EXPLANATORY MEMORANDUM TO

THE RAIL VEHICLE ACCESSIBILITY (B2007 VEHICLES) EXEMPTION ORDER 2008

2008 No.

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

2. Description

2.1 This Order exempts certain specified rail vehicles, which were built for use by Docklands Light Railway (DLR), from six requirements of the Rail Vehicle Accessibility Regulations 1998 (S.I. 1998/2456, amended by S.I. 2000/3215). The Order sets expiry dates for the exemptions.

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

3.1 None.

4. Legislative Background

4.1 Section 46 of the Disability Discrimination Act 1995 (the DDA) empowers the Secretary of State to make rail vehicle accessibility regulations (RVAR) 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. The regulations, which were made in 1998 and amended in 2000, apply to rail vehicles constructed or adapted for passenger use, and first brought into use after 31st December 1998.

4.2 Section 47 of the DDA enables the Secretary of State, on receipt of an application for exemption from particular requirements of the RVAR, to make Orders authorising specified regulated rail vehicles to be used in passenger service even though they do not conform to all of the requirements of the RVAR. Such Orders may contain conditions and set time limits.

4.3 The Disability Discrimination Act 2005 requires the Secretary of State for Transport to set an 'end date'(which can be no later than 1 January 2020) by which time all rail vehicles must comply with accessibility regulations. The Department for Transport intends to bring forward regulations later this year which, subject to consultation, will set this "end date" and will, additionally, extend accessibility legislation to all rail vehicles. These regulations have been delayed so that they can take account of the forthcoming introduction to heavy rail of the European Technical Specification for Interoperability for Persons with Reduced Mobility (PRM-TSI).

4.4 In addition, the Government intends to incorporate some minor changes, subject to consultation, to the technical requirements of RVAR itself, in the light of operator and passenger experience since they were first introduced in 1998. These changes should not compromise accessibility for disabled people or make the regulations more onerous for operators.

5. Territorial Extent and Application

5.1 This instrument applies to Great Britain.

6. European Convention on Human Rights

Tom Harris has made the following statement regarding Human Rights:

In my view the provisions of the Rail Vehicle Accessibility (B2007 Vehicles) Exemption Order 2008 are compatible with the Convention rights.

7. Policy background

7.1 The policy objectives of the parent Act are to ensure that all rail vehicles first brought into use after a certain date are designed in accordance with the specific requirements of the RVAR, so as to enable disabled persons to travel in them in comfort and safety. However, the Act provides the Secretary of State with a power to exempt specified vehicles from particular requirements, on application by the operator. Each application is considered on a case by case basis. The Order is made in the terms requested in the applications, with the exception of some expiry dates. For reasons of clarity, the Secretary of State has exercised her discretion and made all exemptions connected with the door closure warning system have the same expiry date.

7.2 In this instance, the operator (DLR) is taking delivery of 55 new vehicles ("B2007 stock") to allow longer trains, an extension to the network and increased frequencies. The DLR network itself has some constraints, relating to the signalling system and the gap between platforms and trains, which preclude full compliance with RVAR. Where exemptions have been requested because of these constraints, they would be limited to the vehicles' use on the DLR. Where exemptions have been requested because of non-compliances on the vehicles themselves, the exemptions would apply if the vehicles were used on other networks. The existing vehicles in use on the DLR are not subject to RVAR as the vehicles are built to a design which pre-dates the legislation. A copy of DLR's applications can be found at Appendix A.

7.3 The DLR uses a fully automated train control system called SELTRAC. This monitors the position of each train and maintains a safe distance between them, enabling DLR to maximise frequencies while maintaining safety. Door closure at stations is controlled by Passenger Service Agents (PSAs) who travel on every train and use special crew only controls situated at each doorway. They close the doors as soon as it is safe to do so once passengers are clear of the doors and SELTRAC has indicated that the train is free to move. RVAR requires audible and visual warnings to begin three seconds before the doors start to close. As RVAR has not applied to the existing fleet, these warnings only occur as the doors begin to close.

7.4 The DLR's train schedule only allows the minimum dwell time at each station. Introducing a compliant warning within the constraints of the SELTRAC system would require every train to wait an additional three seconds at each station. A professional study of the operating timetable commissioned by DLR demonstrates that the cumulative result would be a significant reduction in service frequency. With fewer trains operating, capacity on the system would be similarly reduced, resulting in a worse service for all

passengers. DLR has therefore applied for exemptions from the requirement for audible and visual warnings of door closure three seconds before the doors begin to close. Audible and visual warnings would still be given but would only start as the doors began to close, which also provides consistency with the current operation of DLR's existing fleet.

7.5 DLR is unable to meet the requirement in regulation 13(4) for public information systems which announce both the destination and the next stop while at a station. The B2007 vehicles, like the earlier B92 stock, will only announce the name of the current stop while at the station and announce the destination and next stop shortly after departure. This is caused by the limitations of the SELTRAC system.

7.6 DLR has identified twenty-eight stations where the gap between the platform and the train is marginally greater than is allowed in RVAR without requiring a boarding device. In each case, the non-compliance is less than 1cm and has not inhibited wheelchair users' ability to board existing DLR trains without using a boarding device since the service began in 1987. The non-compliance can be resolved either by adding rubber strips to the platform edge or stopping trains at a different part of the platform. DLR has requested the exemption so that time can be allowed for a rectification programme to take place once real-time trials have taken place using the first few units and once the most appropriate solution has been agreed with HM Railway Inspectorate (HMRI).

7.7 The B2007 vehicles have been designed incorporating three measures that are not currently permitted under RVAR. These reflect the experience of operators and passengers since the RVAR was introduced in 1998 (point 4.4 above). We intend bringing forward a revised version of RVAR later in 2008 which would incorporate these changes. This would be subject to full public consultation and Parliamentary approval. Should the changes not be adopted, DLR would be required to adapt these vehicles to meet the existing standards or apply for, and justify, an extension to these exemptions. However, the Disabled Persons Transport Advisory Committee (DPTAC) and the rail industry have been supportive of the proposals.

7.8 The first of the improvements DLR wishes to introduce is the fitment of a waist height handrail in the wheelchair space. Although this is not permitted under RVAR, experience with a similar fitting on the existing unregulated B92 fleet has shown that wheelchair users welcome being able to steady themselves with it. Standing passengers can also use it for support.

7.9 The new vehicles have a small gap between the top of some seats and the draught screens. Under the existing RVAR, DLR would be required to install a seat-back handhold wherever such a gap exists. However, because seats flex when the vehicle brakes or someone sits down on them, a passenger holding onto the handhold might trap their fingers against the draught screen. DLR has therefore requested an exemption from this requirement for safety reasons. This is the second improvement to RVAR, proposals for which we intend to bring forward for consultation later this year. In this case, we will propose permitting a gap (of no more than 50mm) between a seat and draught screen before a handhold is required, in order to avoid creating a finger-trap hazard. The B2007 stock is being built with a 25mm gap.

7.10 The final improvement to RVAR that we intend to bring forward later this year, but which DLR wish to incorporate now, relates to the door warning sounds. As the audible alarms are emitted from speakers close to the control panel used by a PSA closing the doors, this could become loud and repetitive during the course of a normal shift. DLR has therefore also applied for an exemption that will allow the door closure warning to be switched off for the doorway at which the PSA is standing, as any warning to stand clear can be provided directly by the PSA themselves.

7.11 Section 47(3) of the DDA requires the Secretary of State, as part of the consideration of an application for exemption, to consult the Disabled Persons Transport Advisory Committee together with any other appropriate persons. DPTAC was established under section 125 of the Transport Act 1985 to advise the Government on transport policy as it affects the mobility of disabled people. DPTAC has been consulted on this application, along with HM Railway Inspectorate, and supplied comments. These were generally sympathetic to the system constraints DLR operate under and DLR's desire to introduce access improvements which are not currently permissible under RVAR. A copy of DPTAC's comments is attached to this Memorandum at Appendix B and a copy of HMRI's comments is attached at Appendix C.

8. Impact

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

8.2 The impact on the public sector is negligible.

9. Contact

Nathan Cole at the Department of Transport Tel: 020 7944 4916 or e-mail: nathan.cole@dft.gsi.gov.uk can answer any queries regarding the instrument.

Appendix A

Application for an exemption from the requirements of the RVAR

1. Full name of applicant and address

David Keep
Company Secretary
Docklands Light Railway
PO Box 154
Castor Lane
Poplar
London E14 0DX

2. Description of Rail Vehicles

Docklands Light Railway B92 Stock, vehicle numbers 1-16 and 92-99 inclusive
Docklands Light Railway B2007 Stock, vehicle numbers 101-155 inclusive

3. Circumstances in which exemption is to apply

At all times in passenger service.

4. Relevant requirement from which exemption is sought

Regulation 4(3)(b):

'The (door) audible warning device shall:
If the door is operated by a member of the operator's staff, emit a different distinct sound commencing not less than three seconds before the door starts to close.'

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

The door closure audible warning on the applicable vehicles sounds for a minimum of three seconds but only begins to sound at the instant when the doors start to close. If DLR was to comply by modifying the sounder timing, they would be unable to provide even the current level of service to meet the present demand. This is not due to the vehicles themselves but to the constraints on the system which include a number of strategic junctions where conflicting services cross and the intense nature of the services operated. Any delay in despatching trains has a disproportionate effect on the whole service delivery. Providing capacity to meet the rapidly increasing forecast passenger numbers would not be possible nor would meeting their committed targets for service quality, i.e. train frequency, punctuality and reliability. Please see the attached briefing note for a full explanation.

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.

Please see the attached briefing note. The system currently operates without the 3 second delay proposed. This has not caused problems to passengers in boarding trains on the system. There will not therefore be an increased risk to a disabled person's ability to use our rail vehicles or of being caught by the doors if the vehicles continued to be non compliant and operate as today.

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

Please see Section 1 – DLR Operating Principles in the attached briefing note. Every DLR train has a Passenger Services Agent (PSA) on board who, due to the automatic operation of DLR, is free to move through the train and help any passengers who need assistance. As well as checking tickets and giving information, the PSA's primary duty is to close doors and despatch the train. They receive specific training in looking out for the needs of disabled passengers and have a duty to ensure that all passengers have properly boarded before the train doors are closed.

DLR already does much to ensure that disabled persons can easily use its services but regularly reviews the arrangements in place and enhances them where applicable. Recent changes have been to provide additional Travel Safe Officers on the system specifically there to assist passengers, including disabled passengers. We have CCTV on all stations and twelve cameras in every train; we have increased staffing in the control centre to ensure that there is constant monitoring of these camera views. Staff in the control centre can easily alert the PSA on every train to assist disabled passengers seen on the system. DLR this year is celebrating its 20th year of providing fully accessible transport. Just in the last ten years we have provided approximately 420m passenger journeys and we do not believe that disabled passengers have found it difficult to use DLR services safely.

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

DLR has fully co-operated with the recent research carried out on door sounders. DLR do not however propose to modify the timing of the door closure audible warning, although fitment of best practice 'white noise' sounders (which we understand are examined in the DfT's research into door audible and visual warnings) will be considered, subject to technical and logistical feasibility.

9. The period for which exemption is sought.

Exemption sought for the life of the applicable vehicles.

Briefing Note

DLR Introduction

This report has been prepared for DLR in support of its application for an Exemption under the RVAR Regulations. It has been prepared for DLR by Atkins whose advice, we understand, is respected by DfT. The study was to give an objective, independent view of the proposals and their effect on the operation of DLR. The results of the study are shown below and accompanied by some more detailed work done on the timetabling aspects attached as an appendix.

The study was done in the light of the specific nature of the DLR operation. The DLR is an intensive, high frequency (up to every 2 minutes), short distance use service with frequent station stops which is much more akin to a tramway system than the Underground or main line railways for which we believe the legislation was largely framed. The trains on DLR are also shorter than those on mainline railways with a member of staff in every train – in with the passengers rather than being separated in a driving cab remotely at the front of the train.

DLR has been operating for 20 years now as London's only fully accessible railway. We have transported over half a billion passengers and we are not aware of any specific problems our passengers have with accessibility or method of operation. Indeed we have enjoyed wholehearted support from disability groups and individuals. Considerable investment has been made in the network. A great deal of planning and over £800m is being invested over the next few years to **increase** capacity on the railway, using public funds; it would be unfortunate if this work was negated (even in part) by a need to take measures which reduced capacity, especially in gearing up to meet the needs of the Olympic and Paralympic Games in 2012 and the legacy arrangements.

DLR is not seeking an exemption "just for the sake of it". We genuinely believe we are a special case. At a cost it would be technically possible to adjust vehicles to meet the Regulations but the study indicates, on the basis of the studies carried out, that adhering to the Regulations would cause real problems, a reduction in capacity and an inability to operate reliable services. In reality these effects would be exacerbated as the "normal" problems and delays which we handle and alleviate are overlaid with an additional time requirement. This would cause all of our 63m (current) passengers problems and we feel sure this is a position neither our stakeholders nor the Government would find satisfactory. We should be grateful if serious consideration can be given to our representations.

We are happy to discuss any of the aspects mentioned and provide facilities for a visit if this would be helpful.

REPORT FROM W S ATKINS

Docklands Light Railway (DLR) – application for Exemption from RVAR Regulation 4(3)(b)

Technical, economic and operational aspects

1 DLR operating principles

From an operational standpoint, DLR is arguably the UK's most complex railway network. It has a unique combination of a frequent train service, high passenger volume, closely spaced stations and flat junctions where services have to cut across each other's paths (see map Fig.1). This presents a significant challenge to those tasked with achieving and maintaining capacity and the specified levels of punctuality and reliability. Operation and maintenance of the network is the responsibility of Serco Docklands Limited under a franchise agreement, whilst DLR retains ownership of the trains and infrastructure.

DLR's trains operate under the control of a fully automatic train protection and control system called SELTRAC, which is monitored from a central control room. Using the latest 'moving block' technology, SELTRAC monitors the position of each train and maintains a safe distance between the preceding and following trains, enabling DLR to maximise the frequency of their train service. Messages are transmitted from the central computer to each train, adjusting acceleration, train speed and braking and triggering the opening of the doors during station stops.

Each train has a member of staff on board known as a Passenger Service Agent (PSA). Door closure is initiated by the PSA. As the trains are automatically controlled by the central computer, the PSA is in the train saloon with the passengers. This means they are aware of any special needs of passengers travelling on the train. After the train comes to a stop and the doors have been opened, the central computer sends a message to a control panel on the train, indicating that the line ahead is clear and it is safe to depart. Upon receipt of this message the PSA checks to ensure that all passengers are clear of the doors and presses a button to close them. This operation is carried out from any one of the passenger doorways and therefore DLR staff are much closer to passengers than in the Underground or main line situations where drivers are always at the front driving cab position. Current DLR trains are also only 60m long and serve stations with largely straight platforms, which means that the PSA, who needs to look outside the train before closing the doors, can see clearly where there might be any problems and is trained to assist. Once the doors are closed and locked, a message is sent back to the central computer which then sends a return message releasing the brakes on the train and accelerating it away from the station. The train cannot move if the doors are not closed, or if someone is trapped. If, on rare occasions, any passenger is caught in the doors, the PSA on the train immediately reactivates the doors so that they can be opened and release the passenger.

DLR's train schedule only allows for a minimum dwell time at each station, generally this is the minimum required to allow passengers to board or alight from the train. In practice, the scheduled dwell time is often exceeded, particularly

during the morning and evening peaks due to the large numbers of passengers travelling. The PSAs generally close the doors as soon as it is safe to do so, but the longer dwell time at each station results in trains arriving late at their terminating station. The schedule includes a small allowance for this, so trains generally commence their return journey on time.

2 Door closure audible warning

At the time of their entry into service, DLR's existing train fleet (B90 and the two builds of B92 Stock) was not regulated by the RVAR (either because they were introduced before the RVAR came into effect, or they were additional builds of a type which pre-dated the RVAR). The second build of B92 Stock is one of the fleets affected by the 2005 amendment of Part 5 of the DDA and will become regulated when the RVAR becomes applicable to them. A further, regulated build, the B2007 Stock, is under construction at Bombardier's plant in Bautzen, Germany. These vehicles will be fully compliant other than the door closure audible warning.

Most of the non-compliant features on the second build of B92 Stock have been addressed by the recent refurbishment; exemptions have already been sought for the few remaining issues apart from the door closure audible warning. DPTAC were consulted on the exemptions and were generally supportive of this position.,

Currently the warning begins to sound when the doors start to close and continues to sound for a minimum of three seconds while the doors are closing. The Regulation 4(3)(b) warning is required to sound for three seconds **prior** to the door closure.process starting

It is proposed that the timing of the door closure warning on the B2007 Stock be made consistent with the existing fleet, on safety and technical grounds. Exemption is therefore sought from Regulation 4(3)(b) for the second build of B92 Stock (vehicle numbers 1-16 and 92-99) and the B2007 Stock (vehicle numbers 101-155).

At present, there are no plans to alter the door sounder timings on the remainder of the existing fleet which is unregulated (B90 Stock and the first build of B92 Stock).

3 Operational implications of compliance

DLR's timetable is based on the scheduled dwell time at each station being the minimum required to complete passenger boarding and alighting, plus an allowance for the signalling system to detect door closure and instruct the train to start. Significant effort, spanning several years, has gone into optimising the signalling system to reduce the latter time to the minimum which can be practicably achieved. It is not therefore possible to accommodate the required three seconds door closure warning within the station dwell times allowed by the existing schedule. The longer that the trains are in the station, the fewer trains we can run.

The likely effect on the overall DLR service pattern of increasing the dwell time at each station by three seconds has been investigated in detail, starting at

commencement of the train service on a typical weekday and modelling the running of trains through the morning peak into the off-peak period. The key conclusions from this exercise were:

- During the morning peak, the cumulative effect of prolonged station dwell times is expected to significantly disrupt the interaction of trains at the key junctions on the network, resulting in a considerable number of trains arriving late at their terminating station, some of them after the scheduled departure time of their return service. The Stratford to Lewisham service is likely to suffer the worst disruption as trains operate over a single track between Bow Church and Stratford. Many trains on this route are expected to run over three minutes late; some could be delayed by as much as seven minutes (on services where the combined frequency can be 2 minutes). These effects will combine to lead to a material decrease in passenger capacity.

- Off peak, the situation on the Stratford to Lewisham service is likely to be less disrupted, but the turnround times allowed at other terminal stations, in particular Bank and Beckton, is reduced. This would lead to a build-up of late running on services originating from/terminating at those stations which would eventually disrupt the evening peak service.

- Overall, DLR would not be able to achieve its present levels of service, in terms of frequency, punctuality and reliability and even more importantly, capacity. Existing levels of punctuality and reliability could only be maintained at the expense of a reduction in service frequency (i.e. running fewer trains). Even this would require a major re-cast of the timetable.

In practice, the effect on DLR's train service of complying with Regulation 4(3)(b) are likely to be worse than the prediction, which assumed that scheduled dwell times would be adhered to (with an extra three seconds for the door closure warning). A review of video recordings from station platform CCTV cameras showed that the scheduled dwell times are routinely exceeded on the peak traffic flows. The study also made no allowances for recovering time lost during unexpected delays – this is a key consideration when planning any timetable. There is also a consideration that, with fewer trains able to run, the platforms themselves will be become crowded which could in itself create a safety hazard.

4 Potential mitigations

Any reduction in DLR's existing service levels would be unacceptable to its passengers, TfL and other stakeholders but we have nevertheless considered a number of mitigations including those which reduce capacity, viz:

i) Commence the door closure procedure three seconds earlier at each station stop

As outlined above, the scheduled station dwell time is set at the minimum required for completion of passenger boarding/alighting and the door closure and departure procedure. In practice, the actual dwell time often exceeds the scheduled allowance, especially during the peaks. At many

station stops, the PSA would be put in the position of having to initiate door closure before all passengers are clear of the doors. This is not just a potential safety issue, but also risks prolonging the dwell time as the doors will need to be re-opened if obstructed by a passenger and the departure sequence will have to be re-started, incurring a further 3 second delay for the proposed RVAR door sounder.

It should be noted that these mitigations are against the theoretical position outlined in this paper. In reality trains will already run late to some extent, meaning that the ready to depart signal is given very soon after arrival as the system tries to get trains back to timetable. This would further exacerbate the situation.

ii) Reduce station-to-station running times by increasing the maximum speed of trains and/or acceleration/braking performance.

DLR's ability to minimise the running time between stations is subject to a number of constraints, including:

- the power supply to the third rail;
- the maximum power rating of the traction motors and associated onboard equipment;
- the performance of the train braking system and the effect of an increased braking rate on passenger comfort;
- the ability of the SELTRAC train control system to keep trains a safe distance apart;
- the ability of the track to withstand the increased forces imposed on it by trains running at higher speeds.
- the short distance between stations.

Addressing one of these issues in isolation will not provide a practicable solution; in reality a package of upgrades to both trains and infrastructure would be required, costing many millions of pounds and taking several years to deliver.

Although DLR do review their operation from time to time to see if they can operate trains faster, this needs to be done in a way that takes account of environmental effects, wear and tear on vehicles, whole life of vehicles and infrastructure and the "comfort" of the ride for passengers. Any efficiencies achieved are however intended to ensure that they can continue to operate the current levels of service reliably as the system gets busier.

iii) "**Reduce the number of trains operating/increase the number of trains in service**

In order to reduce/avoid the impact of the additional 3 seconds delay, the number of trains in service could be reduced and the timetable re-written. This is unacceptable as the system already runs at capacity, particularly in the peak periods, and reducing the level of service would mean leaving

passengers behind and thus causing further crowding/delay to subsequent services.

The other possible mitigation is to increase the number of trains operating to accommodate the 3 second delay and still provide the required capacity. This is unacceptable as a) DLR does not have sufficient stock to enable this, and more particularly, b) much of the system could not accommodate additional trains in the diagram (trains already operate at minimum frequencies where more than one service operates over the same section of track and at minimum distances between trains of about 30m).

The Government is investing considerable sums of money to increase the capacity of the system over the next few years. Forecasts show passenger numbers increasing from the current 62m passengers per annum to up to 120m (by 2015). The plans will increase the train length from 2-car trains to 3-car to provide the additional capacity. Additional measures such as re-building Stratford station to provide a two-platform facility (replacing the previous one platform station) are also to provide additional capacity. Having to reduce frequency would negate this work and give the passengers a worse service with reduced capacity, reliability and efficiency of operation, and increased crowding.

5 Implications for disabled passengers

DLR's door closure procedure and the associated audible and visual warnings have been in operation for a number of years now and have a proven safety record. A check of the available accident statistics and passenger complaint records has revealed no evidence to suggest that any disabled passenger has been injured or put at risk as a result of being trapped in a closing door, or suffered any inconvenience by being unable to board or alight from a train before departure.

DLR is aware of, and has actually provided practical assistance to the DfT's programme of research into audible and visual warnings at train doors, which has reinforced the importance of sounding of an audible warning prior to door closure. Whilst it is acknowledged that this is a valid conclusion in the context of a typical heavy rail environment where there is a gap and/or step between train and platform, there are two aspects of DLR's service which would significantly reduce the impact of sounding the warning as the doors begin to close:

- The level access, with a minimal gap, between the platform and the train. This reduces the time needed to assess boarding strategy and minimises the risk of slips, trips and falls.
- The presence of the Passenger Service Agent (PSA) on all trains. This is a completely different scenario to the main line railways or the Underground. The PSA is in the train with the passengers and therefore immediately available to assist and ensure all passengers are safely on board before closing the doors. The PSA is in control of the train departure process operated from one of the doorways. All PSAs undergo an approved course of training in disability awareness, refreshed annually, during their induction. This training stresses the importance of actively

looking out for and offering help to disabled passengers. Where a disabled passenger is using their train, PSAs are encouraged to act on their own initiative to provide appropriate help and allow more time for boarding and alighting if necessary. Due to DLR's automatic operation, they are able to move through the train to provide this service. DLR's largely straight platforms and short trains (compared to the heavy rail network) aid visibility of the doors from the PSA's control panel which is at any doorway on that side of the train, which further reduces the risk of passenger entrapment.

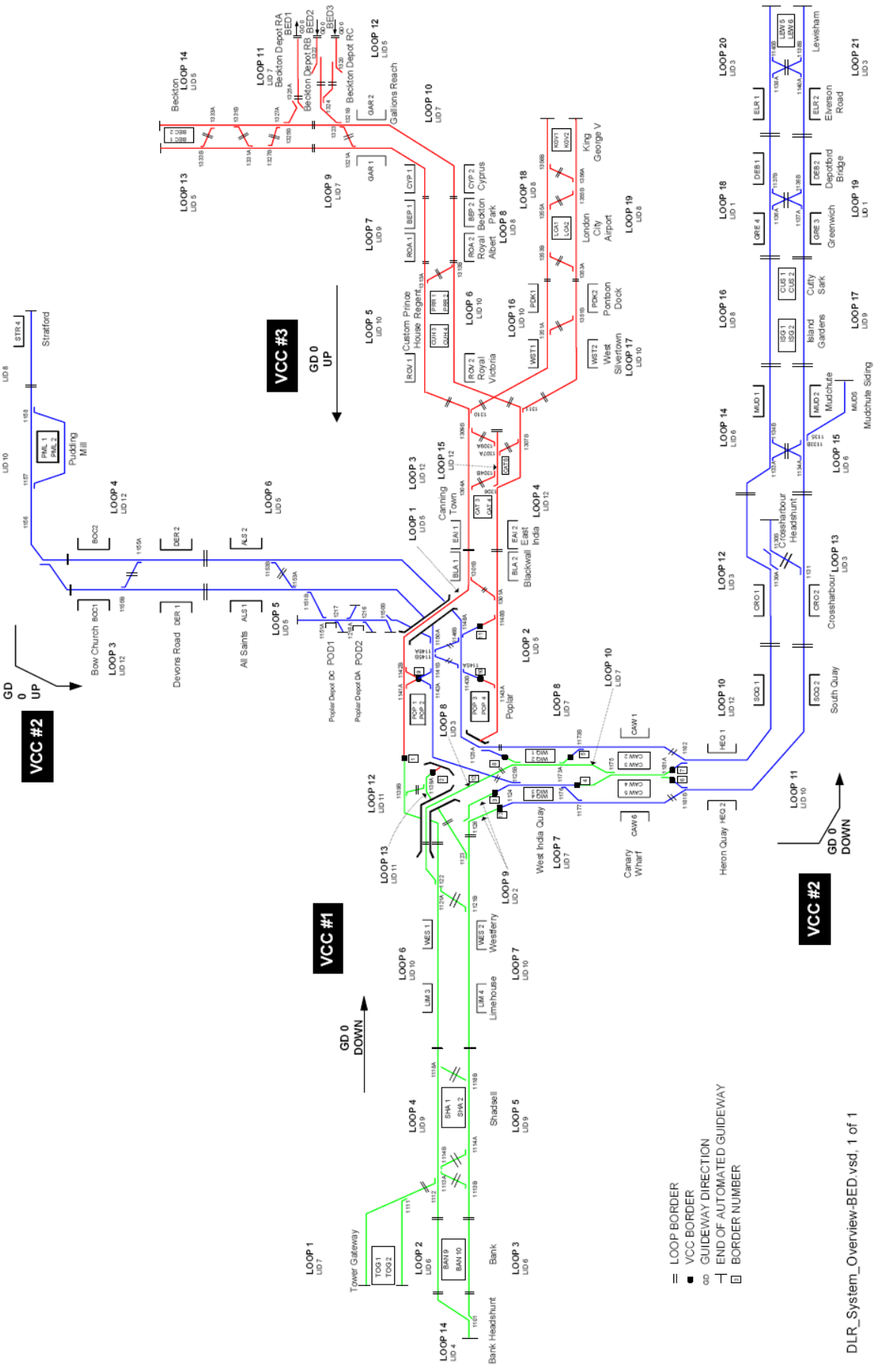
DLR is consulting with some of its own passengers with disabilities with whom we have contact, London Travelwatch and would be happy for members of DPTAC to witness some of the training given and how the system operates on a day to day basis.

6 Conclusion

The primary issue for DLR in achieving compliance with Regulation 4(3)(b) is the effect on network capacity, rather than the cost of upgrading the trains and infrastructure although this is considerable. DLR is already investing considerable sums to provide **additional** capacity to meet the forecast passenger numbers. Introducing these measures to the DLR will mean that Ministers will see the benefits of public funds being negated and much of the business cases put forward undermined. Since its inception, capacity enhancement has been a central part of DLR's long-term strategy and its importance is set to increase as development of the Docklands area continues.

There is no evidence to suggest that DLR's current door control arrangements and the audible and visual warnings provided at each door have any significant adverse effect on the comfort or safety of disabled passengers or that adherence to the Regulations would enhance comfort or safety on DLR with its specific characteristics. DLR therefore seeks to continue the existing method of operation on the second build of B92 Stock and to carry it over on to the new build of B2007 Stock.

Fig. 1: DLR Network Map



APPENDIX 1 – TIMETABLING ASPECTS

Atkins were asked to review the effects of the RVAR Regulations to see if the DLR system can continue to deliver a robust and reliable service with the imposition of the extra 3 seconds delay in door closing. The conclusion is that certainly in the peak periods this would not be possible and the existing situation of a reliable service would be severely affected, meaning reduced capacity at a time of increasing passenger numbers; there would also be disruption to services in the off peak.

This analysis has been carried out against possible scenarios and assumptions. Trains accumulate some delay in normal existing operation and the situation is likely, in reality, to be significantly worse that the effects shown here.

The in depth analysis has been completed for the DLR timetable. The period chosen was from start of service around 0500 until 1200. The timetable used was the Mondays to Fridays version so we have the AM peak period moving into 2 hours off peak.

The service groups were as follows:-

- AM peak
  - Bank/Lewisham
  - Bank/King George V
  - Tower Gateway/Beckton
  - Stratford/Crossharbour
  - Stratford/Lewisham
  - Canning Town/King George V

- Off Peak
  - Bank/Lewisham
  - Bank/King George V
  - Bank/Canary Wharf
  - Tower Gateway/Beckton
  - Stratford/Lewisham
  - Canning Town/Beckton

Discussions took place with DLR on certain of the parameters to be used in this exercise. These can be summarised as follows:-

- All dwells at all stations to be extended by 3 seconds
- Departure from originating station to be minimum turnround time plus 3 seconds.
- Minimum turnrounds at terminating stations as follows:-
  - Stratford 1 minute 30 seconds peak
  - Stratford 1 minute off peak
  - Lewisham 1 minute 10 seconds peak
  - Lewisham 1 minute off peak
  - Beckton 1 minute
  - Canning Town 1 minute siding when turning back in platform and not using reversing siding
  - King George V 1 minute
  - Tower Gateway 1 minute
  - Minimum time between a train arriving at Bank, platform 10, to departing from platform 9 via the headshunt 3 minutes 19 seconds

- Reversed in headshunt / turnback siding 1 second

From the exercise and subsequent analysis the following picture has emerged:-

1. **Peak**

In the peak periods particularly, the regular frequency and reliability of services are the principal drivers of capacity. If trains are running late or at irregular intervals, the number of passengers builds up, delaying subsequent trains as more people try to board or alight. This also produces the likelihood that more passengers will end up obstructing doors and thus require the whole sequence (with the extra 3 seconds) to be repeated. The time taken to alight all passengers (and check that the train is cleared) before entering e.g. headshunts has also not been taken into account in these scenarios.

- All late running services into Bank could start back on time plus 3 seconds
- Late running services into Tower Gateway could not recover all the lost time as the turnround time did not permit this. Therefore they started late and got progressively later through the peak.
- There were some conflicts at Junction 1, near Shadwell, between trains into Tower Gateway and trains from Bank. For the purpose of this exercise in most instances priority was given to the Tower Gateway services in view of the point outlined above.
- Conflicts at Junction 3X near West India Quay, between services from Bank and to Stratford. Priorities in the exercise varied depending on degree of lateness already incurred.
- Arrivals at Crossharbour of terminating services varied between 30 seconds and 3 minutes 42 seconds late
- Arrivals at Lewisham varied between 30 seconds and 6 minutes 14 seconds late.
- The worst late running between Canary Wharf and Lewisham were the Stratford services. Some of these were so late that they ran out of course behind the train they were booked to precede.
- Arrivals at King George V varied between 12 seconds and 1 minute 25 seconds late.
- Arrivals at Beckton varied between 33 seconds and 1 minute 20 seconds late.
- Some conflicts occurred at Junction 7X, near Canning Town, between services from Beckton and to King George V.
- The train service between Bow Church and Stratford suffered severe disruption on the two single line sections with many trains being over 3 minutes late. This situation worsened during the peak with some trains being up to 7 minutes late.
- Many services started back late from being George V, there being insufficient turnround to make up the inward late running.
- Despite the above, the King George V/Canning Town shuttle service made up all lost time in each turnround at Canning Town.
- King George V to Bank services tended to start back 1 minute 18 seconds late.
- All services at Beckton started back on time plus 3 seconds
- Due to the disruption caused by the single line sections, trains departed Stratford up to 5 minutes 26 seconds late.
- Some trains incurred excessive delay at Bow Church or Pudding Mill waiting a train in the opposite direction to clear the single line.
- Few trains managed to gain all lost time before departing from Lewisham, the worst services being those to Stratford. The worst late departure to Bank was 1 minute 31 seconds and to Stratford 5 minutes and 21 seconds.

- Crossharbour terminating services from Stratford also failed, in many instances, to recover all lost time before starting, the worst case being 2 minutes 32 seconds.

2. **Off Peak**

Off peak the booked turnrounds are shorter at Bank and Beckton but longer at Stratford, King George V, Tower Gateway and Lewisham. The Canning Town shuttle runs to/from Beckton and terminates directly in platform 3 ready for its next service without reversing from platform 4 via the siding.

The following issues came to light:-

- Not all services were able to regain all lost time before starting back from Bank - a situation that was getting progressively worse as time went on
- Late starts from Tower Gateway lessened during the period with some regaining all lost time.
- Conflicts continued at Junction 1
- Few conflicts were noted at Junction 3X or Junction 7X
- All trains started back on time from King George V plus 3 seconds
- Late starts from Beckton on trains for Bank got progressively worse.
- The longer turnround times at Stratford, combined with those at Lewisham, enabled the service to return to right time starts from that point plus 3 seconds
- The Canning Town shuttle, in the main, managed to start on time plus 3 seconds
- Late starts from Lewisham lessened although the Lewisham/Bank services were starting to deteriorate due to the reduced turnround times at Bank (The need to ensure trains are empty on arrival before proceeding into the headshunt would add a further delaying factor here).

3. Summary of Findings

To summarise in the peak the Stratford services are totally unreliable, affecting other services on the common route between Canary Wharf and Lewisham. It is only the generous turnaround times at Bank which prevents the rest of the service falling into complete chaos. (In reality the need to ensure trains are empty before proceeding into the headshunt would show that the turnround time is not generous.)

Off peak, the effects on the Stratford service are less significant, due to the increased turnround time at that point. Reduced turnrounds at Bank and at Beckton in particular have an adverse effect on punctuality which will progressively worsen as the service continues. Inevitably this will have a serious effect on the PM peak which will not enjoy all initial services starting on time, unlike the AM peak.

It should also not be forgotten that the above results have been attained by a theoretical train service which is operating with minimum turnrounds etc. and absolutely no spare contingency/flexibility whatsoever. In reality the results shown here would be worse with the ability to run a reliable, frequent service drastically reduced; in practice no train service would be planned in this way as some slack must be put in. In practice, therefore, if the timetable had to be re-written on the lines outlined above with no junction or single line conflicts, adequate turnrounds and some spare contingency, it is difficult to see how this could be done without removing some of the existing services or putting additional trains in the diagram (for which DLR has no stock and which could not

be reliably handled by the signalling system on the existing track layout).

The above course of action would have severe consequences for the network in view of the rapidly increasing passenger numbers and is not therefore recommended. Retention of the existing timetable is the only practicable course of action open to DLR at present; for this to run reliably, an exemption from the 3 seconds door rule must be obtained.

Jan Glasscock FIRO, Technical Director Railway Operations, Atkins Rail
Euston Tower, 286 Euston Road London NW1 3AT
Tel: 0207 121 2310 Fax: 0207 121 2525

Application for an exemption from the requirements of the RVAR

1. Full name of applicant and address

David Keep
Company Secretary
Docklands Light Railway
PO Box 154
Castor Lane
Poplar
London E14 0DX

2. Description of Rail Vehicles

Docklands Light Railway B2007 vehicles, serial numbers 101 to 155 inclusive.

3. Circumstances in which exemption is to apply

At all times in passenger service.

4. Relevant requirement from which exemption is sought

See Appendices 1 – 6 attached.

Appendix 1

Application for Exemption from Regulations 4(2) and 4(3) and 5(2)

1. Requirement from which exemption is sought

4(2) Each passenger doorway in the side of a regulated rail vehicle shall be fitted with an audible warning device which shall emit warning sounds in accordance with paragraph (3) inside and outside the vehicle in the proximity of each control device for that doorway or, if there is no such control device, adjacent to that doorway.

4(3) The audible warning device shall:

4(3)(a) emit a distinct sound for a period of not less than 3 seconds commencing when a door becomes openable by a passenger;

4(3)(b) if the door is operated by a member of the operator's staff, emit a different distinct sound commencing not less than 3 seconds before the doors start to close.

5(2) When power-operated doors are closed by a member of the operator's staff the illumination of each such control device shall cease not less than 3 seconds before the doors start to close.

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

All DLR trains carry a Passenger Service Agent (PSA), whose duties include controlling the closure of all the doors on the train using special 'crew only' controls located at each doorway. This avoids the need for the PSA to have to move from one end of the train to the other to access the door controls during station stops and makes it much easier to check that all passengers are clear of the doors before initiating the closure sequence.

For the PSA, the audible and visual warnings required by the above Regulations can be a source of annoyance, given that the audible warnings in particular are very loud and repeated frequently throughout a typical 8 hour shift. Given that the PSA would be present at any door under his/her local control and would either be able to verbally warn a passenger that the doors are about to close or, more likely, would delay door closure to enable the passenger to board, DLR requests exemption from the above Regulations to enable the audible and visual warnings to be disabled at any door under the local control of the PSA.

3. 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.

None.

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

None – DLR believes that the existing training given to all PSA's is sufficient to minimise any risks caused by the proposed non-compliance.

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

None.

6. The period for which exemption is sought.

Exemption sought until 31st December 2009 (or publication of the revised RVAR, whichever is sooner).

Appendix 2

Application for Exemption from Regulation 5(2)

1. Requirement from which exemption is sought

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

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

The internal 'close' pushbuttons at each bodyside door remain illuminated until the doors are closed.

This feature was carried over from the original B92 stock design which pre-dates the RVAR. Whilst we recognise that making the pushbutton illumination timing compliant would offer benefits for hearing impaired passengers, the principal implications for DLR are as described in our previous application for exemption from Regulation 4(3)(b) for the B92 Stock, i.e. we would be unable to deliver our present level of service due to the cumulative effect of a three second increase in dwell time at each station.

DLR is also aware of, and has actually contributed to, the Department's current programme of research into provision of the most appropriate door audible and visual warnings for disabled people. Since the findings of this research may be incorporated into new or amended Regulations, we consider it prudent to await publication of the final report before considering whether we could achieve compliance without adversely affecting the quality of our train service. .

3. 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.

We acknowledge that this non-compliance will cause difficulties for hearing impaired passengers; however we would point out that the timing of the door pushbutton illumination is exactly the same as on existing DLR trains, which have now been in service for approximately 15 years with no known adverse effects on the safety or convenience of disabled passengers.

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

All customer facing staff on stations and trains receive disability awareness training as part of their induction, with an annual refresher course. The training emphasises the importance of proactively looking out for and providing appropriate assistance to disabled passengers, including those whose disability may not be readily apparent. All trains carry at least one Passenger Service Agent (PSA), whose duties include closing the train doors before departure from each station. PSAs are instructed to check that all passengers are clear of the doors before closing them. Since the PSA actually travels within the passenger accommodation, rather than in a separate

driving cab, the doors can be more easily observed than on a normal ‘heavy rail’ train, so the risk of a passenger being trapped in a closing door is minimal.

A review of DLR’s accident data found no record of any injuries to disabled passengers which were caused by doors. There were a small number of injuries to able-bodied passengers (the typical rate of injury being in the region of 0.00001% of the total number of passengers carried, i.e. 1 in 10 million) and all of them were classified as ‘minor’.

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

For operational, technical and commercial reasons we would prefer any work to be carried out to rectify this non-compliance at the next appropriate refurbishment or classified overhaul opportunity.

6. The period for which exemption is sought.

Exemption sought until 31st December 2016.

Appendix 3

Application for Exemption from Regulation 11(3)

1. **Requirement from which exemption is sought**

   A handhold shall be fitted to the top of the back of each seat which faces towards the end of a regulated rail vehicle and which is next to a gangway in a passenger saloon.

2. **Technical, economic and operational reasons why exemption is sought**

   The aisle seats adjacent to the draughtscreens (4 locations per vehicle) face towards the vehicle ends but are not fitted with a handhold (see Fig.1).

   We recognise that the lack of a handhold on the top of the aisle seat at each draughtscreen results in our failing to comply with the letter of this Regulation. We are prepared to fit a spacer between the seat back and the draughtscreen which would then invoke Regulation 11(4), thus obviating the requirement to fit a seat back handhold, even though this would not provide any benefits to disabled people.

   Our contention is that because the gap between the top of the seat back and the draughtscreen is approximately 25 mm wide and the draughtscreen is fitted with a grab pole which complies with Regulations 11(2)(a) to (e), the existing design has no adverse effect on the safety or comfort of disabled people and is in line with the spirit of Regulations 11(3) and 11(4).

   Furthermore, we would be reluctant to fit an additional seat back mounted handhold as it would create a safety risk due to its proximity to the draughtscreen, resulting in a potential finger trap. There is also a small amount of fore-and-aft movement inherent in the seat back structure which could exacerbate the potential for injury if a handhold were fitted.

3. **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.**

   None.

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

   None.

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

   We understand that there is a proposal to amend Regulations 11(3) and 11(4) to disapply the requirement to fit a seat back handhold in cases where a seat is in close proximity to a draughtscreen. However, should the existing wording be retained, we would fit an appropriate spacer between the back of the bodyside seat and the draughtscreen during scheduled maintenance.

6. The period for which exemption is sought.

Exemption sought until 31st December 2009 (or until publication of the revised RVAR, whichever is sooner).



Figure 1: Arrangement of seats and grab pole at draughtscreens

Appendix 4

Application for Exemption from Regulation 13(4)

1. Requirement from which exemption is sought

Whilst the vehicle is stationary or at a tram stop, the systems inside the passenger saloon and on the exterior of the vehicle shall be used to announce the destination of the vehicle, or, if the vehicle is following a circular route, the name and number of the route, and in the case of systems inside the passenger saloon only, to announce the next stop.

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

The automated audible and visual announcements made during station stops do not contain the information required by this Regulation (destination and next stop). At present, the intention is to announce (audibly and visually) the next stop and destination as the train approaches each station. During the station stop the visual displays carry on scrolling this message, but the audible announcement only states the name of the station stop and not the destination of the train. The destination and the next stop are then announced (in both audible and visual formats) shortly after departure.

This is a perpetuation of the situation on the existing (unregulated) fleets, which were fitted with a new passenger information system during the recent refurbishment programme. Whilst the system was being designed, advice was taken from the Joint Mobility Unit (JMU) Access Partnership. One of the issues they highlighted was the length of the announcements during station stops, which is critical to sight impaired passengers being able to make the right travel decisions within the often very short timeframe available. Originally, with the best of intentions, it was proposed to include such information as interchange opportunities with other LUL lines and the main line network at certain stations, but on reviewing the design we accepted JMU's recommendation that the messages should be shortened, to reduce the risk of 'information overload'. After the train resumes its journey, the 'next stop' announcement is repeated every minute (both audibly and visually) to reassure passengers.

Whilst we recognise that our disabled passengers may sometimes require more information than is presently provided, there are some significant technical issues to be overcome if the audible announcements are to be changed. The announcements are controlled from a central computer in the Control Centre at Poplar and triggered by the signalling system which controls the operation of the trains. Changing the announcements will require a major upgrade of safety critical software and there may still be certain stations where announcements may not be completed before departure, due to the physical limitations of the system hardware which triggers the announcements.

3. 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.

Sight impaired passengers may experience some difficulties in making the correct travel decisions.

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

   All customer facing staff on stations and trains receive disability awareness training as part of their induction, with an annual refresher course. The training emphasises the importance of proactively looking out for and providing appropriate assistance to disabled passengers, including those whose disability may not be readily apparent. All trains carry at least one Passenger Service Agent (PSA), who travels within the passenger accommodation on the train, rather than in a physically separate compartment as on 'heavy rail' trains. Should any passenger appear confused or distressed, the PSA is well placed to spot this relatively quickly and provide appropriate assistance.

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

   We will investigate potential solutions to this issue, but since these may not be technically straightforward and may involve modifications to infrastructure and vehicle based hardware and software, we do not envisage being able to achieve full compliance in the short term.

6. **The period for which exemption is sought.**

   Exemption sought until 31st December 2016.

Appendix 5

Application for Exemption from Regulations 16(1)(d)

1. Requirement from which exemption is sought

A wheelchair space shall comply with the following specifications:

(d) no magazine rack or other fitting for the use of passengers shall be accessible through the space, other than an overhead luggage rack or an openable window (if fitted)

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

A horizontal handrail is mounted in the wheelchair space, on the bodyside above the 'call for aid' pushbutton (see Fig. 2). Neither the handrail nor the 'call for aid' pushbutton housing intrude into the wheelchair space.

The handrail is principally intended to provide support for a wheelchair user, but can be used by standing passengers when a wheelchair is not present. Whilst there is a risk that standing passengers may encroach into a wheelchair user's personal space if they were to use the handrail, the presence of a wheelchair would make access to the handrail physically difficult and this situation is unlikely to arise in practice.

One possible means of achieving compliance is to remove the handrail altogether, however we are reluctant to do so as it we believe it to be a useful feature for wheelchair users and for standing passengers when the wheelchair space is not being used.

3. 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.

None.

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

None.

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

None.

6. The period for which exemption is sought.

Exemption sought until 31st December 2009 (or until publication of the revised RVAR, whichever is sooner).



Fig. 2: Bodyside mounted handrail in wheelchair space

Appendix 6

Application for Exemption from Regulation 23(1)

1. Requirement from which exemption is sought

When a wheelchair compatible doorway in a regulated rail vehicle is open at a platform at a station or at a tram stop a boarding device must be fitted between that doorway and the platform or stop if a disabled person in a wheelchair wishes to use that doorway, unless the gap between the edge of the door sill of that doorway and the edge of the platform or stop is not more than 75 millimetres measured horizontally and not more than 50 millimetres measured vertically.

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

28 out of 38 stations on the DLR network have platforms which were built to give a horizontal distance of between 75 and 84 mm between the platform edge and the edge of the vehicle floor when the doors are open (a full list is given in Table 1). This was to allow a small variation in the position of the platform edge, due to the limitations posed by the processes used to lay the track and build the platform. (The height of all station platforms is within 50 mm of vehicle floor level and therefore compliant with this Regulation).

Reducing the width of the gap between the train and the platform edge increases the risk of the train colliding with the edge of the platform, so to mitigate both this risk and the risks to disabled passengers associated with a large gap, some platforms have a rubber strip fitted to their front edge (see Fig.1). This effectively 'fills' the gap, minimising the risk of wheelchairs becoming trapped in it, whilst providing a benign surface in the event of a train coming into contact with it.

As far as the relationship of vehicle floor edge to station platforms is concerned, B2007 Stock is dimensionally the same as DLR's existing (unregulated) trains. These have a proven record of approximately 15 years of safe operation on the DLR network with no known instances of injury to either wheelchair users or ambulant disabled passengers. For B2007 Stock operating as one or two car trains, the level of risk is not expected to change significantly from the present situation.

However, in order to quantify the scale of the non-compliance, DLR has commissioned Atkins Rail to survey all 28 stations where the platform to vehicle gap exceeds 75 mm. The list of non-compliant stations in Table 1 is very much a 'worst case' scenario as it is believed that most of them are compliant or only marginally non-compliant. Once DLR has a greater understanding of the magnitude of the problem, potential solutions will be investigated. Depending upon the initial findings, the survey may also consider the impact of 3-car operation on certain routes (currently trains operate in either single or 2-car formations).



Fig. 3: Rubber strip fixed to front edge of platform

3. **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.**

   Based on our current knowledge of the problem, we believe that the effect on wheelchair users will not be significant as the non-compliance perpetuates arrangements which have proved safe and convenient for DLR passengers for over 15 years. However, we have commissioned the platform survey outlined above, to be certain that there will be no adverse implications for any of our passengers.

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

   The rubber strip described above is one solution which is already deployed at a number of station platforms, but it may not be the optimum solution at all platforms, especially those which are curved. Other measures will be investigated such as stopping trains at a point on the platform where the stepping distance is smaller, or re-profiling the edge of a short length of platform, local to the wheelchair compatible doorway on each train.

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

   We are already investigating potential solutions to this issue, but since these may not be technically straightforward and the logistics of implementing them may be complex, we do not envisage being able to achieve full compliance in the short term.

6. **The period for which exemption is sought.**

   Exemption sought until 31st December 2014.

Table 1: List of non-compliant stations

Tower Gateway	Canning Town	Gallions Reach	Crossharbour
Shadwell	Royal Victoria	Beckton	Mudchute
Limehouse	Custom House	Bank	Island Gardens
Westferry	Prince Regent	West India Quay	All Saints
Poplar	Royal Albert	Canary Wharf	Devons Road
Blackwall	Beckton Park	Heron Quays	Bow Church
East India	Cyprus	South Quay	Pudding Mill Lane

Appendix B

DPTAC
Access for all

Mr Nathan Cole
DfT Rail Group
Dept for Transport
Great Minster House
76 Marsham Street
London, SW1P 4DR

Ann Bates
Chair of the Rail Working Group
Disabled Persons Transport
Advisory Committee

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31st October 2007

Dear Nathan,

Disability Discrimination Act 1995:
Section 47 Exemption Application by Docklands Light Railway

Thank you for your e-mails of 17th July and 13th September 2007 seeking DPTAC's advice on Docklands Light Railway (DLR) application for exemption under Section 47(3) of the Disability Discrimination Act 1995.

The DPTAC Rail Working Group Exemption Sub-Committee considered this application at a meeting on Wednesday 3rd October 2007, following a presentation by staff from Docklands Light Railway. This presentation referred to the application by DLR for an exemption from regulation 4(3)(b) of the Rail Vehicle Accessibility Regulations.

After careful consideration of the full application and a lengthy discussion at the DPTAC Exemption Sub-Group meeting, DPTAC are persuaded that the tight running of the DLR does not allow for the 3 second audible announcement prior to the door closure.

DPTAC feel the need for consistency across the DLR network will reduce confusion amongst all passengers and recommend that this exemption is granted, provided that a member of staff is on each unit at all times.

With the need for consistency in mind, we also agree with your comment regarding the harmonising of end dates, therefore recommend the exemption should have an end date of October 2016.

As with the Gatwick Express exemption, DPTAC believe the DLR exemption should only apply whilst the rolling stock is in the service described at the exemption meeting, but if it is moved to another service then we suggest a new exemption is applied for.

Yours sincerely



Ann Bates
Chair DPTAC Rail Working Group

Ann Bates
Chair of the Rail Working Group
Disabled Persons Transport
Advisory Committee

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19th December 2007

Mr Nathan Cole
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Dear Nathan,

Disability Discrimination Act 1995:
Section 47(3) Exemption Application by Docklands Light Railway

Thank you for your e-mail of 7th December 2007 seeking DPTAC's advice on Docklands Light Railway (DLR) application for exemption under Section 47(3) of the Disability Discrimination Act 1995.

DPTAC have considered this application following an application by Docklands Light Railway. This application by DLR for an exemption from regulations 4(2), 4(3), 5(2), 11(3), 13(4), 16(1)(d), and 23(1) of the Rail Vehicle Accessibility Regulations.

After careful consideration of the full application, DPTAC recommend the following:

Regulations 4(2), 4(3) and 5(2)
DPTAC are persuaded that the tight running of the DLR does not allow for the 3 second audible announcement prior to the door closure.

DPTAC feel the need for consistency across the DLR network will reduce confusion amongst all passengers and recommend that this exemption is granted, provided that a member of staff is on each unit at all times.

Regulations 11(3)
With the need for consistency in mind and having previously recommended this exemption was granted in October 2006 to DLR, DPTAC recommends this exemption is granted because of concerns resulting from the potential for trapping of fingers that compliance might bring.

Regulations 13(4)
With the need for consistency in mind and having previously recommended this exemption was granted to DLR in October 2006, DPTAC recommends this exemption is granted after considering the major engineering difficulties involved.

Regulations 16(1)(d)
We understand the Department for Transport is looking into the position of handrails within the wheelchair space as part of the RVAR review. DPTAC's view is that the safety of standing passengers is important to all including wheelchair users and would therefore recommend the requested exemption is granted.

Regulations 23(1)
Having considered the proposals put forward by DLR, DPTAC recommend that the exemption is granted for the platform edges quoted in their Table 1 annexe. Once the B2007 rolling stock has been introduced DPTAC recommend that further solutions are investigated to minimise the risk to wheelchair users and ambulant disabled passengers.

With the need for consistency in mind, we also agree with your previous comment regarding the harmonising of end dates, therefore recommend the exemptions should have end dates that are consistent with previous applications.

Yours sincerely



Ann Bates
Chair DPTAC Rail Working Group

Appendix C

From: "Whalley, Ron" <Ron.Whalley@orr.gsi.gov.uk>
To: "Nathan Cole" <Nathan.Cole@dft.gsi.gov.uk>
Date: 31/10/07 14:22:16
Subject: RE: Docklands Light Railway - RVAR exemption application

Nathan,

I have studied the submission from DLR and the supporting document from ATKINS.

It is clear with the existing track layout, and the train performance with regards to acceleration and braking, that there is no "slack" in the current DLR timetable. It would also appear that because of passenger growth this situation will probably get worse rather than better.

Given the record of passenger handling over the past 20 years with the current door warning arrangement, I agree that any changes which might result in overcrowded stations and trains would be most undesirable and may potentially reduce the safety of all passengers.

HMRI would, therefore, not object to this derogation on safety grounds from the facts as presented. The other passenger information systems need to be periodically reviewed and maintained to provide suitable advice regarding the short door warning times.

Regards,

Ronald H. Whalley. C.Eng., MIEE
H.M. Inspecting Officer of Railways.

Tel. 01625 571135 or 0845 310 3370
or 0207 282 3766

From: "Whalley, Ron" <Ron.Whalley@orr.gsi.gov.uk>
To: "Nathan Cole" <Nathan.Cole@dft.gsi.gov.uk>
Date: 19/12/07 16:44:06
Subject: RVAR exemptions for DLR

Nathan,

I have now considered these exemption requests and discussed them with the inspector who handles DLR.

HMRI has no objection on safety grounds to the exemptions requested by DLR and detailed in appendicees 1 ~ 5.

We do, however, have some concern with regard to that detailed in appendix 6. This refers to the platform to car clearances. Whilst we appreciate that the nominal dimensions of the new vehicles are the same as those previously supplied, we would prefer to examine the vehicles upon delivery and during commissioning and also to review the Atkins Rail report when this is published in order that all of the issues can be fully examined. After this will be able to take a more informed view of any safety issues.

Regards,

Ron

Ronald H. Whalley. C.Eng., MIEE
H.M. Inspecting Officer of Railways.

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