EXPLANATORY MEMORANDUM TO

THE RAIL VEHICLE ACCESSIBILITY (NON-INTEROPERABLE RAIL SYSTEM) (LONDON UNDERGROUND CIRCLE, DISTRICT AND HAMMERSMITH & CITY LINES S7 VEHICLES) EXEMPTION ORDER 2012

2012 No. 105

1. This explanatory memorandum has been prepared by the Department for Transport ("the Department") and is laid before Parliament by Command of Her Majesty.

2. Purpose of the Instrument

2.1 The Order exempts specified rail vehicles built for use by London Underground Limited ("LUL") on the Circle, District and Hammersmith & City Lines, from four requirements of the Rail Vehicle Accessibility (Non-Interoperable Rail System) Regulations 2010¹ ("RVAR").

2.2. The Order sets time or other limitations to these exemptions, except in certain cases relating to the requirements for wheelchair compatible doorways. The reasons behind this are explained more fully below (see **paragraphs 7.5** to **7.11**).

3. Matters of special interest to the Joint Committee on Statutory Instruments

3.1 Exemption orders such as this one are made primarily under s183(1) of the Equality Act 2010. The Rail Vehicle Accessibility Exemption Orders (Parliamentary Procedures) Regulations 2008 govern how they are to be made². These regulations require that an exemption from RVAR in these circumstances (ie for new trains and where some exemptions have no expiry date) would normally require consideration by Parliament via the draft affirmative resolution procedure. However, both section 184(1) and (2) of the Equality Act 2010, and regulation 5(2) of these regulations allow the Secretary of State, having regard to representations of the Disabled Persons Transport Advisory Committee ("DPTAC") to make the Order using the negative resolution procedure.

3.2 In the view of the Secretary of State, the Order does not raise any new issues of principle in addition to those considered by Parliament during its consideration of the similar Rail Vehicle Accessibility (London Underground Metropolitan Line S8 Vehicles) Exemption Order 2010³. This latter order exempted vehicles from broadly the same requirements of RVAR and was subject to the draft affirmative procedure, so was therefore debated fully in both Houses of Parliament. The Secretary of State therefore consulted DPTAC on the use of the negative resolution procedure to make the present Order (as well as on the Order itself), on the basis that there are no new points of principle here to debate and Parliament's time can more effectively be used on other

¹ S.I. 2010/432

² S.I. 2008/2975

³ S.I. 2010/435

matters. DPTAC did not object to the use of the negative resolution procedure on this basis so the Secretary of State has decided to use this procedure.

4. Legislative Context

4.1 The Disability Discrimination Act 1995 (the "DDA")⁴ gave powers to the Secretary of State to make "rail vehicle accessibility regulations" to ensure that it is possible for disabled persons, including wheelchair users, to travel in safety and reasonable comfort in those vehicles to which the regulations apply. Under this power, the Secretary of State made the Rail Vehicle Accessibility Regulations 1998⁵ ("RVAR 1998"), which initially applied to passenger rail vehicles which were first brought into use after 31st December 1998. This Regulations set technical standards which such vehicles were obliged to meet to facilitate use by disabled travellers.

4.2 In 2010, RVAR 1998 was revoked. In its place the Rail Vehicle Accessibility (Non-Interoperable Rail System) Regulations 2010⁶ ("RVAR") were made. These apply accessibility standards to all passenger vehicles on light rail systems (such as tramways and the London Underground) whilst passenger rail vehicles on national, "heavy rail" lines have been subject to pan-European access requirements since 2008.

4.3 Under the DDA, the Secretary of State was also given the power to make "exemption orders" authorising regulated rail vehicles to be used in passenger service even though they do not conform to the requirements of rail vehicle accessibility regulations. These orders could impose conditions and restrictions on the exemptions, and a number have been made since 1998. This power to make exemption orders is now contained in s183 of the Equality Act 2010 ("the EA"), which has replaced the relevant sections of the DDA.

4.4 The present Order is an exemption order, and is being made to exempt a class of vehicle ("S7") from certain requirements of RVAR when in use on the Circle, District, Hammersmith & City Lines of the London Underground (see below for further details). Equivalent exemptions came into force in February 2010 in respect of 58 almost identical trains on the Metropolitan Line⁷, while a number of similar exemptions were also granted in 2008 in respect of trains for introduction on the Victoria Line⁸.

5. Territorial Extent and Application

5.1 This instrument applies to Great Britain.

6. European Convention on Human Rights

6.1. As the instrument is subject to negative resolution procedure and does not amend primary legislation, no statement is needed.

⁴see sections 46 and 67. This regulation making power has been replaced now by provisions in the Equality Act 2010

⁵ S.I. 1998/2456

⁶ S.I. 2010/432

⁷ S.I. 2010/435

⁸ S.I. 2008/2969

7. Policy Background

7.1 The policy objectives of the EA and RVAR are to ensure certain accessibility standards apply to passenger rail vehicles running on certain networks, such as the London Underground, metros and tramways, for the benefit of disabled people. Broadly, vehicles first brought into use on these networks after 31st December 1998 must meet these requirements, and other vehicles must meet them by 1 January 2020. Where applications are received for exemption from RVAR requirements, each is considered on a case by case basis. The Order grants the exemptions requested in an application from LUL in respect of a class of vehicles for use on the Circle District, and Hammersmith & City lines, subject to certain conditions (and following a reduction in the scope of exemptions from Schedule 1, Part 1, Paragraph 1(1) set out in paragraphs 7.4 to 7.6 below).

7.2 In this instance LUL, the operator, is taking delivery of 133 new seven-car S7 trains on the Circle, District and Hammersmith & City Lines. These vehicles are part of a broader replacement programme for its sub-surface lines which includes upgrades to signalling and stations with the aim of increasing capacity and reducing delays. There has also been associated work at stations as part of LUL's wider "Step Free Access" programme. This programme provides step-free access (usually via the provision of lifts) from station entrances to platforms at 20 per cent of stations on the LUL network by the end of 2010. Additional stations are due to become "step-free" during the next decade, particularly in relation to the Crossrail and Thameslink rail projects.

7.3 LUL has identified a small number of areas where compliance with RVAR creates a challenge to its existing operations on the Circle, District and Hammersmith & City lines- either because of the high frequency, high capacity service run on these lines, or because of the physical restrictions at the particular stations. It has therefore applied for exemptions from four requirements. A copy of LUL's application can be found at **Annex A**. The exemptions do not apply if the vehicles are used on other lines.

7.4 In its initial application, LUL, for the first time, sought timed exemptions for six platforms (until 31 March 2016) from Schedule 1, Part 1, Paragraph 1(1) of RVAR, for financial programming reasons. However, while the Department was considering its application, LUL was able to realise efficiencies in its programme and accelerate its programme of rectification work, such that exemptions for these sites would no longer be needed. Early work to provide level access from the train to the platform at two further stations (Mile End and Barons Court), in anticipation of step-free access to other LUL lines, means that these stations too no longer need the exemptions for which LUL originally applied.

7.5 In addition, LUL found that, as a result of very small tolerances caused by the curvature of the platform, their rectification work at Wood Lane Platform 1 is likely to become non-compliant over time. It has shown that it would not be viable financially to establish a continuous programme of corrective work at this site. It therefore asked for this platform to additionally be added to list of those exempted.

7.6 As a result of the changes explained in the two paragraphs above, the Order grants fewer exemptions from Schedule 1, Part 1, Paragraph 1(1) than were in LUL's original application.

7.7 The new S7 trains will progressively replace the existing C and D stock fleet which are not currently subject to the requirement to meet the relevant accessibility standards set out in RVAR because they were first put into use before 1st January 1999. This older stock does not therefore meet the RVAR specifications in a number of ways. The S7 fleet will be phased in as new vehicles are delivered. However, the last of the C and D stock vehicles will not be withdrawn from service on the Circle, District and Hammersmith & City Lines until the end of 2016 when all the new vehicles will have been delivered. This means the two fleets will operate alongside each other for an interim period causing issues of consistency of service across the fleet during this period. Some of the exemptions requested are for this period until 31 December 2016 when the last of the older vehicles currently in use on these lines will be replaced.

Wheelchair compatible doorways

7.8 RVAR requires that in these circumstances there be at least two wheelchair spaces for each train⁹. Carriages containing wheelchair spaces (known in the Order as "wheelchair space vehicles") are also required to be "wheelchair accessible" meaning, amongst other things, that if the gap between the level of the carriage floor and the platform is not of a stated size or less, then a boarding device (ramp or lift) must be fitted by an operator if a person in a wheelchair wishes to use the doorway (the "vehicle access requirement"). Level access between platforms and trains, without the need for a boarding device, is preferred by wheelchair users over the use of manually deployed ramps as this allows for independent travel without the need to involve staff.

7.9 However, the level access requirement has not always been possible to achieve. LUL was granted a progressively reducing exemption from this requirement for its Victoria Line trains, the platforms for which were built in the late-1960s and which are generally straight and of a uniform height. However, the Circle, District and Hammersmith & City Lines present greater challenges than the Victoria Line. As on the Metropolitan Line, many elements of infrastructure, including platform alignments, were built over 130 years ago when attitudes towards customer accessibility were very different. Some platforms are severely curved or of "compromised height" where the line is shared with other LUL or National Rail lines and platforms must consequently make allowances for the different height, size and shape of trains which use the same track and platforms.

7.10 Although the new S7 train has been designed with a lower floor than the old C and D stock trains, LUL notes that this provision alone will not make the vehicles compliant at all platforms. In the case of some severely curved or compromised height platforms LUL do not expect to be able to adjust them so that they are sufficiently close to the S7 stock carriage floor to meet RVAR requirements. In respect of these platforms, LUL also believes that it would be impractical to use manual boarding ramps for wheelchair users because of limited space on platforms; the extreme degree of crowding on some platforms during peak hours; and the potential impact that using boarding ramps might have on dwell times (ie. the time that the train is stationary at a stop).

⁹ In fact each S7 train on the Circle, District and Hammersmith & City lines will have four wheelchair spaces installed.

7. 11 An exemption from the vehicle access requirement has therefore been sought in relation to these severely curved or "compromise height" platforms and these are listed in table 3 of Schedule 1. It should be noted that, although these exemptions are granted without limitation of time, the Secretary of State would have the power to revoke the exemptions by a further Order if it was no longer felt that they were appropriate.

7.12 In respect of the platforms listed in table 2 of Schedule 1, the Order provides an exemption from the vehicle access requirement which will last until work to provide step-free routes out of the station from the relevant platform is completed. This is so that work to provide level access between the platform and the train (by adjusting the level of the platform or the track) is focussed at sites where broader refurbishment work has given (or will give) step-free access to the platform from street level. This coordinates work so that the risk of a passenger getting stranded on a platform where there is no step-free route out of the station is reduced and disruption caused by engineering work is minimised.

7.13 The exemption in respect of Turnham Green, platform 4 (on the District Line) will cease to apply when step free access is provided to the street from this platform, or when access to it without the use of stairs or escalators can be achieved from a train on one of that station's Piccadilly Line platforms where the vehicle access requirement has also been achieved (so that a wheelchair passenger might at least transfer to/from this latter line even if not onto the street). Additionally, the exemptions in respect of the platforms in table 1 of Schedule 1 are limited until 31 December 2017, by which date step-free access to those platforms is scheduled to have been completed. LUL has undertaken to comply with the vehicle access requirement at an earlier stage if works to provide step-free access are completed ahead of schedule.

7.14 In its application, LUL indicates that it is spending £22 million to bring 90 Circle, District and Hammersmith & City Lines platforms within the required dimensions of RVAR. The application for exemption details the steps LUL has taken to address the problem of train and platform gaps including an independent survey by the Frankham Consultancy Group. This looked at solutions to the problem of compromised height platforms such as platform humps and track adjustments and even changes to service patterns that might result in different types of rolling stock using different platforms. Additionally, LUL refer in their application to an agreement reached with London Overground that platforms will be raised to the LUL standard height of 950mm at stations where the platforms are shared by S7 and London Overground trains.

Audible door closure warnings

7.15 The audible door closure warning on the existing C and D stock vehicles begins to sound 1.75 seconds before the doors begin to close. This is the standard warning period used on existing LUL trains. However, on vehicles subject to RVAR, such as the new S7 trains, a longer warning is required which starts 3 seconds before the doors begin to close. LUL contend that passengers could be confused by vehicles operating on the same route having different durations of audible warning depending on whether they were subject to RVAR or not. Visually-impaired passengers in particular would not know how long they had until the doors closed. This could increase the risk of them being trapped in the doors of the older trains and potentially increase dwell times as the doors would have to be reopened. LUL are also concerned that a longer warning could

impact on the dwell time and reduce the overall frequency of the service – which runs counter to efforts to increase the network's capacity.

7.16 Although the hardware on the S7 vehicles is capable of providing a compliant 3 second warning of door closure, LUL has requested an exemption from this requirement until 31 December 2016 on all three lines, by which time all older rolling stock in use on the Circle, District and Hammersmith & City Lines, and the Metropolitan Line, will have been replaced. The Order nevertheless requires LUL to maintain a minimum door closure warning of 1.75 seconds until 31 December 2016 for consistency with the existing, older, C and D stock vehicles, and to maintain existing standards. The S7 stock would revert to a compliant warning after this date.

7.17 Similar exemptions have been granted in respect of Victoria Line vehicles until 31 December 2013. This period will be used to trial on the Victoria Line whether an increased, 3 second, warning time can be incorporated on a metro service without compromising safety and frequency of service (which is a core target of the planned upgrades). It is envisaged that the results of this trial will be available well in advance of the 2016 expiry date for the S7 vehicles exemptions and will form part of the consideration on whether an exemption is appropriate after 2016. LUL would need to seek a further exemption order if the Victoria Line trial shows that the 1.75 second warning needs to be retained beyond the expiry date.

Illumination of door controls

7.18 RVAR requires the illumination of door controls on power-operated doors which acts as a visual notification for deaf people that doors are about to open or close. Specifically, when doors are about to close, it prescribes that the illumination shall cease not less than 3 seconds before the doors begin to move. LUL has requested an exemption, until 31 December 2016, to allow this illumination to cease 1.75 seconds before closure, rather than the required 3 seconds – again due to the potential impact on dwell times and service frequency This also means that the visual and audible warnings of door closure are synchronised - commencing at the same time (1.75 seconds before the doors start to move). The exemption will apply at all times in passenger service on all three lines.

7.19 As the interior door controls for customers are hidden when the door is open, LUL has installed a visual indicator in each doorway to signal that the doors are about to close. This indicator is positioned at eye level and will flash as the audible door closure warnings sound.

7.20 With regard to both the exemptions above, LUL has advised that door closure mechanisms on the new trains will be operated by the train driver who is required to ensure that it is safe to close the doors using the platform CCTV cameras via their incab monitors (these give an exterior view of the full length of the train at the platform). Drivers are trained to hold the train on the platform if they see that someone is still boarding or alighting and the new S7 trains have an intelligent door system that incorporates obstacle detection and 'sensitive edge' anti-drag technologies.

Internal public information announcements

7.21 RVAR requires that, whilst a train is stationary at a stop, the passenger information systems inside the carriage shall be used to announce (audibly and visually) the destination of the vehicle and the next stop. This requirement is designed to ensure passengers know the destination of the train they are boarding and whether it is a fast or stopping service.

7.22 However, as Circle, District and Hammersmith & City Lines trains are used to provide a frequent service with short station stops, LUL suggest that this limits the amount of information that can be given to customers whilst trains are stationary at platforms without affecting the frequency of service. Additionally, some platforms on the line will be shorter than the trains arriving there and LUL needs to use the customer information systems to ensure that customers move towards an opening door in time for them to alight if they wish to do so. LUL has therefore requested an exemption to allow *either* the destination of the vehicle, *or* the next stop (whichever is not announced at the station) to be given during transit between some stations instead.

7.23 The exemption that LUL has requested would apply until 31 December 2016 by which time the operator will have completed research to establish which pieces of information passengers find most useful and which should be broadcast at key moments. The new S7 trains will give the passenger information mandated by RVAR, in both audible and visual formats within the carriage, though not necessarily at the times required by the regulations. LUL notes other means by which customers will be given information about the destination and next stop of trains, including station announcements, platform 'next train' display indicators, visual displays on the front and external sides of each carriage and fixed signage such as network maps. The exemption will only apply at certain non-critical stations and in certain directions of travel, where there are no branches ahead, and where the station is not a junction. For key stations with junctions, no exemption is being sought from the announcement requirements, so compliant "next station" and "final destination" details will both be given while the train is stationary at those stations, so helping passengers understand to which branch the train is about to depart. Additionally, both pieces of information will be given at all terminus stations, as the dwell times here are longer, so allowing LUL to provide these, and other useful pieces of information, to customers. The stations at which this exemption applies are listed in Schedule 2 of the Order.

7.24 In 2008, LUL was granted a similar exemption from this requirement in respect of its new Victoria Line trains. In that instance however, the exemption applied on the whole of the Victoria Line as there are no branches or fast/stopping services. On the Victoria Line, LUL will conduct a trial with a series of announcements that it believes could be more useful than those currently required by the RVAR including, for example, interchange information. As part of that trial, which will conclude by the end of 2013, LUL wants to establish whether passengers find it more useful to have the next station or the terminus announced and the results will inform future policy in this area.

7.25 More recently, LUL was granted a very similar exemption from this requirement at certain, non-key stations on the Metropolitan Line, which does have branches like the Circle, District and Hammersmith & City Lines. Uniquely for LUL, however, the Metropolitan Line also sees fast and stopping trains from the same platforms, so that recent exemption also reflected the need for both pieces of mandated information to be given at stations where this circumstance arose.

8. Consultation Outcome

8.1 Section 183 (4) of the EA requires the Secretary of State, as part of his consideration of an application for exemption, to consult DPTAC together with any other appropriate persons. LUL's application was posted on the Department's web site. As mentioned above, the EA also requires that the Secretary of State consult DPTAC with respect to which parliamentary procedure to use when making an exemption order. Accordingly, DPTAC were also consulted about the Secretary of State's proposal to make the order using the negative resolution procedure.

8.2 Comments were received from DPTAC, London Travelwatch and the Office of Rail Regulation and these are attached as **Annexes B**, **C** and **D**. Consultees had no objection to the application, although each made comments about specific aspects of the exemptions requested. DPTAC was content for the order to be dealt with under the negative resolution process, given the earlier precedent referred to in paragraph 3.2 above.

Wheelchair compatible doorways

8.3 A number of comments were received on this aspect of the application and these are summarised below.

8.4 As with the previous Metropolitan Line Order, DPTAC recommended that all of the exemptions requested by LUL should be subject to time limits. They indicated that the lack of available manual boarding ramps, both on-board trains and at stations, might be considered short-sighted. DPTAC believes that assistance in the form of ramps should be available to mobility impaired customers in the same ad hoc manner as assistance is currently provided to visually-impaired passengers, particularly at those stations which are step-free from pavement to platform.

8.5 The Department agrees that it is unfortunate that, in the past, LUL provided step-free access at some sites on the Circle, District and Hammersmith & City Lines where the platform geometry means that level access to the train cannot currently be provided. The Department hopes that LUL work to provide step-free access in the future will be better matched to those sites where level access between the train and platform can also be achieved. The Department notes, however, that even where independent access for wheelchair users to the train is currently impossible, then the provision of step-free access at those sites in the past still benefits ambulant disabled people and passengers travelling with small children or heavy luggage.

8.6 As with the Rail Vehicle Accessibility (London Underground Metropolitan Line S8 Vehicles) Exemption Order 2010, DPTAC also suggested that, notwithstanding exemptions to the vehicle accessibility requirement, boarding ramps should nevertheless be available on the Circle, District and Metropolitan & City line in emergency situations. LUL has in response supplied evidence to the Department to demonstrate that the introduction of their new, low floor, trains will reduce existing stepping distances at these stations by a significant amount - 190mm. Whilst these would remain non-compliant at some stations it will, nevertheless, be significantly easier for wheelchair users to alight independently or with assistance during an emergency without having to rely on manual handling by the emergency services, or a boarding ramp. They do not, therefore, believe that the provision of boarding ramps for emergencies is necessary.

8.7 As emergency situations are not regulated under RVAR this is an issue for LUL, as the legal duty holders, to satisfy themselves of compliance with health and safety legislation and to provide ramps if necessary. The Order therefore reflects LUL's original application on this matter. The Department remains of the view that, on balance, the use of manual boarding ramps during normal service on the London Underground network is inappropriate for such a high-frequency and crowded system.

8.8 The ORR similarly felt that a time limit ought to be set for all exemptions from the vehicle accessibility requirement. This differed from its response to LUL's applications for the Victoria and Metropolitan Lines, and it explained that it now "believes that a regular review of circumstances where LU asserts that it has grounds for not complying with the legislation is necessary, and that limiting the duration of the exemption will achieve this".

8.9 In the case of the stations listed in table 1 of Schedule 1, the exemption from the vehicle accessibility requirement will expire on 31 December 2017, tying in with the end date for the completion of existing step-free access works; for those listed in table 2 of Schedule 1 the exemption will expire when step free access is available for the relevant platforms of those stations.

However, for financial reasons there is no plan to provide step free access to 8.10 every station platform on LUL's network – this would probably cost several billion pounds. Similarly, as previously discussed, in some cases station platforms are so curved that the straightening of platforms and track would be required before the gap would decrease sufficiently so as to meet the vehicle accessibility requirement – this too would cost billions of pounds. In these cases, we see no benefit in setting artificial end dates in relation to the exemption for those station platforms, (see the stations and platforms listed in Schedule 1, table 3). We believe that setting expiry dates in respect of platforms with currently no realistic prospect of meeting the vehicle accessibility requirements would create an avoidable administrative burden on LUL as it would need to apply for extensions to these exemptions in due course. We appreciate, however, that providing exemptions without expiry dates might suggest that the Department does not expect access to these platforms to improve further once the Order comes into force. This is not the case; it remains open to the Secretary of State to revoke the exemptions by Order should circumstances change. Further, we believe that the early completion of rectification work set out in paragraphs 7.4 to 7.6 above illustrate that LUL takes its accessibility responsibilities seriously.

8.11 London TravelWatch (LTW) supported the exemption application but sought assurances that, should the budgetary position improve then the exemptions for the platforms that were being deferred for financial reasons would be reviewed. In reality this was overtaken as, as explained in **paragraph 7.4**, LUL has already identified efficiencies that will enable rectification work to take place before the first S7 train serves those platforms so exemptions at those sites will not, after all, be necessary. The Department also emphasised, as above, that the Secretary of State may revoke exemptions by Order should the situation change. LUL also have a good record of

providing level access ahead of the date specified by exemption Orders – with provision on some Victoria Line platforms having been provided up to two years early.

Audible door closure warnings & Illumination of door controls

8.12 All responses supported LUL's request for a temporary exemption from the requirements for audible door closure warnings and the illumination of door controls. LTW noted, in particular, that these exemptions were time limited and that, if LUL wished to continue with non-compliant warning times after these periods, a clear case would be needed to justify any extension. This emphasises the importance of LUL's trial of the 3 second warning on its Victoria Line fleet which would inform future provision (see **paragraph 7.17**).

Internal public information announcement

8.13 All responses supported the exemption requested for internal public information announcements – regulation 13(4) - although DPTAC was concerned that the extra time between announcements should not be used for standard announcements regarding security or for advertising purposes. DPTAC also felt it was important that the destination be announced. The Department expects that this will be considered as part of the research into passengers' preferences noted in **paragraph 7.24**. These comments have been passed to LUL for consideration.

9. Guidance

9.1 Comprehensive guidance on the application of RVAR 1998 has been published¹⁰. This remains relevant to RVAR. The Department for Transport has worked closely with LUL and DPTAC throughout the design and manufacture stages of the new Circle, District and Hammersmith & City Line vehicles to ensure that the number of exemptions is minimised – and this was reduced further while the application was under consideration (**paragraphs 7.4 to 7.6** above). DPTAC commented favourably on the small number of exemptions that have been sought.

10. Impact

10.1 An Impact Assessment has not been prepared for this instrument as it has no impact on business, charities or voluntary bodies.

10.2 The impact on the public sector is beneficial – through the avoidance or deferral of expenditure on straightening platforms or deploying manual boarding ramps, and from maximising investment in raising service frequencies and increasing capacity.

11. Regulating small business

11.1 The Order does not apply to any small businesses.

12. Monitoring & Review

¹⁰ See www.dft.gov.uk/transportforyou/access/rail/vehicles/pubs/rva/rvareg1998

12.1 The Government's policy objective is to ensure that the number of exemptions is minimised and that new and refurbished rail vehicles are as compliant as possible with the requirements of RVAR.

12.2 Since the Order contains some exemptions which are not time limited, the Secretary of State will keep these provisions under review and will consider whether to revoke these in future, in consultation with stakeholders, if it were felt that these were no longer appropriate. Progress on the other obligations the Order places on LUL, in particular the time limits for the completion of platform and other works, will also be closely monitored to ensure the relevant deadlines are met.

13. Contact

John Bengough at the Department for Transport (Tel: 020 7944 5035 or e-mail: john.bengough@dft.gsi.gov.uk) can answer any queries regarding the Order.

Introduction

London Underground (LUL) is committed to improving the accessibility of our services for all of our customers.

Our aim is to provide a service that can be accessed by anyone safely, easily and independently, regardless of their age, impairment or encumbrance. We aim to provide the same or equivalent levels of service to all our customers, whilst recognising that customers' individual requirements vary.

London Underground is currently undertaking an extensive investment programme to modernise and improve our stations and trains. One of the largest single investment projects is the Sub Surface Railway Upgrade Project (the Upgrade).

The Sub Surface Railway (SSR) covers over a third of the entire Underground network and is made up of the following four lines:

- Circle line
- District line
- Hammersmith & City line
- Metropolitan line



Diagram Showing Sub-Surface Railway

It was agreed with the Department for Transport that the exemptions relating to new 'S7' & 'S8' vehicles which are being introduced as part of the SSR Upgrade would be submitted in 2 separate batches.

For the most part, the new 'S7' and 'S8' trains are the same and we are requesting exemptions from the same regulations - subject to changes to the exemption numbers and slight drafting changes due to the revision and replacement of RVAR 1998 (amended 2000) with the Rail Vehicle Accessibility (Non-Interoperability Rail System) Regulations 2010 ("RVAR 10").

The submission of separate applications has enabled us to include more specific information about the different vehicle layouts and formation as well as reflect the different services, timescales and issues on each of the lines.

The first batch of exemptions relating to the 'S8' vehicles to be used on the Metropolitan line was submitted in August 2009 as these were the first vehicles to be introduced. These exemptions were granted - with Statutory Instrument 2010/435 coming into effect in February 2010. These vehicles began entering into limited passenger service in August 2010 and have received very positive feedback from stakeholders.

This second batch of applications relates to new 'S7' vehicles, which will be used on the Circle, District and Hammersmith & City (H&C) lines.

The Hammersmith & City Line

The Metropolitan Railway, the world's first underground railway, opened in 1863 between Bishop's Road, Paddington and Farringdon. The first section of the line we now know as the Hammersmith & City line was originally opened as a branch line of the Metropolitan Railway between Paddington and Hammersmith in June 1864.

After a number of extensions and changes, the current route took its present form in 1936 when trains began running over District lines tracks beyond Whitechapel to Barking. The most recent change to the line was the addition of a brand new station at Wood Lane in 2008 as part of the Westfield Retail Development.

The Hammersmith & City line runs for 16¹/₂ miles (26¹/₂ km) between Hammersmith in the west and Barking in the east.



Diagram of the Hammersmith & City Line

It serves 29 stations, including smaller suburban stations and large key central London interchanges. The busiest station on the line is King's Cross St. Pancras which is used by over 102 million passengers a year.

Currently the Hammersmith & City line shares a fleet of 46 six-car 'C' stock trains with the Circle line. During peak hours 41 trains are required to provide the service for both of these lines. In the off-peak the service is provided by 38 trains per hour.

It carries over 45 ³/₄ million passengers a year.

The District Line

The District Railway was the second company to operate underground railway services in London. Since the first section of what is now known as the District line opened between South Kensington and Westminster on 24th December 1868, the line has seen many extensions and changes to destinations served. Its current form was largely in place by 1932, when it was extended beyond Barking to Upminster.

Through its history the District line has always been closely associated with the operation of other railways, and in its time has run services to Windsor and Southendon-Sea. The Richmond branch of the line continues to be a joint operation with London Overground (previously Silverlink) Services, although Network Rail is responsible for the tracks between Gunnersbury and Richmond.

The District line today covers 40 miles (64km) and is one of the most complex of all the Underground lines to operate. Although there is only a single route eastwards to Upminster, there are three branches to the west – Ealing Common, Richmond and Wimbledon – and a separate Wimbledon to Edgware Road service with a further branch to Kensington Olympia. Additionally the main central London tracks also accommodate the southern section of the Circle line.



The line serves 60 stations, more than any other line on the network. These vary from small suburban stations to large key central London interchanges. The busiest station on the line is Victoria which is used by over 96 million passengers a year. Although only 25 of the 60 stations are underground, all District line services pass through Earl's Court.

The District line's stations reflect its long and varied history with a wide range of architectural styles, and include some such as Barons Court and Fulham Broadway which have been listed as buildings of special interest.

Two types of train operate District line services. The main service is provided by a fleet of 'D' stock trains, whilst the Edgware Road and Olympia branches are served by 'C' stock trains. Currently 68 trains are required to operate the full morning and evening peak period services on the main section of the line, with an additional 8 operating the Edgware Road branch. 'D' stock trains received significant refurbishment between 2004 – 2008, during which their accessibility was enhanced, including the provision of audio/visual passenger information systems, priority seating and visual contrast.

It carries over 172 ³/₄ million passengers a year.

The Circle Line

The Circle line is one of the most recognisable lines on the Tube map; however for many years the circular route did not have its own identity, but was split between the Metropolitan and District lines. It wasn't until 1949 that the Circle was shown as a distinct line in yellow on the Underground map.

The first part of the line opened as the Metropolitan Railway in January 1863 between Paddington and Farringdon. From this initial section the route was gradually extended in both directions by both the Metropolitan and District Railways, with the completion of the 'Circle' in 1884 with the opening of the final section between Mansion House and Mark Lane (now Tower Hill) stations.

In December 2009 the route was extended to Hammersmith as part of the SSR Upgrade; however its iconic status, including its name and bright yellow colour, remained unchanged.

After many extensions and changes, today's Extended Circle line covers 17 miles (27km) and runs from Hammersmith H&C station, joining the existing Circle line at Edgware Road before making a single loop which terminates at Edgware Road and then returns in the opposite direction.

The line shares most of its route with the 3 other SSR lines. Only the 2 short sections between High Street Kensington and Gloucester Road and between Aldgate and Minories Junction (east of Tower Hill) are used solely by Circle line trains.



Diagram of the Circle Line

There are 35 stations on the Circle line, and it has the distinction of serving most of London's main line railway termini. The busiest station on the line is King's Cross St. Pancras which is used by over 102 million passengers a year.

Currently the Circle line shares a fleet of 46 six-car 'C' stock trains with the Hammersmith & City line. During peak hours 41 trains are required to provide the service for both of these lines. In the off-peak the service is provided by 38 trains per hour.

It carries just under 68 ½ million passengers a year (pre-2009 route change figures).

Although there have been great changes to all 4 of the sub-surface lines over time, the majority of the infrastructure still being used, including the platform alignments, is substantially as it was built in the Victorian era more than 136 years ago, when attitudes to customer accessibility were very different.

The Sub Surface Railway Upgrade

In 2006, the SSR network was carrying 370 million passengers a year.

On completion of the Upgrade, LU will be able to operate higher frequency services with reduced journey times compared to 2006 levels. An increase in off-peak and weekend services will also be implemented to meet increasing demand levels at these times. As well as enabling faster journey times, the Upgrade will deliver increased capacity on the SSR lines and improved reliability through essential asset renewal.

Currently there are three different types of rolling stock running on the Sub Surface Railway:

 'A' Stock: These are used on the Metropolitan line and are the oldest vehicles in regular use on the Underground Network, coming into service between 1960 - 1962. These vehicles were refurbished between 1994-1997.

- **'C' Stock**: These are used on the Circle line, Hammersmith & City Line and the Edgware Road and Olympia branches of the District line. These vehicles came into service from 1969 and were refurbished between 1991-1994.
- **'D' Stock**: These vehicles have been used on the District line since 1979 and were refurbished between 2004-2008.

As part of the Upgrade, the three existing fleets will be replaced by a single fleet of 191 new trains known as the 'S' Stock. There will however be some slight differences in the layout and formation of the trains.

Trains on the Metropolitan Line, the 'S8' trains, will have 8 carriages, whilst the 'S7' trains on the Circle, Hammersmith & City and District Line will have 7 carriages.

To ensure the smooth continuation of service, the new trains will be introduced gradually, replacing the oldest trains first in the following order¹¹:

- **'A' Stock:** the process of replacing the existing fleet began in 2010, with the last of the old 'A' stock being removed in 2013.
- **'C' Stock**: the process of replacing the existing fleet will begin in 2012, with the last of the old 'C' stock being removed in 2014.
- **'D' Stock**: the process of replacing the existing fleet will begin in 2013, with the last of the 'D' Stock being removed in 2016.

There are a number of advantages of having a single fleet:

- All Sub-Surface line trains will have the same benefits and accessibility features, such as door closing alarms, visual contrast within the carriage, and layout of wheelchair spaces. This consistency will enable customers to become familiar with the position and function of facilities within the trains.
- We will be able to move the new 'S7' trains quickly and easily between the lines to improve the regularity of service and ensure faster recovery from service disruptions.
- There are also advantages in terms of economies of scale for purchase and maintenance.

While using a single fleet has advantages, it also has complexities. The greatest of these is that each of the lines share tracks with the other lines along part of their route. Extensive work will need to be done on the signalling systems so that both new and old trains can operate together whilst the 'S' Stock trains are being introduced and the

¹¹ In accordance with the milestones set by DfT as part of the Spending Review 2010. These are outlined in the TfL Funding agreement letter of 20th October 2010 from Secretary of State for Transport, Philip Hammond MP, in his letter to the Mayor of London Boris Johnson.

old vehicles phased out. When the last of the current trains are replaced, a new signalling system will be introduced to allow trains to run more efficiently.

In addition to introducing new trains, other works will also take place to ensure that the Upgrade is able to provide an improved service for our customers. These will include:

- Platform extensions and new stopping positions to accommodate the new, longer trains although this is not possible in some locations
- New signalling system and track side signage to allow trains to run more efficiently, along with a new Signalling Control Centre to improve reliability of the service, covering the whole of the SSR.
- New infrastructure including new cable routes, sub-stations and conductor rails,
- Track and maintenance depot works to support new trains including work on train berthing positions and stabling
- New train crew accommodation.

In preparation for the Upgrade a new timetable was introduced in December 2009 to improve the reliability and capacity of the whole Sub Surface Railway. This was necessary to ensure the smooth introduction of the new rolling stock and signalling systems.

The most prominent aspect of the new timetable was the extension of the Circle line route to provide a service between Edgware Road and Hammersmith (H&C) stations.

This change to the service pattern was necessary to meet the increased demand at the nine stations on this section, in particular the new Wood Lane station, which had previously only been served by the Hammersmith & City line. Increasing the frequency of trains on this section has reducing overcrowding.

It will also mean a 70% increase in capacity on the branch from Hammersmith to Paddington throughout the day. In addition off-peak Hammersmith & City line trains no longer start/terminate at Whitechapel but will run all the way to Plaistow or Barking.

Extending the Circle line route has significantly improved reliability. It has allowed recovery time to be scheduled at each end of the line. This was previously not possible due to the lack of termini, which mean that any delays were compounded. In addition, it allows the regular cycling of trains to Hammersmith depot for ad-hoc maintenance.

As all the SSR lines share track with the Circle line, this improved reliability and recovery capability has had a significant effect on the other 3 lines as the knock-on effects of Circle line disruption have been reduced.

After the Upgrade, the new 'S7' fleet will be made up of 133 seven-car trains. Completion of this work will result in an increase in capacity of 24% on the District line, and 61% on the Circle and Hammersmith & City lines. Combined with similar improvements on the Metropolitan Line, this will give an increase in peak hour capacity of 33% across the Sub Surface lines.

Originally the Upgrade was being delivered in partnership with the Metronet Rail Infraco, which was responsible for the maintenance, upgrading and renewal of the Sub Surface Railway' assets. However, following ongoing financial problems Metronet went into Administration in July 2007 and in May 2008, Metronet Rail transferred into Transport for London.

The 'S7' trains will have the following permanent seven-car formation with driving motor cars at each end.



Accessibility Features of the S Stock

Accessibility has been a key feature of the new 'S7' train design process. In addition to the requirements of RVAR; London Underground has its own additional stringent standards.

The SSR Upgrade Team along with the LUL Accessibility and Inclusion Team have worked with officials from the Department for Transport (DfT), members of the Disabled Persons Transport Advisory Committee (DPTAC) and Transport for London's own Independent Disability Advisory Group (IDAG) to ensure the correct approach to RVAR compliance.

In September 2008, DfT officials, DPTAC members and representatives of organisations of/for disabled people, including the RNIB, RNID, Guide Dogs, Sense,

People First, Transport for All and the National Autistic Society were invited to view and comment on a carriage mock-up. As part of the Upgrade communications programme, the mock up was also open to the public for a week and was visited by over 9,000 people.

Following the introduction of the new 'S8' vehicles on the Metropolitan line in August 2010, wheelchair users participated in the Operational Testing of 'S8' vehicles and were very pleased with the layout and facilities within the vehicles. The arrangements for wheelchair users are identical between the 'S8' and 'S7' fleets.

In addition to fully complying with all RVAR requirements (apart from the 4 exemptions being sought below) the new 'S7' trains incorporate a number of additional accessibility features:

• Additional Wheelchair Spaces:

The new 'S7' train has 4 wheelchair spaces, 2 more than required by RVAR.

• Multi-purpose areas:

In addition to the 4 designated wheelchair spaces, the new 'S7' train will have 10 multi-purpose areas, 2 in each carriage apart from the 2 centre cars which contain the wheelchair spaces. The multi-purpose areas will provide space where passengers with luggage, prams, buggies or shopping can stand comfortably. They also contain 3 tip-up seats which passengers can use if the space is not in use.

These areas will be clearly labelled to differentiate them from the designated wheelchair spaces. The presence of these areas should reduce competition for the wheelchair space from other users.

In addition to this, the cantilever design seating will provide additional storage beneath the seats; this will help to ensure that the wheelchair space is unobstructed so that wheelchair users are able to get easy access. This design also enables guide dogs to lie safely underneath the seats rather than in the aisles.

• Additional Priority Seating:

The new 'S7' trains have 256 seats, 28 of which are priority seats. This exceeds the requirement for 10% of all seating to be designated as priority seating. All priority seating is located next to the doors to enable easy access and is clearly labelled.

• Low level floor lighting across door thresholds:

Although there is no regulated step on the new 'S7' train, we have recognised the need to assist visually-impaired passengers to identify the gap between the train and the platform. Therefore we have installed low level lighting to illuminate the edge of the vehicle in each doorway to assist all passengers as they board or alight.

• Visual door closing indicators:

As the interior door controls are hidden when the door is open, we have installed an additional visual indicator in each doorway to signal that the doors are about to close. This indicator is positioned at eye-level and will flash as the audible door closure warnings sound (at a frequency which complies with the new requirement with RVAR 10). The exterior passenger door controls are visible at all times.

• Push-button passenger emergency alarms throughout:

The RVAR only requires push-button alarms in wheelchair spaces. We felt that this easy-to-use design would benefit all passengers, and so have installed push-button alarms in every doorway, enabling all passengers to easily summon help if required. Each alarm provides visual reassurance of activation and enables direct voice communication to the train operator, who can use the CCTV system to view the area.

Exemptions Requested for the 'S7' Circle, District and Hammersmith & City Lines Trains

We believe that we have designed the most accessible trains possible within the constraints of our service and infrastructure. If granted, we believe that some of the exemptions will enable us to improve the service we provide to our disabled passengers – meeting the spirit if not the letter of the RVAR.

With this background in mind, London Underground is seeking exemptions from the following provisions of Schedule 1 Part 1 of the Rail Vehicle Accessibility (Non-Interoperable Rail System) Regulations 2010 under Section 183 of the Equality Act 2010 ("EA"):

- Schedule 1, Part 1: General Requirements, Paragraph 1(2) Boarding devices at wheelchair accessible doorways
- Schedule 1, Part 1: General Requirements, Paragraph 3(5)(b) Audible Door Closure Warnings
- Schedule 1, Part 1: General Requirements, Paragraph 4(2) Visual Door Warning Indicators
- Schedule 1, Part 1: General Requirements, Paragraph 11(5) Announcements to be made whilst at a station

Exemptions for identical reasons have already been granted for the 'S8' fleet currently being introduced on the Metropolitan Line.

1. Full name of applicant and address

London Underground Limited 55 Broadway London SW1H 0BD

2. Description of Rail Vehicles

'S7' Stock trains Vehicles numbers: 24301 - 24566

This exemption only applies to the 266 'MS' cars which will be used as the middle two cars in each train. They differ in layout to the other cars in the train as they contain the regulated wheelchair spaces. The exemption relates specifically to the wheelchair compatible doorways in these carriages.



3. Circumstances in which exemptions are to apply

At all times in passenger service, when an 'S7' train stops at a platform where: a) there is no step-free route from the platform out of the station: or

- b) there is no step-free route between that platform and platforms for other LU lines or national rail services: or
- c) it is not physically possible to bring the dimensions of the step and/or gap within the maximum permitted tolerances.

A phased programme of deadlines for compliance is set out below. A Key setting out the reasons for the Untimed Temporary Exemptions can be found at the end of the table.

Station	Plat	Exemption Requested
Aldgate East	01	No Exemption
Aldgate East	02	No Exemption
Baker Street	06	No Exemption
Barbican	01	No Exemption
Barbican	02	No Exemption
Barking	1a	No Exemption
Barking	02	No Exemption
Barking	03	No Exemption
Barking	06	No Exemption
Blackfriars	01	No Exemption
Blackfriars	02	No Exemption
Dagenham Heathway	01	No Exemption
Dagenham Heathway	02	No Exemption
Earl's Court	01	No Exemption
Earl's Court	02	No Exemption
Earl's Court	03	No Exemption
Earl's Court	04	No Exemption
East Ham	01	No Exemption
East Ham	02	No Exemption
Elm Park	01	No Exemption
Elm Park	02	No Exemption
Embankment	01	No Exemption
Embankment	02	No Exemption
Euston Square	01	No Exemption
Euston Square	02	No Exemption
Goldhawk Road	02	No Exemption

Hammersmith (D)	01	No Exemption
Hammersmith (D)	04	No Exemption
Hammersmith (H&C)	01	No Exemption
Hammersmith (H&C)	02	No Exemption
Hammersmith (H&C)	03	No Exemption
High Street Kensington	02	No Exemption
High Street Kensington	03	No Exemption
High Street Kensington	04	No Exemption
Kew Gardens	01	No Exemption
King's Cross	01	No Exemption
King's Cross	02	No Exemption
Liverpool Street	01	No Exemption
Liverpool Street	02	No Exemption
Moorgate	01	No Exemption
Moorgate	02	No Exemption
Moorgate	03	No Exemption
Moorgate	04	No Exemption
Paddington (Circle)	2	No Exemption
Paddington (H&C)	15	No Exemption
Paddington (H&C)	16	No Exemption
Richmond	04	No Exemption
Richmond	05	No Exemption
Richmond	06	No Exemption
Richmond	07	No Exemption
Royal Oak	01	No Exemption
Royal Oak	02	No Exemption
Parsons Green	01	No Exemption
Parsons Green	02	No Exemption
Southfields	01	No Exemption
Southfields	02	No Exemption

South Kensington	01	No Exemption
South Kensington	02	No Exemption
Turnham Green	01	No Exemption
Upminster	03	No Exemption
Upminster	04	No Exemption
Upminster	05	No Exemption
Upney	01	No Exemption
Upney	02	No Exemption
West Brompton	02	No Exemption
West Ham	01	No Exemption
West Ham	02	No Exemption
Whitechapel	01	No Exemption
Whitechapel	02	No Exemption
Wimbledon	01	No Exemption
Wimbledon	02	No Exemption
Wimbledon	03	No Exemption
Wimbledon	04	No Exemption
Wood Lane	01	No Exemption
Dagenham East	02	Until 31 March 2016
Dagenham East	03	Until 31 March 2016
Gloucester Road	02	Until 31 March 2016
Gloucester Road	03	Until 31 March 2016
West Kensington	01	Until 31 March 2016
West Kensington	02	Until 31 March 2016
Ealing Broadway	07	Until 31 December 2017
Ealing Broadway	08	Until 31 December 2017
Ealing Broadway	09	Until 31 December 2017

Acton Town	01	Untimed temporary exemption (2)
Acton Town	02	Untimed temporary exemption (5)
Acton Town	03	Untimed temporary exemption (5)
Acton Town	04	Untimed temporary exemption (2)
Aldgate	01	Untimed temporary exemption (1)
Aldgate	02	Untimed temporary exemption (1)
Aldgate	03	Untimed temporary exemption (1)
Aldgate	04	Untimed temporary exemption (3)
Baker Street	01	Untimed temporary exemption (7)
Baker Street	02	Untimed temporary exemption (1)
Baker Street	03	Untimed temporary exemption (1)
Baker Street	04	Untimed temporary exemption (7)
Baker Street	05	Untimed temporary exemption (3)
Barons Court	01	Untimed temporary exemption (4)
Barons Court	04	Untimed temporary exemption (4)
Bayswater	01	Untimed temporary exemption (6)
Bayswater	02	Untimed temporary exemption (6)
Becontree	01	Untimed temporary exemption (6)
Becontree	02	Untimed temporary exemption (6)
Bow Road	01	Untimed temporary exemption (7)
Bow Road	02	Untimed temporary exemption (7)
Bromley-by-Bow	01	Untimed temporary exemption (6)
Bromley-by-Bow	02	Untimed temporary exemption (6)
Cannon Street	01	Untimed temporary exemption (1)
Cannon Street	02	Untimed temporary exemption (7)
Chiswick Park	01	Untimed temporary exemption (7)
Chiswick Park	02	Untimed temporary exemption (7)
Dagenham East	01	Untimed temporary exemption (6)
Ealing Common	01	Untimed temporary exemption (2)
Ealing Common	02	Untimed temporary exemption (2)
East Putney	01	Untimed temporary exemption (7)
East Putney	02	Untimed temporary exemption (7)

Edgware Road (H&C)	01	Untimed temporary exemption (3)
Edgware Road (H&C)	02	Untimed temporary exemption (1)
Edgware Road (H&C)	03	Untimed temporary exemption (1)
Edgware Road (H&C)	04	Untimed temporary exemption (3)
Farringdon	01	Untimed temporary exemption (1)
Farringdon	02	Untimed temporary exemption (1)
Fulham Broadway	01	Untimed temporary exemption (1)
Fulham Broadway	02	Untimed temporary exemption (1)
Gloucester Road	01	Untimed temporary exemption (6)
Goldhawk Road	01	Untimed temporary exemption (6)
Great Portland Street	01	Untimed temporary exemption (7)
Great Portland Street	02	Untimed temporary exemption (7)
Gunnersbury	01	Untimed temporary exemption (1)
Gunnersbury	02	Untimed temporary exemption (1)
Hammersmith (D)	02	Untimed temporary exemption (5)
Hammersmith (D)	03	Untimed temporary exemption (5)
High Street Kensington	01	Untimed temporary exemption (6)
Hornchurch	01	Untimed temporary exemption (6)
Hornchurch	02	Untimed temporary exemption (6)
Kensington Olympia	01	Untimed temporary exemption (1)
Kew Gardens	02	Untimed temporary exemption (1)
Ladbroke Grove	01	Untimed temporary exemption (6)
Ladbroke Grove	02	Untimed temporary exemption (6)
Latimer Road	01	Untimed temporary exemption (6)
Latimer Road	02	Untimed temporary exemption (6)
Mansion House	01	Untimed temporary exemption (7)
Mansion House	03	Untimed temporary exemption (7)
Mile End	02	Untimed temporary exemption (4)
Mile End	03	Untimed temporary exemption (4)
Monument	01	Untimed temporary exemption (7)
Monument	03	Untimed temporary exemption (1)

Notting Hill Gate	01	Untimed temporary exemption (6)
Notting Hill Gate	02	Untimed temporary exemption (7)
Paddington (Circle)	01	Untimed temporary exemption (3)
Plaistow	01	Untimed temporary exemption (6)
Plaistow	02	Untimed temporary exemption (3)
Plaistow	03	Untimed temporary exemption (1)
Putney Bridge	01	Untimed temporary exemption (6)
Putney Bridge	03	Untimed temporary exemption (7)
Ravenscourt Park	01	Untimed temporary exemption (7)
Ravenscourt Park	02	Untimed temporary exemption (7)
Ravenscourt Park	03	Untimed temporary exemption (7)
Ravenscourt Park	04	Untimed temporary exemption (7)
Shepherd's Bush Market	01	Untimed temporary exemption (6)
Shepherd's Bush Market	02	Untimed temporary exemption (6)
Sloane Square	01	Untimed temporary exemption (7)
Sloane Square	02	Untimed temporary exemption (7)
St James's Park	01	Untimed temporary exemption (7)
St James's Park	02	Untimed temporary exemption (7)
Stamford Brook	01	Untimed temporary exemption (7)
Stamford Brook	02	Untimed temporary exemption (7)
Stamford Brook	03	Untimed temporary exemption (7)
Stepney Green	01	Untimed temporary exemption (6)
Stepney Green	02	Untimed temporary exemption (6)
Temple	01	Untimed temporary exemption (7)
Temple	02	Untimed temporary exemption (7)
Tower Hill	01	Untimed temporary exemption (1)
Tower Hill	02	Untimed temporary exemption (1)
Tower Hill	03	Untimed temporary exemption (1)
Turnham Green	02	Untimed temporary exemption (5)
Turnham Green	03	Untimed temporary exemption (5)
Turnham Green	04	Untimed temporary exemption (4)
Upminster Bridge	01	Untimed temporary exemption (6)

Upminster Bridge	02	Untimed temporary exemption (6)
Upton Park	01	Untimed temporary exemption (6)
Upton Park	02	Untimed temporary exemption (7)
Victoria	01	Untimed temporary exemption (1)
Victoria	02	Untimed temporary exemption (1)
West Brompton	01	Untimed temporary exemption (7)
Westbourne Park	01	Untimed temporary exemption (6)
Westbourne Park	02	Untimed temporary exemption (6)
Westminster	01	Untimed temporary exemption (1)
Westminster	02	Untimed temporary exemption (1)
Wimbledon Park	01	Untimed temporary exemption (7)
Wimbledon Park	02	Untimed temporary exemption (7)
Wood Lane	02	Untimed temporary exemption (1)

Untimed temporary exemptions requested until such time as:

- (1) until such time as an appropriate solution is identified for severely curved platform
- (2) until such time as an appropriate solution is identified for severely curved and LU compromise height platform
- (3) until such time as an appropriate solution is identified to allow interchange with a severely curved platform
- (4) until such time as level-access interchange is possible with rolling stock on other lines.
- (5) for Piccadilly line platform with occasional District line use
- (6) until such time as the platform becomes step-free
- (7) until such time as the platform becomes step-free and an appropriate solution is identified for severely curved and/ or LU compromise height platforms

4. Relevant requirements from which exemption is sought

Schedule 1, Part 1 (General Requirements)

• Paragraph 1(2)

1(1) Subject to sub-paragraph (2), when a wheelchair-compatible doorway in a rail vehicle is open at a platform at a station, or at a stop, a boarding device must be fitted by the operator between that doorway and the platform, or the stop, if a disabled person in a wheelchair wishes to use that doorway.

1(2) Sub-paragraph (1) does not apply where the gap between the edge of the door sill of the wheelchair-compatible doorway and the platform, or stop, is not more than 75 millimetres measured horizontally and not more than 50 millimetres measured vertically.

5. Technical, economic and operational reasons why exemption is sought

London Underground is requesting a series of temporary exemptions to enable us to provide useful level-access between the train and platform within the constraints of the infrastructure on the District, Circle and Hammersmith & City lines.

Our aim is to provide a 'turn up and go' service which allows passengers the greatest level of independent access without the need for staff intervention and assistance. However, this is made more difficult because many of our stations and tunnels are over 100 years old and were never designed to give level-access. These stations are often difficult to alter due to their physical layout and constraints, especially as many are underground.

We understand the importance of a seamless accessible route from the street through the station and on to the train. We recognise that, in addition to access barriers between the street and platforms, the step and gap between the platform and train can cause a significant problem for many passengers. Therefore, we have invested a great deal of time and money to investigate and develop appropriate permanent solutions.

The new 'S Stock' train has been designed with a lower floor than the old 'A' 'C' & 'D' Stock trains currently in use on the District, Circle, Hammersmith & City and Metropolitan lines. This will improve access at all platforms by reducing the vertical step between the train and platform at standard LU height platforms. However this will not make the vehicles compliant at all platforms, so additional works will be required at a number of platforms to bring the step and gap within the dimensions allowed by RVAR.

LU does not believe that manual boarding ramps deployed by staff are an appropriate solution at our stations. Instead we are proposing to use physical improvement works to provide permanent, reliable and independent access to customers. A more detailed explanation of why we do not believe ramps are appropriate is given in Section 7.

The use of permanent physical infrastructure improvements rather than temporary solutions requiring staff intervention has been supported by DfT, DPTAC and Parliament during the introduction of previous fleets. However this preferred method of compliance is a very expensive option, requiring a significant amount of capital expenditure at each platform.

As a public body, LU has a responsibility to spend our limited funding wisely and fairly. This is particularly important at this time as, like many organisations, LU has seen a significant reduction in our income during the recession. In addition further reductions are anticipated as the implications of the Government Spending Review in October 2010 become clearer. Unfortunately these reductions are affecting our ability to deliver both improvements and business as usual activities in all areas of our service, and will continue to do so for some time.

LU is committed to providing independent access to our service whenever possible and practicable. However due to infrastructure restrictions and the nature of the SSR service, even if expensive infrastructure alterations were made to every SSR platform, disabled passengers would still not have effective or appropriate access at a significant number of stations and platforms.

At some locations it is not physically possible to bring the step and gap within the maximum dimensions because of the curvature or height of the platform. While at other locations, works would enable passengers to get off the train but they would not be able to leave the platform as there is no step free route through the station. In addition, it is judged that in a small number of locations the limited customer benefit offered by a platform could be more economically and better delivered through alternative means in the short term.

Therefore LU has worked with DfT and DPTAC to develop a phased programme of timed and untimed exemptions which would enable us to focus on the platforms which will give maximum benefit to disabled customers within a realistic timescale. We believe that this is the most effective use of our resources, taking account of the reality that regrettably many underground stations are not currently accessible to all passengers, especially wheelchair users and others with mobility impairments.

To take account of all the complexities and variations of platform infrastructure and service on the SSR, it was necessary to use a 3 stage process to analyse the platform infrastructure and service in order to identify the final appropriate solutions and programme:

- Stage 1 Categorisation of platforms using service patterns and the Step-Free Access Programme
- Stage 2 Consideration of infrastructure constraints
- Stage 3 Consideration of other relevant factors including future works on other lines, funding constraints and value for money

In total LU has budgeted over £22million¹² to bring 90 Circle, District and Hammersmith & City line platforms which will give most benefit to customers and are technically possible, within the required dimensions of RVAR.

¹² As this budget includes an element of risk and contingency, it is expected that the final costs will be less; however this cannot be quantified until the work is completed.

Stage 1 - Categorisation of platforms

In agreement with DfT and DPTAC, LU have developed a categorisation system which enables us to prioritise platforms which will give maximum benefit to passengers by linking platforms works to the existing accessibility of the whole station. It prioritises platforms which provide:

- existing or planned step-free access between street & platform
- step-free interchange routes between platforms, or
- potential turning or terminus points.

This approach was agreed with DfT and DPTAC during the development of the Victoria Line Upgrade (VLU) exemption in 2008, and was subsequently used for the 'S8' Metropolitan line exemption application in 2009. It was supported as a pragmatic approach by all involved during the debates in Parliament for both applications.

To enable us to identify the platforms where useful level-access should be provided we have used the categorisation system set out below.

Category 1: Existing step-free stations and platforms

Currently 62 stations across the network are step-free from street to platform. We have spent over £200 million over the last 5 years and will continue to invest in step-free access schemes within our funding constraints.

On the Circle, District and Hammersmith & City lines 22 stations are step-free from street to platform, with an additional 3 being step-free in one direction only. A map showing current and planned step-free stations on these lines can be found in Annex A.

At these platforms we intend to bring the step and gap between the train and platform within the required dimensions of RVAR before the introduction of the 1st new 'S7' train into passenger service in order to provide a complete step-free and level-access route from the train on to the platform and out of the station.

We will therefore not be requesting exemptions for these platforms, unless there are additional infrastructure constraints – further details about these constraints are given later in this section.

A list of all the platforms in Category 1 and the exemptions requested can be found in Annex B

Category 2: Planned step-free stations and platforms

LU has a programme of step-free access works which will undertake major infrastructure works, such as the installation of lifts, to make accessible routes through stations without the need to use stairs or escalators. Plans are in place to make 9 more stations step-free over the next 10 years including Blackfriars, Ealing Broadway, Farringdon, Paddington, Victoria and Whitechapel stations on the Circle, District and Hammersmith & City lines. These improvements will be delivered as part of our major station enhancement projects, our Olympic & Paralympic access programme, Crossrail or the Thameslink upgrade.

A map showing current and planned step-free stations on these lines can be found in Annex A.

It is our intention to link the two programmes of work together so that the works to give level-access between the train and platform will take place as part of, or in preparation for the works to provide step-free access between the platform and street. This will enable us to provide a fully seamless step-free route from the train through the station and out to the street.

In addition we have given a commitment that any future increase the number of stepfree stations will include level-access between the platform and train as an integral part of the plans – subject to the restrictions outlined in later in this section.

As the roll out of the new 'S7' trains is phased over a number of years, the majority of these platforms will be made step-free prior to the introduction of the 1st 'S7' vehicle at these platforms. However we are requesting timed exemptions for those platforms which will be served by 'S7' trains prior to being made step-free in order to link these programmes of work together.

A list of all the platforms in Category 2 and the exemptions requested can be found in Annex C.

<u>Category 3: Existing or planned step-free interchange between platforms or</u> <u>stations and platforms regularly used as termination or reversing points</u>

LU recognises that some platforms may also be of significant benefit to disabled passengers even if there isn't a complete step-free entry/exit route from the platform to street.

At some stations passengers may be able to interchange between branches, lines and other services within the station to continue their journey. Therefore we have included platforms which have a step-free interchange route to other platforms or services.

In many areas of the network, a duplicate service with identical interchange options is offered at adjacent stations. For example the 4 stations between Wood Lane and Paddington stations which are served by both the Circle and Hammersmith & City lines. We do not believe that undertaking expensive works to give level-access to all of these platforms would give good value for money as it offers little additional benefit for passengers. Therefore we have focused on platforms which provide the first or last opportunity to interchange between the different lines and branches, and platforms which offer multiple interchange opportunities, as these are the most beneficial to passengers.

In addition there are a numbers of situations and locations when all passengers may need to disembark from the train. These include:

• Terminus stations at the end of the line.

- Stations where the scheduled service terminates prior to the end of the line for example Eastbound District line trains often terminate at Barking rather than running through to Upminster.
- Terminating platforms these may be platforms near to depots where trains may be taken out of service and passengers have to change to another platform to continue their journey.
- Platforms where unscheduled reversing or terminating regularly takes place. The frequency with which this happens varies, at some platforms this could be a daily occurrence, while at others it could happen weekly or less often.

As in most cases platforms in this category will give immediate benefit, we intend to bring the step and gap within the required dimensions before the introduction of the 1st new 'S7' train in service through these platforms.

We will therefore not be requesting exemptions for these platforms - except at platforms with additional infrastructure or other constraints – further details of these constraints are given in this section.

A list of all the platforms in Category 3 and the exemptions requested can be found in Annex D.

Category 4: Stations and platforms with no existing or planned step-free routes or interchange or where trains do not terminate or reverse

We believe that platforms in this category would be of little if any benefit to disabled passengers as they do not offer any of the step-free entry/exit or interchange routes outlined in the earlier 3 categories.

Therefore we are requesting temporary exemptions for platforms in this category until such time as there is a step-free access route from the platform out of the station or between platforms, except where there are additional infrastructures constraints – further details are given later in this section. Due to the lower floor on S7 trains some straight and LU standard height platforms in this category may be within the permitted dimensions of RVAR without additional works.

Due to the variation or platform infrastructure and service, the rationale behind the exemptions requested for this category can be further divided into the following 5 sub-categories:

- Untimed temporary exemptions requested until such time as the platforms are made step-free
- Untimed temporary exemptions requested until such time as the platforms are made step-free and an appropriate solution is identified for severely curved and/or LU compromise height platform
- Untimed temporary exemptions requested until such time as an appropriate solution is identified to allow interchange with a severely curved platforms
- Untimed temporary exemptions requested until such time as level-access interchange is possible with rolling stock on other lines

• Untimed temporary exemptions requested as Piccadilly line platform with occasional District line use

A list of all the platforms in Category 4 and the exemptions requested can be found in Annex E.

Stage 2 – Consideration of infrastructure constraints

Our ability to bring the step and gap within the required dimensions is affected by the varied height and curvature of the platforms served by the new 'S7' trains.

Platforms on the Circle, District and Hammersmith & City lines are set at 3 different heights:

- LU Standard height platform set at 950mm above the track
- BR Compromise height platform set at 915mm above the track
- LU Compromise height platform set at 840mm above the track

Compromise Height platforms are those which are also used by other LU or National Rail lines. These platforms are set at a non standard LU height to make allowance for the different height, size and shape of trains which use the same track and platforms. They are so called as they are set at a compromise height between the different types of train that use them.

Platforms on these lines also vary in relation to radius of curve:

- Straight platforms with a radius of more than 1000m
- Curved platforms with a radius of between 601m and 1000m.
- Severely Curved platforms with a radius of less than 6000m.

In addition some platforms are both curved or severely curved **and** set at a compromise height.

Due to this variety, a single level-access solution for all platforms is not a viable option. LU has therefore invested significant resources to investigate different solutions and taken a platform by platform approach.

Details about the nature of each of these platform types and the investigative work undertaken by LU in respect of level-access solutions are given below, but in summary;

Our work has meant that we have identified feasible solutions for those platforms which are:

- LU Standard Height or BR Compromise Height, which are also
- Straight or Curved

We have also been able to identify solutions for a limited number of Compromise Height (LU) platforms and Severely Curved platforms. However, appropriate solutions have not been found for the majority of Compromise Height (LU) and/or Severely
Curved platforms. We do not believe that it is physically possible to bring the step and/or gap at these platforms within the maximum permitted dimensions at this time.

We are therefore requesting untimed temporary exemptions for a number of Severely Curved and/or Compromise Height (LU) platforms in Categories 1, 2 & 3 as set out in the following sections.

Straight and Standard Height Platforms

These are platforms which are set at the standard LU platform height of 950mm above the track and which are straight. In technical terms straight means having a radius of more than 1000m along the length of the platform.



Photograph showing straight platform at Barbican¹³

The lower floor of the new 'S7' trains will bring the majority of these platforms within vertical compliance. A mixture of localised track and platform works will make these platforms both vertically and horizontally compliant in line with the dates set out in Section 3.

A list of the straight and standard height platforms in Categories 1, 2 & 3 and any exemptions requested can be found in Annex F.

Curved Platforms

These are platforms where the radius is between 601m and 1000m.

At curved platforms, the standard LU platform clearance offsets are increased as the train needs to sit further away from the platform at certain points to stop it from hitting the platform as it passes through. This increases the horizontal gap between the platform and some doors along the length of the train.

¹³ Still image taken from video footage shot from the driver's cab of an 'A' Stock Metropolitan line train.

At trains on the inside of a curve (concave platforms), the gap is largest at doorways at the centre of the carriage with smaller gaps at doorways at the ends of the carriage. This is referred to as 'centre throw'.

At trains on the outside of a curve (convex platforms), the gap is largest between the ends of the carriage and the platform, with a smaller gap at the centre of the carriage. This is referred to as 'end throw'.



The effect of platform curvature and door position on stepping distance¹⁴

As the degree of the curve increases, the greater the 'throw' and the larger the gap needed to stop the train striking the platform. The consequence of this is that the step at the doorways gets larger.

LU has tried to minimise the impact of these 'throws' by positioning the wheelchair compatible doorways over the bogies (fixed wheel axles) at the ends of 2 carriages in the middle of the train which will give the smallest gap in most cases.

We have investigated a variety of solutions to make these platforms compliant. These solutions depend on the exact dimensions and characteristics of each platform and vary by location, on a door specific basis.

These platforms will be made compliant using a mixture of localised track and platforms works in line with the dates set out in Section 3.

¹⁴ Diagram from DfT Significant Steps Research Report. This is for illustrative purposed only and it should be noted that the 'S7' vehicles only have 3 doors.



Photograph showing curved platform at Kings Cross¹⁵

¹⁵ Still image taken from video footage shot from the driver's cab of an 'A' Stock Metropolitan line train.

Severely Curved Platforms

These are platforms where the radius of the platform is less than 600m.

These platforms have the same issues as curved platforms. However, due to the more extreme curvature and the increased risk of the train striking the platform, the gap between the train and the platform is larger at some points than at curved platforms. This means that the track and platform solutions being used for curved platforms are not always appropriate for severely curved platforms.

Due to the non-uniform nature of platform curvature in relation to the wheelchair accessible doors, we have been able to achieve compliance at some severely curved platforms by moving stopping positions or using by re-aligning the track, however this is not appropriate at all locations.

At some of these platforms we are only able to achieve compliance at shorter sections of the platform, enabling level-access boarding/ alighting at 1 set of wheelchair compatible doors rather than the 2 provided. This does however still enable direct level-access to the 2 regulated wheelchair spaces on the train, ensuring compliance.



Photograph showing severely curved platform at Great Portland St¹⁶

In addition due to the articulated nature of the new 'S7' vehicles, wheelchair users will be able to travel between the carriages thereby enabling them to use all 4 wheelchair spaces if necessary.

¹⁶ Still image taken from video footage shot from the driver's cab of an 'A' Stock Metropolitan line train.

For these platforms we will put in place additional management procedures, customer information and signage to ensure that wheelchair users are aware of the restricted boarding area.

At other locations we have investigated additional solutions, including:

Static Gap Fillers

These are sections of material which can be attached to either the edge of the platform or train to reduce the horizontal gap. They are strong enough to stand on but are deformable so that they can move without damaging the train if hit. However these are not suitable to bridge the size of the gap at severely curved platforms.

Active Gap Fillers

LU employed an independent, external company, Creactive Design, to undertake a detailed study of active, platform-based, mechanical gap fillers and create potential concept designs. For example a metal structure which is built into the platform and automatically deploys when the train stops.

This study found that there is no appropriate 'off the shelf' solution currently available. Discussions based on this study within LU concluded that, although a potential solution could be developed, it would take a significant length of time, as we would need to further investigate the potentially significant impacts on safety, our ability to incorporate such devices into existing platform structures, operational systems and passenger behaviour etc. Concerns were also raised about the negative impact on dwell times¹⁷, as it was estimated that the additional time needed for any such device to be deployed and retracted safely could be significant. Therefore, there is no current viable solution within LU for severely curved platforms. We are happy to share the contents of the Creactive Design Report with DfT if required.

As stated earlier, LU does not believe that Manual Boarding Ramps are an appropriate solution at our stations. A more detailed explanation of why we do not believe manual boarding ramps are appropriate is given in Section 7.

As there is currently no appropriate solution available, we are requesting temporary exemptions, until such a time as compliant solution for severely curved platforms can be identified or developed.

A list of the severely curved platforms in Categories 1,2,3 and any exemptions requested can be found in Annex H.

 $^{^{\}rm 17}$ The time that the train is stationary at the platform.

BR Compromise Height Platforms

These are platforms that are used by both 'S7' trains and mainline National Rail services.

These platforms are located on the western section of the District line between Richmond and Gunnersbury, where the platforms are also used by London Overground services.

These platforms are set at a height of 915mm to take account of the different height of the District line and National Rail trains.



District line 'D' Stock Train at Gunnersbury London Overground Class 378 Train at Gunnersbury

We have worked with London Overground to agree an appropriate solution, and will be raising the height of these platforms to the LU Standard Height of 950mm. This will also improve the stepping distances for London Overground trains, although they will still not be within the required RVAR dimensions.

A list of all BR compromise height platforms in Categories 1,2,3 and any exemptions requested can be found in Annex I.

As part of the SSR Upgrade, we have already successfully modified a number of BR compromise height platforms on the Metropolitan line between Amersham and Harrow-on-the-Hill to the LU standard height of 950mm, in preparation for the introduction of new 'S8' trains.

LU Compromise Height Platforms

These are platforms that will be used by both 'S7' trains and the Piccadilly line which uses smaller "Tube" trains. These platforms are set at a height of 840mm to take account of the different height of the different vehicles.



Photograph of 'D' Stock Sub Surface train & Piccadilly line 'Tube' train

This affects the 25 platforms on the western section of the District line between Barons Court and Ealing Common, where the platforms are also used by the Piccadilly line.

As shown in the diagram below, passengers have to step up into the larger 'S7' trains and step down in to the smaller Piccadilly line trains.



Sub-Surface Train

The difference in floor heights means it is more complicated to modify LU compromise height platforms to provide a step and gap within the tolerances permitted by RVAR for both stock types.

Raising the platform to provide level-access for the 'S7' District line trains would increase the step down into a Piccadilly line train. This may have safety implications relating to both the size of the step and also the increased risk of people hitting their heads on the lower door frame of Piccadilly line trains.

Alternatively, lowering the platform to provide level-access between the platform and the Piccadilly line would increase the step between the District line trains and platform to 270mm for an existing 'D' stock train and 140mm for a new 'S7' train.

Due to the nature of the service and network lay-out in this area, the schedules and platform usage include a significant amount of operational flexibility between the District and Piccadilly line platforms. The specific degree and nature of the service and operational flexibility needed at individual platforms varies, but can be broadly divided into 3 categories:

- Shared platforms used equally by both lines.
- Platforms which are allocated exclusively to either the District or Piccadilly line in train services but which are regularly used by the other line on an unscheduled basis during disrupted operation.
- Island platforms with segregated service.

These variations, pose different types and levels of challenge in respect of levelaccess provision. In some cases, these are compounded by constraints relating to platform curvature as described previously.

As a result of these variations, and other local factors, LU's approach to achieving compliance at LU compromise height platforms also varies.

To reflect this we are applying for the following exemptions relating to compromise height platforms in Categories 1, 2 & 3:

No Exemptions Requested

In 2008 London Underground commissioned an independent external company, Frankhams Consultancy Group to investigate the options and impacts at shared compromise height platforms to achieve RVAR compliance. The Frankhams Report concluded that, whilst technical solutions to achieve compliance for one rolling stock type were already available, e.g. platform humps or track adjustments, such changes would have a significant negative impact upon safety and operations of the other rolling stock using that platform.

The report further concluded that service pattern changes, which would effectively segregate rolling stock so that they do not use the same platforms, would be the only feasible way of achieving RVAR compliance at those sites. Such service segregation would then permit the usual technical solutions to be used. We are happy to share the contents of this report with DfT.

The effect on customers of segregating the District and Piccadilly lines at Hammersmith and Turnham Green would be significant. Piccadilly line trains regularly use the District line platforms during disruption. This has significant benefit to customers, which include:

- Being able to maintain a Piccadilly line services between central and west London, in particular Heathrow Airport, when they would otherwise have to be suspended.
- Being able to maintain a service to Chiswick Park and Stamford Brook stations using the Piccadilly line during unplanned District line suspensions, when otherwise these stations would have to be closed.

LU estimates the total disbenefit to customers of the interoperability being withdrawn as being in the range of £1.47 million to £3.01million per year¹⁸. Given the high customer disbenefit that would accrue from segregating Piccadilly and District line operations; we are keen to find alternative solutions which would provide level-access to 'S7' trains whilst still enabling the continued safe operation of Piccadilly line trains at these platforms.

We do not believe that the 2008 Frankhams Report was exhaustive in its consideration of the impact of the increased step down into a Tube stock train at platforms that have been modified to provide level-access with 'sub-surface' stock trains.

Therefore we are conducting further analysis and a full safety risk assessment to better understand how customers would react to any increased step.

We believe that this will enable us to identify and implement an appropriate solution, along with any additional management measures that would be required, to effectively manage any impact of this increased step down without unduly affecting the operation of Piccadilly line at the 3 key platforms at Hammersmith and Turnham Green

The exemption granted to the new 'S8' Metropolitan line vehicles included temporary exemptions until August 2013 for the LU compromise height platforms at Uxbridge, Hillingdon and Rayners Lane which are also served by Piccadilly line trains. Although there are some differences and additional issues on this section of the network, if an appropriate solution is identified that allows a compliant step and gap to be achieved at LU Compromise Height platforms on the 'S7' network, we will look at whether this solution could also be used at these platforms.

As stated earlier, LU does not believe that Manual Boarding Ramps are an appropriate solution at our stations. A more detailed explanation is given in Section 7.

We believe that there is sufficient time for us to investigate, test and implement an appropriate solution prior to the 1st new 'S7'train in service at these platforms in May 2013. Therefore we are not requesting an exemption for these platforms.

¹⁸ Based on each disruption incident lasting between 10 -20 minutes This does not take account of benefit during planned closures.

However if at any point during the investigation or trial it is subsequently found that an appropriate solution is not feasible, we will have sufficient time to submit a further exemption application.

We will involve DfT, ORR and DPTAC as appropriate in the investigation and trials.

Untimed Temporary Exemptions Requested – Severely Curved Platforms

We are requesting untimed temporary exemptions for LU compromise height platforms that are also severely curved. These exemption applications are explained in detail earlier in this section.

This applies to 4 platforms at Acton Town and Ealing Common stations on the western section of the District line.

Untimed Temporary Exemptions Requested - Piccadilly Line Platforms

We are requesting untimed temporary exemptions for LU compromise height platforms that are allocated exclusively to Piccadilly line trains in scheduled service, but which are also regularly used by District line trains during disruption on this section of the network.

This flexibility provides significant benefit to customers, in particular in enabling us to maintain a service to Heathrow Airport.

As the normal scheduled service at these platforms is provided by the Piccadilly Line, we believe that these platforms should – where physically possible - enable levelaccess to the Piccadilly line trains rather than the 'S7'. Enabling level-access to the 'S7' trains could actually have a detrimental impact on the Piccadilly line increasing boarding times which would lead a degraded service.

This applies to nine platforms at Hammersmith, Acton Town, Turnham Green, Stamford Brook and Ravenscourt Park on the western section of the District line between Acton Town and Hammersmith.

A list of all LU compromise height platforms in Categories 1,2,3 and any exemptions requested can be found in Annex J.

<u>Stage 3 – Consideration of other relevant factors including funding constraints</u> and value for money

As explained earlier, the recent reduction in our income due to the current economic climate is having significant impact on our ability to deliver both improvements and business as usual activities across all areas of our service.

LU is currently scrutinising all aspects of our business to identify where savings can be made or costs reduced. One way that LU is aiming to manage this situation is by deferring projects and activities for a number of years, enabling us to reduce or spread the costs and impact of spending on the business.

Within the SSR upgrade project it has been identified that substantial savings can be made by deferring works at a number of platforms until the 2015/16 financial year without significantly compromising the overall accessibility of the network.

Therefore we are requesting timed temporary exemptions for 6 platforms until 31st March 2016.

Deferring these platforms will also help us to safeguard the reliability of our ability to deliver the platforms which will provide maximum benefit to disabled customers on time and within budget.

The 6 platforms are those that we believe would only provide limited immediate benefit to disabled people, these include;

- Platforms where duplicate or improved interchange options are available at other platforms.
- Platforms where S7 trains will terminate on a less than daily basis

We are confident that in the short term the benefits these platforms would provide can be delivered on a temporary basis through level-access provision at other platforms and / or by further mitigating actions by LU. Appropriate management procedures, including customer information, will be put in place for these platforms to ensure that disabled passengers are not stranded on trains or on the platform.

A list of all platforms deferred until 31st March 2016 and the exemptions requested can be found in Annex K.

6. The effect which non-compliance would have on a disabled person's ability to use rail vehicles of the description to which the application relates

LU has sought to minimise the effect of these exemptions on disabled peoples' ability to travel.

Whilst LU understands that the size of the step and gap between the train and platform will cause a problem for a number of disabled people, in particular some wheelchair users, we believe that this approach, which broadly follows the approach used for the Victoria Line and 'S8' Upgrade projects, is the most appropriate way forward at this time.

An overview of mitigating steps is outlined in Section 7 of this application.

The lower floor design of the new 'S7' train will improve access at all platforms by reducing the vertical step, even if it does not bring it within the dimensions required by the RVAR. This will benefit a large number of disabled passengers - however we are aware that, regrettably, some disabled people, in particular wheelchair users, will not be able to board the trains at platforms that are both LU compromise height and severely curved unless they are able to negotiate the step and gap.

The majority of the exemptions we have applied for relate to platforms in Category 4, which do not currently have a step free route through the station or any useful interchange. We do not believe that these exemptions will further adversely affect a disabled person's ability to use the 'S7' vehicles in these locations. Any future plans to make these platforms step free will include works to bring the step and gap within the permitted dimensions, unless there are any additional infrastructure constraints such as severe curvature.

At platforms where work is planned, we do not believe that phasing these works, so that they take place at the same time as the works to make the whole station step-free or enable level-access to vehicles on other lines, will have a significant effect on disabled peoples' ability to travel, because of existing access barriers between the street and platforms.

Furthermore, we believe that joining up these work programmes will prevent passengers from getting stranded on platforms at stations where there is no stepfree route from the platform, thereby avoiding the confusion, inconvenience and distress that a passenger could experience in these circumstances.

Appropriate communication and management procedures will be put in place to ensure that disabled passengers are not stranded on trains or platforms at these stations.

In the event of service failure or an emergency, passengers will be 'detrained' using the appropriate operational procedure and evacuation equipment.

7. Any measures which could be taken to enable disabled persons to use the rail vehicle if exemption sought is granted

LU is requesting a series of temporary exemptions to take account of the different issues relating to the varied nature of platforms and stations on the Circle, District and Hammersmith & City lines.

The number of locations affected by this exemption will reduce as works are carried out to make stations step-free.

At stations where work is planned, the exemptions will enable LU to undertake platform works at the same time as or in preparation for, the whole station works or works to give level-access to trains on other lines. This will enable us to provide appropriate, accessible and sustainable solutions to give greater independent access for disabled passengers. As these temporary exemptions relate to stations which do not have a step-free route through the station, LU does not believe that it would be appropriate to provide any interim measures to give level-access to the platform. Such measures would increase the risk of passengers being stranded on the platform after getting off a train only to find that there is no accessible route from the platform out of the station.

For the same reason, we do not believe that it would be appropriate to provide interim measures to give level-access to platforms in Category 4.

As explained earlier in this application, we do not believe that there are any appropriate permanent or temporary solutions currently available that would give access at severely curved and/or LU compromise height platforms.

LU does not believe that manual boarding ramps are appropriate or safe to be used in the Underground environment due to the constraints of the infrastructure and intensity of the service.

In particular, we are concerned about the impact that deploying these ramps would have on the safety of our staff, disabled passengers and other passengers. LU differs from the National Rail network in that it has narrower platforms, and generally a higher density of users, which makes the use of ramps a greater hazard.



Photograph showing densely packed platform at Kings Cross ¹⁹

As LU services also usually have considerably shorter dwell times at the platform than National Rail services, it is likely that the introduction of ramps would increase this dwell time, delaying not only that train, but also those behind it. Any increase in dwell times would have a significant impact on the overall service and would reduce the benefits of the Upgrade Programme.

The use of ramps will have a significant impact on our staffing levels and costs. It would also mean a significant change to the existing roles and responsibilities of our station staff.

¹⁹ Still image taken from video footage shot from the driver's cab of a Metropolitan line train.

In addition, we do not believe that ramps would offer an appropriate solution to all passengers who may struggle with the step and gap as they are likely only to be deployed for wheelchair users.

Instead, we are advocating the use of permanent physical improvement works and structures such as 'platform humps' and track lowering/raising to provide permanent, reliable and independent 'turn up and go' access to customers without the need for staff intervention or assistance.

We recognise that the Underground offers limited travel opportunities to a number of disabled people in some areas. However Transport for London (TfL) - of which London Underground is a part – does operate a number of other transport modes which cover the area served by the SSR lines, although it is acknowledged that these may not offer a directly comparable service.

A summary of some of the journey options available is shown below:

TfL Bus Services

All of London's buses are now low-floor with designated wheelchair spaces and priority seats. Most buses are equipped with a state-of-the-art information system 'iBUS' that will provide next stop information in visual and audible formats as well as real-time passenger information at bus stops and on board buses.

TfL Assisted Travel services

Door-to-door services, such as Dial-a-Ride and Taxicard, offer subsidised personal travel for older and disabled people who find it difficult or impossible to use mainstream public transport. TfL has provided a significant level of funding to increase the provision of these door-to-door services for the people who require them. It has also implemented "Capital Call" which provides services with private hire vehicles in areas poorly served by black cabs.

Taxi and Private Hire Vehicles

TfL's Public Carriage Office regulates taxi and private hire trade in London and ensures that all 20,000 black cabs are accessible for wheelchair users.

Although these alternative modes may not provide directly comparable services and journey times, some users may be able to reduce the additional journey time for some longer journeys - such as Stamford Brook to West Ham or Notting Hill Gate to West Ham - by using one of these other modes of travel to the nearest station with step-free and level-access, for example Hammersmith or Earls Court. From here they could continue their journey by Underground.

To ensure that customers are both aware of the benefits of the new vehicles and any access limitations, customer information about the improved accessibility of the 'S7' line trains and stations will form a significant part of the extensive overarching SSR Upgrade information and communication campaign.

In addition an 'accessibility' specific campaign will run alongside, giving more detailed information to customers about both improvements to the service and any ongoing access limitations. As well as existing customers, this information

campaign will target disabled Londoners who live or work near stations on these lines who may not previously have been able to access them.

We will use this information campaign to give customers and local people more detailed information about the timescales and accessibility improvements at individual stations.

Customers will also be able to get information about the accessibility of individual platforms, including information about the size of the step and gap in the following ways:

- Step-Free Tube Guide: this guide is designed for people who need specific information about the size of the steps and gaps between the train and the platform, and information on which stations are step-free from street to platform. Detailed information on step-free stations on all the SSR lines will be included in this guide.
- TfL Journey Planner website: this contains options to 'personalise' a journey search by a number of accessibility criteria, including 'wheelchair accessible vehicles'. TfL Journey Planner will be updated as appropriate to ensure that suitable journey planning information for the SSR line stations will be given. This information can also be obtained by phone from the TfL Customer Service Centre.
- Station staff will be provided with specific instructions, and where necessary local training, to ensure that they are able to provide suitable assistance to customers requiring an accessible journey, including alternative journey options.

8. Any proposals for later modification of rail vehicles to secure compliance with RVAR within a stated period

At stations where work is planned, the temporary exemptions will enable LU to phase the platform works in line with the whole station works.

Our medium and long term solutions will provide an appropriate, accessible and sustainable solution to give greater independent access for disabled passengers at these stations.

The number of locations affected by this exemption will reduce as works are carried out to give level-access between the platform and trains.

London Underground has not applied for a permanent exemption for platforms where compliance is not currently possible as we are aware that technology and circumstances change. Consideration of future compliance methods will be a key factor to any future plans.

9. Unless permanent exemption sought, the period during which exemption is to apply.

London Underground is requesting temporary exemptions in line with the timescale set out in Section 3.



Annex A: Map Showing Current and Planned Step-free Stations on the Circle, District and Hammersmith & City Lines

Station	Plat No.	Exemption Requested	Justification for Exemption Request
Acton Town	01	Untimed	Untimed temporary exemption due to severe curvature & LU compromise height
Acton Town	04	Untimed	Untimed temporary exemption due to severe curvature & LU compromise height
Barking	1a	None	Will be compliant prior to 1st train in service at this platform
Barking	02	None	Will be compliant prior to 1st train in service at this platform
Barking	03	None	Will be compliant prior to 1st train in service at this platform
Barking	06	None	Will be compliant prior to 1st train in service at this platform
Dagenham Heathway	01	None	Will be compliant prior to 1st train in service at this platform
Dagenham Heathway	02	None	Will be compliant prior to 1st train in service at this platform
Earl's Court	01	None	Will be compliant prior to 1st train in service at this platform
Earl's Court	02	None	Will be compliant prior to 1st train in service at this platform
Earl's Court	03	None	Will be compliant prior to 1st train in service at this platform
Earl's Court	04	None	Will be compliant prior to 1st train in service at this platform
East Ham	01	None	Will be compliant prior to 1st train in service at this platform
East Ham	02	None	Will be compliant prior to 1st train in service at this platform

Station	Plat No.	Exemption Requested	Justification for Exemption Request
Elm Park	01	None	Will be compliant prior to 1st train in service at this platform
Elm Park	02	None	Will be compliant prior to 1st train in service at this platform
Euston Square	01	None	Will be compliant prior to 1st train in service at this platform
Fulham Broadway	01	Untimed	Untimed temporary exemption due to severe curvature
Fulham Broadway	02	Untimed	Untimed temporary exemption due to severe curvature
Hammersmith (District)	01	None	Will be compliant prior to 1st train in service at this platform
Hammersmith (District)	04	None	Will be compliant prior to 1st train in service at this platform
Hammersmith (H&C)	01	None	Will be compliant prior to 1st train in service at this platform
Hammersmith (H&C)	02	None	Will be compliant prior to 1st train in service at this platform
Hammersmith (H&C)	03	None	Will be compliant prior to 1st train in service at this platform
Kensington Olympia	01	Untimed	Untimed temporary exemption due to severe curvature
Kew Gardens	01	None	Will be compliant prior to 1st train in service at this platform
Kew Gardens	02	Untimed	Untimed temporary exemption due to severe curvature
King's Cross	01	None	Will be compliant prior to 1st train in service at this platform
King's Cross	02	None	Will be compliant prior to 1st train in service at this platform
Liverpool Street	01	None	Will be compliant prior to 1st train in service at this platform

Station	Plat No.	Exemption Requested	Justification for Exemption Request
Richmond	04	None	Will be compliant prior to 1st train in service at this platform
Richmond	05	None	Will be compliant prior to 1st train in service at this platform
Richmond	06	None	Will be compliant prior to 1st train in service at this platform
Richmond	07	None	Will be compliant prior to 1st train in service at this platform
Paddington (Circle)	2	None	Will be compliant prior to 1st train in service at this platform
Southfields	01	None	Will be compliant prior to 1st train in service at this platform
Southfields	02	None	Will be compliant prior to 1st train in service at this platform
Upminster	03	None	Will be compliant prior to 1st train in service at this platform
Upminster	04	None	Will be compliant prior to 1st train in service at this platform
Upminster	05	None	Will be compliant prior to 1st train in service at this platform
Upney	01	None	Will be compliant prior to 1st train in service at this platform
Upney	02	None	Will be compliant prior to 1st train in service at this platform
West Brompton	02	None	Will be compliant prior to 1st train in service at this platform
West Ham	01	None	Will be compliant prior to 1st train in service at this platform
West Ham	02	None	Will be compliant prior to 1st train in service at this platform
Westminster	01	Untimed	Untimed temporary exemption due to severe curvature
Westminster	02	Untimed	Untimed temporary exemption due to severe curvature

Station	Plat No.	Exemption Requested	Justification for Exemption Request
Wimbledon	01	None	Will be compliant prior to 1st train in service at this platform
Wimbledon	02	None	Will be compliant prior to 1st train in service at this platform
Wimbledon	03	None	Will be compliant prior to 1st train in service at this platform
Wimbledon	04	None	Will be compliant prior to 1st train in service at this platform
Wood Lane	01	None	Will be compliant prior to 1st train in service at this platform
Wood Lane	02	Untimed	Untimed temporary exemption due to severe curvature

Station	Plat No.	Planned SFA Date	Exemption Requested	Justification for Exemption Request
Barbican	01	2018	None	Will be compliant prior to 1st train in service at this platform
Barbican	02	2018	None	Will be compliant prior to 1st train in service at this platform
Blackfriars	01	Dec 2011	None	Will be compliant prior to 1st train in service at this platform
Blackfriars	02	Dec 2011	None	Will be compliant prior to 1st train in service at this platform
Cannon Street	01	Dec 2012	Untimed	Untimed temporary exemption due to severe curvature
Ealing Broadway	07	2017	Dec 2017	Will be compliant prior station becoming step-free
Ealing Broadway	08	2017	Dec 2017	Will be compliant prior station becoming step-free
Ealing Broadway	09	2017	Dec 2017	Will be compliant prior station becoming step-free
Farringdon	01	Dec 2010	Untimed	Untimed temporary exemption due to severe curvature
Farringdon	02	Dec 2010	Untimed	Untimed temporary exemption due to severe curvature
Paddington (H&C)	15	Dec 2014	None	Will be compliant prior to 1st train in service at this platform
Paddington (H&C)	16	Dec 2014	None	Will be compliant prior to 1st train in service at this platform
Victoria	01	2017	Untimed	Untimed temporary exemption due to severe curvature
Victoria	02	2017	Untimed	Untimed temporary exemption due to severe curvature
Whitechapel	01	2017	None	Will be compliant prior to 1st train in service at this platform
Whitechapel	02	2017	None	Will be compliant prior to 1st train in service at this platform

Annex C: Category 2 – SSR Platforms with Planned Step-Free Access (SFA)

Annex D: Category 3 – Platforms with existing or planned step-free interchange between platforms or stations and platforms regularly used as termination or reversing points

Station	Plat No.	Platform Benefit	Exemption Requested	Justification for Exemption Request
Aldgate	01	Interchange Terminating	Untimed	Untimed temporary exemption due to severe curvature
Aldgate	02	Interchange Terminating	Untimed	Untimed temporary exemption due to severe curvature
Aldgate	03	Interchange	Untimed	Untimed temporary exemption due to severe curvature
Aldgate East	01	Interchange	None	Will be compliant prior to 1st train in service at this platform
Aldgate East	02	Interchange Terminating	None	Will be compliant prior to 1st train in service at this platform
Baker Street	02	Interchange	Untimed	Untimed temporary exemption due to severe curvature
Baker Street	03	Interchange	Untimed	Untimed temporary exemption due to severe curvature
Baker Street	06	Terminating	None	Will be compliant prior to 1st train in service at this platform
Dagenham East	02	Interchange Terminating	March 2016	Timed temporary exemption as provides limited immediate benefit
Dagenham East	03	Interchange Terminating	March 2016	Timed temporary exemption as provides limited immediate benefit
Ealing Common	01	Interchange Terminating	Untimed	Untimed temporary exemption due to severe curvature & LU compromise height
Ealing Common	02	Interchange Terminating	Untimed	Untimed temporary exemption due to severe curvature & LU compromise height

Station	Plat No.	Platform Benefit	Exemption Requested	Justification for Exemption Request
Edgware Road (H&C)	02	Terminating	Untimed	Untimed temporary exemption due to severe curvature
Edgware Road (H&C)	03	Terminating	Untimed	Untimed temporary exemption due to severe curvature
Embankment	01	Terminating	None	Will be compliant prior to 1st train in service at this platform
Embankment	02	Terminating	None	Will be compliant prior to 1st train in service at this platform
Euston Square	02	Interchange Consistency	None	Will be compliant prior to 1st train in service at this platform
Gloucester Road	02	Interchange Terminating	March 2016	Timed temporary exemption as provides limited immediate benefit
Gloucester Road	03	Interchange Terminating	March 2016	Timed temporary exemption as provides limited immediate benefit
Goldhawk Road	02	Terminating	None	Will be compliant prior to 1st train in service at this platform
Gunnersbury	01	Interchange Terminating	Untimed	Untimed temporary exemption due to severe curvature
Gunnersbury	02	Interchange Terminating	Untimed	Untimed temporary exemption due to severe curvature

Station	Plat No.	Platform Benefit	Exemption Requested	Justification for Exemption Request
High Street Kensington	02	Interchange Terminating	None	Will be compliant prior to 1st train in service at this platform
High Street Kensington	03	Interchange Terminating	None	Will be compliant prior to 1st train in service at this platform
High Street Kensington	04	Interchange Terminating	None	Will be compliant prior to 1st train in service at this platform
Liverpool Street	02	Interchange Terminating	None	Will be compliant prior to 1st train in service at this platform
Monument	02	Interchange	Untimed	Untimed temporary exemption due to severe curvature
Moorgate	01	Interchange Consistency	None	Will be compliant prior to 1st train in service at this platform
Moorgate	02	Interchange Consistency	None	Will be compliant prior to 1st train in service at this platform
Moorgate	03	Interchange Terminating	None	Will be compliant prior to 1st train in service at this platform
Moorgate	04	Interchange Terminating	None	Will be compliant prior to 1st train in service at this platform
Parsons Green	01	Terminating	None	Will be compliant prior to 1st train in service at this platform
Parsons Green	02	Terminating	None	Will be compliant prior to 1st train in service at this platform
Plaistow	03	Terminating	Untimed	Untimed temporary exemption due to severe curvature
Royal Oak	01	Consistency	None	Will be compliant prior to 1st train in service at this platform
Royal Oak	02	Terminating	None	Will be compliant prior to 1st train in service at this platform
South Kensington	01	Interchange Terminating	None	Will be compliant prior to 1st train in service at this platform
South Kensington	02	Terminating	None	Will be compliant prior to 1st train in service at this platform

Station	Plat No.	Platform Benefit	Exemption Requested	Justification for Exemption Request
Tower Hill	01	Interchange Terminating	Untimed	Untimed temporary exemption due to severe curvature
Tower Hill	02	Interchange Terminating	Untimed	Untimed temporary exemption due to severe curvature
Tower Hill	03	Interchange	Untimed	Untimed temporary exemption due to severe curvature
Turnham Green	01	Interchange	None	Will be compliant prior to 1st train in service at this platform
West Kensington	01	Terminating	March 2016	Timed temporary exemption as provides limited immediate benefit
West Kensington	02	Terminating	March 2016	Timed temporary exemption as provides limited immediate benefit

Annex E: Category 4 - Stations and platforms with no existing or planned step-free routes or interchange or where trains do not terminate or reverse

Station	Plat No.	Exemption Requested and with Justification
Acton Town	02	Untimed temporary exemption as Piccadilly line with occasional District line usage
Acton Town	03	Untimed temporary exemption as Piccadilly line with occasional District line usage
Aldgate	04	Untimed temporary exemption until solution identified for severe curvature of interchange platforms
Baker Street	01	Untimed temporary exemption until platform becomes step-free and a solution is identified for severe curvature &/ or LU compromise height
Baker Street	04	Untimed temporary exemption until platform becomes step-free and a solution is identified for severe curvature &/ or LU compromise height
Baker Street	05	Untimed temporary exemption until solution identified for severe curvature of interchange platforms
Barons Court	01	Untimed temporary exemption until such time as level access interchange is possible with rolling stock on other lines
Barons Court	04	Untimed temporary exemption until such time as level access interchange is possible with rolling stock on other lines
Bayswater	01	Untimed temporary exemption until platform becomes step-free
Bayswater	02	Untimed temporary exemption until platform becomes step-free
Becontree	01	Untimed temporary exemption until platform becomes step-free
Becontree	02	Untimed temporary exemption until platform becomes step-free

Station	Plat No.	Exemption Requested and with Justification
Bow Road	01	Untimed temporary exemption until platform becomes step-free and a solution is identified for severe curvature &/ or LU compromise height
Bow Road	02	Untimed temporary exemption until platform becomes step-free and a solution is identified for severe curvature &/ or LU compromise height
Bromley-by-Bow	01	Untimed temporary exemption until platform becomes step-free
Bromley-by-Bow	02	Untimed temporary exemption until platform becomes step-free
Cannon Street	02	Untimed temporary exemption until platform becomes step-free and a solution is identified for severe curvature &/ or LU compromise height
Chiswick Park	01	Untimed temporary exemption until platform becomes step-free and a solution is identified for severe curvature &/ or LU compromise height
Chiswick Park	02	Untimed temporary exemption until platform becomes step-free and a solution is identified for severe curvature &/ or LU compromise height
Dagenham East	01	Untimed temporary exemption until platform becomes step-free
East Putney	01	Untimed temporary exemption until platform becomes step-free and a solution is identified for severe curvature &/ or LU compromise height
East Putney	02	Untimed temporary exemption until platform becomes step-free and a solution is identified for severe curvature &/ or LU compromise height
Edgware Road (H&C)	01	Untimed temporary exemption until solution identified for severe curvature of interchange platforms
Edgware Road (H&C)	04	Untimed temporary exemption until solution identified for severe curvature of interchange platforms
Gloucester Road	01	Untimed temporary exemption until platform becomes step-free
Goldhawk Road	01	Untimed temporary exemption until platform becomes step-free
Great Portland Street	01	Untimed temporary exemption until platform becomes step-free and a solution is identified for severe curvature &/ or LU compromise height
Great Portland Street	02	Untimed temporary exemption until platform becomes step-free and a solution is identified for severe curvature &/ or LU compromise height

Station	Plat No.	Exemption Requested and with Justification	
Hammersmith (District)	02	Untimed temporary exemption as Piccadilly line with occasional District line usage	
Hammersmith (District)	03	Untimed temporary exemption as Piccadilly line with occasional District line usage	
High Street Kensington	01	Untimed temporary exemption until platform becomes step-free	
Hornchurch	01	Untimed temporary exemption until platform becomes step-free	
Hornchurch	02	Untimed temporary exemption until platform becomes step-free	
Ladbroke Grove	01	Untimed temporary exemption until platform becomes step-free	
Ladbroke Grove	02	Untimed temporary exemption until platform becomes step-free	
Latimer Road	01	Untimed temporary exemption until platform becomes step-free	
Latimer Road	02	Untimed temporary exemption until platform becomes step-free	
Mansion House	01	Untimed temporary exemption until platform becomes step-free and a solution is identified for severe curvature &/ or LU compromise height	
Mansion House	03	Untimed temporary exemption until platform becomes step-free and a solution is identified for severe curvature &/ or LU compromise height	
Mile End	02	Untimed temporary exemption until such time as level access interchange is possible with rolling stock on other lines	
Mile End	03	Untimed temporary exemption until such time as level access interchange is possible with rolling stock on other lines	
Monument	01	Untimed temporary exemption until platform becomes step-free and a solution is identified for severe curvature &/ or LU compromise height	
Notting Hill Gate	01	Untimed temporary exemption until platform becomes step-free	
Notting Hill Gate	02	Untimed temporary exemption until platform becomes step-free and a solution is identified for severe curvature &/ or LU compromise height	
Ravenscourt Park	01	Untimed temporary exemption until platform becomes step-free and a solution is identified for severe curvature &/ or LU compromise height	

Station	Plat No.	Exemption Requested and with Justification
Ravenscourt Park	02	Untimed temporary exemption until platform becomes step-free and a solution is identified for severe curvature &/ or LU compromise height
Ravenscourt Park	03	Untimed temporary exemption until platform becomes step-free and a solution is identified for severe curvature &/ or LU compromise height
Ravenscourt Park	04	Untimed temporary exemption until platform becomes step-free and a solution is identified for severe curvature &/ or LU compromise height
Paddington (Circle)	01	Untimed temporary exemption until solution identified for severe curvature of interchange platforms
Plaistow	01	Untimed temporary exemption until platform becomes step-free
Plaistow	02	Untimed temporary exemption until solution identified for severe curvature of interchange platforms
Putney Bridge	01	Untimed temporary exemption until platform becomes step-free
Putney Bridge	03	Untimed temporary exemption until platform becomes step-free and a solution is identified for severe curvature &/ or LU compromise height
Shepherd's Bush Market	01	Untimed temporary exemption until platform becomes step-free
Shepherd's Bush Market	02	Untimed temporary exemption until platform becomes step-free
Sloane Square	01	Untimed temporary exemption until platform becomes step-free and a solution is identified for severe curvature &/ or LU compromise height
Sloane Square	02	Untimed temporary exemption until platform becomes step-free and a solution is identified for severe curvature &/ or LU compromise height
St James's Park	01	Untimed temporary exemption until platform becomes step-free and a solution is identified for severe curvature &/ or LU compromise height
St James's Park	02	Untimed temporary exemption until platform becomes step-free and a solution is identified for severe curvature &/ or LU compromise height
Stamford Brook	01	Untimed temporary exemption until platform becomes step-free and a solution is identified for severe curvature &/ or LU compromise height
Stamford Brook	02	Untimed temporary exemption until platform becomes step-free and a solution is identified for severe curvature &/ or LU compromise height

Station	Plat No.	Exemption Requested and with Justification			
Stamford Brook	03	Untimed temporary exemption until platform becomes step-free and a solution is identified for severe curvature &/ or LU compromise height			
Stepney Green	01	Untimed temporary exemption until platform becomes step-free			
Stepney Green	02	Untimed temporary exemption until platform becomes step-free			
Temple	01	Untimed temporary exemption until platform becomes step-free and a solution is identified for severe curvature &/ or LU compromise height			
Temple	02	Untimed temporary exemption until platform becomes step-free and a solution is identified for severe curvature &/ or LU compromise height			
Turnham Green	02	Untimed temporary exemption as Piccadilly line with occasional District line usage			
Turnham Green	03	Untimed temporary exemption as Piccadilly line with occasional District line usage			
Turnham Green	04	Untimed temporary exemption until platform becomes step-free			
Upminster Bridge	01	Untimed temporary exemption until platform becomes step-free			
Upminster Bridge	02	Untimed temporary exemption until platform becomes step-free			
Upton Park	01	Untimed temporary exemption until platform becomes step-free			
Upton Park	02	Untimed temporary exemption until platform becomes step-free and a solution is identified for severe curvature &/ or LU compromise height			
West Brompton	01	Untimed temporary exemption until platform becomes step-free and a solution is identified for severe curvature &/ or LU compromise height			
Westbourne Park	01	Untimed temporary exemption until platform becomes step-free			
Westbourne Park	02	Untimed temporary exemption until platform becomes step-free			

Station	Plat No.	Exemption Requested and with Justification
Wimbledon Park	01	Untimed temporary exemption until platform becomes step-free and a solution is identified for severe curvature &/ or LU compromise height
Wimbledon Park 02		Untimed temporary exemption until platform becomes step-free and a solution is identified for severe curvature &/ or LU compromise height

Annex F:	Straight	Platforms	in	Categories	1, 2	& 3	3

Station	Plat No.	Plat Cat	SFA Status	Exemption Requested	Justification for Exemption Request	Platform Height
Aldgate East	01	3	None	None	None Will be compliant prior to 1st train in service at this platform	
Baker Street	06	3	None	None	None Will be compliant prior to 1st train in service at this platform	
Barbican	01	2	2018	None	Will be compliant prior to 1st train in service at this platform	Standard
Barbican	02	2	2018	None	Will be compliant prior to 1st train in service at this platform	Standard
Barking	1a	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Standard
Barking	02	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Standard
Barking	06	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Standard
Blackfriars	01	2	December 2011	None	Will be compliant prior to 1st train in service at this platform	Standard
Blackfriars	02	2	December 2011	None	Will be compliant prior to 1st train in service at this platform	Standard
Dagenham East	02	3	None	March 2016	Timed temporary exemption as provides limited immediate benefit	Standard
Dagenham East	03	3	None	March 2016	Timed temporary exemption as provides limited immediate benefit	Standard

Station	Plat No.	Plat Cat	SFA Status	Exemption Requested	Justification for Exemption Request	Platform Height
Dagenham Heathway	01	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Standard
Ealing Broadway	07	2	2017	December 2017	Will be compliant prior station becoming step-free	Standard
Ealing Broadway	08	2	2017	December 2017	Will be compliant prior station becoming step-free	Standard
Ealing Broadway	09	2	2017	December 2017	Will be compliant prior station becoming step-free	Standard
Earl's Court	01	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Standard
Earl's Court	02	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Standard
Earl's Court	03	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Standard
Earl's Court	04	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Standard
Elm Park	01	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Standard
Elm Park	02	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Standard
Embankment	01	3	None	None	Will be compliant prior to 1st train in service at this platform	Standard
Embankment	02	3	None	None	Will be compliant prior to 1st train in service at this platform	Standard

Station	Plat No.	Plat Cat	SFA Status	Exemption Requested	Justification for Exemption Request	Platform Height
Euston Square	01	1	Existing	None	None Will be compliant prior to 1st train in service at this platform	
Euston Square	02	3	None	None	None Will be compliant prior to 1st train in service at this platform	
Gloucester Road	02	3	None	March 2016	Timed temporary exemption as provides limited immediate benefit	Standard
Gloucester Road	03	3	None	March 2016	Timed temporary exemption as provides limited immediate benefit	Standard
Goldhawk Road	02	3	None	None	Will be compliant prior to 1st train in service at this platform	Standard
Hammersmith (District)	01	1	Existing	None	Will be compliant prior to 1st train in service at this platform	LU Compromise Height
Hammersmith (H&C)	01	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Standard
Hammersmith (H&C)	02	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Standard
Hammersmith (H&C)	03	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Standard
High Street Kensington	02	3	None	None	Will be compliant prior to 1st train in service at this platform	Standard
High Street Kensington	03	3	None	None	Will be compliant prior to 1st train in service at this platform	Standard
High Street Kensington	04	3	None	None	Will be compliant prior to 1st train in service at this platform	Standard
Station	Plat No.	Plat Cat	SFA Status	Exemption Requested	Justification for Exemption Request	Platform Height
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Kew Gardens	01	1	Existing	None	Will be compliant prior to 1st train in service at this platform	BR Compromise Height
Liverpool Street	01	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Standard
Liverpool Street	02	3	Crossrail	None	Will be compliant prior to 1st train in service at this platform	Standard
Moorgate	01	3	None	None	Will be compliant prior to 1st train in service at this platform	Standard
Moorgate	02	3	None	None	Will be compliant prior to 1st train in service at this platform	Standard
Moorgate	03	3	None	None	Will be compliant prior to 1st train in service at this platform	Standard
Moorgate	04	3	None	None	Will be compliant prior to 1st train in service at this platform	Standard
Richmond	04	1	Existing	None	Will be compliant prior to 1st train in service at this platform	BR Compromise Height
Richmond	05	1	Existing	None	Will be compliant prior to 1st train in service at this platform	BR Compromise Height
Richmond	06	1	Existing	None	Will be compliant prior to 1st train in service at this platform	BR Compromise Height
Richmond	07	1	Existing	None	Will be compliant prior to 1st train in service at this platform	BR Compromise Height
Royal Oak	02	3	None	None	Will be compliant prior to 1st train in service at this platform	Standard

Station	Plat No.	Plat Cat	SFA Status	Exemption Requested	Justification for Exemption Request	Platform Height
Parsons Green	01	3	None	None	Will be compliant prior to 1st train in service at this platform	Standard
Parsons Green	02	3	None	None	Will be compliant prior to 1st train in service at this platform	Standard
South Kensington	02	3	None	None	Will be compliant prior to 1st train in service at this platform	Standard
Turnham Green	01	3	None	None	Will be compliant prior to 1st train in service at this platform	LU Compromise Height
Upminster	03	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Standard
Upminster	04	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Standard
Upney	01	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Standard
West Brompton	02	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Standard
West Kensington	01	3	None	March 2016	Timed temporary exemption as provides limited immediate benefit	Standard
West Kensington	02	3	None	March 2016	Timed temporary exemption as provides limited immediate benefit	Standard
West Ham	01	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Standard
West Ham	02	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Standard

Station	Plat No.	Plat Cat	SFA Status	Exemption Requested	Justification for Exemption Request	Platform Height
Whitechapel	01	2	2017	None	Will be compliant prior to 1st train in service at this platform	Standard
Whitechapel	02	2	2017	None	Will be compliant prior to 1st train in service at this platform	Standard
Wimbledon	01	1	Existing	None	Will be compliant prior to 1st train in service at this platform	BR Compromise Height
Wimbledon	02	1	Existing	None	Will be compliant prior to 1st train in service at this platform	BR Compromise Height
Wimbledon	03	1	Existing	None	Will be compliant prior to 1st train in service at this platform	BR Compromise Height
Wimbledon	04	1	Existing	None	Will be compliant prior to 1st train in service at this platform	BR Compromise Height

Station	Plat No.	Plat Cat	SFA Status	Exemption Requested	Justification for Exemption Request	Platform Height
Barons Court	01	3	None	Untimed	Untimed temporary exemption until level access interchange is possible with rolling stock on other lines	LU Compromise Height
Barons Court	04	3	None	Untimed	Untimed temporary exemption until level access interchange is possible with rolling stock on other lines	LU Compromise Height
Dagenham Heathway	02	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Standard
East Ham	01	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Standard
East Ham	02	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Standard
Hammersmith (District)	04	1	Existing	None	Will be compliant prior to 1st train in service at this platform	LU Compromise Height
King's Cross	01	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Standard
King's Cross	02	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Standard
Royal Oak	01	3	None	None	Will be compliant prior to 1st train in service at this platform	Standard

Annex G: Curved Platforms in Categories 1, 2 &3

Station	Plat No.	Plat Cat	SFA Status	Exemption Requested	Justification for Exemption Request	Platform Height
Southfields	01	1	Existing	None	Will be compliant prior to 1st train in service at this platform	BR Compromise Height
Southfields	02	1	Existing	None	Will be compliant prior to 1st train in service at this platform	BR Compromise Height
Upminster	05	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Standard
Upney	02	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Standard
Wood Lane	01	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Standard

Station	Plat No.	Plat Cat	SFA Status	Exemption Requested	Justification for Exemption Request	Platform Height
Acton Town	01	1	Existing	Untimed	Untimed temporary exemption due to severe curvature & LU compromise height	LU Compromise Height
Acton Town	04	1	Existing	Untimed	Untimed temporary exemption due to severe curvature & LU compromise height	LU Compromise Height
Aldgate	01	3	None	Untimed	Untimed temporary exemption due to severe curvature	Standard
Aldgate	02	3	None	Untimed	Untimed temporary exemption due to severe curvature	Standard
Aldgate	03	3	None	Untimed	Untimed temporary exemption due to severe curvature	Standard
Aldgate East	02	3	None	None	Will be compliant prior to 1st train in service at this platform	Standard
Baker Street	02	3	None	Untimed	Untimed temporary exemption due to severe curvature	Standard
Baker Street	03	3	None	Untimed	Untimed temporary exemption due to severe curvature	Standard
Barking	03	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Standard
Cannon Street	01	2	December 2012	Untimed	Untimed temporary exemption due to severe curvature	Standard
Ealing Common	01	3	None	Untimed	Untimed temporary exemption due to severe curvature & LU compromise height	LU Compromise Height
Ealing Common	02	3	None	Untimed	Untimed temporary exemption due to severe curvature & LU compromise height	LU Compromise Height
Edgware Road (H&C)	02	3	None	Untimed	Untimed temporary exemption due to severe curvature	Standard
Edgware Road (H&C)	03	3	None	Untimed	Untimed temporary exemption due to severe curvature	Standard

Annex H: Severely Curved Platforms in Categories 1, 2 &3

Station	Plat No.	Plat Cat	SFA Status	Exemption Requested	Justification for Exemption Request	Platform Height
Farringdon	01	2	December 2010	Untimed	Untimed temporary exemption due to severe curvature	Standard
Farringdon	02	2	December 2010	Untimed	Untimed temporary exemption due to severe curvature	Standard
Fulham Broadway	01	1	Existing	Untimed	Untimed temporary exemption due to severe curvature	Standard
Fulham Broadway	02	1	Existing	Untimed	Untimed temporary exemption due to severe curvature	Standard
Gunnersbury	01	3	None	Untimed	Untimed temporary exemption due to severe curvature	BR Compromise Height
Gunnersbury	02	3	None	Untimed	Untimed temporary exemption due to severe curvature	BR Compromise Height
Kensington Olympia	01	1	Existing	Untimed	Untimed temporary exemption due to severe curvature	Standard
Kew Gardens	02	1	Existing	Untimed	Untimed temporary exemption due to severe curvature	BR Compromise Height
Monument	02	3	None	Untimed	Untimed temporary exemption due to severe curvature	Standard
Paddington (Circle)	2	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Standard
Paddington (H&C)	15	2	December 2014	None	Will be compliant prior to 1st train in service at this platform	Standard
Paddington (H&C)	16	2	December 2014	None	Will be compliant prior to 1st train in service at this platform	Standard
Plaistow	03	3	None	Untimed	Untimed temporary exemption due to severe curvature	Standard
South Kensington	01	3	None	None	Will be compliant prior to 1st train in service at this platform	Standard

Station	Plat No.	Plat Cat	SFA Status	Exemption Requested	Justification for Exemption Request	Platform Height
Tower Hill	01	3	None	Untimed	Untimed temporary exemption due to severe curvature	Standard
Tower Hill	02	3	None	Untimed	Untimed temporary exemption due to severe curvature	Standard
Tower Hill	03	3	None	Untimed	Untimed temporary exemption due to severe curvature	Standard
Victoria	01	2	2017	Untimed	Untimed temporary exemption due to severe curvature	Standard
Victoria	02	2	2017	Untimed	Untimed temporary exemption due to severe curvature	Standard
Westminster	01	1	Existing	Untimed	Untimed temporary exemption due to severe curvature	Standard
Westminster	02	1	Existing	Untimed	Untimed temporary exemption due to severe curvature	Standard
Wood Lane	02	1	Existing	Untimed	Untimed temporary exemption due to severe curvature	Standard

Station	Plat No.	Plat Cat	SFA Status	Exemption Requested	Justification for Exemption Request	Platform Curvature
Kew Gardens	01	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Straight
Kew Gardens	02	1	Existing	Untimed	Untimed temporary exemption due to severe curvature	Severely Curved
Gunnersbury	01	3	None	Untimed	Untimed temporary exemption due to severe curvature	Severely Curved
Gunnersbury	02	3	None	Untimed	Untimed temporary exemption due to severe curvature	Severely Curved
Richmond	04	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Straight
Richmond	05	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Straight
Richmond	06	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Straight
Richmond	07	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Straight
Southfields	01	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Curved
Southfields	02	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Curved
Wimbledon	01	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Straight
Wimbledon	02	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Straight
Wimbledon	03	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Straight
Wimbledon	04	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Straight

Annex I: BR Compromise Height Platforms in Categories 1, 2 & 3

Station	Plat No.	PlatC at	SFA Status	Exemption Requested	Justification for Exemption Request	Platform Curvature
Acton Town	01	1	Existing	Untimed	Untimed temporary exemption due to severe curvature & LU compromise height	Severely Curved
Acton Town	04	1	Existing	Untimed	Untimed temporary exemption due to severe curvature & LU compromise height	Severely Curved
Hammersmith (District)	01	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Straight
Hammersmith (District)	04	1	Existing	None	Will be compliant prior to 1st train in service at this platform	Curved
Ealing Common	01	3	None	Untimed	Untimed temporary exemption due to severe curvature & LU compromise height	Severely Curved
Ealing Common	02	3	None	Untimed	Untimed temporary exemption due to severe curvature & LU compromise height	Severely Curved
Turnham Green	01	3	None	None	Will be compliant prior to 1st train in service at this platform	Straight

Annex J: LU Compromise Height Platforms in Categories 1, 2 & 3

Annex K: Category 3 Platforms Deferred Until March 2016

Station	Plat No.	Customer Benefit	Justification for Exemption Request
Dagenham East	02	Platform enables interchange between scheduled terminating trains and through trains on a weekly basis.	As this is a scheduled termination passengers would be informed of the destination when boarding and throughout the journey. Trains terminate infrequently at this platform, and the likelihood of a passenger requiring level access being on terminating train is initially relatively low. Appropriate management procedures will be put in place to ensure that passengers are not stranded on the train or platform.
Dagenham East	03	Platform enables interchange between scheduled terminating trains and through trains on a weekly basis.	As this is a scheduled termination passengers would be informed of the destination when boarding and throughout the journey. Trains terminate infrequently at this platform, and the likelihood of a passenger requiring level access being on terminating train is initially relatively low. Appropriate management procedures will be put in place to ensure that passengers are not stranded on the train or platform.
Gloucester Road	2	Platform enables interchange between terminating trains and clockwise Circle trains. Cross platform interchange between terminating trains / anticlockwise Circle trains and eastbound District line trains	Duplicate interchange opportunities are available at South Kensington, the preceding station- which also enables step-free interchange between the westbound Circle and District lines which is not possible at Gloucester Road. Although trains terminate here on an unscheduled basis, this takes place less than daily. On these occasions, passengers would be informed that the train was terminating prior to it leaving South Kensington to allow passengers to disembark if necessary. Appropriate management procedures will be put in place to ensure that passengers are not stranded on the train or platform.
Gloucester Road	3	Platform enables 1 st opportunity to interchange between anticlockwise Circle and eastbound District lines. Cross platform interchange between west bound Circle line.	It is believed that this interchange offers little if any value as currently passengers are not able to access the anticlockwise Circle line prior to this station as there is no step-free access or interchange between Edgware Road where the anticlockwise Circle line begins and Gloucester Road.

			Duplicate interchange opportunities are available at the South Kensington, next station- which also enables step-free interchange between the westbound Circle and District lines which is not possible at Gloucester Road. Appropriate management procedures will be put in place to ensure that passengers are not stranded on the train or platform
West Kensington	01	Platform enables interchange between scheduled terminating trains and through trains on a daily basis and during disruption.	Although trains terminate daily at this platform, this happens infrequently and the likelihood of a passenger requiring level access being on terminating train is initially relatively low. For scheduled terminations passengers would be informed of the destination when boarding and throughout the journey. Appropriate management procedures will be put in place to ensure that passengers are not stranded on the train or platform.
West Kensington	02	Platform enables interchange between scheduled terminating trains and through trains on a daily basis and during disruption.	Although trains terminate daily at this platform, this happens infrequently and the likelihood of a passenger requiring level access being on terminating train is initially relatively low. For scheduled terminations passengers would be informed of the destination when boarding and throughout the journey. Appropriate management procedures will be put in place to ensure that passengers are not stranded on the train or platform.

1. Full name of applicant and address

London Underground Limited 55 Broadway London SW1H 0BD

2. Description of Rail Vehicles

Circle, District and Hammersmith & City line 'S7 Stock'

Train Formation:

133 x 7 Car permanent formations

Train Numbers:

Driving Motor Cars:	21301 – 21566
Non Driving Motor Cars M1:	22301 – 22566
Non Driving Motor Cars M2:	23388 – 23566 (even numbers)
Non Driving Motor Cars MS2:	24301 – 24566
Non Driving Motor Cars de-icing:	25302 – 25386 (even numbers)

3. Circumstances in which exemptions are to apply

At all times in passenger service

4. Relevant requirements from which exemption is sought

Schedule 1, Part 1 (General Requirements)

- Paragraph 3(5)(b)
- Paragraph 4(2)

3(3) Subject to sub-paragraph (4), each passenger doorway in the side of a rail vehicle must be fitted with an audible warning device which must emit warning sounds in accordance with sub-paragraph (5) inside and outside the vehicle in the proximity of each control device for the doorway or, if there is no such control device, adjacent to the doorway.

3(5) Subject to sub-paragraph (6), the audible warning device must—

3(5)(a) where the unlocking of all the passenger doors in the side of a rail vehicle is activated by a member of the operator's staff, emit a distinct sound for a period

of not less than 3 seconds commencing when the doors become openable by passengers; and

3(5)(b) emit a different distinct sound to that required by paragraph (a) and, where applicable, paragraph 1 of Part 2 of this Schedule, commencing not less than 3 seconds before the door starts to close.

Also

4(1) Subject to **sub-paragraph (6)**, no control device to enable a passenger to open or close a power operated door, other than a device to which **sub-paragraph (3)** applies, may be fitted to a rail vehicle unless—

4(2) When power operated doors are closed by a member of the operator's staff the illumination of each such control device must cease not less than 3 seconds before the doors start to close.

5. Technical, economic and operational reasons why exemption is sought

This exemption is being requested on the same grounds as that granted to the new 'S8' Metropolitan line vehicles in February 2010²⁰.

The new 'S7' trains are capable of complying with the 3 second closure warning required by RVAR.

Audible Warnings

LUL understands the significance and importance of the 3 second duration to disabled passengers, especially those with visual impairments. We have worked closely with the DfT on their "Design and Use of Rail Door Warning Systems for Sensory Impaired People" research. We contributed funding towards Stage 1 of the research and hosted a trial at Charing Cross underground station as part of Stage 2. LUL has used this research to help identify the most appropriate tones for use in the Underground environment to assist visually impaired passengers.

The new 'S7' vehicles will use 3 second audible door opening tones which can be heard both inside and outside the vehicle. These will play adjacent to doorways to assist people in locating the controls and/or doorway.

The vehicles are also capable of giving 3 second audible door closure tones. However we have a number of safety and operational concerns about the use of the 3 second door closure warning in the Underground environment.

²⁰ Metropolitan line exemption Statutory Instrument 2010/435

These concerns, which are listed below, are the same as those set out in exemption granted to the new '09TS' vehicles being introduced as part of the Victoria Line Upgrade (VLU)²¹.

During the consideration of the VLU exemption, both Houses of Parliament, DfT, DPTAC, HMRI and London TravelWatch all supported the exemption to allow a reduction of the 3 second audible closure warning during mixed fleet²² running until a trial of its impact had been evaluated on that line.

In November 2008 LUL was granted an exemption until December 2013 in order to undertake and evaluate a trial using the 3 second closure warning once mixed fleet running ends on the Victoria line in 2011.

This trial will provide accurate and quantifiable evidence regarding the impact of the additional time on the operation of the Victoria line and any changes to the safety and behaviour of passengers.

The outputs and lessons learned from the Victoria line trial will be used by the SSR Upgrade team for both the 'S7' and 'S8' vehicles as well as other future Upgrade and refurbishment projects to create a consistent approach to the duration of audible door closure warnings on the Underground network.

The majority of vehicles currently in service on the Underground, including the existing 'A', 'C' and 'D' Stock vehicles on the SSR lines give an audible door closure warning starting 1.75 (+/-0.25) seconds before the doors begin to close. This is believed to be sufficient and appropriate for the service provided by London Underground.

LUL is requesting a temporary exemption to maintain consistency while the new vehicles are introduced and running alongside the older trains. The new 'S7' vehicles will run alongside the new 'S8' and existing 'A', 'C' & 'D' Stock vehicles on the Sub-Surface lines for more than 3 years during the phased introduction of the new vehicles.

In addition, the 'S7' vehicles will also be running permanently alongside the Piccadilly line vehicles on the western section of the District line.

LUL believes it is important to keep audible warnings consistent across all of the SSR lines until the last of the old vehicles have been replaced. We believe that it is important for passenger safety and confidence that audible warnings are consistent particularly as all the old stock fleets are being replaced by a single fleet of vehicles.

²¹ Victoria line exemption Statutory Instrument 2008/2969

²²Mixed fleet running refers to the period when 2 or more different types of train stock will be running alongside each other on the Circle, District and Hammersmith & City lines, following the introduction of the 1st S7 train into service until the withdrawal of the last of the old 'A', 'C' & 'D' stock trains.

This consistency between the new rolling stock and those currently on the network will preserve the familiarity that our customers have with the meaning of audible tones and thereby minimise the risk of accidents. The use of different warning durations across the single new fleet and three fleets being progressively replaced would cause confusion amongst passengers and increase the risk of accidents and injury, especially amongst passengers moving between lines.

Therefore we are requesting an exemption until December 2016 when the last of the old 'D' stock trains will be replaced on the District line by new 'S7' vehicles. This will enable us to discuss the findings from the Victoria line trials (which completes before 2014) with users and the DfT.

Although LUL recognises the importance of the audible tones for visually impaired passengers, on the Underground, the audible door closure warning is considered by most passengers as a 'hustle alarm'. During everyday service, the sounding of the alarm is used as the signal to run and jump onto the train as the doors are closing.

LUL is concerned that extending the warning duration to 3 seconds will encourage additional passengers to attempt to board, increasing the risk of accidents and injury. Such activity often also necessitates the re-opening of the doors which will delay the vehicles, causing service disruption and increased journey time for all passengers.

The current audible warning of 1.75 seconds has been in use on Underground trains for many years and we believe that it is appropriate to the nature of the service we operate.

In operational terms, extending the warning would increase the dwell time at each station, which would have a cumulative effect along the entire journey. This would increase journey times for passengers across the whole fleet and reduces line capacity which would reduce the benefit gained from the Upgrade improvements, the prime aim of which is to increase capacity and reduce overcrowding.

Visual Warnings

LUL are also requesting a temporary exemption to reduce the period prior to the closure of the doors when the illumination of the door control device must extinguish, from 3 to 1.75 (+/-0.25) seconds for consistency with the timing of the audible closure tone.

At the majority of platforms, the doors will be operated by the driver; however the visual indicators will still be used to give information to customers.

The customer door open buttons will only be used when there is a significant dwell time or at a terminal station where customer numbers are often low and the trains are stationary at the platform for longer periods. At these locations the doors will be kept shut as much as possible to preserve the temperature within the train. This is particularly relevant and important as the new 'S Stock' trains will be the first on the Underground network to have air conditioning.

To enable customers to open the doors, Door Open push-buttons are provided at each doorway. The interior control is fitted towards the centre of the doorway on the edge of the left hand door (when looking from within the car)



Position of interior door closure buttons

The interior door controls are hidden when the door is open, so their extinguishment prior to door closure is not visible as a warning to users. Therefore, we have installed an additional visual indicator in each doorway to signal that the doors are about to close. This indicator is positioned at eye-level and will flash as the audible door closure warnings are sounded.



Position and close up of additional visual door indicator

These indicators will flash at a rate of 2 hertz per second, which complies with the new Additional Requirements of Part 2 of RVAR 10.

The two exterior door controls are fitted to the outside edge of each door and are visible at all times.



Position of interior and exterior door closure buttons

The positioning of the buttons encourages customers outside the train to stand away from the doorway and those inside the train to stand in the middle of the doorway, to influence customer flow.

In addition, the immediate door control surround or "halo" will remain continuously illuminated to indicate that the doors are operable.

The features of the push-buttons are compliant with the requirements of the RVAR. They are located at appropriate heights, identifiable by touch, surrounded by suitably contrasting bezels and require a force not exceeding 15 Newtons to operate them.

6. The effect which non-compliance would have on a disabled person's ability to use rail vehicles of the description to which the application relates

LUL considers that due to our existing standard operating procedures outlined in Section 7, the shorter audible and visual door closure warnings will have minimal effect on disabled passengers' ability to board or alight from the train safely.

The new 'S7' Stock has an intelligent door system which incorporates both obstacle detection and 'sensitive edge' anti-drag technologies. If an obstruction is detected the doors will open just enough to allow the object to be removed. The obstacle detection will cycle three times before holding on the obstruction until it is removed.

The rubber door edge seals are also fitted with a sensitive edge strip which will detect any opposing force should the train move away with an object such as a rucksack strap or dog's lead trapped in the doors. The sensitive edge is only active once the doors are closed and locked. Currently an activation of the sensitive edge will always trigger the application of the automatic emergency brake.

This technology is being introduced first on the new '09TS' trains which are currently being brought into service on the Victoria line. We will monitor their experiences to get a better understanding of any impact the use of sensitive edge doors may have on the service. LUL will keep DfT informed of any operational impact which may influence any future changes to the existing approach.

These intelligent systems will ensure that people won't get trapped in the closing doors.

7. Any measures which could be taken to enable disabled persons to use the rail vehicle if exemption sought is granted

Although it is proposed that the new 'S7' trains will not give the full 3 second closure warning required by RVAR, they will still provide audible and visual closure warnings to assist passengers.

The door closure mechanism on the new 'S7' vehicles is operated by the train driver. Drivers are required to ensure that it is safe to close the doors by using the platform CCTV cameras via their in-cab monitors, which give an exterior view of the full length of the train at the platform. Drivers are trained to hold the train on the platform with the doors open if they see that someone is still boarding or alighting.

At stations where customer service assistants are present on the platform, they will not give the all clear for departure signal if they can see that someone is still boarding or alighting from a train.

All of our staff are trained to identify when passengers may need assistance and receive disability awareness training to enable them to give appropriate assistance when necessary.

Awareness of the barriers faced by disabled customers is a key part of the induction training for all station customer service assistants and train drivers This initial training is supported up by annual disability awareness training which all station staff receives as part of their continuous development programme. This training is reviewed every year to ensure it continues to meet the needs of both customers and staff. It includes sections on invisible disabilities such as hearing impairment and learning difficulties, the social model of disability, communicating with disabled people and discrimination. Last year we trained more than 13,000 members of frontline staff.

If requested station staff guide visually impaired passengers from the ticket hall to the platform and onto the train or vice versa.

For LUL staff, giving such assistance is an everyday occurrence. London Underground regularly receives positive feedback and praise, including an award, from visually impaired passengers about the assistance given by staff.

8. Any proposals for later modification of rail vehicles to secure compliance with RVAR within a stated period

The system installed on the new 'S7' vehicles is capable of giving a 3 second audible warning before the doors start to open and close.

As part of the Victoria Line Upgrade, which will be receiving its new vehicles before the SSR, a trial using the 3 second warning duration will be carried out once the last of its current vehicles has left service in 2011. The findings will then be evaluated and acted on prior to the expiry of the exemption in 2013.

The results of this trial will provide accurate information about the impact of using a 3 second audible door closure warning on the operation of the Victoria line and any changes to the safety and behaviour of passengers. If the trial shows that the 3 second warning is safe and does not cause significant disruption to the service, the 3 second warning will remain in use by the Victoria Line and this precedent will be followed by SSR – subject to the different operational requirements of these 4 lines.

LUL is requesting this exemption to ensure consistency across all lines and as a precaution in case the Victoria line trial shows that the 3 second warning is not appropriate or causes an additional safety risk in the Underground environment. In this situation LUL would seek a further exemption to maintain the current 1.75 second warning.

9. Unless permanent exemption sought, the period during which exemption is to apply.

London Underground is requesting an exemption until 31st December 2016 when the last of the old 'D' stock trains are replaced by the new 'S7' trains.

During the mixed fleet running LUL will monitor the SSR and gather data and statistics on any incidents or accidents relating to the audible door closure warning.

We will then be able to compare this information against the data and statistics obtained during the trial of the 3 second audible door closure warning carried out by the Victoria line to give us a better understanding of the impact on the safety and behaviour of passengers on the Circle, District and Hammersmith & City lines.

1. Full name of applicant and address

London Underground Limited 55 Broadway London SW1H 0BD

2. Description of Rail Vehicles

Circle, District and Hammersmith & City line 'S7 Stock'

Train Formation: 133 x 7 Car permanent formations

Train Numbers:

Driving Motor Cars:		21301 –	21566
Non Driving Motor Car	M1:	22301 –	22566
Non Driving Motor Car	M2:	23388 -	23566 (even numbers)
Non Driving Motor Car MS2:	24301	- 24566	(with wheelchair spaces)
Non Driving Motor Cars de-icing:	25302	2 – 25386	(even numbers)

3. Circumstances in which exemptions are to apply

At all times in passenger service at the following platforms:

Station	Platforms			
Aldgate	1	4		
Aldgate East	2			
Baker Street	5			
Barbican	1	2		
Barking	1a	2	6	
Barons Court	1	4		
Bayswater	1	2		
Becontree	1	2		
Blackfriars	1	2		
Bow Road	1	2		
Bromley-by-Bow	1	2		
Cannon Street	1	2		

Chiswick Park	1	2		
Dagenham East	1	2		
Dagenham Heathway	1	2		
Ealing Common	2			
East Ham	1	2		
East Putney	1	2		
Edgware Road (H&C)	1			
Elm Park	1	2		
Embankment	1	2		
Euston Square	1	2		
Farringdon	1	2		
Fulham Broadway	1	2		
Gloucester Road	3			
Goldhawk Road	1	2		
Great Portland Street	1	2		
Gunnersbury	1	2		
Hammersmith (District)	3	4		
High Street Kensington	2			
Hornchurch	1	2		
Kew Gardens	1	2		
King's Cross	1	2		
Ladbroke Grove	1	2		
Latimer Road	1	2		
Liverpool Street	2			
Mansion House	1	3		
Mile End	2	3		
Monument	1	3		
Moorgate	1	2		
Notting Hill Gate	1	2		
Paddington (Circle)	1	2		
Paddington (H&C)	15	16		
Parsons Green	1	2		
Plaistow	1	2		
Putney Bridge	1	3		
Ravenscourt Park	1	2	3	4
Royal Oak	1	2	İ	

Shepherd's Bush Market	1	2		
Sloane Square	1	2		
South Kensington	1	2		
Southfields	1	2		
St James's Park	1	2		
Stamford Brook	1	2	3	
Stepney Green	1	2		
Temple	1	2		
Tower Hill	1			
Upminster Bridge	1	2		
Upney	1	2		
Upton Park	1	2		
Victoria	1	2		
West Brompton	1	2		
West Ham	1	2		
West Kensington	1	2		
Westbourne Park	1	2		
Westminster	1	2		
Whitechapel	1	2		
Wimbledon Park	1	2		
Wood Lane	1	2		

4. Relevant requirements from which exemption is sought

Schedule 1, Part 1 (General Requirements)

• Paragraph 11(5)

"Whilst a rail vehicle is stationary at a station or stop any public address systems required to be fitted inside the vehicle, and on its exterior, must be used to announce the destination of the vehicle or, if it is following a circular route, the name or number of the route and, in the case of systems inside the vehicle only, to announce the next stop."

5. Technical, economic and operational reasons why exemption is sought

London Underground (LUL) is seeking an exemption that would allow either the 'next station' or the 'destination station' information inside the saloon to be given during the times that the doors are closing or after the doors have closed at some of the platforms on this line. This is to allow for the provision of other important safety and customer station information during at short dwell times at those platforms instead.

LUL is committed to providing sufficient timely, accurate and accessible customer information to enable our customers to be confident during their journey, to make informed decisions and to minimise the impact of disruption.

The new 'S7' trains will give customer information in both audible and visual formats within the carriage. Information will be given audibly using the train announcement system and visually using 4 dot matrix indicators within each carriage.

The lines on which the new 'S7' trains will operate provide fast, frequent services with short dwell times. This limits the amount of information we are able to give to customers while the train is stationary at a platform. During this short 'doors-open' period LUL needs to provide information about the current station, including the name of the station, any selective door opening(SDO)²³, any excessively large gap between the train and the platform, and the name of the line on which the train is travelling.

There is not sufficient time to provide both this information and the name of **both** the next stop **and** destination within the 'doors-open' time at many platforms as required by RVAR.

Giving all of this information during the 'doors-open' period would increase the dwell time at a large number of platforms, which would have a cumulative effect along the entire journey. This would increase journey times for passengers across the whole fleet, greatly reducing the line capacity and benefit gained from the Upgrade improvements.

LUL understands that the main intention behind requiring next stop and destination information while stationary at a platform is to help passengers differentiate between fast and stopping services to the same destination. This type of operation does not occur on the Circle, District or Hammersmith & City lines. The majority of these lines run on simple and straight forward routes with trains stopping at all stations.

On these routes, LUL believes that the 'next station' and 'terminus station' announcements serve the same purpose in providing reassurance to passengers that they are in a train heading in the right direction – this is particularly relevant on the Circle line.

We believe that this purpose can be served equally well by making next stop or destination announcements after the doors have closed. This would allow the short period of doors-open time to be utilised for key information about the current station, including safety information, and allow the train to depart promptly.

²³ Selective Door Opening: At a number of stations the new S7 trains are longer than the platforms. In order for the trains to stop at these shorter platforms safely, one or more sets of doors at either end of the train will not open. More information about SDO is given in Annex A.

However, there are a number of points on the 'S7' network where the service becomes more complicated, in particular on the western end of the District line when the service splits into multiple branches with terminus stations at:

- Ealing Broadway
- Richmond
- Wimbledon
- Kensington Olympia

LUL recognises the impact these route variations may have on passengers' confidence that they are boarding or on board the correct train.

To ensure that passengers have sufficient appropriate information, we have committed to making sure that all regulated information about both the next station and final destination is given in full during the doors-open time at a number of key platforms, immediately prior to a junction or split in service, where action or reassurance may be required. These platforms are:

- Acton Town westbound 1,2
- Aldgate East westbound 1
- Baker Street westbound 6
- Ealing Common westbound 1
- Earl's Court westbound and eastbound 1, 2, 3, 4
- Edgware Road westbound 4
- Gloucester Road westbound 1, 2
- High Street Kensington westbound 1
- Liverpool Street eastbound 1
- Tower Hill eastbound 3
- Turnham Green westbound 1, 2

Therefore exemptions are not being requested for these platforms. A diagram showing these platforms can be found in Annex B.

In addition at terminus platforms, trains entering service have an extended doors-open period. This means that at these platforms there is sufficient time to provide all of the necessary information, including both next stop and destination. All regulated information will be given at the following terminus platforms:

- Barking 3: westbound departure
- Ealing Broadway 7,8,9: eastbound departure
- Edgware Road 2,3: westbound departure
- Hammersmith 1,2,3: (H&C/Circle lines) eastbound departure

- High Street Kensington 3,4: westbound departure
- Kensington Olympia 1: eastbound departure
- Plaistow 3: westbound departure
- Richmond 4,5,6,7: eastbound departure
- Tower Hill 2: westbound departure
- Upminster 3,4,5: westbound departure
- Wimbledon 1,2,3,4: eastbound departure

Therefore exemptions are not being requested for these platforms. A diagram showing these platforms can be found in Annex B.

At all other non-key platforms, we are requesting an exemption that allows us to give some of the regulated information after the doors have closed, if necessary, rather than while the train is stationary.

The information will also be given in both audible and visual formats during the journey between the stations in good time to enable passengers to prepare themselves for any action needed.

Customers on the platform will be able to get information about the destination of trains from a range of sources including audible station announcements, platform 'next train' display indicators, visual displays on the front and external sides of each carriage of the vehicle and fixed signage such as network maps.

Currently we are required to give the following information

"The next station is Kings Cross, St Pancras. This is a Hammersmith & City line train to Barking."

Some additional routine pieces of information given by the on train customer information system at stations and between stations to assist and inform passengers on the Circle, District and Hammersmith & City lines ²⁴ include:

- This is Shepherd's Bush Market
- This is a Circle line train via Embankment and Victoria.
- Change here for the Northern, Piccadilly and Victoria lines, National and International Rail services.
- Exit here for the Royal National Institute of Blind People and the British Library
- Change here for the Piccadilly line and District line services to other destinations

²⁴ These messages are indicative and may differ slightly from the final messages used.

- The next station has a short platform. The rear two doors will not open there. Please use the other doors
- Please mind the gap between the train and the platform.

The exact combination of information messages given in the 'at station' announcement will be specific to each individual platform and programmed to be announced automatically. The information given is prioritised according to its usefulness and importance to our customers.

To ensure that the entire message can be played within the doors-open time, LUL has removed all non-essential tourist and interchange information from the at-station announcements. This information will now be played on the approach to the station.

The exemption requested is similar to those granted for both the new Victoria line '09TS' trains and the new Metropolitan line 'S8' trains under the equivalent RVAR 1998 regulation.

A full list of all platforms, along with an explanation of key location status and any exemptions requested is given in Annex C.

6. The effect which non-compliance would have on a disabled person's ability to use rail vehicles of the description to which the application relates

LU does not believe that this non-compliance would have any effect on a disabled person's ability to use the new 'S7' trains on the Circle, District and Hammersmith & City lines.

We believe that there are a number of other audible and visual sources, both inside the train and on the platform, which enable a disabled passenger to be confident in the direction of the train and next station at which the train will call.

Within the train, regulated information will be given in both audible and visual formats during the journey between the stations in good time to enable passengers to prepare themselves for any action needed at the next station.

Customers on the platform will be able to get information about the destination of trains from a range of sources including audible station announcements, platform 'next train' display indicators, visual displays on the front and external sides of each carriage of the vehicle and fixed signage such as network maps.

7. Any measures which could be taken to enable disabled persons to use the rail vehicle if exemption sought is granted

LU does not believe that this non-compliance disadvantages customers using the new 'S7' trains on the Circle, District and Hammersmith & City lines.

All regulated information will be given at key platforms where passengers need to take action or require extra assurance that they are on the correct train. At all

other platforms, the information will be given, although some parts of the message may be given after the doors close.

In addition **all** of the regulated information will be provided in both audible and visual formats within the train between stations. The information is also available from a variety of sources on the platform before the train arrives and when it is stationary.

8. Any proposals for later modification of rail vehicles to secure compliance with RVAR within a stated period

The information systems in the new 'S7' trains are capable of complying with this Regulation. However in operational terms to ensure that all announcements were fully compliant with RVAR, we would need to extend dwell times at a significant number of stations which would have a cumulative effect along the entire journey. This would increase journey times for passengers across the whole fleet which would greatly reduce the benefit gained from the Upgrade improvements.

9. Unless permanent exemption sought, the period during which exemption is to apply.

London Underground is requesting an exemption until 31st December 2016 when the last of the D stock trains are replaced by the new 'S7' trains.

LUL will monitor the ongoing impact of these arrangements on the Circle, District and Hammersmith & City lines. In addition we will use any lessons learned by the Victoria and Metropolitan lines, whose new trains have previously been granted similar exemptions. LUL will use customer feedback to determine whether there is any significant evidence that this exemption is causing a problem for customers.

Annex A: Selective Door Opening (SDO)

At a number of stations the new 'S7' trains are longer than the platforms. In order for the trains to stop at these shorter platforms safely, one or more sets of doors at either end of the train will not open. Therefore customers must move further along the train to exit.

This system is already in use on a number of Underground lines including the Northern line and some National Rail services.

Our priority at these stations is to ensure that our customers understand which doors will not open at which platforms to avoid confusion and panic when doors do not open as expected. This will also avoid delays to the service caused by passengers using the emergency alarm because the doors don't open.

The customer information system will be used to inform customers audibly and visually that doors will not open both on the approaching journey to an affected station and whilst the train is stationary at the platform. A message will also be given whilst the train is stationary at the preceding station to enable customers to get on at the correct doors for their stop if possible or to ensure that they begin moving towards the correct doors as soon as possible once on the train.

These messages will be carriage specific, which means that only those customers to whom the message applies will see and hear it. These localised announcements will help to avoid confusion.

In addition, if a door will not open, a 'Door Out of Use' dot matrix indicator above door will be illuminated. These indicators are located above the first four and last four sets of doors of the train (as all other doors will open at every station).

The requirement for SDO at a particular platform is affected by a number of interdependent factors. LU is working to minimise the number of locations where SDO will be in operation. It is expected that SDO will be necessary at platforms at the following stations:

- Baker Street
- Bayswater
- Blackfriars
- Ealing Broadway
- Ealing Common
- Embankment
- Gloucester Road
- Great Portland Street
- Hammersmith (Circle and H&C lines)
- Mansion House
- Monument

- Notting Hill Gate
- Ravenscourt Park
- Paddington (Circle and District lines)
- Parsons Green
- Sloane Square
- Temple
- Victoria
- West Brompton
- West Kensington



Annex B: Key and Terminus Stations: No Exemptions Required

Key Station – Regulated messages to be given in full at all platforms* where both pieces of information are needed *This may not be all platforms at the station

Annex C: Exemptions Requested and Key Locations Where Messages Will Be Given In Full on the Circle, District and Hammersmith & City Lines

Station	Platform	Direction	Exemption Requested	Key Location Status
Acton Town	1	West	No Exemption	Service Split
Acton Town	2	West	No Exemption	Service Split
Acton Town	3	East	No Exemption	Service Split
Acton Town	4	East	No Exemption	Service Split
Aldgate	1	South & Anti-clockwise	31 st December 2016	None
Aldgate	2	North & Anti-clockwise	No Exemption	Terminating
Aldgate	3	North & Anti-clockwise	No Exemption	Terminating
Aldgate	4	North & Anti-clockwise	31 st December 2016	None
Aldgate East	1	West	No Exemption	Service Split
Aldgate East	2	East	31 st December 2016	None
Baker Street	1	North	No Exemption	Terminating
Baker Street	2	North	No Exemption	Alternative Service
Baker Street	3	South	No Exemption	Alternative Service
Baker Street	4	North	No Exemption	Terminating
Baker Street	5	East & Clockwise	31 st December 2016	None
Baker Street	6	West & Anti-clockwise	No Exemption	Service Split
Barbican	1	South & Clockwise	31 st December 2016	None
Barbican	2	North & Anti-clockwise	31 st December 2016	None

Station	Platform	Direction	Exemption Requested	Key Location Status
Barking	1a	East	31 st December 2016	None
Barking	2	East	31 st December 2016	None
Barking	3	East	No Exemption	Terminating
Barking	6	West	31 st December 2016	None
Barons Court	1	West	31 st December 2016	None
Barons Court	4	East	31 st December 2016	None
Bayswater	1	Anti-clockwise	31 st December 2016	None
Bayswater	2	Clockwise	31 st December 2016	None
Becontree	1	West	31 st December 2016	None
Becontree	2	East	31 st December 2016	None
Blackfriars	1	West & Clockwise	31 st December 2016	None
Blackfriars	2	East & Anti-clockwise	31 st December 2016	None
Bow Road	1	West	31 st December 2016	None
Bow Road	2	East	31 st December 2016	None
Bromley-by-Bow	1	West	31 st December 2016	None
Bromley-by-Bow	2	East	31 st December 2016	None
Cannon Street	1	West & Clockwise	31 st December 2016	None
Cannon Street	2	East & Anti-clockwise	31 st December 2016	None
Chiswick Park	1	West	31 st December 2016	None
Chiswick Park	2	East	31 st December 2016	None

Station	Platform	Direction	Exemption Requested	Key Location Status
Dagenham East	1	West	31 st December 2016	None
Dagenham East	2	East	31 st December 2016	None
Dagenham East	3	West	No Exemption	Terminating
Dagenham Heathway	1	West	31 st December 2016	None
Dagenham Heathway	2	East	31 st December 2016	None
Ealing Broadway	7	East	No Exemption	Terminus
Ealing Broadway	8	East	No Exemption	Terminus
Ealing Broadway	9	East	No Exemption	Terminus
Ealing Common	1	West	No Exemption	Service Split
Ealing Common	2	East	31 st December 2016	None
Earl's Court	1	East	No Exemption	Service Split
Earl's Court	2	East	No Exemption	Service Split
Earl's Court	3	West	No Exemption	Service Split
Earl's Court	4	West	No Exemption	Service Split
East Ham	1	West	31 st December 2016	None
East Ham	2	East	31 st December 2016	None
East Putney	1	East	31 st December 2016	None
East Putney	2	West	31 st December 2016	None
Edgware Road (H&C)	1	East & Clockwise	31 st December 2016	None
Edgware Road (H&C)	2	Anti-clockwise	No Exemption	Terminating
Edgware Road (H&C)	3	Anti-clockwise	No Exemption	Terminating
Edgware Road (H&C)	4	West & Anti-clockwise	No Exemption	Service Split

Station	Platform	Direction	Exemption Requested	Key Location Status
Elm Park	1	West	31 st December 2016	None
Elm Park	2	East	31 st December 2016	None
Embankment	1	West & Clockwise	31 st December 2016	None
Embankment	2	East & Anti-clockwise	31 st December 2016	None
Euston Square	1	North & Anti-clockwise	31 st December 2016	None
Euston Square	2	South & Clockwise	31 st December 2016	None
Farringdon	1	South & Clockwise	31 st December 2016	None
Farringdon	2	North & Anti-clockwise	31 st December 2016	None
Fulham Broadway	1	West	31 st December 2016	None
Fulham Broadway	2	East	31 st December 2016	None
Gloucester Road	1	West	No Exemption	Service Split
Gloucester Road	2	West & Clockwise	No Exemption	Terminating & Service Split
Gloucester Road	3	East & Anti-clockwise	31 st December 2016	None
Goldhawk Road	1	East & Clockwise	31 st December 2016	None
Goldhawk Road	2	West & Anti-clockwise	31 st December 2016	None
Great Portland Street	1	North & Anti-clockwise	31 st December 2016	None
Great Portland Street	2	South & Clockwise	31 st December 2016	None
Gunnersbury	1	South	31 st December 2016	None
Gunnersbury	2	North	31 st December 2016	None

Station	Platform	Direction	Exemption Requested	Key Location Status
Hammersmith (District)	1	West	No Exemption	Service Split
Hammersmith (District)	2	West	No Exemption	Service Split
Hammersmith (District)	3	East	31 st December 2016	None
Hammersmith (District)	4	East	31 st December 2016	None
Hammersmith (H&C)	1	East & Clockwise	No Exemption	Terminus
Hammersmith (H&C)	2	East & Clockwise	No Exemption	Terminus
Hammersmith (H&C)	3	East & Clockwise	No Exemption	Terminus
High Street Kensington	1	Anti-clockwise	No Exemption	Service Split
High Street Kensington	2	Clockwise	31 st December 2016	None
High Street Kensington	3	West & Anti-clockwise	No Exemption	Terminating
High Street Kensington	4	West & Anti-clockwise	No Exemption	Terminating
Hornchurch	1	West	31 st December 2016	None
Hornchurch	2	East	31 st December 2016	None
Kensington Olympia	1	South	No Exemption	Terminus
Kew Gardens	1	South	31 st December 2016	None
Kew Gardens	2	North	31 st December 2016	None
King's Cross	1	North & Anti-clockwise	31 st December 2016	None
King's Cross	2	South & Clockwise	31 st December 2016	None
Ladbroke Grove	1	East & Clockwise	31 st December 2016	None
Ladbroke Grove	2	West & Anti-clockwise	31 st December 2016	None

Station	Platform	Direction	Exemption Requested	Key Location Status
Latimer Road	1	East & Clockwise	31 st December 2016	None
Latimer Road	2	West & Anti-clockwise	31 st December 2016	None
Liverpool Street	1	South & Clockwise	No Exemption	Service Split
Liverpool Street	2	North & Anti-clockwise	31 st December 2016	None
Mansion House	1	West & Clockwise	31 st December 2016	None
Mansion House	3	East & Anti-clockwise	31 st December 2016	None
Mile End	2	West	31 st December 2016	None
Mile End	3	East	31 st December 2016	None
Monument	1	West & Clockwise	31 st December 2016	None
Monument	3	East & Anti-clockwise	31 st December 2016	None
Moorgate	1	South & Clockwise	31 st December 2016	None
Moorgate	2	North & Anti-clockwise	31 st December 2016	None
Moorgate	3	North & Anti-clockwise	No Exemption	Terminating
Moorgate	4	North & Anti-clockwise	No Exemption	Terminating
Notting Hill Gate	1	Anti-clockwise	31 st December 2016	None
Notting Hill Gate	2	Clockwise	31 st December 2016	None
Paddington (Circle)	1	Anti-clockwise	31 st December 2016	None
Paddington (Circle)	2	Clockwise	31 st December 2016	None
Paddington (H&C)	15	West & Anti-clockwise	31 st December 2016	None
Paddington (H&C)	16	East & Clockwise	31 st December 2016	None

Station	Platform	Direction	Exemption Requested	Key Location Status
Parsons Green	1	West	31 st December 2016	None
Parsons Green	2	East	31 st December 2016	None
Plaistow	1	West	31 st December 2016	None
Plaistow	2	East	31 st December 2016	None
Plaistow	3	West	No Exemption	Terminating
Putney Bridge	1	East	31 st December 2016	None
Putney Bridge	3	West	31 st December 2016	None
Ravenscourt Park	1	West	31 st December 2016	None
Ravenscourt Park	2	West	31 st December 2016	None
Ravenscourt Park	3	East	31 st December 2016	None
Ravenscourt Park	4	East	31 st December 2016	None
Richmond	4	East	No Exemption	Terminus
Richmond	5	East	No Exemption	Terminus
Richmond	6	East	No Exemption	Terminus
Richmond	7	East	No Exemption	Terminus
Royal Oak	1	West & Anti-clockwise	31 st December 2016	None
Royal Oak	2	East	31 st December 2016	None
Shepherd's Bush Market	1	East & Clockwise	31 st December 2016	None
Shepherd's Bush Market	2	West & Anti-clockwise	31 st December 2016	None
Sloane Square	1	West & Clockwise	31 st December 2016	None
Sloane Square	2	East & Anti-clockwise	31 st December 2016	None

Station	Platform	Direction	Exemption Requested	Key Location Status
South Kensington	1	West & Clockwise	31 st December 2016	None
South Kensington	2	East & Anti-clockwise	31 st December 2016	None
Southfields	1	East	31 st December 2016	None
Southfields	2	West	31 st December 2016	None
St James's Park	1	West & Clockwise	31 st December 2016	None
St James's Park	2	East & Anti-clockwise	31 st December 2016	None
Stamford Brook	1	West	31 st December 2016	None
Stamford Brook	2	West	31 st December 2016	None
Stamford Brook	3	East	31 st December 2016	None
Stepney Green	1	West	31 st December 2016	None
Stepney Green	2	East	31 st December 2016	None
Temple	1	West & Clockwise	31 st December 2016	None
Temple	2	East & Anti-clockwise	31 st December 2016	None
Tower Hill	1	West & Clockwise	31 st December 2016	None
Tower Hill	2	West & Clockwise	No Exemption	Terminating
Tower Hill	3	East & Anti-clockwise	No Exemption	Service Split
Turnham Green	1	West	No Exemption	Service Split
Turnham Green	2	West	No Exemption	Service Split
Turnham Green	3	East	No Exemption	Service Split
Turnham Green	4	East	No Exemption	Service Split

Station	Platform	Direction	Exemption Requested	Key Location Status
Upminster	3	West	No Exemption	Terminus
Upminster	4	West	No Exemption	Terminus
Upminster	5	West	No Exemption	Terminus
Upminster Bridge	1	West	31 st December 2016	None
Upminster Bridge	2	East	31 st December 2016	None
Upney	1	West	31 st December 2016	None
Upney	2	East	31 st December 2016	None
Upton Park	1	West	31 st December 2016	None
Upton Park	2	East	31 st December 2016	None
Victoria	1	West & Clockwise	31 st December 2016	None
Victoria	2	East & Anti-clockwise	31 st December 2016	None
West Brompton	1	West	31 st December 2016	None
West Brompton	2	East	31 st December 2016	None
West Ham	1	West	31 st December 2016	None
West Ham	2	East	31 st December 2016	None
West Kensington	1	West	31 st December 2016	None
West Kensington	2	East	31 st December 2016	None
Westbourne Park	1	West & Anti-clockwise	31 st December 2016	None
Westbourne Park	2	East & Clockwise	31 st December 2016	None
Westminster	1	West & Clockwise	31 st December 2016	None
Westminster	2	East & Anti-clockwise	31 st December 2016	None

Station	Platform	Direction	Exemption Requested	Key Location Status
Whitechapel	1	East	31 st December 2016	None
Whitechapel	2	West	31 st December 2016	None
Wimbledon	1	East	No Exemption	Terminus
Wimbledon	2	East	No Exemption	Terminus
Wimbledon	3	East	No Exemption	Terminus
Wimbledon	4	East	No Exemption	Terminus
Wimbledon Park	1	East	31 st December 2016	None
Wimbledon Park	2	West	31 st December 2016	None
Wood Lane	1	East & Clockwise	31 st December 2016	None
Wood Lane	2	West & Anti-clockwise	31 st December 2016	None

Annex B



Mr John Bengough Department for Transport Zone 4/32 Great Minster House 76 Marsham Street London SW1P 4DR Tomi Jones Deputy Chair Disabled Persons Transport Advisory Committee 2/23 Great Minster House 76 Marsham Street London SW1P 4DR Telephone: 020 7944 8013 Fax: 020 7944 6998

E-mail: <u>dptac@dft.gov.uk</u> Website: www.independent.gov.uk/dptac

12 April 2011

Exemption Application – London Underground – Circle, District and Hammersmith & City Lines S7 Vehicles

DPTAC thank London Underground (LU) for consulting DPTAC on the Exemption application for the Circle, District and Hammersmith & City Line S7 vehicles. DPTAC acknowledge the huge amount of work that has been put in by LU in partnership with the Department for Transport (DfT). We also congratulate LU on the very small number of exemptions that we have to comment on.

Schedule 1, Part 1, Paragraph 3(5)(b) – Audible Door Closure Warnings: DPTAC are willing to accept an exemption until 31st December 2016 on the basis that LU keep DPTAC informed of the results of the Victoria Line audible and visual warning trials. In doing this, DPTAC request that LU factor multiple solutions into the trial, including signals of varying lengths (above the current 1.75 seconds and below the required 3 seconds).

Schedule 1, Part 1, Paragraph 4(2) – Visual Door Warning Indicators: As above, we are willing to accept this exemption until 31st December 2016 on and will revisit our position after the results of the Victoria Line trials are released.

Schedule 1, Part 1, Paragraph 11(5) – Announcements at Stations: DPTAC are willing to accept this exemption, providing LU do not use the extra time for standard announcements regarding security or LU advertising. We would also welcome LU considering alternative orders for announcements, such as the current station being announced immediately before the doors are opened. It is also crucial that the destination of the train is stated in any audio announcements.

Schedule 1, Part 1, Paragraph 1(2) – Boarding devices: Whilst DPTAC fully understand LU's reasoning behind asking for this exemption, we have concerns for a number of reasons and will be recommending a time limited exemption. Our concerns are as follows:

- 1. Even if a booking system is not in place, the absence of an on-train ramp for both casual and emergency provision would seem to be short-sighted.
- 2. Many disabled people do not see the need to pre-book their travel and we believe that non-provision of any ramps at stations would, in the long-term, cause greater difficulty for LU by way of extended dwell times than skeleton provision of ramps would. Anecdotally, LU users who are blind and partially sighted are complimentary to ad hoc assistance provision, and it would make sense to use the same system for reduced mobility passengers, especially at stations which are step-free from pavement to platform.
- 3. Whilst DPTAC understand that LU do not wish to have ramps on every platform, we believe they should consider having a ramp available for the same ad hoc assistance provision that is currently used for passengers who are blind and partially sighted.
- 4. DPTAC would strongly recommend that a ramp is available in a cupboard on all accessible stations in case of emergencies.

Regarding the stations that will be deferred for financial reasons until March 2016, DPTAC appreciate the financial constraints LU are under. Provided the Department are satisfied that there are appropriate procedures in place to assist disabled people in the event of trains terminating at inaccessible stations, DPTAC are willing to accept the deferral.

Considering the previous Exemptions granted to the Metropolitan Line S8 vehicles, DPTAC agree that it is appropriate to use the negative resolution procedure.

Yours sincerely,

Tomi Jones Deputy Chair DPTAC

Annex C

19th April 2011

John Bengough Rail Sustainability – Operations Zone 4/32 Great Minster House 76 Marsham Street London SW1P 4DR

Dear Mr. Bengough

Disability Discrimination Act: Section 47 Exemption Application by London Underground Ltd

Thank you for letter of 23rd February 2011, regarding the proposed Section 47 Exemption Application by London Underground Ltd.

In considering these requests for exemption we have recognised that London Underground operates a very high frequency railway carrying large numbers of passengers.

- 1 Schedule 1, Part 1: General Requirements, Paragraph 3(5)(b), Audible Door Closure Warnings
- 2 Schedule 1, Part 1: General Requirements, Paragraph 4(2) Visual Door Warning Indicators

We are happy to support these temporary exemptions whilst new trains are introduced. However, this should not be taken as support for a permanent exemption. We would like to be involved in the review which will occur at the end of the period.

3 Schedule 1, Part 1: General Requirements, Paragraph 11(5) Announcements to be made whilst at a station

We accept the operational reasons for this exemption.

4 Schedule 1, Part 1: General Requirements, Paragraph 1(2) Boarding devices at wheelchair accessible doorways

We accept this request for these exemptions, but if any of those three stations where work has been deferred due to financial constraints, were to be step free to the platform prior to this date we would expect this exemption to be reviewed.

Yours sincerely

Vincent Stops Streets & Surface Transport Policy Officer Direct Dial: 020 7726 9956 Fax Dial: 020 7505 9003 Email: <u>vincent.stops@londontravelwatch.org.uk</u> Dear Mr Bengough,

Thank you for giving ORR the opportunity to comment on London Underground's application for exemptions from elements of The Rail Vehicle Accessibility (Non-interoperable Rail System) Regulations 2010 for S7 stock. The proposed exemptions do not have implications for safety, nor do they affect ORR's ability to enforce against the unaffected provisions of RVAR. However, ORR recommends that the exemption from paragraph 1 (the provision of ramps for wheelchair access) be limited in duration for all stations, and suggests an expiry date of 31 December 2016 for those stations currently identified as requiring an 'untimed temporary exemption'. ORR believes that a regular review of circumstances where LU asserts that it has grounds for not complying with the legislation is necessary, and that limiting the duration of the exemption will achieve this.

Yours sincerely,

Giles Turner