

For the attention of all Station and Revenue Control staff

TICKETING & TRU 138 REVENUE UPDATE

APRIL / MAY 2022

INSIDE TRU138

TRU NEWS – THE LATEST FROM THE WORLD OF T&R

Pages 1-7 → [Fares Revision Overview](#) → [Elizabeth Line Oyster Cards](#) → [Station Changes](#) → [Magnetic Ticket Migration](#) → [Collection Changes](#)

ASK OLLY!

Pages 8-9 → [More of your queries answered](#)

OYSTER EXPLAINED

Page 10-12 → [Passenger and Route Validators](#)

SPECIAL FEATURE

Pages 13-15 → [Elizabeth line recap](#) → [Barcode Ticketing](#)

PROJECT UPDATES

Pages 16-21 → [RID2](#) → [MFM NHU Upgrade](#) → [Gate Upgrades](#) → [CHD Issues](#) → [SCU Displays](#)

AND FINALLY

Page 22 → [Armed Forces Free Travel](#) → [Looking Ahead to TRU139](#)

TRIVIA – Pages 4, 11 & 15 – [Answers on Page 21](#)

COUNTDOWN TO THE 'LATE' MAY FARES REVISION

After a very late January Fares Revision, for the second year running, it is now full steam ahead towards the next of this year's fares updates.

We would normally be looking for the second fares revision of the year to take place in May, but a combination of the late implementation of the main revision on 01 March and this year's Platinum Jubilee celebrations which have seen the late May Bank Holiday moved into early June, have resulted in the May Fares Revision being scheduled to take place on Sunday 12 June.

On [Pages 2 & 3](#) inside this edition we outline some of the main changes that are to be implemented as part of this package.

Since we were not able to change the prices of tickets to National Rail destinations in March, the largest volume of changes will be on the prices of Single and Return tickets to NR stations outside of the London zonal area, bringing these into line with NR fares which were increased on 01 March.

The other main T&R story in the coming weeks is the final confirmation of the opening date of the central section of the Elizabeth line, between Abbey Wood and Paddington.

ELIZABETH LINE

We carried a special feature in [TRU137](#), anticipating an opening date during May, but it has now been confirmed that services will commence on Tuesday 24 May.



The event will be celebrated by the release of a limited-edition Elizabeth Line Oyster card, details of which appear on [Page 4](#) inside.



KEY STORIES INSIDE

Page 5

[BACK ON THE MAP](#)

We outline a glut of station changes with entrances opening for the first time and some stations re-opening to customers after temporary closures.

Page 6

[MAGNETIC TICKET MIGRATION](#)

We provide an update on what a number of TOCs are doing to accelerate the shift of customers away from magnetic tickets to other media.

Pages 14/15

[BARCODE TICKETING](#)

We outline initial plans for acceptance of barcoded tickets at some LU stations and types of products used.

Page 16

[RID REPLACEMENT](#)

We provide an update on progress towards the introduction of a new Revenue Inspection Device for Revenue Control staff.

Page 17

[MFM NHU REPLACEMENT](#)

The latest information on the rollout of new note handling units and recent changes to address current issues we are facing.

~~JUNE~~ FARES REVISION

NR THROUGH FARES

The 'May Fares Revision' traditionally does not normally feature many actual fare changes, other than a small number of changes to certain fares set by individual Train Operating Companies (TOCs).



However, as there was insufficient time to implement changes to the prices of NR Single and Return fares and of through fares for journeys from LU to NR destinations, the forthcoming fares revision will see a large number of changes to the prices of these journeys.

Since 01 March, the prices we charge for Single and Return tickets for these journeys on our POMs has remained at the 2021 levels, even though the corresponding tickets bought from TOC stations have increased.

This has meant that the customer would potentially pay less if they bought a Single ticket for each journey than if they bought a Return ticket at a TOC station, or if making a return trip from an LU station than if they were making the corresponding round trip from a station outside of London.

The fare changes scheduled for Sunday 12 June will bring fares back into line with NR station devices and as a result we will be issuing a new set of staff fares lists for NR destinations. These will be available for staff to access from early June, via the [T&R section of Platform](#).

As LU Station of Origin fares are not changing at this fares revision, the staff fares lists for these journeys which were issued in March will remain valid.

Other changes

There will also be some minor adjustments to certain PAYG fares and Mixed travel to correct certain anomalies identified since the fares revision in March.

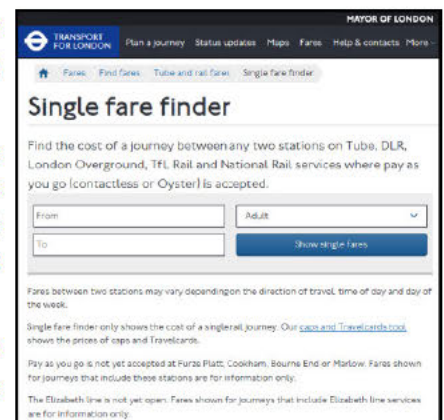


More Information

We will be publishing further information on the fares changes in the Hot Issues Bulletin and in an updated Fares Revision Circular (FRC).

Although the most common fares are reproduced within the FRC, some Zonal fares combinations and a number of journeys outside the Zones where "Special Fares Apply" have not been included.

These fares are available using the Single fare finder, which can be found on the TfL website or by [clicking here](#).



PADDINGTON OSI CHANGES

As part of the fares revision changes, we will be implementing an additional Out of Station Interchange (OSI) between the new Paddington (Elizabeth line) ticket hall and nearby Lancaster Gate station.

This interchange will mirror the existing OSIs which already exist between Lancaster Gate and the other parts of Paddington (NR) and Paddington (LU) stations.

The interchange facility will apply to both contactless payment and Oyster card users.

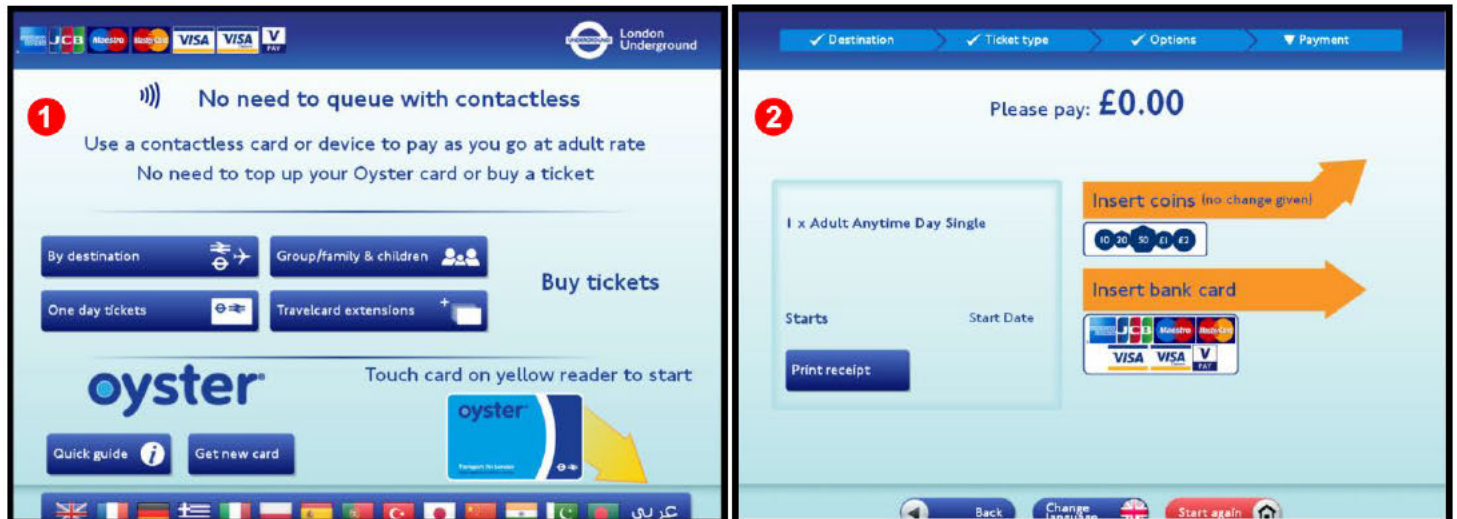
Although part of the fares revision process, this change was implemented early by Cubic on Sunday 01 May, to spread their workload. Although the OSI will not be effective immediately, it will ensure that the interchange is available ready for the planned opening of the central section of the Elizabeth line on Tuesday 24 May.



POM SCREEN CHANGES

In conjunction with the fares revision changes, Cubic will be making some minor changes to POM screens based on recent customer feedback:

1. Change to home screen to indicate “*Touch card on yellow reader to start*” for Oyster users.
2. Changing the colour of the ‘Print Receipt’ button to *white text on blue background* to make this clearer to customers who may want a receipt for their card transaction.
 - It was suggested that the option for a receipt was often not seen until it was too late, and a receipt cannot be selected once the bankcard transaction has been completed, unlike some other terminals customers may be used to using.
3. Change of destination ‘Heathrow (TfL Rail)’ to ‘*Heathrow (Elizabeth line)*’



ALL CHANGE AT EALING BROADWAY

Completion of the Elizabeth line works at Paddington and the opening of an interchange passageway between the Elizabeth line and Bakerloo line platforms, it will in future be possible for customers to interchange within the gateline, rather than having to exit and re-enter different parts of the station.

As a result, for a sizeable number of journeys it will no longer be possible to distinguish whether the customer has travelled via Paddington and Zone 1 or via a cheaper non-Zone 1 route by changing trains at Ealing Broadway.

To overcome this, the previous Passenger Validators (PVals) at Ealing Broadway have been converted to become pink Route Validators, to allow customers who are interchanging at the station, to validate and indicate which route they have taken.

The small number of customers holding magnetic tickets and travelling to / from stations outside of the PAYG area and wishing to start or finish a PAYG journey at Ealing Broadway, are now required to exit and then re-enter via the gateline at Ealing Broadway to swap between ticket types.



At present, PAYG customers receive the benefit of non-Zone 1 routings for many journeys, whether or not they validate on the Route Validators at Ealing Broadway.

However, from 12 June, the chargeable routes for these journeys will be changed to in future charge the via Zone 1 fare, unless the customer has validated on one of the Route Validators at Ealing Broadway.

Ahead of the change signage will be changed and customers will be encouraged to use the Route Validators when interchanging at the station. The subject of Route Validators is covered in this month's [Oyster Explained](#).

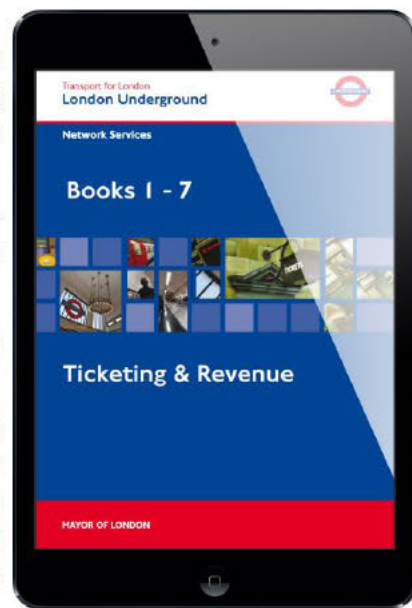


T&R BOOK UPDATES

Following on from the fares revision on 12 June, we will be embarking on the process of updating the T&R Books to reflect the changes that are being implementing in June, together with a backlog of other changes that we have been unable to make since the last update of the books were undertaken.

In line with changes we have previously made, we will be moving completely away from printed copies of the T&R Books, so that in future they will only be available online via the [T&R section of Platform](#).

Currently Books 1 and 4 are available as hard copies, but these will not be reprinted when the updated versions are ready.



Section 5 – PROCEDURAL CHANGES SINCE LAST T&R BOOKS UPDATE

This table is only a guide to the nature of the changes and does not contain the full details of the changes. For a full list of changes, please refer to the relevant sections of the T&R Books. The changes are listed in the order in which they were implemented, with a cross-reference to the relevant section of the T&R Books.

Change	Effective Date	Book	Section
London Underground Network Services	12/06/2014	T&R Book 1	1.1.1
London Underground Network Services	12/06/2014	T&R Book 2	2.1.1
London Underground Network Services	12/06/2014	T&R Book 3	3.1.1
London Underground Network Services	12/06/2014	T&R Book 4	4.1.1
London Underground Network Services	12/06/2014	T&R Book 5	5.1.1
London Underground Network Services	12/06/2014	T&R Book 6	6.1.1
London Underground Network Services	12/06/2014	T&R Book 7	7.1.1
London Underground Network Services	12/06/2014	T&R Book 8	8.1.1
London Underground Network Services	12/06/2014	T&R Book 9	9.1.1
London Underground Network Services	12/06/2014	T&R Book 10	10.1.1
London Underground Network Services	12/06/2014	T&R Book 11	11.1.1
London Underground Network Services	12/06/2014	T&R Book 12	12.1.1
London Underground Network Services	12/06/2014	T&R Book 13	13.1.1
London Underground Network Services	12/06/2014	T&R Book 14	14.1.1
London Underground Network Services	12/06/2014	T&R Book 15	15.1.1
London Underground Network Services	12/06/2014	T&R Book 16	16.1.1
London Underground Network Services	12/06/2014	T&R Book 17	17.1.1
London Underground Network Services	12/06/2014	T&R Book 18	18.1.1
London Underground Network Services	12/06/2014	T&R Book 19	19.1.1
London Underground Network Services	12/06/2014	T&R Book 20	20.1.1
London Underground Network Services	12/06/2014	T&R Book 21	21.1.1
London Underground Network Services	12/06/2014	T&R Book 22	22.1.1
London Underground Network Services	12/06/2014	T&R Book 23	23.1.1
London Underground Network Services	12/06/2014	T&R Book 24	24.1.1
London Underground Network Services	12/06/2014	T&R Book 25	25.1.1
London Underground Network Services	12/06/2014	T&R Book 26	26.1.1
London Underground Network Services	12/06/2014	T&R Book 27	27.1.1
London Underground Network Services	12/06/2014	T&R Book 28	28.1.1
London Underground Network Services	12/06/2014	T&R Book 29	29.1.1
London Underground Network Services	12/06/2014	T&R Book 30	30.1.1
London Underground Network Services	12/06/2014	T&R Book 31	31.1.1
London Underground Network Services	12/06/2014	T&R Book 32	32.1.1
London Underground Network Services	12/06/2014	T&R Book 33	33.1.1
London Underground Network Services	12/06/2014	T&R Book 34	34.1.1
London Underground Network Services	12/06/2014	T&R Book 35	35.1.1
London Underground Network Services	12/06/2014	T&R Book 36	36.1.1
London Underground Network Services	12/06/2014	T&R Book 37	37.1.1
London Underground Network Services	12/06/2014	T&R Book 38	38.1.1
London Underground Network Services	12/06/2014	T&R Book 39	39.1.1
London Underground Network Services	12/06/2014	T&R Book 40	40.1.1
London Underground Network Services	12/06/2014	T&R Book 41	41.1.1
London Underground Network Services	12/06/2014	T&R Book 42	42.1.1
London Underground Network Services	12/06/2014	T&R Book 43	43.1.1
London Underground Network Services	12/06/2014	T&R Book 44	44.1.1
London Underground Network Services	12/06/2014	T&R Book 45	45.1.1
London Underground Network Services	12/06/2014	T&R Book 46	46.1.1
London Underground Network Services	12/06/2014	T&R Book 47	47.1.1
London Underground Network Services	12/06/2014	T&R Book 48	48.1.1
London Underground Network Services	12/06/2014	T&R Book 49	49.1.1
London Underground Network Services	12/06/2014	T&R Book 50	50.1.1

Hot Issues Bulletin 14-25 - Page 14 of 17

This time round, we plan to update the books one by one, rather than releasing the new versions of all of the books at the same time and as each book is released, we will provide a notification of this in the weekly Hot Issue Bulletin.

In the meantime, just a reminder that a full list of all changes that have taken place which are not yet reflected in the current edition of each of the T&R Books, appears as the final section of the Hot issues Bulletin, with a reference to the topic and section affected.

Each subject also includes a link to which edition the change came into effect, in order to make them easier to find.

Until the revised books are available, it is worth checking for potential updates, when needing to check a procedure or other information within the T&R Books.

ELIZABETH LINE OYSTER CARD

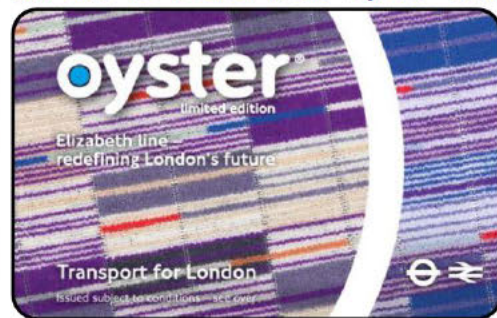
To celebrate the forthcoming opening of the central section of the Elizabeth line, TfL will be releasing a further limited edition Oyster card, the first since the “Year of the Bus “ Oyster card in March 2014.

The new cards illustrated on the right, will be delivered to LU stations within Zone 1 plus Whitechapel and Heathrow T2&3 from week commencing Monday 09 May. The cards will also be issued from Oyster Ticket Stops within Zone 1 and from stations on the Elizabeth line.

At LU stations that are due to receive the new stock, staff have been instructed to run down stocks of standard blue Oyster cards held within POMs, before adding the new Elizabeth line cards to Oyster card dispenser cassettes from start of traffic on Monday 16 May.

As the device will need to issue the remaining standard Oyster cards, it may be sometime before the POM issues the first of the limited edition cards.

Existing stocks of standard Oyster cards need to be retained securely and not used until all of the Elizabeth line stock has been exhausted, to ensure that the Elizabeth line cards are used up in a timely manner.



Part 1 – This month’s theme is “No longer accepted”...

Q1) ...when did LU stop accepting personal cheques at stations?

- A Sunday 17 July 2005
- B Sunday 16 July 2006
- C Sunday 15 July 2007
- D Sunday 13 July 2008



Answers on Page 21

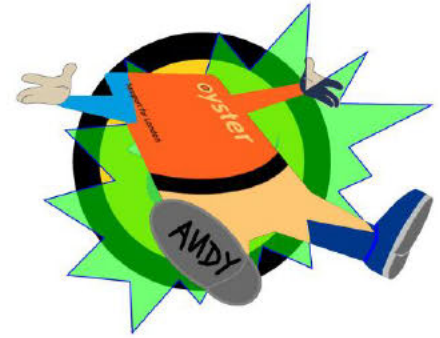
OYSTER HOT LIST EXPANSION

It is planned to expand the size of the current Oyster “hotlist” held by devices from the current capacity of around 100,000 entries to allow up to 1 million Oyster cards to be held on the live hotlist.

The implementation of this expansion requires a number of back-office changes but will also require a further upgrade to the card reader (RTD) on all devices, to allow the greater number of card details to be stored by each device.

Cubic plan to Vanguard this change later this year, before a network wide deployment to all RTDs.

The change will mean that cards that have not been used for a long period will be retained on the hotlist and disabled at next use, rather than being held on a ‘reserve list’ and then elevated onto the main list when they are seen by a device, as currently happens.



BACK ON THE MAP AGAIN!

May will see the return of some familiar faces that haven’t featured on tube maps or line diagrams for a while.

The completion of the Northern line Bank branch blockade and the opening of new southbound running tunnels and a new southbound platform at Bank, mean that through services will resume between Moorgate and Kennington and both Borough and the Northern line entrance to Elephant & Castle are scheduled to re-open to customers on Sunday 15 May.

Ahead of the re-opening, we will be arranging for Cubic to visit both of these sites to complete any upgrades that could not be completed whilst the stations were shut and to undertake preventative maintenance on the gates and POMs to ensure that there are not any issues with devices when they go back into operation after their four month lay-off. May will also see the opening of three completely new ticket halls in conjunction with the planned opening of the Elizabeth line on Tuesday 24 May.

Farringdon (East) ticket hall will feature 2 TVMs, 6 E2 Gates and 2 WAGs and apart from providing access to the new Elizabeth line platforms at Farringdon, will also have a link to the westbound/Inner Rail platform at Barbican. The new entrance will be located in Long Lane and is physically closer to Barbican than to the main part of Farringdon.

The second new ticket hall is at Tottenham Court Road, where the new Dean Street ticket hall will provide access to the Elizabeth line platforms and will be situated on Oxford Street mid-way between the existing Tottenham Court Road and Oxford Circus stations. The new entrance will be equipped with 3 TVMs, 9 E2 Gates and 2 WAGs.

The final Elizabeth line ticket hall due to open on 24 May, is Liverpool Street (Broadgate), which although linked to the existing LU station at Liverpool Street, will be controlled by the station control room at Moorgate, at the other end of the Liverpool Street Elizabeth line platforms. Unlike the other two ticket halls, the 6 TVMs at Liverpool Street (Broadgate) will be card only devices.



Heathrow Terminal 4 station, which has been closed since the beginning of the Pandemic, was also scheduled to re-open on Monday 30 May, but as the airport terminal re-opening has now been put back a couple of weeks, the station is now scheduled to reopen on Tuesday 14 June. Having been shut for over two years, there is quite a bit of upgrade work which needs to be completed to both gates and POMs at the station and this is now scheduled to take place during May.

The 2 MFMs at Heathrow T4 are the last devices that are still fitted with the old-style Bank Note Recycler (BNR) units and these will be replaced with the new Pay Complete BNR on the night of Monday 02 May. During the same visit, Cubic will also be removing the temporary panels which were installed across the front of the 2 AFMs, as a pilot for the proposed mothballing of a number of lightly used AFMs across the network.

Like the devices at Borough and Elephant & Castle (Northern), all devices at Heathrow T4 will undergo Preventative Maintenance at the end of May, ready for the station to re-open to customers.

MAGNETIC TICKET MIGRATION

There has been a strategy for many years of moving customers away from the magnetic stripe paper ticket format to other more modern forms of ticketing.

Although this has been a stated aim, the pace of change has been quite slow on LU.



The arrival of Oyster and more recently contactless payment has greatly reduced the sales of magnetic tickets, providing the same or better value than a Travelcard through capping and the use of contactless payment increasing the accessibility of PAYG for customers from outside of London, without the need to obtain an Oyster card, which they may or may not want to retain for a future visit.

The transfer of customers to Oyster and contactless, has largely been driven by price differentials with Oyster offering much cheaper fares for single journeys and in recent years the Daily price caps also being below the price of the equivalent day Travelcard. Despite this gradual migration, we still offer Single, Return and Day Travelcards on magnetic stripe format tickets.

Since the migration of Travelcard season tickets onto Oyster, the bulk of magnetic tickets at Zone 1 and at “gateway” stations in particular, have tended to be NR issued season tickets and one day tickets including an element of LU travel. However, the tide is beginning to turn, and our Train Operating Company (TOC) colleagues are now increasingly driving their customers towards other ticket mediums.

The progressive introduction of ITSO format cards like ‘the Key’ by most TOCs has gradually seen this become the chosen medium for the issue of Travelcard season tickets at stations outside of the London Oyster card zones and for Point to Point and tickets to London Terminals within the London area. A further step towards the demise of magnetic tickets took place recently with the withdrawal from sale of magnetic Travelcard seasons for journeys within Zones 1-6, from both stations and online platforms. Travelcards that have previously been issued will remain valid until their expiry date, but it should see an end to magnetic 7 Day Travelcards and not long after that Monthly Travelcards for journeys within the London area.

ITSO cards can potentially hold products other than just season tickets in the future and there has been discussion for many years around the ability to load Single tickets and even tickets with cross London availability onto ITSO format cards.



These already have the advantage that the Tri-reader (RTD) on our gates and POMs are already capable of reading this format of card, in addition to Oyster and contactless format cards.

Looking forward, TOCs are also moving a proportion of their magnetic ticket sales on to barcode format tickets, either via online sales where the customers ticket is held and read from a mobile device, or in printed format from ticket machines or mobile issuing devices. These are both more accessible to customers and potentially cheaper and easier for operators to produce.

From an LU point of view, the major downside of barcode format tickets is in the need for additional equipment both on gates and for mobile checking to be able to read and validate this type of ticket. For this reason, there is currently no agreement between TfL and the TOCs for us to accept these on through journeys on LU trains. However, you will read in this month’s *Special Feature* on [Pages 14 & 15](#), the initial steps which are being planned to accept barcoded tickets at a number of LU stations directly served by NR services.

The demise of magnetic tickets on the NR network may also be further hastened by the potential further expansion of the use of contactless payment for journeys beyond the stations that currently accept contactless. Although currently confined mainly to the London area zones plus a few other sections of line, extending to GTR services to Luton Airport in the north, Gatwick Airport in the south and on TfL Rail / Elizabeth line to Reading to the west, we have recently seen the expansion of contactless payment for PAYG journeys to a number of GWR branch lines in the Thames Valley. In the future, further expansions may take place beyond the current boundaries, as part of the Governments stated objective of improving the ticketing experience for rail customers. So, watch this space for future developments as they are announced.

HELP US TO HELP YOU

Over the last couple of years the T&R Team have been stretched by the dual challenges of the Covid Pandemic, remote working and the loss of key personnel, whom we had initially been unable to replace. This has meant that the methods of supporting colleagues working on LU stations has had to change, moving away from use of helplines to increasingly providing support via email or online.



Unfortunately, our ability to provide support and answers to questions from frontline colleagues is often hampered by correspondence being incomplete or being routed incorrectly. To help us to support you more efficiently, please follow the guidelines below.

- *Please use group mailboxes below rather than sending emails to named individuals, as this will ensure the matter gets to the person that is dealing with the issue, rather than going to someone who may be on leave or away from the office.*
- *Please do not send emails to multiple addresses, as this can waste time in redirecting emails which may have already been dealt with*
- *If you have received an acknowledgement, please do not send further emails to chase a response, as this fills up the mailbox and merely delays us dealing with issues requiring attention.*

Please use one of the following mailboxes:

For TSID Card issues	For CSID PIN issues (non TSID card holders)	For General ticketing queries	For Repeat failures and escalation of faults

CASH COLLECTION FREQUENCY CHANGES

We normally review the frequency of cash collections from each station every year, to ensure that they match the level of cash each station is currently taking. The last two years have been very unusual and have resulted in a number of separate batches of changes being made to reduce frequencies at the start of the pandemic, suspend services at many stations and then to reinstate collections from most stations last summer, as stations returned to accepting cash through their POMs.



During the post Covid recovery, we have seen cash volumes gradually increase, but due to changed travel and purchase habits, they have not yet recovered to the levels seen in 2019.

Although we have had to reinstate additional collections at a small number of our busier sites, it is noticeable that over the last couple of months, the amounts being collected at a lot of our smaller stations that now have fortnightly collections, have been very low. We have also seen quite a high level of failed collections recently, where G4S have recorded the service failure as being down to “customer refused service” or “nothing to collect”.

To try to bring cash collections into line with our current needs and avoid unnecessary expenditure, we are currently looking at further reducing the frequency of collections at a number of these smaller stations, to reduce collections to either once per month, or by implementing a “dynamic collection schedule”, where there are not set collection dates and where a collection is only scheduled once the contents of the CHD sack reach a specific trigger level.

We are planning to pilot these changes on a couple of areas at the east end of the Central line and at the north end of the Metropolitan line, within the next few months and further details will shortly be shared with the areas affected.

If successful, we would then look to implement similar changes to other similar stations around the network, as part of an update of the collection schedule. It is worth highlighting, that even with a reduced frequency of collection, the amount of cash held at any of these sites would still be lower than the levels regularly held at many of our busier sites.



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: 01 April 2022 12:22
To: Ask Olly
Subject: New NHU's

Hi Olly,

A quick question with regards to the new NHU's, if we have a note jam, are we still required to select 95E before addressing the NHU as with the old units?

Your help would be much appreciated.

Kind regards

[REDACTED]
[REDACTED]
[REDACTED]

From: [REDACTED]
Sent: 31 March 2022 00:04
To: Ask Olly
Subject: NOTE JAMS ON NEW NHU

Hi Olly,

Can we have some clarification on the procedure when dealing with note jams on the new NHU'S, do we still need to do a 95E reset on MFM for the note to come out like it used to do, or do we follow the instructions given and just open the NHU to gain access to any jammed notes.

If you could clarify for us it would be appreciated.

Regards

[REDACTED]
[REDACTED]
[REDACTED]

Hi [REDACTED]

Thanks for your emails and queries regarding the new MFM Note Handling Units. We have had a couple of similar queries this month.

It has been confirmed by the Cubic Engineering team that if the note is jammed in the accessible area of the acceptor or within the vault area, it can just be removed.

The device will know whereabouts the note is jammed within the unit and it will also know when the jam has been cleared, so there is no need to enter 95E to do a soft reset in this case.

Regards

Olly Oyster

Hi [REDACTED]

Thank you for your email and query. Incomplete PAYG journeys can be resolved under the following limited circumstances:

- Recent customer error at the station concerned (e.g. customer validating Oyster when in possession of a valid paper ticket)
- Known incident (e.g., power / gateline failure which prevented validation)

In all cases the incomplete journey must have taken place in the last 48 hours.

I hope this clarifies this for you.

Regards

Olly Oyster

From: [REDACTED]
Sent: 14 May 2022 16:38
To: Ask Olly
Subject: Resolution of unresolved journeys

Hi Olly,

Just to clarify if we can or cannot resolve unresolved journeys?

Some staff on my area say we can some say we can't, but at some point I do recall that it did say we can in the Hot Issues Bulletin. Don't know if that changed again and I missed it.

Regards

[REDACTED]
[REDACTED]
[REDACTED]

From: [REDACTED]
Sent: 07 March 2022 13:26
To: Ask Olly >
Subject: Oyster cards refunds

Hi Olly

Recently a customer had multiple Oyster cards and managed to obtain refunds of 2 Oyster card deposits and PAYG balances from the MFM and some Oyster cards only the PAYG balances, whilst for some cards they were advised to contact Oyster Customer Services.

Please can you clarify if the process has been changed?

Kind regards

[REDACTED]
[REDACTED]
[REDACTED]

Hi [REDACTED]

Thank you for your email and your query.

We can confirm that there has not been any change to the Oyster card refund rules and customers should be able to obtain a refund of the card deposit and up to £10 of PAYG via the MFM / TVM.

The difference between transactions you witnessed is likely to be as a result of the balances on individual Oyster cards. Cards issued since February 2020 have a card fee which cannot be refunded, instead of a refundable deposit.

These would result in the customer only being offered a refund of their PAYG balance.

The cards which triggered a message to contact Customer Services are likely to be either where the PAYG balance is more than £10, is one of older Mifare format Oyster cards, or where there is a block on refunds for a particular method of payment used for a transaction. This happens less often now but may occur if a refund has been made to the card.

Hope this explains the possible reasons why you have observed differences in certain transactions.

As with other Oyster related queries, we can only really give a definitive answer if we have the number of the Oyster card involved.

Regards

Olly Oyster

Hi [REDACTED]

Thank you for your email and raising this issue.

Although our POMs do not accept £50 notes, it has been permissible for staff to assist customers by changing a £50 note for lower denomination notes / coins via the CHD in order that they can buy the product they require or top-up using our POMs.

Having done some digging, it would appear that the latest 'bill set' containing images of the new polymer £50 note may not have been loaded to all of our CHDs, as the note was introduced during a period where some stations were not accepting cash payments.

It looks as if PayComplete may have only upgraded devices at stations that were taking cash with the latest bill set and this has then not been picked up when other stations returned to accepting cash.

We are currently awaiting confirmation from PayComplete as to which devices have the current bill set and which need to be upgraded.

We will then arrange for the outstanding stations to be brought up to date, so that their CHDs accept both paper and polymer £50 notes.

Regards

Olly Oyster

From: [REDACTED]
Sent: 06 April 2022 08:07
To: Ask Olly
Subject: £50 Note

Hi Olly,

A question was raised this morning regarding £50 notes.

As good customer service especially as Stations on the Amersham & Pinner Areas are outlying with no other shops etc nearby, staff on inspection have taken old style £50 and changed them in the CHD so as that the customer can use the machines, but now with the new Polymer £50 note the CHD will not take them.

Could you advise firstly if we should have actually been accepting them? Also if we are will the CHD be re-configured to accept them?

Kind Regards,

[REDACTED]
[REDACTED]
[REDACTED]



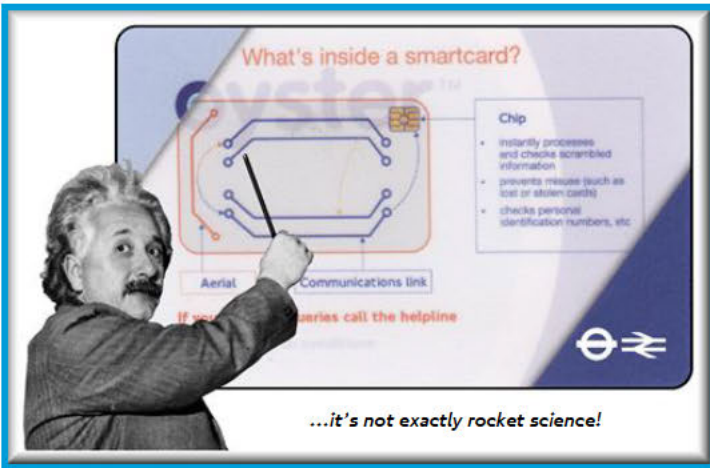
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OYSTER EXPLAINED

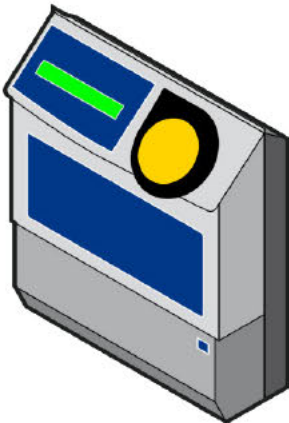


For this month's Oyster Explained feature, we focus on the subject of Passenger Validators (PVals) and Route Validators and attempt to explain a little more about how each function and the differences between them.

ROUTE VALIDATORS & PASSENGER VALIDATORS

This month's Oyster Explained feature follows on from the recent completion of the gating of Finsbury Park station (see [TRU137](#)) and a change in the role of PVals there, plus the forthcoming changes being implemented at Ealing Broadway, as outlined on [Page 3](#).

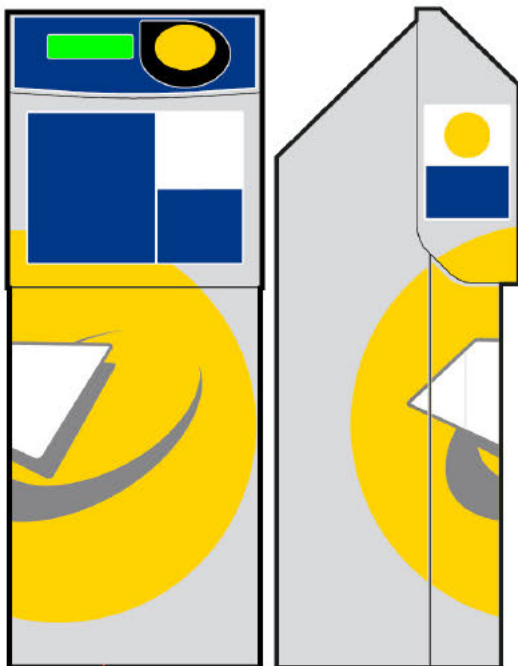
With almost all stations now gated on the LU network and the removal of the majority of Manual Gates from LU ticket halls, the number of PVals around the network is now quite small. They do however, play an important role at the handful of locations where we do not have gates and at points on the system, where customers may need to start or end a PAYG journey when interchanging to or from long distance NR services from stations outside of the PAYG area. As PAYG and in particular contactless payment acceptance has been expanded, the number of such journeys has also been reduced.



There are two main types of PVal, both of which are fitted with the standard yellow RTD and function in the same way.

← The first version shown to the left, is a smaller wall-mounted unit and often arranged in pairs either side of a passageway. These are typically found at interchange passageways, where the wall-mounting means that they do not encroach into the walkway used by customers.

The second version (↙ below) is a larger free-standing unit, many of which are enclosed within a waterproof housing, to allow them to be located at station entrances and on platforms where they may be exposed to the elements. This design is more common at NR stations, Tram stops and on DLR stations, where they are often on platforms and in the open.



PVals like gates have the ability to start or finish a journey, but whereas an entry gate will know that all validations on the RTD on the unpaid side will be the start of a journey, the PVal does not have the ability to tell whether the customer is entering or leaving the station when they validate, so it basically has to guess based on the previous validation. So, if the last validation was an entry at another station, the PVal will record an exit validation, whereas if the previous validation was an exit validation, it will record the start of a new journey.

Until recently, the PVals situated within the interchange corridors at Finsbury Park had the ability to mimic the Out of Station Interchange (OSI) facility of a gate, by re-opening the original journey after a customer had exited through the gateline on the NR platforms. Having re-opened the journey, customers could then exit through the LU gates and be charged the correct fare for their journey.

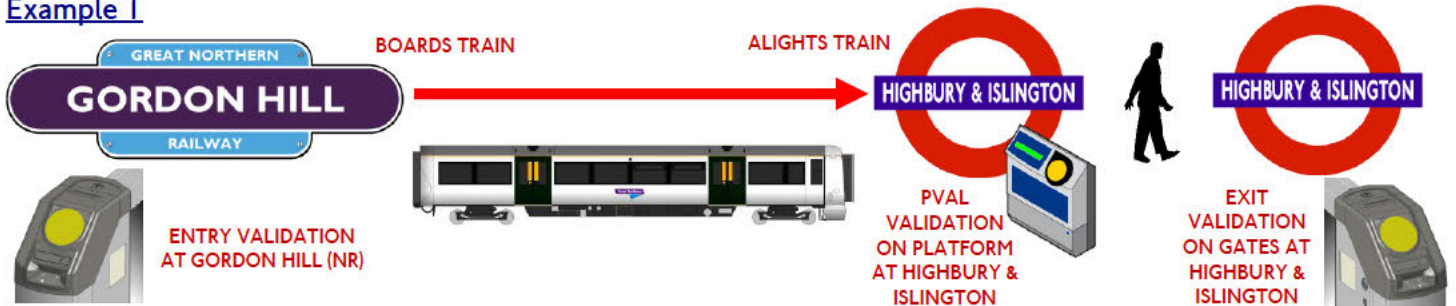
The recent relocation of the NR gates to the Station Place entrance, has reduced the dependence on the PVals, as customers can now enter and exit the station via any gateline. However, this does raise another question about the functionality of a PVal.

PVALS AND ROUTE VALIDATORS... continued

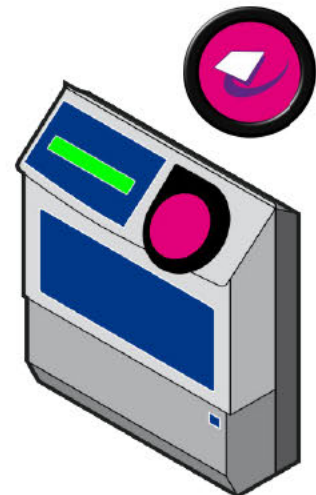
One question that is often asked is: "What happens if a customer touches on a PVal on a platform or interchange, before then touching out on a gateline?"

This scenario occurs at a number of locations where PVals are located within the gateline. It is a situation we try to avoid where we can, due to the potential revenue control concerns about customers being able to start or end a PAYG journey, when they are in fact making a much longer journey without a valid ticket covering the whole of it

Example 1



In this scenario, the customer's PAYG journey is completed when they use the PVal on the platform at Highbury & Islington. However, when they reach the ticket hall and exit through the gateline, the PVal validation is treated as a "continuation exit", allowing the customer to then exit through the gates.



The journey from Gordon Hill is closed off and effectively the earlier PVal touch is ignored.

So apart from the colour of the RTD being different, how else does a Route Validator differ from a standard PVal?

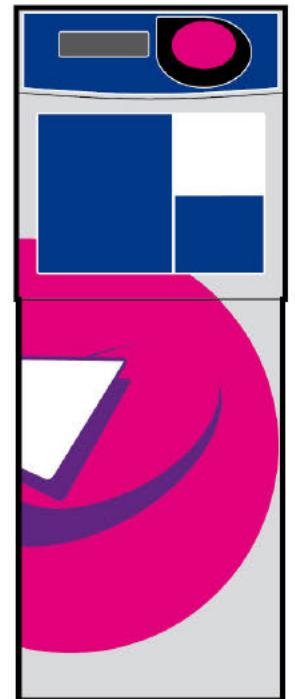
Like the PVals opposite, there are also two types of Route Validator used, depending upon where they are going to be situated. Both feature pink coloured RTD coverings and they also have distinctly different signage to that displayed on a PVal, to highlight which customers should use them.

The significant difference between a PVal and a Route Validator is that customers cannot start or finish a journey on a Route Validator.

At locations where both PVals and Route Validators are located within the same station (e.g. Stratford or West Brompton) it is important that the differences between the two are distinguished, so that customers use them correctly.

The main function of a Route Validator is to effectively set a marker midway through a journey to distinguish which route a customer has taken and allow the appropriate zonal fare to be charged.

There are a relatively small number of LU locations that currently have Route Validators and these are generally where a route that avoids travel through Zone 1 needs to be distinguished from a more expensive route across the central area.



Continued on the next page

Part 2 – Still on the subject of "no longer accepted"...

[Answers on Page 21](#)

Q2) ...From which date were paper Customer Charter and Refund Vouchers no longer accepted at LU stations?

- A Sunday 01 January 2012
- B Wednesday 02 January 2013
- C Thursday 02 January 2014
- D Friday 02 January 2015



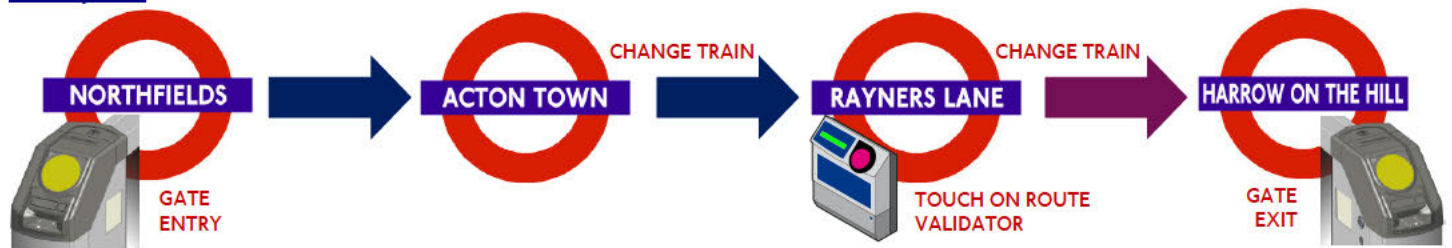
Ticketing & Revenue
T&R
Trivia

OYSTER EXPLAINED

PVALS AND ROUTE VALIDATORS... continued

So looking at an example of how a Route validator operates;

Example 2

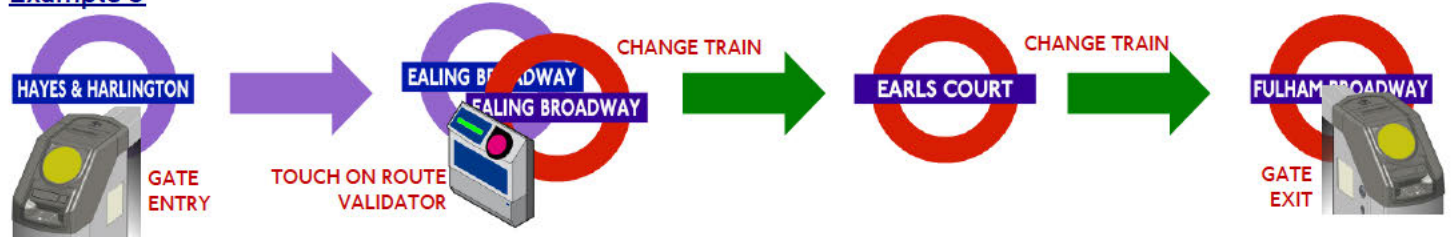


In Example 2 the fact that the customer validates on the Route Validator when changing trains at Rayners Lane, results in the journey being treated as a Zone 3-5 journey. Without this validation the customer will be assumed to have travelled via Zone 1 (e.g. via Green Park and Finchley Road) and the customer would therefore be charged the higher Zone 1-5 fare instead.

We have gradually reduced the number of journeys on which 'alternative chargeable routes' have been set. These allow customers the benefit of the doubt as to which route, they have actually used and charges them the lower of two possible fares, or the route covered by the season ticket on their card. This means that customers increasingly have to validate at key points on their journey to get the benefit of a lower fare.

The forthcoming changes at Ealing Broadway, outlined on [Page 3](#), extend a further raft of journeys where customers will in future have to use the pink Route Validators to ensure they are charged for the correct route.

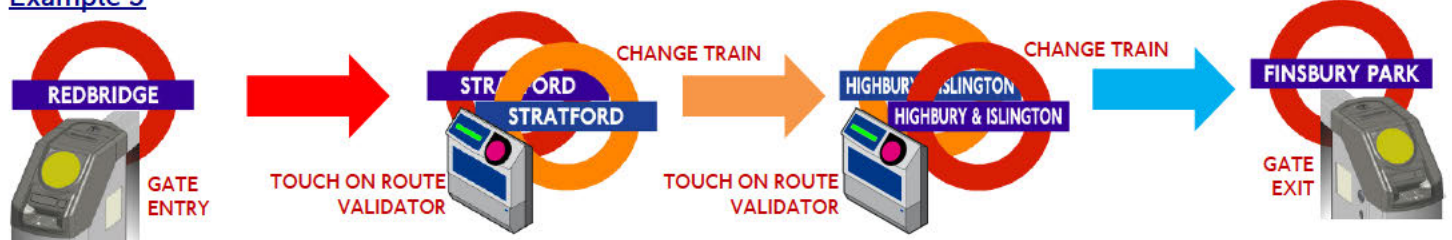
Example 3



In this example use of the Route Validator indicates the customer has travelled via the District line, rather than via Paddington and Zone 1, so the customer would be charged on the basis of a Zone 2-5 journey, rather than a Zone 1-5 fare.

Finally, on some more complicated orbital journeys, there may be actual more than one point at which the customer has to change train and, in some cases there may also be Route Validators at more than one of these, as in the example below.

Example 3



In this example there are Route Validators on the London Overground platforms at both Stratford and Highbury & Islington, but in this example the critical validation is at Stratford to differentiate the Zone 2-4 journey via the North London line, from the use of the Central line and a single change at Oxford Circus or travel via Mile End and a change onto London Overground at Whitechapel, both of which attract a Zone 1-4 fare.

NEXT MONTH.....

For our *Oyster Explained* topic in the next edition of TRU, we plan to revisit the subject of Weekly Capping on Oyster, as over the last few weeks it has become apparent that the actual operation of the Weekly Oyster cap, is not exactly as we had explained it when we covered the topic in our original Oyster Explained feature

We will attempt to explain some of the hidden complexities of how the cap is actually applied and what the customer may see.

SPECIAL FEATURE

ELIZABETH LINE RECAP

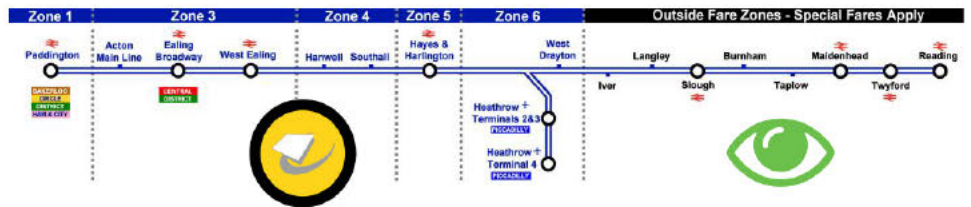
Further to our [Special Feature](#) in [TRU137](#), in which we provided some basic information on ticketing and fares on the central section of the Elizabeth line, we have received a few queries in the run up to the official opening of the line and we thought it might be useful to provide a brief recap on a few issues and provide a little more detail on some topics that we have been asked about.



The Elizabeth line, like London Overground is a sort of hybrid in terms of ticketing between a National Rail service and a TfL service. As a result, NR products that would not normally be valid on LU services will be valid for travel on the Elizabeth line.

As a result both Tottenham Court Road and Bond Street (when it opens later in the year) will now be covered by T&R Book 6 (Ticket issuing and acceptance on behalf of other operators). These will be added when the Book is reissued shortly.

The other LU stations served by the new section of the Elizabeth line (Whitechapel, Liverpool Street/Moorgate and Farringdon) are already included in the list of Book 6 stations as they are already served by NR or London Overground services.



STAFF TRAVEL

As a TfL service, Staff and Dependent Oyster cards are valid throughout the Elizabeth line, as they are on London Overground and Docklands Light Railway services.

The only slight difference is that at stations west of West Drayton, where Oyster is not accepted, holders will have to show their Staff / Dependent Oyster card and ID at the gateline to enter or exit, as Staff Oyster cards will not work on the gates at these stations.

NR staff travel facilities which would not normally be valid for travel on LU services, will be valid for travel on the Elizabeth line, including:

- Dated free travel boxes on NR Staff Travel Cards
- NR Status Passes
- Privilege Single / Return tickets supported by NR Rail Staff Leisure card
- Oyster cards with 'Privilege NR only' discount set on



Although NR Staff holding the Rail Staff Leisure card are not entitled to Privilege rate travel on LU, they will be able to use the Elizabeth line and travel at privilege rate either using a privilege single or return bought from a NR station, or if they have previously had the Priv NR only discount set on their Oyster card.

However, they will **not** be able to get the Privilege NR only discount set at any LU station, including those served by the Elizabeth line.



FARES TO HEATHROW

Finally, with new easier journey opportunities opened up by the Elizabeth line, albeit initially still requiring a change of train at Paddington until through services commence, it is worth a reminder that fares to Heathrow via the Elizabeth line are higher than those to Heathrow via the Piccadilly line.

Journey	Mode	Standard PAYG (Peak)	Reduced PAYG (Off-Peak)
Zone 1 to Heathrow via	PICCADILLY LINE	£5.50	£3.50
	ELIZABETH LINE	£12.70	£10.80

So when advising customers on their travel options, you will need to advise them of both the speed / journey time and the cost of travel.

SPECIAL FEATURE









BARCODE TICKETING AT LU STATIONS

Over the last couple of years, there have been a few issues raised about barcode format tickets being issued by various Train Operators (TOCs).

It was subsequently confirmed that TOCs should not be issuing barcoded format tickets for through journeys to LU destinations, as we don't currently have the capability to process these on our gates, or to be able to check the validity of a particular barcode.

As TOCs continue to move away from reliance on magnetic stripe ticketing and switch to barcode format tickets, we have recently started to explore the potential installation of barcode readers on gates at around 20 LU stations (listed right), which are stations that are directly served by NR services:

At this stage Cubic are being engaged to initially develop a design study to identify the best solution for how barcode readers could be integrated into our gates and at the same time, also link to the relevant NR systems that validate each code.

LU Station	NR Operator		
AMERSHAM			
CHALFONT & LATIMER			
CHORLEYWOOD			
HARROW ON THE HILL			
RICKMANSWORTH			
SOUTH RUISLIP			
WEST RUISLIP			
FARRINGDON (Cowcross St)			
FINSBURY PARK (Western)			
KENTISH TOWN			
MOORGATE (Northern)			
OLD STREET			
HARROW & WEALDSTONE			
WEMBLEY CENTRAL			
HIGHBURY & ISLINGTON			
WEST BROMPTON			
SEVEN SISTERS (NR)			
STRATFORD (East & North)			
GREENFORD			
WEST HAM			



It is likely that we would opt not to fit the equipment to every gate on a particular gateline and at some of the outlying stations this is likely to be combined with plans to remove the magnetic ticket acceptance from certain gates.

At some of the larger sites from the list above, we plan to only upgrade the gates on certain gatelines, where they are most likely to be used by NR customers entering or leaving the station.

What are digital tickets and QR Codes?

Digital tickets hold the same information as a paper ticket and come in two formats;

- **etickets** – which comes as a PDF attached to an email which can be printed or opened on a personal device such as a phone or tablet.
- **Mobile Tickets** – which can be opened directly from the provider's app and needs to be "activated" before it can be used.

Both contain a QR code. QR stands for 'Quick Response' – while a standard barcode can communicate up to 25 characters, a QR Code can hold up to 2500 meaning that you can include much more information such as a webpage and contact details. They can also be up to 10 times smaller than a barcode, can be scanned from any angle and can still be read if up to 30% of the code is damaged.



SPECIAL FEATURE

BARCODE TICKETING IN MORE DETAIL

There are basically three types of barcode format ticket in use on the UK Rail network:

- **eTicket** – single use ticket downloaded onto a customer's phone or mobile device
- **sTicket** – a multiple use ticket or season ticket only available on mobile devices
- **PRT** – barcoded paper roll ticket

Regular eTickets have a static barcode which is at risk of being copied and shared however single use, timebound barcodes significantly reduce the risk of being shared because they have a limited validity window.

The gates at stations with barcode readers validate the barcode and check with a barcode server to confirm both its validity and whether the ticket has already been used.

The barcodes used on rail tickets include security features to guard against fraud, including keys encrypted when the product is sold and separate security keys that are used by validation devices when checking the product.

The uptake of barcode tickets has increased significantly since 2019 and to meet the demand the range of barcode tickets is expanding to include season tickets which are referred to as sTickets.

The 's' (secure) standard has been developed to offer better anti-fraud protection than an eTicket. These are currently due to be trialled on National Rail network.

For sTickets the situation is slightly more complex as the customer needs to be able to make multiple journeys, but at the same time, the system needs to guard against different people using the same product. As a result, there are some restrictions in how a sTicket is used:

- *It can only be inspected from the Trainline app from which they are issued*
- *can not to be used from screenshots, wallets apps or in printed form.*
- *cannot be viewed from the same account on more than one device at any one time*

The app allows the holder to download a single use token which is replaced for each journey they want to make. When a customer wants to travel, they have to display their sTicket which then generates a single use barcode coupon that is valid for 3 hours.



This length of time is normally long enough for the customer to complete their journey. However, if it is not long enough to complete the journey, then another single use barcode coupon can be generated to allow the customer to complete their journey and to exit through the gates at their destination.

With the introduction of monthly sTickets, digital photocards have been introduced and will feature on both weekly and monthly adult sTickets.

Govia Thameslink Railway (GTR) are the first TOC to pilot the new sTicket barcode standard for Season Tickets in collaboration with the Rail Delivery Group (RDG), and the online ticket retailer Trainline.



The initial pilot was launched in December 2021 retailing only weekly sTickets for journeys on their Thameslink route between Bedford and St Albans, but pilot testing has since been extended to include monthly sTickets and a wider range of Thameslink destinations.

REVENUE PROJECTS

REVENUE INSPECTION DEVICE REPLACEMENT (RID2)

Following around two years of development work, we are now getting near to the planned rollout of a replacement for the current Revenue Inspection Device (RID) which is used by our Revenue Control team, with the new equipment scheduled to be rolled out later this year.

The new device, which is currently referred to as RID2, will be very different to the current equipment illustrated on the right and will be much lighter and easier to use than the present device. The replacement device manufactured by PAX is an android device, of a similar size and shape to a mobile phone.


Cubic are currently undertaking the final build of RID2 software, ready for the start of a formal testing programme for the new device.

It is hoped that some test units and test cards will shortly be available for field demonstrations to take place with users across all TfL modes, including on LU.



CURRENT RID

RID2 - THE KEY POINTS

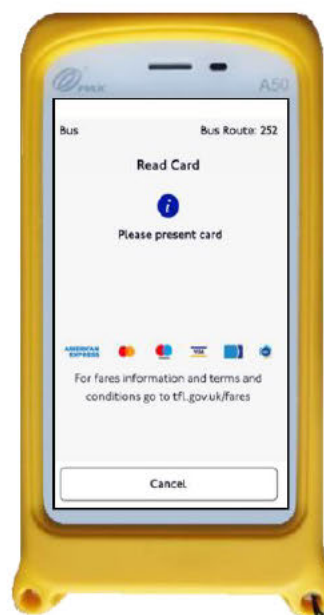


- ▶ Communicates via 4G SIM
- ▶ USB charging
- ▶ Option to charge via single or multiple cradles
- ▶ Silicon protective case and screen protector
- ▶ Match current RID functionality to read Oyster, ITSO and Contactless

Following completion of testing, it is then planned to have a Vanguard using around 50 of the new devices, again across all modes that use RIDs and this is currently scheduled to start in mid-June and run through to early September.

LU users will be amongst the first to be issued with around 10 of the new devices for a period of about 4 weeks, before these units are then passed on to other user groups to Vanguard.

During this Vanguard period, both existing RIDs and the new RID 2 devices will be in use for checking activities, whilst we ensure that operation on the network reflects the results of off-system testing.



RID 2 IN PROTECTIVE CASE

It is also planned to hold a number of 'Train the trainer' sessions to facilitate the briefing of users on how to use the new equipment.

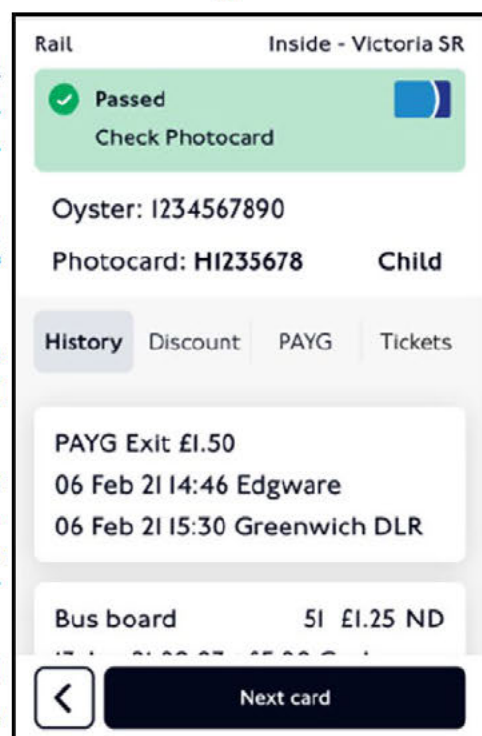
Following on from this Vanguard, the rollout of the new RID2 units to all users is scheduled to take place during September 2022 and there will again be a short transition period during which both types of device will be in use.

Details of the programme for users to collect their new RID2 device and hand in their existing units will be communicated to revenue control staff nearer to the proposed rollout date.

Following this transition period, it is planned to then withdraw all of the remaining current design of RIDs, as they will no longer be supported after the end of September.

The RID2 device will initially (Day 1) offer similar functionality to the current units, with the ability to read and check the validity of Oyster, ITSO and contactless payment cards and to report inspection taps to the TfL back office. The new devices will, however, have the capability for additional facilities to be added at a later date.

This Day2 functionality may also include the capability to read and validate National Rail barcode format tickets, to support the expansion of this format of ticketing on the network.



EXAMPLE SCREEN SHOT

MFM NHU REPLACEMENT..... UPDATE

Cubic completed the replacement of all of the previous 100 Bank Note Recycler (BNR) units with the new Pay Complete version of BNR, with the upgrade of the last two devices at Heathrow Terminal 4 on the night of Monday 02 May. They have also recently completed a programme of revisits to undertake a modification to ensure that these units are correctly aligned when they are pushed back into the MFM.

A similar modification has also recently been completed on devices that have been fitted with the Pay Complete Note Handling Unit (NHU) working as a Bank Note Acceptor (BNA) in an attempt to improve the performance of these units and reduce the number of jams and NHU failures.

The rollout of further Pay Complete BNA units has recently been paused, due to concerns over the number of failures and notes jams we have been seeing on certain devices, despite a number of modifications having been made.

Cubic are currently undertaking further investigations to understand why these issues are occurring on certain devices with BNAs. However, interestingly we are not currently seeing the same level of note unit failures on other MFMs which have the same equipment but have been fitted with an additional note recycler module.

Currently we have around 95 MFMs equipped with the new BNA, with approximately 136 further devices yet to be upgraded with the new NHU.

In an effort to get to the bottom of the current issues and improve performance and reliability, discussions are underway between Cubic and TfL with a view to increasing the number of devices fitted with BNR units, since these seem to be performing better.

The initial focus is on a Vanguard of 10 MFMs which are at the higher end of BNA devices in terms of cash take, refund volumes and NHU related faults. It is proposed to upgrade the devices listed below from BNA to BNR by fitting of the additional recycler module.

These devices were due to be upgraded during the second week of May and will then be monitored to see if performance improves and the number of note jams and related faults reduces.

At some of these sites there will also be the added benefit of reducing the consumption of change for refunds and change giving, thereby reducing the requirements to buy in change and re-float the device as often.



BETHNAL GREEN	LEYTON	LEYTONSTONE	MILE END
TURNPIKE LANE	WOOD GREEN	TOOTING BROADWAY	WARREN STREET
	HARROW ON THE HILL	UXBRIDGE	

If this is successful, we have identified around 20 further devices which have already been fitted with the Pay Complete NHU, which could potentially benefit from a similar upgrade from BNA to BNR devices. In addition to this, applying the revised criteria, we believe there are around another 30 MFMs which still have the older style of BNA unit, which when updated with the new NHU, would probably warrant the installation of a recycler module in place of a straight BNA for BNA swap that we had planned to do.

It is our intention to retain Bank Note Acceptors on approximately half of the MFM fleet, as at lower cash volume stations, installation of recycler modules would have an adverse impact on the amount of cash held at stations and the speed at which cash receipts are banked.

Part 3 – And the final question on “no longer accepted” is...

Q3) ...when were Travellers Cheques withdrawn as payment at LU stations



- | | | | |
|---|---------------------|---|---------------------|
| A | Sunday 24 June 2012 | B | Sunday 23 June 2013 |
| C | Sunday 22 June 2014 | D | Sunday 21 June 2015 |

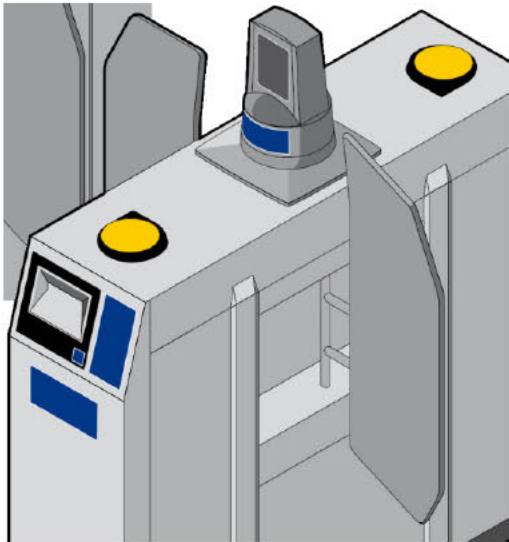
[Answers on Page 21](#)

REVENUE PROJECTS

GATE UPDATES

The main focus on gate upgrades continues to be on the older Pneumatic gates mainly within Zone 1 stations. However, preparatory work for the forthcoming re-opening of Heathrow T4 will see updates to the WAGs at that station to fit cooling fans and update the paddle control software, as these devices could not be completed during the recent upgrade programme which took place whilst the station was closed.

PNEUMATIC GATE BEAM LOGIC UNIT



Two separate pieces of work are planned for the older pneumatic gates within Zone 1. The deployment of both of these have been delayed but will hopefully commence during May.

Cubic will be making improvements to the arrangement of the light beams which control the opening and closing of gate paddles, to improve reliability and reduce the level of failures attributable to dust build up.

Some final tweaks are being made to the current Vanguard stations before a deployment to other pneumatic gates. At the time that this edition of TRU was published, Cubic were due to update gates at Pimlico, Bank (Central) and Waterloo (Main) during week commencing Monday 6 May.

The rollout to other sites with pneumatic gates is now scheduled to start around 20 June and run through until the end of July.

PNEUMATIC GATE POD DISPLAY

As outlined in previous editions of TRU, since the rollout of the new gate POD to all of our EI and Pneumatic type gates, we have had an issue where information is not being displayed on the rear (Paid side) of the POD of single direction Entry gates. We have previously attempted to Vanguard this upgrade, but each time we have encountered some issues which Cubic have until now, been unable to replicate in their test environment.

The start of a third attempt to Vanguard new pneumatic gate LCP software to correct this issue on Entry gates has been further delayed by Cubic being unable to replicate the fault seen when the new software was loaded onto devices at an LU station, due to a lack of single direction gates in their test environment. Attempts to get a reversible gate to behave as an entry gate by disconnecting certain components has again failed to show the same problems seen on live stations.

To try and speed up the process of finding a solution, we are planning to take advantage of the temporary closure of Elephant & Castle (Northern) ticket hall during the 'Bank blockade', to undertake some further tests on the way in gateline there.

On the night of Tuesday 03 May, revised tables will be remotely downloaded to the station by Cubic, to allow an updated version of the Gate LCP software to be loaded onto individual gates. The following morning a Cubic engineer is scheduled to attend the station, install the new LCP and hopefully will be able to test some further options to address the problem. If this too is unsuccessful, it will at least give the opportunity of arranging for detailed device logs to be extracted from the devices to help their engineering team track down the cause of the problem. Whatever the outcome of this test, we will be arranging for the upgraded LCPs to be replaced with standard LCPs and for the standard tables to be reloaded at the end of that week.

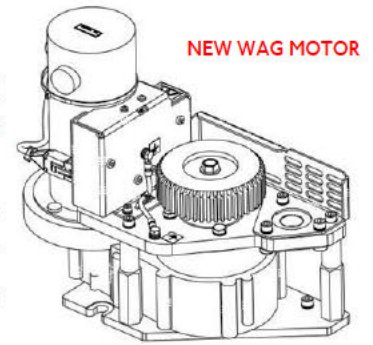
Hopefully once we have a solution we are happy with, we will be able to make a further attempt of updating gates at the three Vanguard stations the new software, followed by a planned rollout of the new LCP software to all other stations with pneumatic gates.



WAG UPGRADE

A vanguard of an improved design of WAG motor, replacement paddle shafts and the new light weight composite material paddles is planned for sites which have seen high levels of WAG motor replacements and related faults.

As previously outlined in [TRU134](#), to address concerns about the level of motor failures on WAGs, Cubic are initially deploying the new “ruggedised” WAG motor in combination with the new light weight composite material paddles to the following 6 WAGs in early May:



- | | | | | | |
|-----------|---------------|-------------------|-------------|---------|---------------|
| BURNT OAK | DAGENHAM EAST | DAGENHAM HEATHWAY | DOLLIS HILL | NEASDEN | TURNPIKE LANE |
|-----------|---------------|-------------------|-------------|---------|---------------|

Following on from this it is intended to also rollout the new motors to some additional sites and to upgrade some further sites with the new motor and the newer light weight paddles, as a prelude to a planned system wide upgrade next year.

Feedback from station staff has indicated some concerns around the new paddles and paddle control software making it easier for customers to push through the WAGs. As a result discussions have taken place with Cubic are the forces required to achieve a “breakthrough” of the paddles when closed.

WAG COMPOSITE PADDLE



Cubic’s engineering team have confirmed that the “breakthrough force” is set the same for both the new and traditional designs of paddle and that the force needing to be applied to a standard gate and a WAG are the same. The measurement is taken at the motor end of the shaft, but as a WAG has larger paddles with more leverage, you actually need to apply less force to the WAG paddle to achieve the same force on the motor.

We are currently examining options for possibly increasing the breakthrough force on exit gates, as this is currently set lower than when a WAG is working on entry mode. In doing so we would need to balance the safety aspects of having a “breakthrough” against the potential revenue losses through customers pushing through gates.

Cubic have also highlighted that increasing the force required to breakthrough a gate, will require more force to be applied to the paddles and in turn lead to a higher level of force being transmitted to the paddle shaft and motor.

This may then in turn impact on equipment failures and negate some of the benefits of deploying the tougher motor.

MANUAL GATES

The long running project to remove most of the remaining Manual gates from around the LU network has inched slightly nearer conclusion, with the recent completion of the removal of the Manual Gate from Knightsbridge (East) ticket hall and the completion of the replacement of the non-standard JLE Manual Gate at North Greenwich, which was retained to accommodate crowds attending the regular events at the nearby O2.

One station remains to be completed within the current programme, with discussions continuing on whether to remove the last remaining ABP design of Manual Gate from Temple.

Modelling of the gateline capacity has recently been undertaken to determine the ability of the gateline to handle crowds attending events which are sometimes held in the locality. Once feedback on this has been received from the local team, a decision will be made on whether we can proceed with the removal of the final Manual gate and the associated Passenger Validator.



REVENUE PROJECTS

TVM UPDATE

Following completion of the recent Note Handler firmware upgrade on all TVMs, a further upgrade to the TVM will shortly be Vanguarded.

This time the upgrade is to address an issue identified on Heathrow Express TVMs, but as all devices run on common software, it will eventually be necessary to upgrade all of the LU TVMs with the new software once it has been approved for rollout.

It is currently planned to Vanguard the new software from mid-June until early July, before commencing the rollout between the middle and end of July.

It is likely that the Vanguard will initially focus heavily on Hex devices which have the issue that is being rectified, but there is a possibility that one or more LU or RSLU devices may be included in the Vanguard, to ensure that the new software has no unexpected affects when it is deployed.

All of our TVMs will then be picked up for this software upgrade as it is rolled out to all TVMs.



CHD ISSUES CONTINUE

PayComplete

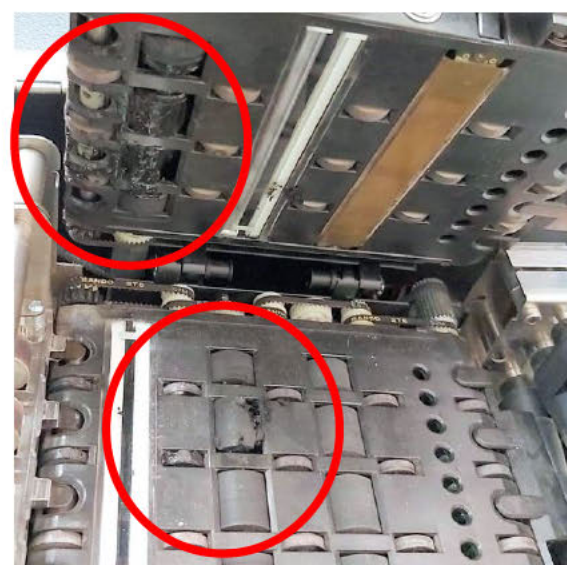
Pay Complete who maintain our Cash Handling Devices (CHDs) have encountered a number of issues recently that have impacted on their ability to clear CHD faults within the normal timescales.

In March, there was a major outage of the 3G/4G network that the bulk of the CHDs use to transmit and receive data. Unfortunately, when this was resolved many CHDs remained offline and required engineer visits to reset the device and remove a corrupted file from the device to allow communications to be restored. This happened to coincide with a spike in Covid infections in London and a couple of Pay Complete's small team of engineers having to self-isolate, which severely reduced their ability to respond to calls.

We are also continuing to see a high level of failures of a module within the CHD which validates notes that are being deposited. The failures caused by deterioration of the rubber belts within the device have been attributed to chemicals within hand sanitisers.

These failures have resulted in the stock holding of this part being exhausted and we currently have approximately 17 machines that are awaiting replacements.

There was initially a contractual dispute between TfL and Pay Complete over liability for the cost of these additional spares as Pay Complete believed that the failures were being caused by external factors not covered by the current contract. We are now pleased to report that a commercial agreement has now been reached between Pay Complete and TfL, and a further batch of spares has now been ordered.



The fact that the spares have to come from the manufacturers in Italy, means that it is likely to be at a couple of weeks before the parts arrive, and engineers are able to start to fit them to affected devices.

Unfortunately, during the period between discussions around the funding of these spares and the order being processed, the number of devices afflicted by this issue has grown, so even when the parts do arrive in London, the Pay Complete team will not be able to immediately fit parts to all of the devices that are currently awaiting spares.

We will prioritise the deployment of the spares based on the cash volumes taken by each site and the geographical spread of the devices across the network, it being more efficient to get an engineer to replace units at 2 or 3 stations that are close together, rather than making long journeys across London, between sites.

We are regularly updating the affected stations with the timescales for their devices being restored to full service, as we appreciate the inconvenience and difficulties that the non-availability of the CHD can cause.

SCU DISPLAYS

Further to previous coverage in various editions of TRU, we are still waiting for Cubic to develop a solution to an issue that has resulted in a large number of SCUs not being able to be accessed remotely.

The loss of this facility, which was one of several attractive features of the new PC based SCU when it was deployed, means that Cubic are unable to remotely update or check SCU screens or perform remote upgrades of software on certain devices.

When these issues do occur, it is currently necessary for Cubic to send an engineer to each site to restore the remote access facility on each affected SCU.

A couple of different 'fixes' are under consideration, one of which is a workaround that would get the device to check that it can be remotely accessed on a regular basis and if found not to be, to trigger the device to reset itself so that it is accessible again.

We were hopeful of this at least being deployed as a trial, but at the moment there does not appear to have been much progress on this front and attention seems to have been turned to a proper fix to prevent the problem from occurring, rather than using the workaround to get around the issue when it occurs.



In the interim, we have been slightly hampered by the inability to view SCU displays and settings remotely and it has recently come to light that the SCUs at a number of stations, where works have recently been undertaken, may not have been configured exactly as they should have been.

We are currently working through these sites with Cubic to agree the amended screen configurations, correct any errors and ensure that the display on each device is in accordance with the standard we had developed and agreed with Cubic

Colleagues on stations can assist us with this task, by highlighting anything that appears to be wrong with your current SCU displays.

Some examples of things we would like to know about are:

- Gaps in the row in which devices are displayed
- Devices displayed that are no longer present or are located in a different area of the station
- Devices missing from the SCU display
- Max Entry, Max Exit or Custom gateline settings missing from SCU
- Gates/WAGs not shown on correct arrays

Please forward details to [REDACTED] and if possible, please include a photo of the SCU showing what is current displayed, to help us understand the issue.

ANSWERS TO T&R TRIVIA

Pt.1 **C** Sunday 15 July 2007

Pt.2 **D** Friday 02 January 2015

Pt.3 **C** Sunday 22 June 2014

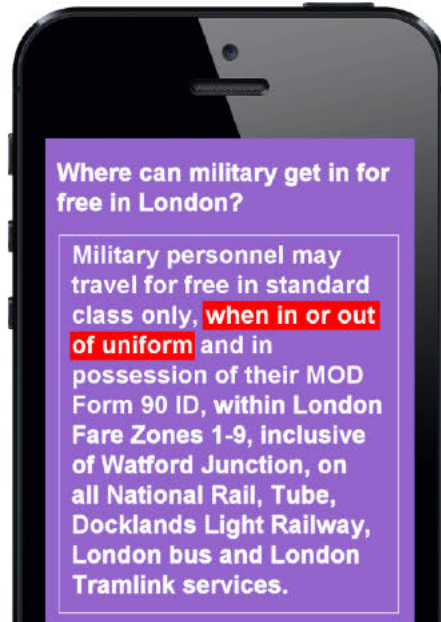
How did you do?

...AND FINALLY

ARMED FORCES FREE TRAVEL – NOTHING HAS CHANGED!

One of the most recurring issues that the T&R team are contacted about is the issue of free travel for armed forces personnel, usually with the opening line “Please can you confirm if the rules have changed, because...” followed by an example of someone improperly trying to obtain free travel.

The latest appears to be a screenshot from a 2012 gov.uk news article that covered the London 2012 Olympics where armed forces personnel helped marshal the crowds at events around the capital. This webpage stated that for the period of the games there would be no requirement to wear uniform from *June until September 2012* following the end of the Paralympic games. This was only a temporary arrangement and the dates were clearly outlined in the body of the original article.



MISLEADING – THIS TEXT IS FROM A 2012 WEBPAGE THAT IS NO LONGER VALID



Unfortunately, at the time of writing this page has not been removed or updated and it appears from recent feedback that some opportunists have conveniently selected only the bits as they wanted as shown above, which they then show to staff.

We are very grateful to staff for sending us this information to share with you and have also asked our colleagues within TfL to raise this with the MOD and have the page updated or removed.

We appreciate that this is an emotive issue for many people, but staff need to understand that the MOD have set the terms and conditions for this free agreement.



If any armed forces personnel claim they were instructed to travel out of uniform, they **must** pay for their journey themselves or use tickets issued by their base. This is important, because any armed forces member who commits a travel irregularity on LU, could face disciplinary action from the Ministry of Defence when reported.

At this point, it is also worth reminding all staff that if you wish to clarify any ticketing issues, you should firstly check the table of changes in the *Hot Issues Bulletin* and then the T&R Book relevant to the issue at hand. We interact closely with both TfL and the Rail Delivery Group and put basically, if we didn't tell you first, it is very unlikely to have changed.

LOOKING AHEAD TO TRU139

We are planning to publish the next edition of TRU towards the end of June and in TRU139 we will be looking to focus on:

- Review of the June Fares Revision
- Latest update on our Oyster Charity schemes
- A more detailed look at the new Elizabeth line sites
- An updated Oyster Explained covering Weekly Capping

Plus other Ticketing and Revenue news stories, updates on current projects and a selection of our other regular features.

139