

## Y Pwyllgor Menter a Busnes

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Lleoliad:  
**Ystafell Bwyllgora 3 – y Senedd**

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Dyddiad:  
**Dydd Mercher, 9 Hydref 2013**

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Amser:  
**09:00**

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Cynulliad  
Cenedlaethol  
Cymru

National  
Assembly for  
Wales



I gael rhagor o wybodaeth, cysylltwch â:

**Siân Phipps**  
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### Agenda

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CYFARFOD FFURFIOL (PREIFAT) (09.00 – 10.00)

#### **1 Ymchwiliad i Entrepreneuriaeth ymhlith Pobl Ifanc: Trafod yr Adroddiad Drafft**

Dogfennau ategol:

EBC(4)-37-13(p1) – Adroddiad drafft

CYFARFOD CYHOEDDUS FFURFIOL (10.00)

#### **2 Cyflwyniadau, ymddiheuriadau a dirprwyon (10.00)**

#### **3 Ymchwiliad i Ddyfodol Masnachfaint Rheilffordd Cymru a'r Gororau (sesiwn dystiolaeth panel) (10.00–11.00) (Tudalennau 1 - 11)**

Tystion:

Angel Trains:

- Kevin Tribley, Prif Swyddog Gweithredu

Porterbrook Leasing Company Limited:

- Keith Howard, Cyfarwyddwr Masnachol

Dogfennau ategol:

EBC(4)-37-13(p2) – WBF90 – Angel Trains

EBC(4)-37-13(p3) – WBF24 – Porterbrook Leasing Company Limited

**EGWYL (11.00 – 11.15)**

#### **4 Ymchwiliad i Ddyfodol Masnachfaint Rheilffordd Cymru a'r Gororau (sesiwn dystiolaeth panel) (11.15–12.00) (Tudalennau 12 - 36)**

Tystion:

Cymdeithas y Partneriaethau Rheilffordd Cymunedol (ACoRP):

- Neil Buxton, Rheolwr Cyffredinol

Canolfan Ymchwil Trafnidiaeth Cymru, Prifysgol De Cymru

- Yr Athro Stuart Cole, Athro Emeritws ym maes Trafnidiaeth

Dogfennau ategol:

EBC(4)-37-13(p4) – WBF85 – Cymdeithas y Partneriaethau Rheilffordd Cymunedol

EBC(4)-37-13(p5) – WBF62 – Stuart Cole

#### **5 Papurau i'w nodi (Tudalennau 37 - 38)**

Cofnodion y cyfarfod blaenorol

**Ôl-drafodaeth (preifat) (12.00 – 12.15)**

[National Assembly for Wales](#)

[Enterprise and Business Committee](#)

[Inquiry into the future of the Wales and Borders Rail](#)

Evidence from Angel Trains – WBF 90

**Response to Enterprise and Business Committee's inquiry into the future of the  
Wales and Borders Rail Franchise**

**Angel Trains Ltd**

**1. Angel Trains Ltd**

- 1.1 Angel Trains Ltd owns, leases and maintains trains for Train Operating Companies (TOCs). We are the largest Rolling Stock Operating Company (ROSCO) in the country and our customers include all 19 franchised TOCs and two open access operators. We are one of the largest private investors in UK rail and since 1996 we have invested over £3.5 billion in new trains and the refurbishment of existing trains.
- 1.2 Angel Trains Ltd owns and maintains more than 4,450 passenger vehicles and 280 freight locomotives in the UK, which is about 37% of the nation's rolling stock. One of the roles of the ROSCO is to act as a conduit between the international capital markets and the UK rail industry. The ability to secure financing against a diverse portfolio of assets also offers Angel Trains Ltd, and other ROSCOs, a significant degree of choice in determining the optimal sources of finance to arrive at the most cost effective solution for the industry.
- 1.3 Our workforce consists of over 100 individuals who are specialists in many aspects of train leasing, from finance and engineering to commercial and customer service. From our offices in London and Derby, we provide expertise in the procurement of maintenance for our leased trains and know-how on the purchase of new rolling stock. In addition to our own resources, we have a network of suppliers and contractors, from large companies through to specialist SMEs, who are sustained by the work we generate for them. Every year we channel over £60 million through our supply chain.
- 1.4 Angel Trains Ltd owns the Class 158 fleet which is leased to Arriva Trains Wales (ATW).

More information about our company is available on our website: [www.angeltrains.co.uk](http://www.angeltrains.co.uk)

**2. Introduction**

- 2.1 Angel Trains welcomes the opportunity to respond to the Enterprise and Business Committee's inquiry. In responding to the Committee's call for evidence we intend to focus on rolling stock, as the other questions posed are outside our areas of expertise.
- 2.2 While rolling stock only accounts for a small proportion of whole industry costs, we are very conscious of the need for the whole UK rail industry to work together to reduce the

overall unit cost of the sector. Angel Trains recognises that it has an important role to play in the delivery of an effectively operating railway that delivers value for money.

- 2.3 Following the publication of the McNulty report Angel Trains Ltd has worked constructively with the Rail Delivery Group and other industry stakeholders to review and develop many of the work streams in the report. We recently supported the development and publication of a high level, long term, industry wide rolling stock strategy.
- 2.4 Figures released last year by the Association of Train Operating Companies (ATOC) show that passengers are increasingly choosing to travel between Britain's major cities by railway. The organisation also predicts that rail is set to replace air travel as the most popular choice for long-distance travel in the UK.<sup>1</sup> This modal shift is occurring partly because of road congestion, increased petrol prices, concern about carbon emissions, and increase in security at airports. However, it is also a function of the improvements made in terms of quality of service and customer satisfaction since privatisation. We believe that the Welsh Government and UK Government visions for railways should be focused firmly on customer satisfaction, just like any modern service industry.

### **3. Wales and Borders Franchise**

- 3.1 Rolling stock should not be considered in isolation but rather as part of a wider long term rail strategy and demand forecasting that links to economic development strategies and plans for future employment distribution in Wales. Angel Trains Ltd would like to work closely with Network Rail, industry stakeholders, the Welsh Government and the Department for Transport on the development of an industry rolling stock strategy, which naturally flows from the forthcoming electrification programme.
- 3.2 We would welcome clear communication by government with the rail industry on their vision for the future of the Wales and Borders services so that the resulting franchise fulfills the specific needs, and future projected needs, of the Welsh population as set out by Welsh policy makers. Transport Scotland is an excellent example of how open, consistent and clear communication to industry of its strategy and needs has led to a positive response from industry in helping to provide solutions to challenges and meet Transport Scotland's requirements.
- 3.3 The current Wales and Borders franchise was procured on a lowest cost basis. Careful consideration should be given in the next procurement to the balance of affordability with the type and quality of service for the passenger, based on the UK and Welsh Governments' assessment of what the future of the service should look like in Wales.
- 3.4 By virtue of the length of their franchises TOCs are focused on the short-term. Rolling stock, however, has a life-cycle of up to 40 years. Angel Trains therefore has an interest in the long-term outlook for the rail sector, given our significant investments. A longer franchise would provide greater certainty to encourage further investment in rolling stock and reduce whole life costs, which would bring mutual benefit.
- 3.5 An essential element of a longer franchise period would be clear points within this to measure performance against set criteria (and either break away or revise the criteria), re-assess requirements, and adjust rolling stock provision accordingly. This would provide flexibility to respond to technological advances and changes in the infrastructure

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<sup>1</sup> <http://www.atoc.org/media-centre/latest-press-releases/shift-from-air-to-rail-heralds-turning-point-in-how-people-travel-between-uks-main-cities-100571>

capability, and could allow procurement of new rolling stock at a point when it may be more affordable within the franchise.

- 3.6 Quality can be maintained through the franchise specification by including a performance regime that looks at every aspect, from service to carpet cleanliness. This has been implemented in Scotland through the Service Quality Incentive Regime (SQUIRE).
- 3.7 The leasing model works well; we know that passenger vehicles have improved since privatisation, leading to measurable, positive changes in passenger satisfaction.<sup>2</sup> Crucially, the leasing model allows for flexibility in rolling stock requirements over time so that the numbers of trains can be expanded or reduced if needed.
- 3.8 Operational safety and efficiency should be taken into account when considering different models of ownership and operation. Angel Trains Ltd and other ROSCOs have unique expertise; one third of all Angel Trains staff are engineers working on configuration, maintenance and solving problems to ensure safe and efficient running. TOCs similarly have expertise in carefully identifying passenger flows and managing services.

#### **4. Delivering value for money**

- 4.1 Having taken a collaborative approach for many years, Angel Trains is continuing to work with others across the industry to deliver sustainable value for money. This includes bringing about effective procurement of rolling stock, increased standardisation of trains and whole system cost reduction in the asset management of vehicles to the overall joint benefit of the industry.
- 4.2 Angel Trains believes that it is possible to provide lower cost rolling stock solutions through continued service operation of existing fleets, and we would like to emphasise the benefits of upgrading existing stock in reducing the cost of the UK rail industry.
- 4.3 As an example, earlier this year Angel Trains worked closely with ATW and rail maintenance specialist LNWR to complete a total overhaul and refurbishment of 24 Arriva Trains Wales Class 158 trains running on the Cambrian line. The refurbishment of this rolling stock, funded by the Welsh Government, created a new carriage interior in addition to improvements such as the installation of power sockets for passengers and low energy lighting. Passengers have been so impressed with the work carried out that many thought that the trains were new.
- 4.4 In 2012 Angel Trains Ltd signed a £7m contract with Bombardier for the re-traction and interior re-design of a Class 317 unit. This trial should confirm the anticipated benefits of reduced energy usage (including regenerative braking), lower maintenance costs and improved reliability and establish if the whole Class 317 fleet can be developed in this way; a partial alternative to manufacturing new electric trains which would also have an impact on UK rail costs in a shorter time scale.
- 4.5 Refurbishing an existing train can provide as comfortable and economic an experience for passengers as new trains, and refurbishment still allows for trains that are specifically designed for each market need within Wales. For instance, the Valleys lines could be served by trains with metro-style interiors which include standing areas for shorter commutes, whilst more rural services and typically longer journeys would be

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<sup>2</sup> National Passenger Surveys (2005-2010), published by Passenger Focus, <http://www.passengerfocus.org.uk/research/nps/content.asp?dsid=496>

served by trains with further seating. Variants of refurbished train interiors could be developed in response to clear specifications from government as to the needs of passengers on different routes to support their future vision for the Welsh economy.

- 4.6 It is important to remember that the 'bread and butter' business of the rail supply chain is maintenance and upgrade work, rather than the construction business which tends to make headlines. This is an additional benefit which should not be ignored in the current economic environment.
- 4.7 A move towards standardisation of rolling stock could reduce costs for the railway. Angel Trains supports the development of common platforms or "families" of fleets, with variants designed to meet with needs of specific market sectors (as outlined above). Indeed, where common platforms have previously been developed they have demonstrably brought about benefits in terms of reliability and operational cost in addition to capital savings. A good example of a successful common platform is the Siemens Desiro, which is consistently among the most reliable trains on the network. This is a common platform train with multiple variants including EMUs with vehicle lengths of 20m and 23m, a variety of seating configurations to match market sector needs, with both 3<sup>rd</sup> Rail DC and 25kV AC electric and diesel-powered variants.
- 4.8 In addition to the potential savings in capital costs, procuring common platform trains can also bring about a range of benefits relating to the reliability and operating cost of the train. For example, maintenance of the Siemens Desiro fleet by the manufacturer has led to efficiency savings being realised whilst maintaining and enhancing the reliability of the fleet. Additional costs, such as the provision of spares and special tools, can be minimised by the owner procuring a pool of common spare parts and tools to service a number of sub-fleets from the same common platform, and the cost of training for drivers and maintenance engineers can be reduced.
- 4.9 Long-term flexibility and savings across and within franchise periods can be further achieved if common branding is used. Transport Scotland provides a good example of common branded trains to reduce costs, whereby rolling stock is customised with Transport Scotland branding rather than that of the TOC.

## **5. Sustainability**

- 5.1 Angel Trains recognises the drive for sustainability by the Welsh Government and wider public sector in Wales and the need for the rail sector to further encourage a modal transfer from road to rail (passenger and freight) to help meet the UK's CO<sup>2</sup> emission targets. In conjunction with TOCs and manufacturers, Angel Trains is supporting the development of key modifications including driver advisory systems, to help reduce a train's energy consumption, and are investing in projects such as energy metering for London Midland and South West Trains to help improve energy efficiency. We also assess our suppliers on their environmental policies and how they manage environmental issues.
- 5.2 In terms of manufacturing and maintenance, Angel Trains Ltd believes that the industry can go even further to use more environmentally friendly materials, more sustainable refurbishment activities and greener disposal methods for obsolete trains or materials.
6. We would be happy to discuss this in more detail with the Committee.

## **Contact**

If you would like further information relating to this submission, please contact:

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09 September 2013

email: keith.howard@porterbrook.co.uk

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 1<sup>st</sup> January 2020 all 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 1<sup>st</sup> 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 1<sup>st</sup> 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 1<sup>st</sup> 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 1<sup>st</sup> 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

Enc:

Copies:



# Eitem 4

[National Assembly for Wales](#)

[Enterprise and Business Committee](#)

[Inquiry into the future of the Wales and Borders Rail](#)

Evidence from Stuart Cole – WBF 62

**CYNULLIAD CENEDLAETHOL CYMRU**

**PWLLGOR MENTER A BUSNES**

**YMCHWILIAD MEWN I FASNACHFRAINT CYMRU A'R GORORAU**

**NATIONAL ASSEMBLY FOR WALES**

**ENTERPRISE AND BUSINESS COMMITTEE**

**INQUIRY INTO THE FUTURE OF THE WALES AND BORDERS FRANCHISE**

**YMATEB O: Yr Athro Stuart Cole, CBE BA MSc FCILT FICE, Athro Emeritws mewn**

**Trafnidiaeth, Canolfan Ymchwil Trafnidiaeth Cymru, Prifysgol De Cymru**

**SUBMISSION FROM: Professor Stuart Cole CBE BA MSc FCILT FICE, Emeritus Professor of Transport, Wales Transport Research Centre, University of South Wales**

## **INTRODUCTION**

The Wales and Borders (W&B) rail franchise which comes into effect in 2018 has a series of passenger travel opportunities – electrification; new Welsh trains (preferable to cascaded rolling stock); new London InterCity trains, more frequent trains; shortened journey times; more stations served more park and ride facilities so enabling drivers to make at least a part of the journey by rail not car.

Well-designed operational planning will enable a wider mix of stopping, limited stop and express trains enabling the railway to serve more people with a much improved travel experience. It could change modal split to a greater extent than might ever have been expected. But fifteen years ago and three years ago the franchise itself and electrification respectively would not have seemed credible.

The new franchise will cost more but it has the potential to achieve not just better value for money but also grow the rail passenger market. This franchise can be a radical move in rail provision. If it is just 'more of the same' it will be a failure

**.CURRENT FRANCHISE PASSENGER NEEDS / LESSONS TO BE LEARNT**

- **Whether the current franchise meets passenger needs and what lessons should be learnt from it;**

The decision to privatise the train operating companies and the track operation separately resulted from a European Commission directive to split both elements. The format was further influenced by the realisation that a free market such as that which had been created for the bus industry could not provide the network benefits required by passengers. Hence the franchising system was set up.

The Wales and Borders Franchise is a conventional rail franchise awarded to Arriva Trains Wales by the Secretary of State for Transport (Westminster Government) was on a 'no growth' basis. A joint parties agreement (April 2006) between the Welsh Government and DfT made the former responsible for funding and performance management of all ATW services following a budget transfer in the block grant of £140m (2011-12). The Welsh Government then used its own powers to provide a further £30m funding for additional services.

In 2003 when the franchise was let to Arriva Group it had a low level specification with no allowance for growth in passenger numbers, no extra train capacity and indeed one of the competitors pulled out of the bidding process because of what it saw as running down the railway in Wales by the Strategic Rail Authority (and when it took over responsibility, the Department for Transport).

Trains such as Pacers and Class 150's were over 30 years old and it is to the credit of Arriva Trains Wales engineering staff that the reliability figures are so good.

The outcome since 2003 has been one of growth:

- rates of between 8% and 13% per annum on different parts of the Wales and Borders franchise
- 60% passenger growth over the 10 years of the franchise
- 1200 (25%) more trains per week since 2003

Research has shown this growth to be a result of cross price elasticity with car costs; road congestion; preference for what is seen as a more comfortable journey and environmental concerns.

The current franchise trains have load factors on most trains such that all passengers have seats and some load factors are down to 15% in the morning peak in Cardiff but on outbound trains.

The problem of high load factors (up to 130%) arises on certain journeys. Examples are:

- Morning inbound and evening outbound on Valley Lines
- North Wales main line services where only two car sets are in use (particularly at holiday periods, Sunday afternoons and where a delay in the Irish ferry arrival into Holyhead after the departure of the Virgin Trains 'boat' train.

- Cardiff / Bristol commuter services although this has been alleviated with the use of 3 – car sets. (Note this is a First great Western Service although on electrification it would logically be transferred into the Wales and Borders franchise as part of the Swansea – Cardiff – Bristol – Bath service)
- Certain school time journeys
- Summer services to west Wales

The passenger growth is a positive move but it was not forecast and has been an expensive issue for the Welsh Government in providing additional capacity through the contractor Arriva Trains Wales

### **Lessons to be learned**

A primary lesson is to effectively forecast demand and take into account any potential shifts in demand and demand patterns. The demand and train supply options should be set out as measures to meet changes in demand. This flexibility will protect the Government and the contractor against risks of lower or higher demand affecting increased capacity provision or revenue shortfalls. (Please see later section).

If demand continues to grow at 8% per annum there is little point in assuming 2.5%. This is effectively what the DfT are doing. The use of more realistic demand figures can increase costs of future provision so that major investment would not take place as it might not achieve the required benefit cost ratio

To clearly define the franchise specification in terms of demand and rolling stock both diesel and electric (please see later section) and the working relationship between the train operating contractor and Network Rail who operate the infrastructure. This becomes easier as the Network Rail Wales Route (division) with its own management builds up and (for south Wales) the presence of both sets of staff at the new control room at Canton.

This would have enabled the Welsh Government to have considered the best option for example for:

- North south services and their increase to hourly
- Additional capacity on Valley Lines
- The impact of reopening the Glyn Ebbw and the Vale of Glamorgan lines
- Procuring additional rolling stock

The current penalty system relies too heavily on timekeeping alone. The new franchise should consider factors such as passenger growth, journey experience, train cleanliness and passengers personal security perception.

### **PASSENGER INVOLVEMENT IN FRANCHISE DEVELOPMENT**

- **How passengers should be involved in the franchise development and delivery;**



There are many major government schemes where public consultation and market research takes place. In infrastructure the consultation period for the proposed new M4 began in September. An extensive exercise took place in determining the services to be provided by TrawsCymru the Government's long distance express bus network. The DfT also consult with passengers for their franchises which of course are re-let more frequently and their experiences and processes should be considered

In the rail industry there are two other already available means of identifying passenger aspirations, views of the existing service and how they would wish to see the new franchise

- The regular provision of passenger views in the National Passenger Survey and the routine and special reports from Passenger Focus. For Wales a larger sample size should be negotiated with Passenger Focus. The franchise specification should not merely be based on timekeeping but on a series of targets related to incentives for payment of grant. This requires adequate resources for monitoring these new performance criteria
- Passenger Transport Users Committee (PTUC). The functions and membership of PTUC is currently being considered by the Minister for Transport. One of its responsibilities could be the assessment of passenger needs under the new franchise

#### **FRANCHISE SPECIFICATION: REGIONAL TRANSPORT CONSORTIA / PASSENGER TRANSPORT AUTHORITIES / LOCAL COMMUNITIES INVOLVEMENT**

- **How communities and local government / Regional Transport Consortia should be involved. Could they be involved in specifying the franchise or perhaps even in delivering services?**

The Regional Transport Consortia already have a role in identifying how they see future rail services developing through the regional rail strategy.

The consortia and their constituent local authorities have a responsibility for tendered bus services but as became clear in the Committee's report (Integrated Public Transport in Wales May 2013) integration no coordination of commercial bus services is possible unless there is a financial advantage for the bus company involved.

This position may change and also in Wales the statutory Joint Transport Authorities may have been established by 2018. This will have the effect of providing a co-ordination framework for bus and rail services.

These bodies could have the 'bottom up' responsibility for bus services with the Welsh Government having 'top down' responsibility for franchised rail services and the TrawsCymru network. The latter would become a part of an overall national long distance travel franchise in 2018. The Cardiff city region metro (*CwmFro / ValleysVale Metro*) (a report on which is to be completed this autumn for the Minister) would logically be a part of this same network. Common branding is an essential part of this integrated network with

ticketing, timetables and ease of transfer. Close working between the Government's Franchise Authority and JTA's/Consortia/local authorities public transport units and therefore an input into the rail franchise specification is essential to achieve a through integrated journey experience for travellers.

### **MANGEMENT MODEL CHOICE**

- **The management model to be adopted, including the Welsh Government's proposal for a not-for-dividend franchise;**

The new franchise in 2018 will under the present agreement be awarded by DfT with input from the Welsh Government as co-signatory. This may of course change and DfT have indicated that they would not be averse to the Welsh Government being the primary contractor.

However this implies an 'operator of the last resort' responsibility where the Welsh Government would have to take over operational control with the additional costs that might imply. This has happened in the case of the south central network from London and the East Coast Main Line operations (twice) for example. Thus if the Welsh Government wishes to change this basis to its own sole franchise, to a Not for Dividend (NfD) company or a Co-operative approach then DfT agreement will be required.

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In all management model options set out below the principle of franchising is inherent in each. The franchising model has been criticised in recent months in relation to the railway because of the problems which arose on the re-letting of the West Coast Main Line franchise. However the franchising principle is the operational / management basis for very successful companies such as MacDonalds and Marriott Hotels. Its near parallel, outsourcing, forms the basis of National Express operations and Marks & Spencer stock manufacture and logistics.

The issue is not one of principle but the internal competency of the franchisor.

Before setting out the options two factors have to be considered:

- The objectives of any change
- Competitive franchising – the benefits of supply side competition

### **Competitive Franchising – benefits of supply side competition**

Whichever of the options outlined above is selected there will be a requirement for competitive procurement referred to here as supply side competition or competition for the contract to operate the Wales and Borders rail network. The only exception could be Option 3 above where the Government owned NfD Company has sole position in the process

There are significant benefits to be derived from the franchising system whether it is competition between PLC's as at present, Not for Dividend companies or Co-operative suppliers. The control of the rail network remains in the hands of the Welsh Government. The benefits of franchising are:

- it allows competition in terms of service provision ideas and funding levels
- it provides a more secure train market and service not entirely dependent on the commercial market
- it allows other economic, environmental and social factors to be taken into account
- it prevents instability in the market through an operator of the last resort i.e. the Welsh Government (see the parallel in South Central and the east Coast Main Line)
- it retains network benefits such as integration of services within the Welsh operation and in relation to Great Britain rail operations
- it prevents 'cherry picking' of the most profitable routes leaving loss making operations to the public authority (under free market competition)
- it gives value for money
- it can provide for the transfer from one operator to another and any phased changes required in connection with rail electrification
- subsidy forecasting can be more accurate
- efficiency without instability
- Integrated bus and rail branding
- increase integration of timetables / ticketing / inter TOC discounts

## **MANAGEMENT MODEL OPTIONS**

There are four alternative formats for which the risks and benefits have to be assessed. Three of these options imply a franchise base. One is a sole state owned company which may be franchised or not.

But to achieve a supply side competitive regime acceptable to competition regulators does require the emergence of several bidders from one or more of these models. The role of the Welsh Government has to be clearly set down, recognised by the Office of Rail Regulation and is incorporated in to the High level Output Statement (HLOS) and any future Rail Utilisation Studies and within an adequate future funding regime agreed with the UK Treasury

### **1. Conventional rail franchise**

- A conventional rail franchise from the Welsh Government alone (unlike the present joint arrangement) The likely operator would be one of the PLC companies Currently Arriva Trains Wales (ATW)
- In Wales all local services and some cross border services, e.g. to Manchester, are within the Wales and Borders franchise. In Wales there are also three franchises let by the DfT - the Cross Country franchise from Cardiff, the Great Western franchise to London Paddington and Bristol/Portsmouth and Virgin Trains along the north Wales coast
- Revenue and cost risk lies with the PLC operator. There is no capital investment risk as currently all assets are leased (e.g. rolling stock; stations and track from Network Rail) for the life of the franchise. The other options are a concession or a management contract where the franchising authority takes the financial risk.

### **2. Not for Dividend Company: franchised**

- A Not for Dividend (NfD) company operated as a franchise from the Welsh Government. This would require the appearance in the market of new NfD companies or a combination of PLC's and NfD's bidding for the franchise in order to achieve meet European competition rules. Unless it could be shown that a single NfD company was not obtaining competitive advantage. Either corporate structure would be a pre-qualification condition for entry into the competitive franchising process.
- It has been suggested that Glas Cymru (upon which Network Rail was largely based) could be the model for a Welsh Train Operating Company (TOC) with a guaranteed revenue stream and a highly capitalised registered asset base. The TOC model only has the revenue stream guaranteed for the subsidy element and a buoyant and expanding market for the fare paying element.
- The revenue and cost risk lies with the NfD Company and to succeed it has to match public sector ethos with private sector commercial discipline through continuing strong corporate governance.
- This might also be the basis of a concession or management contract. It would operate as Directly Operating Railways does on behalf of DfT for the East Coast Main Line. Merseyrail also operates on a concession basis as does London Overground

### **3. A State – owned Not for Dividend company: possibly no franchise**

- A Not for Dividend Company (owned / guaranteed by Welsh Government but operated at 'arms-length'. The Cardiff Airport company has a similar basis with specialist air industry management and the degree of success of this venture may influence the Welsh Government. Other successful examples are Birmingham Airport, London Overground (TfL) and The Port Authority of New York and New Jersey (various transport facilities). The experience of Directly Operated railways the company set up by DfT to provide its 'train operator of last resort' role should be considered in this decision. This would require agreement with DfT and would have to satisfy the procurement and competition rules of the European Commission. Some have suggested that this is a means of nationalising the railways operations in Wales while others have pointed to Network Rail which has a close relationship with DfT but is of course a Not for Dividend private sector company.
- Risk on revenue and operating costs lies with the NfD company
- Capital expenditure, for example new rolling stock, could be procured through Welsh Government borrowing powers or through a Special Purpose Investment vehicle (SPIV)
- Potential competition for funding with other Welsh Government transport schemes.

#### **4. A Co-operative company: franchised**

- This could be a Co-operative Rail company owned by passengers (Co-op shops) or employees (John Lewis partnership) franchised by Welsh Government. There could be a combination of these two.
- A co-operative business may give a greater sense of collective ethos which Christian Wolmar suggests helped the industry through it's difficult times
- Staff absences are lower than other forms of business (claims John Lewis Partnership)
- The successful existence of the Co-operative retailing business suggests that any business with a large number of customers (as with a train operating company) could be a mutual.
- Many of the complaints about rail companies might disappear if the passenger felt a direct ownership. But the last time the public owned the railways that didn't happen though that might have been because the BR model was little different from the PLC model
- Persuading travellers that this railway really was for their benefit might move remove the 'them and us' perception
- Revenue and cost risk lies with the passengers and / or employees. If the company mirrors the present retail companies the extent of this will be on the same basis.

### **Local rail model**

The Community Rail model based on the five rail services in Wales covered by such schemes might be seen in a different context. These would be locally managed but would be integrated into the network. They are not considered here.

### **Conclusion**

But fundamental issues also remain.

- Exactly who of Welsh Government and DfT does what in terms of the railway? This has developed over time with several agreements?
- What has the present rail franchising system brought to the Wales rail market? The inadequacy of the initial Wales and Borders franchise left the Government with an additional cost of £30m per annum (total £170m pa) to develop services which match demand
- Should there be a vertical integration of trains and track. Does that give us any benefits or are there economies of scale from Network Rail
- The Transport Act 1985 prevents the full integration of bus and rail services through its fundamental principle of 'the market provides' transport facilities. This has now been discredited and through the new franchise the Welsh Government should provide a fully integrated RailCymru / TrawsCymru network feeding into a franchised local bus operation using the Joint Transport Authorities (as provided for in the Transport (Wales) Act 2006

What then is the driver towards a new rail management format? Reduction in cost has to be one primary reason but not necessarily at the expense of service quality. In all business restructuring the principles are:

- Reduce costs (through detailed examination of each model)
- Increase revenue (through improved marketing)
- Maintain or improve the service quality (through the passenger experience)

The Government is about to begin its study of the options and processes set out here. 2018 may seem a long way off but investment and contractual decisions will have to be finalised by 2015 if we are to have an orderly transition at the end of this current rail franchiser

### **FRANCHISE SPECIFICATION – ISSUES / PASSENGER EXPERIENCE**

- **How the franchise specification should improve the passenger experience, including issues such as franchise length, targets / incentives and the core service standards which should be included;**

The key justification for any changes – electrification, resignalling, different rolling stock, alternative franchising structure – would be the benefits received by end users. These include the passengers, the primary subsidy funder – the tax payer, the Welsh economy, the environment and society in general in Wales. Any other rationale should be unacceptable.

The benefits which will show the new franchise to be a success (and could form the basis of incentives) are:

- Increases in passenger demand (peak and off-peak; rural, urban and inter-urban:
- Improved passenger satisfaction
- Increases in train frequency
- More modern, more comfortable trains
- Higher levels of infrastructure investment at stations and on track and signals
- Improved services and capacity for the same cost
- Information: high standard of presentation and easy to understand
- Information: breadth of availability (from posters / hard copy to on-line / aps)
- Increased capacity on trains (e.g. with new possibly electric trains) particularly on commuter routes to meet expected demand increase. This may be jointly with the Welsh Government and TOC
- Reduced journey times through faster trains
- The same level of service at lower cost to the taxpayer
- Improved service at lower cost because of some inherent faulty aspect of the alternative structure
- Any significant aspects of the present system which are shown to be deficient which one of the alternative structures will remove

The train operating company (TOC) would be set targets such as service frequency, reliability (trains operating), timekeeping, station facilities and market growth. The TOC would then be financially rewarded for achieving the targets but with financial penalties for failure. Monitoring on a constant basis is essential and electronic techniques are available to enable this to be routinely carried out. While National Express operates far fewer vehicles than the Wales and Borders franchise, that company's methods and penalty / reward system should be considered as a base. This principle of rewards / penalties applies in all successful commercial franchising and outsourcing operations. The key to its effectiveness is constant robust monitoring

On London Overground train, station and overall performance criteria are used. Merseyrail operates on a concession basis with passenger satisfaction targets and incentives to achieve them. The concession is over 25 years but with a review every 5 years when the contact may be continued or not.







#### Cardiff – Bristol Temple Meads – Portsmouth Harbour

- The current diesel service between Cardiff and Portsmouth Harbour is a remnant of the single operator British Rail. This is currently a part of the Great\Western franchise let by the DfT. Very few passengers (to or from Wales) would be inconvenienced if the service were to operate between Bristol Temple Meads and Portsmouth Harbour. A logical progression from electrification of the South Wales Main Line (SWML) to Swansea would be for regional services (i.e. non London IEP InterCity services) originating in Swansea would operate to Bristol or Bath Spa stations. These are replacements for current services operating along the SWML. The integration of services would then occur at Swansea with a 15 minute interval service between Swansea and Cardiff and a half hourly service between Swansea and Carmarthen. To enable the Welsh Government to let the whole of the south Wales rail network efficiently the section from Cardiff to Bristol would also be a part of the Wales and Borders franchise. This would provide for commuting passengers to be accommodated in larger capacity electric trains than at present. From an operational point of view the biggest operator by far of non - InterCity electric trains in the area would be the Wales & Borders franchisee. Hence there is operational logic

#### Carmarthen – Manchester

- The Carmarthen – Manchester service provides an essential link between south Wales and parts of mid and north Wales and has only a limited role in the Manchester based operations. It also provides one through service each hour between Carmarthen and Cardiff. Other west Wales services will require a change at Swansea but into a high frequency electric service east of Swansea.

#### Wrexham – Bidston

- Wrexham – Bidston is currently a diesel service and thus a W&B franchise operation as Merseyrail is entirely electric... The objective is to electrify the line and create a 'circle line' service between Liverpool – Birkenhead – Chester – Wrexham General – Wrexham Central - Wirral Stations – Bidston – Birkenhead – Liverpool. When this is complete the service would transfer to Merseyrail with a Memorandum of understanding between Welsh Government and Merseytravel on fares, train frequencies and reliability and service interchange for Welsh travellers

### **ROLLING STOCK REQUIREMENTS**

- **The rolling stock needed for the new franchise. What factors need to be considered and how this should be procured? Will new rolling stock be required?**

Before any move is made to procure rolling stock a major analytical process has to be completed. This is

## **Demand > Capacity > Services > Rolling stock > Depot locations**

This work should be carried out by officials in the Welsh Government appointed for their experience at a senior level in franchising and railways economic and operation. These skills are limited at present within Government. Such personnel are vital to give Welsh Government the best value for money in rolling stock procurement and in service and price negotiation with applicant companies

### **Stage 1 Demand analysis**

The expected growth rates in the rail passenger market have to be determined.

There is an assessment of risk transfer of course but which company takes the revenue risk – the franchisor (Government) or the franchisee train company).

Forecasting revenue over more than three years is a difficult task as markets change rapidly in retailing – clothing, food, motor cars, DIY, and of course railways and buses. Cost forecasting is also tricky as many transport companies have found in trying to forecast the price of oil products which once were only about five per cent of total costs but have now risen to nearly twenty per cent in some large bus companies.

So a decision has to be made by Welsh Government on whether franchising is possible without the transfer of revenue risk. But the private sector's expected strengths are in assessing markets and growing revenue, providing a dynamic base which adapts to changing markets and brings good quality services for passengers and value for money for the funder.

To achieve this, the franchise conditions have to be clearly set out and a whole range of possible options built in. This involves considerable vision and forward thinking and the provision of break clauses where neither party has unfair advantage.

This is not easy particularly for long term franchises. In 2003 for example when the Wales and Borders franchise was let, who would have guessed that seven years later electrification of the southern network would be underway. The Government will be involved in revenue support interventions if it wishes to achieve other economic, social and environmental objectives thus accurate subsidy projections are essential.

### **Stage 2 Capacity**

Having determined the potential demand levels the size of vehicle will have to match that. As forecasting is difficult several options for future vehicle procurement have to be determined. The capacity of the rolling stock has to be balanced against purchasing vehicles in which space will never be used (thus 'overspending') and not procuring enough capacity making it necessary to procure at a later date either assuming the same vehicles are available or having a non-standardised fleet if demand expands.

### **Stage 3 Services**

The services to be provided will vary from route to route. The intensive service on Valley Lines Metro will operate at eight – ten minute intervals. The Swansea – Cardiff – Bristol Temple Meads route will require an electric fleet to provide stopping and express services on a half hourly frequency to supplement the InterCity IEP London service.

Carmarthen – Manchester is expected to continue on an hourly basis. It provides for Wales the link between south and mid Wales with bus or rail connections at for example Pontypool, Abergavenny, Hereford Church Stratton and Shrewsbury.

Services to / from west Wales would be expected to increase in frequency providing a half hourly service between Swansea, Llanelli, Carmarthen and Whitland and hourly to Pembroke Dock and Milford Haven. Whitland should become a major park and ride facility using available railway land and its nearness to the A 40 trunk road

The Heart of Wales line services require the results of the current analysis into its markets and if / how a five train a day service may be justified.

On the Cambrian Line to Aberystwyth an hourly service is now operationally possible with connections at Machynlleth for the Pwllheli service

Wrexham – Bidston services have been dealt with elsewhere with electrification the best option.

On the North Wales Main Line the combined services of the Wales and Borders and the West Coast Main Line will require increased capacity to match expected growth.

Llandudno to Blaenau Ffestiniog services will continue to have a summer peak demand.

In all cases integration of train and bus services using the 4I's principle

#### **Information + Interchange + Investment + Imagination**

is vital to the success of the post 2018 rail franchise

### **Stage 4 Rolling Stock**

Wales requires a mix of rolling stock to match the service requirements outlined above. They are:

- Metro style electric trains with three / four double double-door locations
- Regional electric express services with two / three double-door locations
- Regional diesel trains with two double-door locations
- Local diesel trains with two double-door locations

There are several options for rolling stock procurement and several potential suppliers. The issues are:

### **Cascaded stock v new trains and latest procurement date**

Cascaded rolling stock will derive from existing franchises. This will require options to lease agreed with ROSCO's by the end of 2014 or a similar date with manufacturers if new trains are to be procured. This applies to both electric and diesel trains. However cascaded rolling stock will require replacement within 15 years.

The fact that the current Wales and Borders franchise will have a good supply of local diesel trains (e.g. Class 150 / 158) this does not mean that they will automatically be available to the new franchise. The contractual arrangements will have to be made anew by the Welsh Government and the TOC. There is competition for trains (excluding Pacers) such as we have at present. The Northern franchise, for example, will take up trains in 2016 so the Government will have to be clear about Wales rolling stock needs if they are to bet the best deal

Cascaded electric rolling stock which formed the basis of the south Wales electrification Transport Business Case to HM Treasury is currently in use on for example London Suburban Essex (e.g. Class 313 / 315) Greater Anglia services (Class 321) and on Thameslink from Bedford to Brighton (Class 319). New trains either have been ordered or are being negotiated for these services. In either event the existing trains are 20 years old and have an expected life of 15 years. The risk here is that the cascaded trains will not be available by 2018 and in Wales we will have electrified track and no electric trains.

These trains could be available from one of the ROSCO's. A complete refurbishment internally and mechanically would be required but they are cascaded (i.e. second hand) trains. This might not be acceptable both in terms of the image of Wales and its railways and maintenance and leasing economics.

Alternatively trains could be procured directly or through a Special Purpose Investment Vehicle (SPIV) 'owned' by the Government.

### **Which company if new build electric trains are chosen?**

Although the Treasury's Transport Business Case was based on cascaded trains the Welsh Government can make a policy decision to lease or purchase (becoming a ROSCO itself) new electric trains.

The unit cost is reduced as numbers of train units purchased increases. The Welsh Government could buy trains in co-operation with other authorities. Merseyrail have to replace their complete fleet by 2018 and new trains are being procured for Thameslink and Crossrail in London. It should consider entering into a procurement agreement for new trains with such organisations.

There are three manufacturing companies:

**Siemens** produce the Desiro Class 380 which has operated successfully in Scotland since 2010 and has the advantage of a proven operating record

**Hitachi** produce their AT range of trains. The AT – 100 Metro suitable for Valley Lines (*CwmFro / Valley Vale Metro*) and the AT – 200 Regional. These are now in the design / prototype stage and may be available by 2018

Hitachi with Agility Trains, are also the providers of the Great Western Main Line InterCity electric trains and will have a maintenance depot in Maliphant Sidings, Swansea and therefore a rail presence in Wales.

**Bombardier** produces the 'S8' type rolling stock currently in use on the Metropolitan Line of London Underground. This is not a dissimilar service in terms of distance and mainly surface operation to Valley Lines... The local suburban version (same train different interior) the 'S7' is soon to appear on the Hammersmith and City Line and can be seen at Paddington Station. These have a similar profile to the other trains above. They are not deep level tube trains

There are also other sources

**Arriva Trains Wales** it should be recalled are owned by DB German railways who of course have a long standing supply relationship with Siemens. This is another channel that might be pursued. It has advantages and disadvantages.

**Specialist rolling stock companies (ROSCO's)** were created at rail nationalisation to lease rolling stock to train operating companies. The ROSCO's ownership is generally outside the railway industry and more in the financial sector.

There is an argument that government should own and lease to franchisors the rolling stock in particular new rolling stock but some suggest this is 'back door' part-nationalisation. This however is not being said about the DfT's actions as indirect financiers of the new Intercity Express Programme (IEP) trains for use on the Great Western Main Line. On this basis the Welsh Government with appropriate borrowing powers and a funding stream (Severn Bridge tolls have been suggested) could from 2018 become the owners of the Wales and Borders railway fleet. The Transport Wales Act 2006 does appear to give it those powers.

### **Stage 5 Depot location**

Having identified the demand patterns, capacity requirements, services to serve these and rolling stock to carry passengers the final decision is from where the trains will operate. Depots provide the operating base for maintenance (either routine or heavy) and overnight and off peak stabling of trains.

The location has to fit the logistics of train operations to minimise 'dead' mileage (out of service running) particularly at the start and end of the operating day. They also have to be located to minimise the recovery time (and passenger inconvenience) to replace a

failed train. The present depot at Canton was designed for diesel trains and would require major changes or replacement for joint electric / diesel operations

#### **FRANCHISE: ADDITIONAL LINES; INFRASTRUCTURE**

- **Whether additional lines, enhancements to existing lines, new stations or other infrastructure are needed; and**

**There is a need for investment in each of these areas. Examples are shown in Appendix 1**

#### **RELATIONSHIP BETWEEN FRANCHISE AND NETWORK RAIL**

- **Whether the franchise can support an enhanced relationship between Network Rail and the franchise operator and the benefits this might bring.**

Under the Railways Act 2005 and the Transport (Wales) Act 2006 there is no statutory relationship between the Welsh Government and Network Rail. Such a situation does exist in Scotland, in England (with DfT) and with Transport for London

Network Rail has itself established a Cymru – Wales Route (or operating division) to give more transparency to its network maintenance expenditure in Wales and to provide for a closer relationship with Arriva Trains Wales (the TOC) and the Welsh Government. This provides the opportunity to see the budget and to discuss priorities in expenditure.

Major investment is still determined by Network Rail (Great Britain) head office. However there is a planning and strategy team in Cardiff to put the Welsh needs within the overall capital expenditure programme

Suggestions have been made for closer working between Network Rail and the TOC' with joint working of signal centres e.g. Canton (Cardiff) and Swindon signalling centres and information provision for major events and disruption

**Athro / Professor Stuart Cole**

**12 Medi / September 2013**

Rail Franch Inq EntBus2013 sml prt

#### **APPENDIX 1**

**WALES RAILWAY NEEDS – SET OUT BELOW ARE INVESTMENT OPTIONS**

## Electrification

- Valley Lines and Vale of Glamorgan (*CwmFro Metro*)
- North Wales Main Line
- South Wales Main Line
- Marches Line

Higher line speeds on primary routes

Creation of a *CwmFro / ValleysVale Metro*

Increase in capacity to meet future demand

High Speed Rail between Bristol / Cardiff (HS3) and London

Integrated public transport policy and planning (bus/rail/car/cycle/taxi)

## Current investment

### **Network speed and capacity improvements CP 4**

- Aberystwyth – Shrewsbury frequency increased to 1 tph
- Cardiff area re-signalling
- Track doubling from Cockett (Gowerton) to Llanelli and the new Afon Llŵchwr viaduct provides capacity for increased service frequency west of Swansea (e.g. half hourly to Llanelli / Carmarthen and hourly to Pembroke \Dock and Milford Haven)
- Re-signalling of the GWML and SWML

In the case of increased capacity provisions for Aberystwyth and Llanelli, the current shortage of rolling stock makes the increase in frequency unlikely. However if electrification is introduced in time for the next franchise in 2018 (the target date) then considerable diesel rolling stock will become available for refurbishment and re-leasing to the Wales and Borders franchise (please see section on rolling stock above)

## Investment - planned/under consideration

### **Network speed and capacity improvements CP5 and beyond**

- *Valley Lines / CwmFro* electrification / *City Line* capacity
- SWML Electrification
- Wrexham – Chester redoubling
- Wrexham / Bidston / Liverpool / Chester electrification

## New / reopened stations / increased frequency

- Gateway Wales – Cardiff Airport frequency at 3 tph
- Bridgend frequency increased to 2 tph
- Swanline stations: east - increased frequency
- Queen Street Station Cardiff – two new platforms to increase capacity; new frontage to improve station quality
- Cardiff Central Station new platform for valley Lines; new south side entrance to improve passenger experience. The role of Cardiff Central Station in the proposed transport interchange – including rail, bus, car setting down / picking up, cycles, walkers, taxis, car parking
- Swansea Station - £3m refurbishment of the platforms and redesigned concourse. Interchange issues with buses remains

### **Integrate bus and rail/car and rail**

Additional P&R stations; expanded capacity at existing P&R

P&R becomes significant player to/from:

- Whitland station P&R (enlarged to major regional P&R)
- Central Cardiff/Newport/Swansea
- Port Talbot Parkway
- Swanline (e.g. Gowerton, Baglan, Skewen)
- Llanelli, Carmarthen

### **New \* P&R / increased capacity P&R (examples)**

SWML

- Bridgend
- Pencoed
- Llanharan
- Pontyclun
- St Mellons \*
- Llanwern \*
- Coedkernew \*
- Severn Tunnel Junction

#### ***CwmFro / ValleysVale Metro (South)***

- Gateway Wales – Airport \*
- Llantwit Major
- Barry Docks \*
- Dinas Powys (? Land availability) \*



### ***CwmFro / Valleys/Vale (North)***

- Llandaf
- Taffs Well
- Trefforest
- Abercynon
- Merthyr Tydfil (to include enlarged bus facilities)

### **Potential new / re-opened lines**

- Beddau / Talbot Green / Creigiau to Danescourt (City Line)
- Re-opened lines: Creigiau from *City Line*; Aberdare to Hirwaun
- New lines and river bridge Coryton to Radyr (for inner circle line)
- Aberdare – Hirwaun
- Vale of Glamorgan line – branch to Gateway Wales / Cardiff Airport (Govt. owned); PPP / Section 106 scheme.

### **Platform extensions**

On planned electrified services the current platforms will mainly accommodate any 4-car sets being considered. However the City Line (Radyr to Cardiff Central via Danescourt) platforms will require extending. If 6-car sets are to be used some platforms will accommodate them but all Valley Lines platforms will require extensions to accommodate 8-car sets required if passenger demand rises significantly in the future

*National Assembly for Wales*

*Enterprise and Business Committee*

*Inquiry into the future of the Wales and Borders Rail*

*Evidence from Association of Community Rail Partnerships – WBF 8 5*

*Memorandum to Enterprise and Business Committee*

**Association of Community Rail Partnerships**

***The Future of the Wales and Borders Rail Franchise***

**ACoRP**

1. ACoRP is the body representing community rail partnerships (CRPs) and station support groups throughout Great Britain. It has 39 CRP members covering 73 lines and 122 station support groups. It provides training and supports research into the potential and benefits of applying community rail principles, disseminates good practice and manages grant schemes which provide encouragement and support for community projects that bring benefits to the lines concerned. It also monitors the passenger numbers of community rail lines with the cooperation of ATOC, to identify trends and the benefits flowing from initiatives promoted by CRPs.
2. In Wales, ACoRP is sponsored by Welsh Assembly Government and represents seven CRPs within the area served by the Wales & Borders franchise together with the Chirk station friends group.
3. In this submission, we only address the issues relating to the new franchise that are relevant to the community rail movement.
4. Community Rail development has been very successful in increasing the number of passengers using the local lines, and the growth on community rail lines has been on average higher than other local rail services. They have also been successful in engaging with the communities they serve. Research carried out for ACoRP indicated that some 4,000 volunteers throughout Britain contributed 1.2m hours of work annually with a value estimated at £27m. Projects on community rail lines also have a high value, typically having a benefit to cost ratio of 4.6:1. Innovative projects have also helped to reduce costs. For example, the “Aberdovey Hump” (a simple way of reducing the

stepping distance at stations with low platforms), has improved accessibility at around one tenth of the cost of raising the platform height by conventional means. Apart from the direct transport benefits, CRPs also help agencies such as Visit Wales deliver on their objectives, and help deal with the transport issues resulting from the concentration of health care or education on larger central units.

### **Principles relating to Community Rail Development**

5. We believe it is essential that a new Wales and Borders franchise should build on the value of CRPs and seek to extend them, particularly to lines in West Wales. We are grateful for the continued support for ACoRP by Welsh Assembly Government and would wish to develop further the productive relationship established. We would strongly recommend that local authorities and transport partnerships should continue to support CRPs and that it should be a franchise obligation for the new train operator.
6. In our experience, the relationship with the existing franchise operator has been good, even though there is currently no obligation in the franchise agreement to support CRPs. However, the very success of community rail in Wales did lead at one stage to the operator cutting the level of support provided, given that the trains provided on the current service were already full. We believe it is important to avoid this in future and that the latent rail passenger demand should not be constrained by the limitations of the service. We also believe that community rail development can provide the key to innovative solutions to meeting rising demand. As a result of this experience we would recommend that support for CRPs should be a franchise commitment for the future.
7. Meeting future growth in demand should be one of the priorities for the new franchise, particularly on community rail lines. We believe more can be done to improve connectivity and improve value for money for passengers, but it is clearly difficult to reconcile this with a parallel objective of reducing payment by the taxpayer, at least in the short term. Most community rail lines are run with minimal resources and the scope to reduce costs further is limited. However, the experience of community rail development is that ridership has increased dramatically, while costs have remained broadly constant, so that passenger miles per pound of support has improved significantly, bring better value to the taxpayer.
8. Looking specifically at the issues raised by the Committee:

- a) Whether the current franchise meets passenger needs and what lessons should be learnt from it.

*The existing franchise was let on a 'steady state' basis, but experience has shown significant growth, constrained on some routes and at times by limited capacity. It is important that the new franchise recognises the inevitability of continuing future growth in demand, and includes mechanisms to allow this to be addressed by the provision of additional capacity. This is particularly true of community rail lines where growth is actively driven by the partnership.*

- b) How passengers should be involved in the franchise development and delivery.

*CRPs are the ideal vehicle to ensure that future plans meet local needs, as the partnerships are rooted in the community and are able to provide the sort of local information that will ensure that service planning fits patterns of demand more closely. The role of Passenger Focus is also important here, and will be particularly valuable on routes without a CRP.*

- c) How communities and local government/ Regional Transport Consortia should be involved. Could they be involved in specifying the franchise or perhaps even in delivering services?

*It is important that local government and RTCs are closely involved in the development of the franchise, along with CRPs. In our experience, some flexibility has to be left to operators to use their technical skills to do the detailed development of the timetable and resource deployment which drives the rolling stock and train crew requirement, and so a large element of the cost of the franchise. At this stage there has to be close cooperation between the CRP/local authority and the operator to balance the pattern of demand with the cost of service provision to get the best result. CRPs can provide some services directly, and there are examples where ACoRP members provide support activities, such as platform gritting in frosty weather, station staffing, ticket selling or station cleaning.*

- d) The management model to be adopted, including the Welsh Government's proposal for a not-for-dividend franchise.

*Whatever model is adopted, it is important that it is structured to work with CRPs and that the franchise terms are sufficiently flexible to allow a separate management unit for community rail lines to be created if required. This might facilitate a different approach to running a local line, or encouraging the development of community based innovative service enhancement schemes of the kind proposed for the Heart of Wales line.*

- e) How the franchise specification should improve the passenger experience, including issues such as franchise length, targets/incentives and the core service standards which should be included:

*We believe that it is important that the length of the franchise should be sufficient to give time for the operator to develop relationships with stakeholder groups and to establish joint ventures to improve the passenger experience with new services or upgraded stations. It is also important that it is structured to avoid the 'dead' period towards the end of the franchise, where an operator is unwilling to commit to further investment or development because the payback period is too short. In our view, this implies a minimum of ten years, and a longer period could also work, providing there are quinquennial reviews to allow a review in the light of performance and also for the terms to be updated to reflect changing circumstances and further growth.*

- f) The routes, particularly cross-border routes, which should be included.

*We believe strongly that services should be shaped around passenger demand rather than around political boundaries. This implies continuation of cross border services where demand lines are strong, for example between mid Wales and the West Midlands.*

- g) The rolling stock needed for the new franchise. What factors need to be considered and how this should be procured? Will new rolling stock be required?

*Rolling stock is a major expense and typically represents around 15% of a franchisee's costs. The overriding need is to secure more trains to increase capacity, although it is also recognised that some of those in use (such as class 153 units on the Heart of Wales line) are not ideal for the purpose.*

- h) Whether additional lines, enhancements to existing lines, new stations or other infrastructure are needed:

*Community Rail Development focuses on making the most of existing lines, rather than promoting new ones, although there is no doubt that some new lines could form the basis of successful CRPs and community rail principles could help to make new lines both more affordable and successful. New stations can be specified and delivered through the franchise agreement, as can infrastructure enhancement (such as track doubling), but for practical reasons, it may be better for new lines to be handled separately. This is because new lines require a Transport and Works Act Order with an unpredictable timescale, and are usually best promoted by Network Rail.*

- i) Whether the franchise can support an enhanced relationship between Network Rail and the franchise operator and the benefits this might bring.

*We believe that alliancing has the potential to bring many benefits in a more coherent approach to operating the railway as a seamless service for passengers. It would benefit CRPs which invariably adopt an integrated approach to resolving problems or developing projects for their lines.*

## Y Pwyllgor Menter a Busnes

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Lleoliad: Ystafell Bwyllgora 3 – y Senedd

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Dyddiad: Dydd Iau, 3 Hydref 2013

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Amser: 13:15 – 14:49

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Cynulliad  
Cenedlaethol  
Cymru

National  
Assembly for  
Wales



Gellir gwyllo'r cyfarfod ar Senedd TV yn:

[http://www.senedd.tv/archiveplayer.jsf?v=cy\\_400000\\_03\\_10\\_2013&t=0&l=cy](http://www.senedd.tv/archiveplayer.jsf?v=cy_400000_03_10_2013&t=0&l=cy)

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### Cofnodion Cryno:

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#### Aelodau'r Cynulliad:

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Nick Ramsay (Cadeirydd)  
Mick Antoniw  
Keith Davies  
Rhun ap Iorwerth  
Alun Ffred Jones  
Eluned Parrott  
David Rees  
Joyce Watson

#### Tystion:

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Mike Bagshaw, Trenau Arriva Cymru  
David Beer, Passenger Focus UK  
Ian Bullock, Trenau Arriva Cymru  
Richard Davies, ATOC  
Mike Hewitson, Passenger Focus  
David Mawdsley, Rail Future  
John Rogers, Rail Future

#### Staff y Pwyllgor:

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Siân Phipps (Clerc)  
Olga Lewis (Dirprwy Glerc)  
Andrew Minnis (Ymchwilydd)  
Gareth Pembridge (Cynghorydd Cyfreithiol)

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## **1 Cyflwyniad, ymddiheuriadau a dirprwyon**

1.1 Cafwyd ymddiheuriadau gan David Rees AC, Julie James AC a Byron Davies AC. Nid oedd neb yn dirprwyo.

## **2 Ymchwiliad i ddyfodol Masnachfaint Rheilffordd Cymru a'r Gororau: Passenger Focus a Railfuture (sesiwn dystiolaeth panel)**

2.1 Clywodd y Pwyllgor dystiolaeth gan gynrychiolwyr Passenger Focus a Railfuture.

## **3 Ymchwiliad i ddyfodol Masnachfaint Rheilffordd Cymru a'r Gororau: Trenau Arriva Cymru a Chymdeithas y Cwmnïau Gweithredu Trenau (ATOC) (sesiwn dystiolaeth panel)**

3.1 Clywodd y Pwyllgor dystiolaeth gan gynrychiolwyr Trenau Arriva Cymru a Chymdeithas y Cwmnïau Gweithredu Trenau.

## **4 Papurau i'w nodi**

4.1 Nododd y Pwyllgor gofnodion y cyfarfod a gynhaliwyd ar 25 Medi 2013.

## **5 Trafod y dystiolaeth**

5.1 Penderfynodd y Pwyllgor, yn unol â Rheol Sefydlog 17.42(vi), gwrdd yn breifat ar gyfer eitem 5 o'r agenda, ac ar gyfer eitem 1 o'r agenda ar gyfer y cyfarfod a gynhelir ar 9 Hydref 2013.

5.2 Trafododd y Pwyllgor ei flaenraglen waith mewn sesiwn breifat.