

[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**

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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 Lluchwr 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