

11 May 2009

Dear [REDACTED],

### **The accessibility of First Great Western (FGW) Class 16X vehicles by 2020**

I am writing in follow up to my letter of 23 January in which I set out the Department's initial views with regard to the current accessibility status of the FGW Class 16X fleet. This was undertaken as part of the Department's programme to assist the rail industry in targeting efforts at those features of rail vehicles that have the greatest negative impact on the ability of disabled passengers to travel, particularly with a view to the vehicles operation past the 2020 "End Date" by which time all rail vehicles are required to be accessible. That view was initial as some aspects of assessment required a site visit to confirm and, subsequent to that, approval of the assessment by key Departmental stakeholders such as the Disabled Persons Transport Advisory Committee (DPTAC).

The site visit has now taken place and the DfT assessment is set out in the attached checklist. As you are aware, the checklist shows the assessed current compliance of the FGW 16X fleet against the standards within both the RVAR and the Technical Specification for Interoperability - Persons with Reduced Mobility, and sets out the Department's view on which areas of these pre-RVAR vehicles (introduced in approximately 1992) would need to be made more accessible in order for us to allow the use of the units beyond the 1 January 2020 End Date.

Based on the Government's stated intention of an accessible rail fleet by at least 1 January 2020 and, following discussions during the site visit, our understanding of some of the engineering challenges on this fleet, the attached checklist shows:

- The areas on the vehicles which are already compliant with either RVAR or the PRM TSI (labelled with green);
- In yellow, those non-compliant areas of the unit which are not expected to be corrected (unless a novel solution arises) as either:
  - they deliver only marginal improvements in accessibility: e.g. lowering a handhold by 20mm; or

- compliance would involve significant re-engineering of the vehicle: eg closing the step riser is not possible without reworking the entire door mechanism; or
- The non-compliant areas on the vehicle where we expect some work to be done to bring them closer to compliance, without necessarily achieving full compliance with either RVAR or the PRM TSI (labelled with yellow and red checks): e.g. Seats are slightly too low for priority seat compliance but are likely to be acceptable, whereas we will require work to ensure compliance of priority seat clearances;
- Areas where the vehicles already partially comply but where further compliance is expected (shown as blue with red checks): eg. the door “closure” alarm is compliant but the door “open” alarm will require rectification;
- Finally, those areas (shown in red) where improvements to accessibility will need to be achieved in order for these vehicles to operate beyond the End Date.

The checklist is also for the use of TOCs and bidders for future franchises, therefore the checklist also shows overall what is expected to be delivered on a unit in service, for example, provision of boarding ramps if required.

My comments are included in bold throughout the checklist but principally, little has changed from the initial view and there remain nine significant areas where further accessibility improvements are expected (please also note that all improvements going forward are to PRM TSI standards):

### Door Alerts

The lack of external audible warning sounds is an issue that will require rectification to achieve compliance as this is an essential feature for people who have low levels of vision. The single bell tone 'door enabled' indicator needs to be lengthened as it does not currently meet required standards.

### Steps

A contrasting band across the stepboard and the doorway are needed to highlight the step into the vehicle. A light source adjacent to the step will also be required. These are two particularly important factors for the assistance of persons with low vision using rail vehicles. It is worth noting that, once fitted, in order to maintain compliance a cleaning regime will need to be in place to ensure that the contrasting bands remain visible.

### Floors

There is no contrast in the floor colour between the vestibule and the saloon, nor a contrasting band between the door jambs. The metal edging strip in place on some vehicles between the vestibule and the saloon does not satisfy compliance with the former requirement. During the assessment Angel/FGW discussed the use of wider coloured bands to provide the required contrast and will forward plans to DfT for consideration.

### Priority seats

Not less than 10% of seats are required to be designated as priority. DfT will expect compliance with this, and the sub requirements that arise from their fitment. For example, other than the facing seats on the 3 car units (cab end), seat spacing does not meet priority seat requirements. Given the percentage fitment of tables on the vehicles, these

will also be required in priority seat areas, though it was noted during the site visit that there was already some provision of tables in potential priority seat areas. Seat heights are slightly below requirements, as are seat widths, but these are non-compliances that DfT can accept.

### Handrails and handholds

Vertical doorway handholds are both too low and too short to meet the required standards and so will need to be improved, but without obscuring the door controls. Discussion during the site visit indicated that there may be a single engineering solution for this and associated issues in the same area (door controls etc). The oval profile is also not in compliance but is something we can accept if the existing handrails remain, but are adapted in some way to become compliant. However, if the handrails are replaced, full profile compliance is expected (if this leads to concerns about increased throughway protrusion DfT will examine the issue again). Lastly, the contrast of seat handholds varies (grey/yellow/blue) between 166/165s units. All handholds will need to contrast with the seat backs to which they are fixed.

### Passenger Information System

The few areas where the current PIS system meets accessibility requirements are noted in the checklist. However, we understand that the intention is to replace the system soon. In that case the PRM TSI should be used as the specification during procurement. Other signage, e.g. the lack of tactile signage, will require improvement.

### Wheelchair spaces/specs/doorways

Two wheelchair spaces is the minimum requirement, which DfT will uphold. A significant number of other sub-requirements, e.g. signage, call-for-aid, etc, cascade from the overall requirement to provide wheelchair spaces, and compliance will be expected. During the visit it was discussed that for, reasons of efficiency, it might be appropriate to include passive provision of call-for-aid during the installation of PIS.

### Toilet/ Toilets for disabled persons in wheelchairs

As an overall measure the contrast of toilet seats and associated controls will need to be made compliant (e.g. push buttons are likely to reach end of life before 2020 and when replaced they must meet PRM TSI standards), as will be the toilet door lock forces. Additionally, toilets nearest to the wheelchair spaces will need to be made wheelchair accessible to PRM TSI specifications. You will wish to be aware that DeltaRail is developing a possible solution for the particularly tight size restraints on Class 158s, which may also be of use on Class 16Xs. Based on an assessment of their concept mock-up, we and members of the Disabled Persons Transport Advisory Committee believe that DeltaRail's solution provides the accessibility required by RVAR and the PRM TSI.

### Door controls

The external 'door open' controls require excessive force to operate which will need to be reduced. The positioning of the interior body side door "open" control particularly, as well as those at vehicle end/ 1<sup>st</sup> class saloon, is also of concern. Whilst we have pragmatically approached such non-compliances in the past, and shown some latitude, in this instance the degree of non-compliance for the interior body side door controls is considerable. The buttons also neither contrast sufficiently, nor are tactile. An engineering solution, to meet these and other non-compliances (door handles) in this area was discussed during the visit. Dependant on the solution chosen, DfT could likely accept a reversal of the open

and close buttons to bring the open button closer to compliance (to the extent accepted elsewhere), though a total solution would of course be preferable.

I hope this is helpful to you, and would be happy to consider the solutions you propose. This assessment should be sufficient to inform your plans for the FGW 16X fleet, however, it should not be used as a precedent on other vehicles, unless the surrounding conditions are exactly the same as this fleet. Equally, you understand that the Department's policy of targeted compliance relates only to existing vehicles, and provides no grounds for building new vehicles with similar non-compliances in the future. We would also welcome a breakdown of indicative costs and your views on the best time(s) to undertake the work.

In due course, Angel Trains will be able to ask the Department for a formal determination under regulation 5(8) of the Railways (Interoperability) Regulations 2006 (RIR) of which non-compliances need not be rectified (our response would mirror the compliance checklist attached to this letter). This would then allow this fleet, if so desired, to operate past the 1 January 2020 date for rail vehicles to be accessible, by virtue of new RIR regulation 4B(d)(iii) (inserted by the Rail Vehicle Accessibility (Interoperable Rail System) Regulations 2008).

I am copying this to Brian Freemantle and Peter Randall here, and DPTAC. I am also copying to the Office of Rail Regulation, as the body responsible for enforcing the End Date on heavy rail.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'K. A. McCarthy', with a long horizontal flourish extending to the right.

**Kraig McCarthy**  
**Disability and Equality Policy Officer**