any stations that run short of coin and require a delivery will need to resubmit their requirements.
- Cash collections** – services will be suspended from stations that have been closed during the current crisis. We are also reviewing frequencies of collections at other stations, based on lower customer usage and less money being taken.



DEPOSIT TO CARD FEE COMMUNICATIONS

As outlined in our lead article on Page 1, feedback from staff at various stations has highlighted some short comings in information provided to our customers, regarding the recent change of the Oyster card deposit to a £5 card fee.

In one of this month's Ask Olly letters on Page 9, it has been highlighted that the information displayed on POM screens when a customer is buying a new Oyster card doesn't highlight that the card fee will not be refunded and gives the impression that a refund will be available after 24 hours.



As part of the May Fares Revision changes, it was planned that this particular screen would be updated as shown on the right, to indicate that PAYG refunds are not available within 24 hours and that the card fee is non-refundable. Unfortunately one of the impacts of the current situation is that a decision has been made to reduce the scope of the forthcoming fares revision and defer all POM screen changes until the September Fares Revision. However, we will be pushing for early implementation of this change before September as part of one of the scheduled base data updates.

The other area where action has been taken, is in relation to highlighting the change to the deposit to existing customers. A whiteboard poster covering this has been produced and sent to stations.

Part 2 – KNOW YOUR ACRONYMS (KYA) – The world of T&R is literally riddled with acronyms and affects almost every area of the ticket hall. But...

Q2) How many do you know? – some are easy, some are not.

- | | | | |
|---|--------------------------------|---|------------------------------|
| 1 | QBM – an equipment acronym | 2 | TSID – an equipment acronym |
| 3 | RSLU – acronym for 11 stations | 4 | MOVie – an equipment acronym |



Answers on [Page 15](#)

GOOGLE PAY SPONSORSHIP

As we outlined in [TRUI23](#), and have since covered in recent Hot Issues Bulletins, a recent sponsorship deal between TfL and Google will see all of the traditional yellow card reader (RTD) stickers on gates, replaced with the new design promoting Google Pay as a method of paying for travel.

After an initial two week launch at five 'Gateway' stations;

KINGS CROSS	LONDON BRIDGE	STRATFORD
TOTTENHAM COURT ROAD		VICTORIA



.... all stations will now progressively have the RTD stickers on their gates replaced by Cubic with the new GPay version (illustrated above).

This is part of a £1.5 million 12 month sponsorship deal with Google and it is therefore important that these stickers are in place and in good condition.

To repeat messages already communicated in [TRUI23](#) and [HIB 10-20](#). If RTD stickers on gates are found to be missing or damaged, this needs to be reported to the Cubic Helpdesk (Auto 1610) as soon as possible.

Please note that RTDs on POMs etc. will continue to have the standard yellow RTD stickers, so when reporting a missing or defective sticker, it is important to highlight both the device type and device number.



Sticker	Part No	Instruction
	Google Pay gate sticker	Damaged or missing Gate RTD stickers must be reported to Cubic on Auto 1610. A Cubic engineer will remove the damaged sticker and apply the replacement.
	YV-011	Damaged or missing POM and PVal RTD stickers must be reported to Cubic on Auto 1610. A Cubic engineer will remove the damaged sticker and apply the replacement.

FREEDOM PASS RENEWAL

On Tuesday 31 March 2020, approximately 695,000 Freedom Passes will expire and will no longer work the automatic gates at LU stations, instead displaying **Reject Code '57'**. London Councils started the renewals process back in February, but a number of eligible holders did not apply for a new Freedom Pass in time to receive their new card before their current one expires.

TfL has agreed to continue to accept Freedom Passes with an expiry date of 31 March 2020 until **Sunday 17 May 2020** for cards displaying Code 57 and Staff should:

- Visually check both the Freedom Pass and the reject code
- Allow the customer to travel / complete their journey if it would otherwise be valid
- Advise the customer they must apply for a new Freedom Pass as soon as possible
- Do not advise customers they can continue to use their expired pass until 17 May.
- Cards showing other reject codes must not be accepted for travel.



TIME CHANGE – GMT to BST



The switch from Greenwich Mean Time to British Summer Time will take place at 01:00 hours on **Sunday 29 March 2020**, going forward to 02:00 hours, resulting in people getting one less hour in bed or losing an hour of their day.

It is not expected that any ticketing related devices will fail to switch over to the new time, but any that do should be reported to the Cubic Helpdesk. TSID card holders should remember to include the TOM in their checks and RCI should check their RIDs.

Any CHDs that fail to switch over to the new time should be reported to Suzohapp on Auto 12261.



POM SCREEN CHANGES

As part of the same base data update that introduced the Oyster Charity Donation via POMs, on Sunday 22 March we also delivered a couple of other changes to POM functionality.

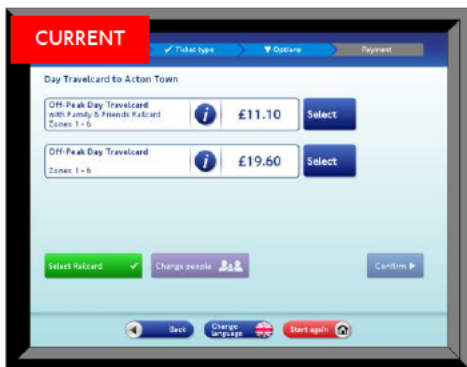
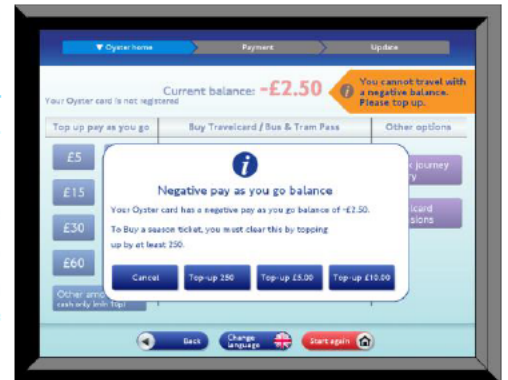
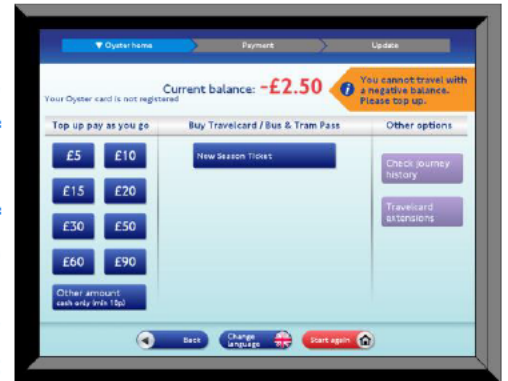
The first is a long awaited change, which means that from the start of traffic on Sunday 22 March, customers using our POMs will be able to clear a negative PAYG balance on their Oyster card at the same time as adding a new season ticket product to the card. This facility was already available on TfL TVMs, but prior to the implementation was not available on AFMs, MFM or QBM, although they shared common software code.

To illustrate the effect of this change, we had previously received regular feedback concerning customers who had failed to realise that their season ticket had expired and had continued to travel by touching in and out as normal. However, instead of using their season ticket, they were in fact using PAYG instead. Depending on how much PAYG they had as a back-up and whether they touched in and out correctly, they then ended up with a negative PAYG balance when touching out at the end of their journey.

Having then realised that their season ticket had expired, they then went to the POM and bought a new 7 Day product. However, when touching in again, travel was prevented as the card had a negative PAYG balance. If the negative balance was small (e.g. -£1.00 or -£2.50 etc.), then they were unable to just clear this if paying with a bankcard or note, as the minimum top-up for these payments is £5.00 (or £3 at a small number of stations where we have trialled a lower £3 top-up button). Even if the customer did notice that they had a negative balance, when buying their new season ticket, the POM would not allow them to add the PAYG at the same time, forcing them to make two separate transactions.

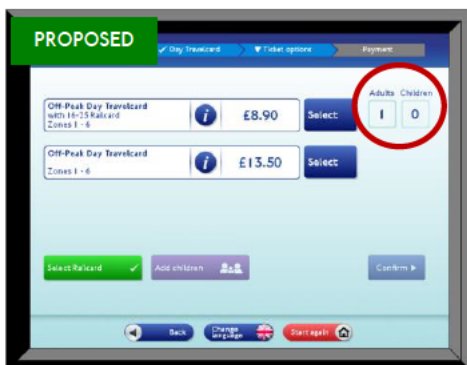
The change being implemented will allow the customer to clear the negative balance and add the new season ticket within the same transaction, rather than having to do this separately and means that customers who don't intend to use PAYG won't have to add more money than they need to clear their debt.

The second POM change being implemented on Sunday 22 March affects the combination of tickets offered to customers buying discounted tickets using a NR Railcard.



This issue was raised in an Ask Olly letter in [TRUI18](#), after being noticed by a member of staff at Rayners Lane, who highlighted that some of their customers were potentially being confused by the prices displayed on the POM when a Railcard was selected which had a minimum group size or the requirement to include a child ticket within the purchase.

Prior to the change being implemented, the POM screen automatically displayed the total cost of the discounted tickets for the minimum purchase possible (i.e. 2 x Adult or 1x Adult + 1x Child) and as a comparison the cost of the same combination of full price tickets, as shown in screen image 1 (left - current). In the example the selection of the Family & Friends Railcard results in the cost of 1 Adult and 1 Child being displayed. The prices quoted were therefore more than the actual price of a single full price adult ticket, but the screen gave no indication that the prices quoted were for more than one.



From Sunday 22 March, the POM screens will now show the number of tickets for all purchases, as shown in screen image 2 (left - proposed). As a result this will also mean that for the purchase of one full price ticket the screen will indicate that 1 Adult ticket has been selected, as in the example shown.

2019-2020 PRIORITIES– PART 5

In the penultimate episode in our series of articles focussing on some of the 2019/20 T&R priorities, this month we turn our attention to the subject of...

[Redacted text block]



[Redacted text block]

2019 / 20 PRIORITIES
Reducing Discrepancies
Failed Card replacements
Settings Discounts
PAYG Journey resolution
Ticketless travel
Gateline management

[Redacted text block]

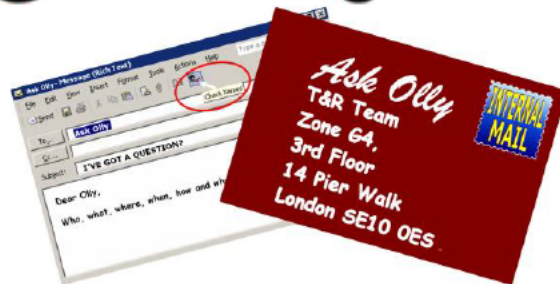


[Redacted text block]



Got a ticketing and revenue related question, problem or simply noticed something you think your colleagues should know about?

Why not test the knowledge of Olly - our resident ticketing guru.



From: [REDACTED]
Sent: 13 January 2020 15:40
To: Ask Olly
Subject: New SCU

Dear Olly,

Could you please explain the purpose of the top row of gate array buttons on the new SCU - close, open, max entry etc.)?

They don't appear to do anything, yet Cubic insisted that all is in working order (job numbers [REDACTED] [REDACTED] [REDACTED])

Yours

Hi [REDACTED]

Thanks for your email and query regarding the new SCU.

The row of buttons you refer to, should perform the following functions:

- **Close Gate Array** - Closes all gates operating in Entry mode, but leaves any gates operating on Exit operational. One button stops any customers entering.
- **Open Gate Array** - Sets any gates operating in Entry mode to "Paddle Open mode"
- **Maximum Entry** - Configures whole gate array to Max Entry setting, as set out in the Array Settings box below (this setting generally caters for peak way in flow)
- **Maximum Exit** - Configures whole gate array to Max Exit setting, as set out in the Array Settings box below (this setting generally caters for peak way out flow)
- **Custom Entry/Exit** - Configures gate array to Custom setting, as set out in the Array Settings box below (this setting generally caters for off peak flows).

We've checked out the SCUs at Gunnersbury and Turnham Green and they appear to be working fine.

It is possible that you may have selected the Gate Array option you wanted, but you also need to press the "Send" button at the bottom?

Regards

Olly Oyster

Hi [REDACTED]

Thanks for your email and query.

Money recorded on the SAF as "Left Change" is added to the stations account and is available for refund if "Return of Left Change" and the item concerned are selected.

If not claimed the money is treated in the same way as other revenue and will partially balance certain discretionary refunds that are taken from our revenue, such as ROLT/RLMP claims.

Hope this answers your query.

Regards

Olly Oyster

From: [REDACTED]
Sent: 25 February 2020 14:14
To: Ask Olly
Subject: Left change

Hello Olly,

Can you confirm what happens to all the revenue accounted for via the left change processes?

Regards

[REDACTED]
[REDACTED]



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- the most recent edition of the TRU, on the same day it goes to the printers.
- having your own personal copy.
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- Send an email to: [REDACTED] today.



From: [REDACTED]
 Sent: 15 February 2020 17:58
 To: Ask Olly
 Subject: 18+ Discount removed

Hi Olly,

We just had a situation here at Waterloo...

A customer came with an 18+ Oyster card (valid and not yet expired) looking to add on her NR railcard discount. Upon investigation her 18+ discount had been replaced by the NR discount at a previous station. We tried to amend this by adding the 18+ discount back on, but as you know it is not one of the options we have.

So our question is why is the 18+ discount able to be overwritten or deleted, but it is not able to be added on?

Shouldn't it be protected so it can't be removed until it expires?

Many thanks

[REDACTED]
 [REDACTED]

Hi [REDACTED]

Thank you for your email and highlighting this issue.

The structure of all cards are basically the same and allow three different discount entitlements to be added in slots 1, 2 and 3. On Oyster Photocards the relevant discount is loaded into slot 1 when the cards are issued.

Unfortunately there are cases from time to time, like the one you have described, where a member of staff adding a discount to the card over-writes an existing discount entitlement.

For 18+ and other discounts which cannot be loaded on a TOM or POM, this means that the error cannot be rectified and the card will unfortunately have to be replaced.

Within the current card format it is not possible to lock or protect a discount entitlement. In the case of 18+ cards, at the expiry of the discount entitlement it will automatically be removed from the card when next used and unlike other cards the 18+ can continue to be used as an Adult Oyster card.

Regards

Olly Oyster

Hi [REDACTED]

Thank you for your email and observations.

This is an issue that has also been highlighted to us by colleagues on other areas and although the message isn't completely wrong, it doesn't convey as clear a message as it could do.

We are already working with TfL's Tech & Data team and Cubic to get this screen message updated to reflect the recent change, but it is likely that the first opportunity to change these screens will be as part of the Fares Revision in May.

Regards

Olly Oyster

From: [REDACTED]
 Sent: 29 February 2020 15:39
 To: Ask Olly
 Subject: Oyster card fee information on POMs

Hello Olly,

I hope you don't mind me emailing, there's something we at Morden have been discussing about the Oyster card fee.

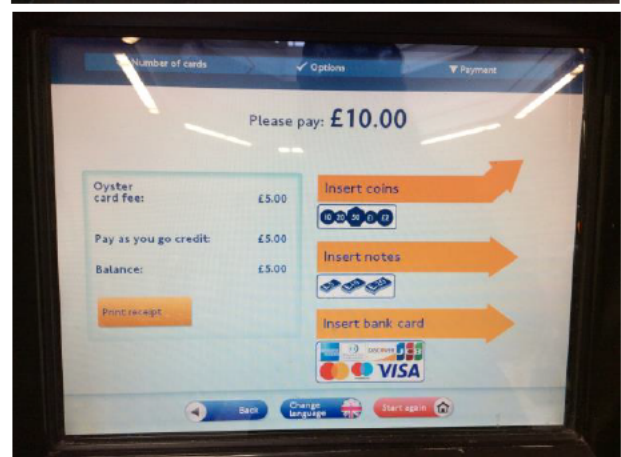
The attached photo show "Note that Oyster card refunds are not available within 24 hours" and "Oyster card fee".

The change from deposit to fee is poorly highlighted and the refund message is misleading, putting us at risk of verbal abuse (at the very least..!)

Can you work your magic and make some changes to make things a lot clearer for our customers please?

Kind regards,

[REDACTED]
 [REDACTED]



NOTE HANDLER REPLACEMENT

As outlined in previous editions of TRU, after the completion of last year's MFM note handler replacement trials and a long wait whilst units were procured, software developed and tested, we eventually moved a step nearer the start of the replacement of our MFM note units in February.



On Tuesday 18 February, as part of an initial Vanguard, the first of the new Suzohapp Bill to Bill note handlers was installed in one of the two MFM's at Ashfield House.

The unit concerned has been installed as a note recycler with additional modules fitted to it to allow the device to dispense notes as change or when making a refund. The unit replaced one of the previous Bank Note Recycler (BNR) units used for staff training. This will mean that staff undergoing training at Ashfield House will have the opportunity of using the new unit whilst there, ahead of the planned rollout across the network. The second of the two MFM's at Ashfield House will continue to operate with a conventional Bank Note Acceptor (BNA) unit, whilst the majority of our MFM's are still fitted with these, but will eventually also be fitted with a new Suzohapp unit, this time without the recycling capability,

Following the initial installation at Ashfield House, which was also used as a training exercise for some of the Cubic installation staff, the first unit deployed to a live station was installed in MFM31 at Vauxhall on the night of Monday 02 March. This device had previously been used for the initial trial of the Suzohapp unit last year; so many staff at this location were already familiar with its operation. This unit has initially been installed as a Bank Note Acceptor, but the level of usage at this location means that we will be looking to add a recycler module to it, towards the end of the current Vanguard. One of the advantages of the new unit is that it is very easy to upgrade it from BNA to BNR capability, as hardware and software are compatible and it is not necessary to change the whole unit over, as was the case with our current BNA and BNR units.

Later the same week, two further Suzohapp BNA units were installed in MFM30 at Vauxhall and MFM30 at Pimlico on the night of Thursday 05 March, to expand the Vanguard to four units and complete all of the devices on the Vauxhall area.



A week later, Cubic upgraded MFM30 at Camden Town, where like Ashfield House an existing BNR unit was replaced with one of the new Suzohapp units fitted with recycling modules.

As with many Vanguards, all was not plain sailing and since completion we have identified issues with both the upgrade and the operation of the new units.



One of these issues affected the alignment of the actual unit when mounted on to a new MFM backbone and this resulted in it being difficult for customers to be able to insert notes into the unit.

The installation at Camden Town was also problematic and it appears that a pre-existing fault on the device had resulted in the device failing once upgraded,

Once in service the major problem observed was with a sudden spike in the number of Error 190's reported by the device. The cause of this was subsequently traced to the new Suzohapp unit being slightly slower than traditional units, when transferring notes from the note escrow to the vault at the end of a transaction.

This meant that when three or more notes needed to be sent to the vault, this was not completed in the time expected by the MFM and an error was therefore flagged up.


To address this, a new version of software was quickly developed by Cubic, which basically allows more time for the transfer of notes to take place.

After an abbreviated round of testing, the new software was deployed to MFM31 at Vauxhall on the night of Monday 16 March and then to the other four Vanguard MFM's two nights later on the night of Wednesday 18 March.

NOTE HANDLER REPLACEMENT continued...

A further four Suzohapp units are scheduled to be installed as part of the current Vanguard. These are due to be installed in MFMs at Baker Street (Bakerloo), Regents Park and on both of the devices at Brixton, but the deployment of these has been delayed by both the issues outlined opposite and the current Coronavirus outbreak.

Ahead of the planned rollout across the network, we would normally be encouraging staff and in particular local T&R champions to visit the Vanguard locations to see and get first-hand experience of the new units. However, in the current environment it probably is unwise to generate additional journeys or to encourage staff to move from one area to another, if this can be avoided.

For all of the Vanguard devices, Cubic are supplying an A3 sized laminated  instruction sheet, outlining how the unit is accessed, serviced and the note vaults changed.



VAUXHALL NHU (front)

These initial Vanguard devices were always scheduled to run on a temporary version of software which allowed them to be deployed to stations without their full range of functionality being available, so that we would be able to get the experience of seeing the units in use on our devices.

One of the principle limitations of this Mark I software, was that the units would initially only have the capability of accepting Bank of England notes, resulting in a slight reduction in functionality on the Vanguard devices which previously had BNR units.

It was always the intention to have a further version of Mark II software for rollout, which had a wider range of functions including Scottish bank note acceptance and a greater capability for Cubic to monitor the device and its performance remotely.

Although our existing units have a counter which records the total number of notes processed, this data is only accessible when a unit is returned to the Cubic workshops, at which time it becomes clear how much usage a particular module has had since it was last overhauled. In contrast on this new unit information is more readily available to engineers, without the need to return the unit to the workshop.

This decision to launch the Vanguard with interim software was very much vindicated by the early discovery of the Error 190 issue we have previously outlined and has now been fixed.

Looking ahead, it is likely that we will now wait until this Mark II software is available before upgrading any further MFMs.

This would then give us an extended period to monitor performance of all of the machines on this software, before a decision is made on the start of the main rollout.

As we have previously outlined, the fact that we will be installing basically the same core unit in all MFMs, makes it much easier to change from BNA to BNR.

Within the rollout we will also be looking to deploy some additional recycling modules at stations where the level of note usage and refunds processed would warrant this.

As part of this review we will also be looking at some of the less used units that currently have BNR units, on the basis of having consistent equipment at a location, to see if these should be upgraded with the basic BNA unit instead, as there will not be the same need to avoid having different types of device at one site.

REVENUE PROJECTS

COVID 19 BRINGS UPGRADE PROGRAMMES TO A HALT

The evolving situation with the spread of the virus and attempts by the UK Government and Public Health England to slow its spread, have presented us with considerable difficulties in trying to complete this edition of TRU. In particular in having to update and replace a number of completed items.

We have outlined a number of different impacts of the current crisis elsewhere in this edition. However, in the final days before publication, the closure of a number of stations and attempts to further reduce the number of customers using the network, particularly during busy times, led to a decision by TfL to close all of the major Elizabeth Line and other major project worksites.

The knock-on effect from this was that work on a number of other projects was also stopped.

The first casualty of this was the suspension of further upgrades of MFMs with the new Suzohapp note handling unit, (a project outlined in detail on Pages 10 and 11). This means that the Vanguard will effectively continue with only 3 units in service (2 at Vauxhall and 1 at Camden Town), with the fourth unit already installed at Pimlico lying unused whilst that station is closed.

The two other main programmes that were underway and are impacted by the decision to temporarily stop upgrade work are the EI Gate POD upgrade (outlined opposite on Page 13) and the SCU upgrade programme which is covered on Page 14. Of these, the Gate POD programme had only just commenced following some initial delays, with only three additional sites being completed before we had to stop.

In contrast the SCU programme was approaching completion, with only a couple more weeks required to complete the remaining stations yet to be visited and to return to a couple of sites which were not completed due to various issues. Unfortunately this will mean that the stations that have not been upgraded with the new SCU will be left with the old style devices until we are able to resume the rollout.

Obviously in these very uncertain times it is difficult to say when any of these rollouts will recommence.

GATE CHANGES

Unfortunately it is not just programmes that were underway that have been impacted by the current crisis. In particular the partial closure of the building housing Cubic's testing facilities is likely to delay most projects.

In previous editions of TRU we had been updating you on progress on a number of forthcoming projects and in [TRU123](#), we had provided updates on a number of separate initiatives affecting gates. All of these have now been delayed for one reason or another. We have summarised below the latest status on a number of these.

- New gate paddle material - *Fire testing has now been successfully completed and parts are on order. Delivery is likely to be delayed and the planned trial at Embankment is likely to be delayed due to restrictions on equipment testing.*
- EI beam shrouds - *the further Vanguard of the final solution scheduled for May, is now also likely to be further delayed*
- EI Paddle control software - *deployment of new software has been prevented by the need to retest certain aspects.*
- Taller paddle trial - *a revised quotation for the planned trial at Stonebridge Park has been received and the order will hopefully be confirmed shortly, to enable components to be ordered. Installation will however be delayed until project work resumes.*



Part 3 – It is all about Jargon in this edition. Four final ones for you...

Q3) How many do you know? - some are easy, some are not.

1 RID – RCI equipment acronym

2 SCU – an equipment acronym

3 POD – a gateline acronym

4 RTD – a gate reader acronym

Ticketing & Revenue

T&R
Trivia

Answers on [Page 15](#)



POD UPGRADES

As we reported in [TRUI23](#), the rollout of the new Gate Passenger Orientated Display (POD) to E1 type gates is now underway with the upgrading of the E1 gate at Ashfield House being completed on Friday 20 March at the second attempt!

The initial visit to complete this work on Wednesday 04 March was unsuccessful, when it was discovered that this location had not been upgraded to the current version of E1 Gate software which supports the operation of both the new and existing PODs. It was also found that the light beam covers on the gate had not been fitted with the current fixings and were difficult to remove to complete the work. The software was subsequently upgraded allowing the new POD to be fitted.

The main rollout started on Sunday 22 March, initially with gates at Amersham and then followed by other stations on the north end of the Metropolitan line later the same week.



This rollout had originally been scheduled to commence on Tuesday 10 March, but was initially delayed by a week until Tuesday 17 March and then by a further five days, as Cubic had not completed all of the necessary paperwork for their internal change control process to allow the programme to commence.

As we have previously outlined, our plan was to continue the rollout to other sites with E1 gatelines until all the relevant components have been delivered and Cubic are ready to start upgrading the older pneumatic gates with the same style of POD. Timescales for this haven't yet been confirmed, but on the original plans this was likely to start around 4 -6 weeks after the E1 programme. Unfortunately, as we were about to go to print, the decision was taken to suspend this and a number of other programmes as outlined on Page 12.

Due to the greater customer benefit in upgrading the current pneumatic gate POD to the new design, we will be looking to switch the installation resource away from E1 gates to complete the work at all of the central London stations that have pneumatic gates. On completion of all of the pneumatic gates, resources will then be switched back to completing the much larger number of stations that have E1 gatelines.

POM OYSTER CARD DISPENSER UPGRADE

In previous editions of TRU, we have reported on an initial trial of a change to the Oyster card dispenser in our POMs, which took place at Liverpool Street and more recently plans to deploy this across the network.

AFM	23%
MFM	19%
TVM	5%

The modification involves changes to the sensors which detect the numbers of cards in the cassette, to give a low stock indication much earlier.

The impact of this is that the device will have a higher number of cards within the cassette, which supports the improvement in reliability seen where the cassette was kept topped up to capacity. The weight of the card stock ensures that the bottom cards in the stack lay flat and reduces the risk of jams.

To date the modification has been completed by Cubic on planned Preventative Maintenance visits, prioritising devices with high failure rates and the latest results we had received indicated that the proportion of each device indicated in the table above had been modified.

Units are also being upgraded as and when they are returned to the Cubic workshop for repair, but the lower failure rates seen recently, has resulted in fewer units being replaced through this route.



REVENUE PROJECTS

SCU UPDATE

As we reported in [TRU123](#), the programme to upgrade all LU stations with the new touchscreen SCU is now nearing completion.

Having passed the 200 station mark, we now only have some stations on the Victoria line and the RSLU stations on the north end of the Bakerloo line to complete, plus a few stations which we need to revisit, due to the upgrade not being completed on the original date. Most of these were as a result of various cabling issues, which need to be resolved before the new SCU can be installed.

The stations left to complete are:

BRIXTON		HEATHROW T4	SUDBURY TOWN
ELEPHANT & CASTLE	(Northern)	HIGHBURY & ISLINGTON	TOTTENHAM HALE
	(Bakerloo)	KENSAL GREEN	VAUXHALL
GLOUCESTER ROAD		KENTON	VICTORIA (District)
GREEN PARK		SOUTH KENTON	WARREN STREET
HANGER LANE		STOCKWELL	WEMBLEY CENTRAL
HARLESDEN		STONEBRIDGE PARK	WHITECHAPEL
HARROW & WEALDSTONE		SUDBURY HILL	

If any other stations are aware of any old style SCUs that are still sitting around working or not, please let us know. We recently stumbled upon an old style SCU at Waterloo (Colonnade) which somehow had been missed during the pre-project surveys and installation planning and there may be others out there?

In [TRU123](#), we also updated you on plans to deploy a new version of SCU software to address a number of issues that have been identified since the start of the Vanguard of the new SCU on LU stations. Unfortunately our hopes of being able to deploy this to a small number of sites in early April have been thwarted.

During the extensive testing of the new software it was identified that one of the defects had not been rectified. Unfortunately the particular issue was the fact that AFMs are permanently shown with amber buttons with a line through, indicating that they are operating in a degraded mode, even though they are in full service. Since this was one of the major defects we wanted addressed, we have advised Cubic that they need this to be fixed before we can deploy the software to our stations.

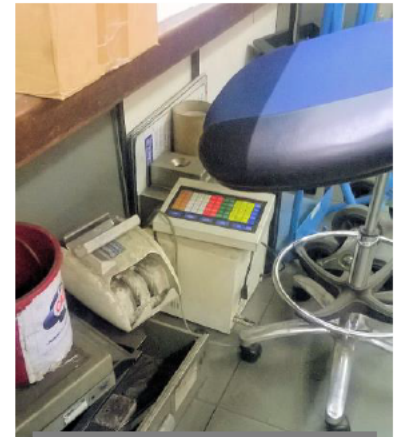
A further issue affecting the SCU screen display has also been highlighted, this time affecting the small number of stations that have pink Route Validators. At these locations the route validators are shown as being in a degraded mode, as in the examples (on the right).

Unlike the AFM and Gate issues we have previously highlighted on the new SCU, the issue with Route Validators is caused by the actual RTD on the device incorrectly reporting its status.

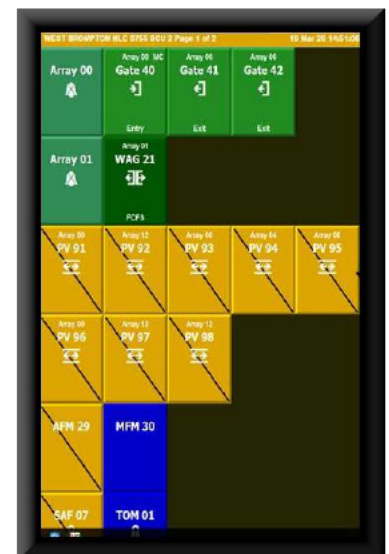
This particular defect has been identified and fixed and is scheduled to be deployed as part of the next reader (RTD) upgrade known as Strategic Release 8. This is currently scheduled to be deployed network wide on 12 August 2020, but given the current climate, this date may change.



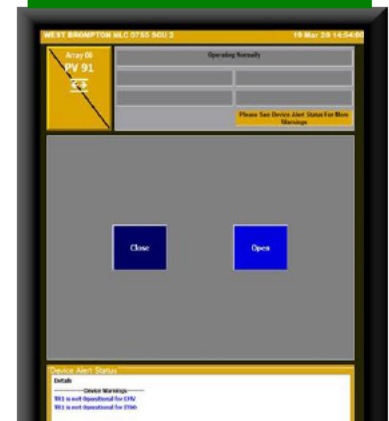
WATERLOO – MISSED SCU



WATERLOO – REDUNDANT SCU



WEST BROMPTON SCU DISPLAY



CUSTOMER REFUNDS

The following information is in relation to refunds for customers who are self-isolating or not travelling due to concerns about Coronavirus, impacted by Coronavirus and have self-isolated

Any customers who ask staff about refunds should be provided with the following advice;

ALL ENQUIRIES	<ul style="list-style-type: none"> Customers can find the latest information on refunds from the TfL website. TfL have waived the £5 admin fee when processing a refund request. The facility for customers to apply for a refund online has been temporarily reinstated. Customers do not need to call the Customer Contact Centre straight away as refunds will be based on the date their Oyster card was last used, which can be seen by operators. The Centre is expected to be busy and customers will need to be patient. Customers will be asked to provide their Oyster card number and bank details, so it would help if they have them available when they call. When refunded, both the Season ticket and the Oyster card will be stopped.
ANNUAL TICKETS	<ul style="list-style-type: none"> Customers must have at least 6 weeks remaining on their ticket. Refunds will be processed as normal, meaning the card will be cancelled and a refund given; TfL will refund the £5 admin fee. Keep their ticket and get no refund.
PERIOD TICKETS	<ul style="list-style-type: none"> Customers must have at least 7 days remaining on their ticket. Refunds will be processed as normal, meaning the card will be cancelled and a refund given; TfL will refund the £5 admin fee. Switch to PAYG; ideally using contactless so they get weekly capping.
7 DAY TICKETS	<ul style="list-style-type: none"> Customers must have at least 3 days remaining on their ticket. Refunds will be processed as normal, meaning the card will be cancelled and a refund given; TfL will refund the £5 admin fee. TfL advice is to use contactless PAYG with weekly capping.
PAYG	<ul style="list-style-type: none"> No refund is necessary

MAY FARES REVISION

Like many other things covered elsewhere in this edition, the changes planned for the May Fares Revision on Sunday 17 May, have been impacted by the current crisis and restrictions on travel etc.

Due to the impact on the Cubic base data team who need to prepare the necessary fares tables and the inability to carry out the normal level of testing, it has been decided to de-scope the May Fares Revision and defer a majority of the items until the following fares revision in September.

Unfortunately this does mean that a number of further POM screen changes that we were intending to make on 17 May will now be delayed.

It is possible that some elements will be delivered before September, as traditionally elements of the fares revision changes are implemented either before or after the revision date, in conjunction with one of the scheduled base data upgrades.

MAY FARES REVISION

We will provide a more detailed update on the changes originally scheduled for May and when they are likely to be implemented in our next edition (TRU125).

ANSWERS TO T&R TRIVIA

Pt.1 D 1987 to 1998

How did you do?

Pt.2	1	RID = Revenue Inspection Device	2	SCU = Station Control Unit
	3	POD = Passenger Orientated Display	4	RTD = Remote Ticketing Device

Pt.3	1	QBM = Queue Buster Machine	2	TSID = Ticketing Systems Identification
	3	RSLU = Regulated Stations on London Underground	4	MOVie = Mobile Oyster Viewer

...AND FINALLY!

REMINDERS TO STAFF HANDLING CASH



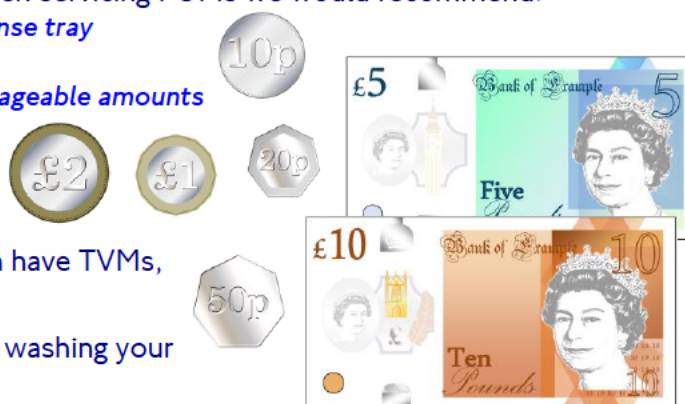
Some concerns have recently been raised by staff about handling money. All money, particularly coin, is potentially dirty, so we would always recommend maintaining good hand hygiene by always washing your hands after undertaking any cash handling activities.

To minimise the amount of money you actually touch when servicing POMs we would recommend:

- Empty coin vault contents into black CHD coin dispense tray
- Tip coin from tray into the CHD in small amounts
- Place notes from note vault directly into CHD in manageable amounts

When preparing bulk coin bags:

- Dispense coin into black CHD coin dispense tray
- Tip coin from tray directly into the bulk coin bag



Separate arrangements will apply at RSLU locations which have TVMs, but do not have Cash Handling Devices.

Don't forget to follow Government and NHS guidance on washing your hands afterwards.

REMINDER TO STAFF – SOCIAL DISTANCING AND HELPING CUSTOMERS

In our line of work, it is impossible not to have some form of interaction with our customers in various scenarios throughout the day. However, although carrying out a vital role we all need to think about our own personal safety and ensure we comply with Government guidelines on social distancing when dealing with customers within the ticket hall.

This means that you should do everything possible to stay at least 2 metres apart from customers and equally important is to avoid handling their cash, tickets and surfaces they come into contact with.

In the table below, we have listed three simple ways that will help you minimise the risk of contact with customers, whilst still assisting them to resolve their issues;

RESOLVING JOURNEYS	Staff should <u>not</u> resolve journeys on POMs and should instead advise customers to access their online account and resolve their journey from there. This is a change to the current procedure listed on T&R Book 3 – POMs, Section 7.	
FAILED OYSTER CARDS	Staff should not replace failed Oyster cards via the POMs but should follow the standard procedure and advise customers to obtain a new card and link this to their old card using their online account.	
TICKETS NOT WORKING IN THE GATES	Staff should check the gateline POD code and check tickets at a safe distance. Customers with valid tickets should be allowed through the gates using the One Shot release facility on the gate or SCU.	

LOOKING AHEAD TO TRU 125

We hope to publish our next edition of TRU at the end of April (subject to other events outside our control).

TRU 125 will include:

- A preview of the main changes included in the May Fares Revision
- Updates on current projects and revised Implementation dates
- Other T&R news stories

Plus more of your letters to Ask Olly and a selection of our other usual features.

