Dear Dr Phipps

**Porterbrook Leasing Company Limited’s submission to the Enterprise and Business Committee regarding its Inquiry into the future of the Wales and Borders Rail Franchise**

1. Porterbrook Leasing Company is one of the three Rolling Stock Companies (ROSCOs) created as a result of the privatisation of British Rail (BR) and currently owns approximately 31% of the passenger trains operating in the UK. With regard specifically to the Wales and Borders Franchise (W&B), Porterbrook owns 97 assorted Diesel Multiple Unit (DMU) carriages which are leased to the franchisee on contracts which expire in October 2018 and account for 40% of the W&B train fleet. As our expertise is in procuring, supplying and maintaining rolling stock we are limiting our comments and observations to these areas.

The current W&B train fleet, which are all DMUs (ignoring the Cardiff to Holyhead locomotive hauled train), are easily divided into 3 distinct sections;

- Class 142 and 143 ‘Pacers’ manufactured 1985/86 – 60 carriages; 23% of the fleet
- Class 150, 153 and 158 ‘Sprinters and Super Sprinters’ manufactured 1985/92 – 128 carriages; 50% of the fleet
- Class 175 ‘Coradia’ manufactured 1999/2000 – 70 carriages; 27% of the fleet

**Section 1: Pacers**

2. These are the trains which get bad press as being uncomfortable to ride on and not fit for carrying large number of commuters; as they certainly do in the South Wales area. It is true that the Pacers are being used to provide services which they were not originally intended to cover and have limitations; but they should not be dismissed out of hand.

3. The Pacer series was a project by BR to create a train with low running costs for use on rural and suburban rail services. At the time, BR was under increasing financial pressure from the government including proposals to cut more rail lines. The Pacers were procured and introduced as the alternative to cutting services. Since privatisation these trains have increasingly been used on commuter services which has necessitated a level of investment by the owners and the operators to improve both their suitability and their reliability. As a result the Porterbrook Pacers with W&B are, at the time of writing, the most reliable Pacers in the UK and...
are more reliable than many Sprinter and Super Sprinter fleets. However, one of the main benefits of a Pacer over any other train in the UK is its cost to lease.

4. At current levels of rental the Pacers that we lease to W&B are 30% of the cost of the Sprinters we lease. They are 18% of the cost of class 170 DMUs that we have purchased over the past 13 years and we estimate that a Pacer will be less than 10% of the cost of a new DMU if there was a product in the market to purchase; which currently there is not.

5. Even accepting the above it is wrong to assume that the Pacers are a long term solution for W&B or indeed any other franchise in the UK; they will need replacing with new or newer trains, either DMUs or EMUs (Electrical Multiple Units) if routes, specifically in South Wales, are electrified. We cover the electrification later in this submission. But before a replacement is procured certain modification work must be undertaken to the Pacer fleet.

6. This work is split into 2 areas. Firstly as with any mechanical piece of equipment there are the engineering modifications needed to ensure that they operate reliably and known weak points and obsolescence issues are dealt with. These are known as CSO (Continued Service Operation) modifications and are generally agreed by the owner and operator.

7. Secondly, on 1st January 2020 at trains in operation must be compliant with the Technical Standard which deals with Passengers of Reduced Mobility (PRM). The Standard requires that trains are fitted with audible and visual information systems, wheelchair accessible toilets, priority seating plus a number of other modifications which have been agreed with the relevant authority.

8. As the current W&B franchise does not end until October 2018 there is no obligation on the current franchisee to undertake this work which will require the trains to be taken out of operation for a period of time and will therefore cause some disruption. Also, if the Pacer trains are not going to be required post 2020 there is no need to undertake the PRM work; although at least some of the CSO work will be needed. The problem is, if it is left until the next franchisee to make that decision there will not be sufficient time, in the first 15 months of the next franchise, to let a contract and complete the work and there certainly would not be time to purchase new trains. Replacement with an alternative existing DMU fleet is also unrealistic as there is no expectation that there will be spare rolling stock in the future as there are no plans to build new.

9. It is therefore necessary for the current franchisee, together with the Welsh Assembly, to plan for the future. Decisions are needed now as to whether the Pacer fleet will be replaced because if it is not then we need to let contracts very shortly to ensure trains are compliant and therefore available for operation in 2020.

**Section 2: Sprinters and Super Sprinters**

10. The Sprinters and Super Sprinter DMUs were built in the second half of the 1980s, have served the railway well and will continue to do so for some time to come. They are comfortable, reasonably reliable, economical to lease and operate compared to new trains and, in the case of the class 158s, air conditioned. It is therefore not necessary to plan for their replacement,
only to plan where they will best operate as part of the overall rolling stock strategy which may also include electrification.

11. However, although they may not be the perceived problem that the Pacers are they do have the same issues as the Pacers in that they also need to be modified for CSO and PRM compliance. Not only that, whereas the Pacers represent currently 23% of the W&B fleet, these types of trains account for a further 50% of the fleet. W&B are therefore in the position that, as currently configured, 73% of the train fleet cannot operate in passenger service on 1st January 2020 and beyond. This will become a major problem well before the end of the current franchise as it will be impossible for the next franchisee to deal with this issue. It must be dealt with now by the current franchisee and the Welsh Assembly.

12. One other point we would make. Delaying the CSO and PRM work will increase the cost by compressing it into a tight schedule. Undertaking it now will not only reduce the cost it will deliver the benefits early to those who need it; the disabled passengers.

Section 3: Coradias

13. These trains are not owned by Porterbrook but we have some knowledge of them and can therefore comment. The Coradia trains are only 13 to 14 years old and seem well accepted by the passengers. They are a medium size fleet which makes up 27% of the overall W&B fleet and we see no reason why they would not be retained by this franchise for the foreseeable future. Although we cannot categorically confirm it, we would expect that this fleet is PRM compliant and that little or no CSO work will be required.

14. Summary of the current DMU fleet

a. Pacers make up 23% of the W&B fleet and decisions need to be made now whether to replace them or modify them for operation post 2020.

b. Sprinters and Super Sprinters make up 50% of the fleet and contracts need to be let for the CSO and PRM work during this franchise term, while there is still time to complete it, as they will certainly be in operation post 2020.

c. The Coradias are the most modern trains in the W&B fleet and we would expect that little or no work needs to be carried out on them during this franchise term.

Electrification

15. As we understand the position, from reading the publically available announcements and statements and by following the press, the line between Cardiff and Swansea will be electrified by 2018 and the Cardiff Valley Lines in the Network Rail Control Period 6 (CP6); between 2019 and 2024. The electrification of the Cardiff to Swansea route will allow the W&B franchisee to replace the DMU trains it operates on this route with EMUs and transfer the DMUs that are released onto other services. Our estimation is that 2 or 3 DMUs will be released.

16. Although it would be good practice to introduce EMU trains as soon as the route is electrified, it would be more sensible, for many operational and cost reasons, to wait until the Valley Lines are electrified and acquire a single homogeneous fleet. Train Operating Companies (TOCs) prefer to operate large single class fleets rather than numerous small fleets and the total number of trains required to operate the services will be less with a single large fleet.
Introducing a small electric train fleet of 3 or 4 units (allowing 1 extra for cover) onto the Cardiff to Swansea route will not be cost effective.

17. Turning to the Valley Lines, we understand that the electrification will take place during CP6 (quoted as early CP6 and 2020 in the press) and that somewhere in the region of 45 to 50 EMUs will be required to replace the DMU trains and operate the services. The question will then be; are new trains purchased or should existing trains be transferred in from other parts of the UK where new trains are being introduced. This is always, understandably, an emotive subject. Why should anyone, in this case the people of South Wales, have someone else’s cast offs. Why can they not have a new train fleet.

18. With regard to new trains it is simply a matter of economics; are new trains affordable. With existing trains its availability and suitability that may be the deciding factor; albeit that cost must still be a consideration. If the Valley Lines are electrified in 2020, it is not currently possible to accurately predict which existing fleets may become available and those which do become available may not be suitable. If existing trains are the solution, the only way of ensuring that trains to the required specification are available is to enter into a contract with the owner of the trains well before the franchise in which they are currently operating is let on a long term basis, thereby giving that franchise time to find an alternative.

19. Consideration must also be given to the fact that if existing trains are chosen it is more than likely that they will require some modifications or refurbishment to made them ideal for the Valley Lines services. This may include a bespoke seating lay out, fitment of wi-fi, air conditioning and will certainly include engineering modifications and enhancement. This work will take time to complete so the fleet must be available to the W&B franchise well before it is needed in operation.

20. Obviously, if the decision is that new trains are affordable then it is a matter of working back from the date they are required in service and starting the procurement process in time for them to be designed, built, tested and delivered. Although, managing and delivering this process should not be underestimated.

Pacers and electrification

21. Earlier in this submission we discussed the Pacer DMU fleet and whether they should be replaced or modified to comply with the forthcoming PRM legislation. As many, if not most, of these trains operate on the Valley Lines this decision is inextricably linked to the electrification programme. If the Valley Lines are not fully electrified by 1st January 2020 the Pacers may be required to operate in passenger service unless other DMU trains are available; which as we have already stated, we think highly unlikely. If therefore it is accepted that the Pacers may need to be in operation and will as a result need the PRM modifications, we would make 2 points.

22. Firstly; as already stated, the contract for the work needs to be placed during this franchise it cannot wait until the next one. And, undertaking the work early will not only reduce the cost it will deliver the benefits to those who need them sooner than the legislation requires; which must be a good thing.
23. Secondly, if, as would now seem likely, the Pacers will be modified for PRM compliance it would make economic sense to keep them in operation for as long as reasonably possible to get the benefit of the money that has been spent. To expand on this point, we estimate that it will cost in the region of £85k per Pacer carriage to carry out the PRM modifications so that they are in operation on 1st January 2020. On 60 carriages that amounts to £5.1m.

24. If the electrification of the Valley Lines is completed in 2020 or 2021 and electric trains are introduced, unless an alternative use can be found for the Pacers, the full value of the investment will not be realised. If the investment is to be made on the Pacers it may be sensible to plan for the introduction of electric trains a year or 2 later to maximise the benefit of the investment. It would also give a level of robustness in the electrification programme and more time to deliver either new or suitably refurbished EMUs.

New Train Procurement

25. Porterbrook has procured 2,000 passenger rail vehicles and almost 2,100 pieces of freight rolling stock since privatisation at a cost of over £2.2bn. This has given us, along with the other ROSCOs, unparalleled experience in new train procurement contracts and the pitfalls that await the unwary. Train owners consider the long term suitability of the rolling stock when entering into contract whereas TOCs tend to only consider their specific and short term requirement. This can and has led to an increased cost of the new trains and a reduced residual value. We would strongly advise that if new trains are to be procured and financed using an operating lease (the standard ROSCO model), the financier is involved early in the process and well before the contract with the manufacturer is signed. In our experience this will deliver a lower cost train with potentially lower operating costs.

Train Maintenance

26. Train maintenance can be provided in entirety by the TOC, it can be undertaken jointly by the TOC and the owner or it can be contracted completely or in part to a third party. All of these schemes have their place, all have benefits and disbenefits and as a result all should be considered and accessed as part of a franchise bidding process.

27. The comments we would make on maintenance are; do not necessarily go for the low cost option on day one but consider whole life or whole franchise costs; and, place high importance on maintenance schemes that deliver improvements in reliability and availability of the trains. It is sometimes forgotten that reliable trains with a high level of availability not only improve the service for the passengers but also reduce costs and this should be a major consideration for any TOC.

28. Summary of the points made in this Submission

   a. 73% of the W&B train fleet may need to be modified for compliance with forthcoming PRM legislation if it is to remain in operation post 1st January 2020.
   b. Contracts for the PRM work will need to be let during the current franchise as there is insufficient time for the next franchisee to place the contracts and deliver compliant trains.
   c. Electrification of the line between Cardiff and Swansea will release very few DMU trains and it would be premature and costly to introduce a small EMU fleet before a decision is made on the much larger Valley Lines electric train fleet.
d. As the Valley lines will not be electrified until early in CP6 (2020?) it may be necessary to undertake the PRM compliance work on the Pacer trains as there may not be alternative DMU trains.

e. The £5.1m required to make the Pacers compliant with PRM will not be recovered if they are quickly replaced with EMUs but they could be allowed to operate longer to give a level of robustness into the electrification programme and the delivery of electric trains.

f. Involve the owner/financier early in the new train procurement process using their experience in dealing with the manufacturers to reduce costs.

g. Consider all types of maintenance schemes but do not forget that the aim is to deliver reliable trains with a high level of availability.

This letter is offered as the written submission of Porterbrook Leasing Company Limited to the Enterprise and Business Committee regarding its Inquiry into the future of the Wales and Borders Rail Franchise.

We are willing to attend the meeting of the Committee and give oral evidence. Keith Howard, Commercial Director, will present the Porterbrook evidence.

Yours sincerely

Keith Howard
On behalf of Porterbrook Leasing Company Limited

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Copies: