

## INTRODUCTION

### 1. Two part rail franchise

This franchise has been split into two parts. The south Wales Metro (Metro) which has the highest risk and the remainder of the franchise which is a conventional rail franchise with a train operating company (TOC) running trains and Network Rail. The first covers 80% of Wales' land area with about 35% of the population; the latter 20% of the land and 65% of the people. The passenger trips are split approximately 50 – 50. Despite much of the public discussion being centred on Valley Lines with its infrastructure implications and higher risk; full cognisance must be given to the remainder of Wales and Borders rail franchise services.

The 'rest of Wales element is familiar ground for letting a rail franchise. Not so in the *competitive dialogue* and transfer of track / signals from Network Rail (NR) which is one possibility for Valley Lines and is relatively unknown waters. WG has to be clear on what is affordable, what is being promised and what passengers want the outcome to be.

There are therefore quite different needs and possible service levels. The railway in west and north Wales provides for mobility and with the TrawsCymru network, the core public transport network much of which is subsidised (both buses and trains). The proposed Metro in its widest sense of both buses and trains must provide mass transit provision especially in peak periods into / out of major centres. Without a significant transfer of motor car users to the rail network, road congestion in the south east will continue to worsen and have an adverse effect on economic efficiency.

### 2. Radical Change

A change in culture / ethos and the degree of expertise available in the public sector decision making process (WG / TfW) is the biggest challenge facing the successful franchise bidder (or grant bids as WG now refers to the funding process). The Welsh Government's (WG) concept of an Operational Development Partner (ODP) is the way forward with far more collaboration with a far closer relationship between WG and the TOC / OpCo / ODP. Passengers will expect cleaner stations and trains; less overcrowding in peak periods; more frequent trains; electric trains throughout the network – but this is a major challenge.

WG has to be looking for radical change with more innovation compared with the old system. The *competitive dialogue* process should identify what the market has to offer and it has been suggested that WG can then cherry-pick the best aspects.

The timescale is intended to fit the current franchise termination in October 2018. There is the possibility of an extension subject to an agreement between Arriva Trains Wales (Deutsche Bahn) and WG. This may however lead to a legal challenge by other bidders and may not be perceived as the best outcome for passengers.

The process has to be watertight particularly from now on as bidders prepare detailed proposals. A repeat of the WCML challenge by Virgin Trains when the award was made to First Group cannot occur. WG must have the ability to prove its decision was right at any possible judicial review.

### **3. Bids**

The bidders now (February 2017) have to consider whether to follow through with their bid. The costs and timespan are higher and longer than for a DfT bid process. At W&B the success odds are 4:1; at south west England they are 2:1. The costs may be £12m compared with £7m - £9m for a more lucrative bid in England – e.g. East Midlands, WCML + HS2 (which is also very exciting).

The Wales Audit Office report on *Welsh Government investment in rail services and infrastructure* (6 September 2016) provides a useful insight into the contractual arrangements WG proposes to fund.

## **SECTION 1- WELSH GOVERNMENT APPROACH TO THE *DEVELOPMENT, PROCUREMENT AND DELIVERY* OF THE W&B FRANCHISE AND SOUTH WALES METRO EFFECTIVENESS, KEY RISKS, DELIVERY**

### **4. Implementation**

WG set up Transport for Wales (TfW) in January 2016 along with a strategic advisory board to manage and advise on procurement. Its primary role at present is to re – let the Wales and Borders (W&B) rail franchise  
The Government will have provided the Committee with its proposed structure of the InfraCo (infrastructure and the OpCo / TOC (train operating company)

The InfraCo would only apply to that part of the Valley Lines commuter network where electric traction would be introduced and in particular a tram / light rail option. Elsewhere the track and signals would be provided by Network Rail as at present.

The Pre – qualifying process should have identified that all the bidders on the short list have satisfied the selection criteria

Currently (14 February 2017) the outline solutions from bidders are with TfW. It will process and assess these

## **5. Process – Summary note**

TfW would have put high level questions (for outline solutions) to all bidders on how they would approach aspects such as:

- Bidders to indicate investment levels
  - Inside Metro
  - Outside Metro (e.g. NWML, community rail e.g. Heart of Wales line; Marcher line)
- WG priorities indicated
- Quality score based on what can be provided – with affordability estimate and revenue projections
- Expectations on Valley Lines (VL) modernisation
- ERDF funds as long as available
- Frequency on different lines; outline timetable plans; differences between high capacity / demand commuter lines and rural services; main line services e.g. SWML, NWML ; cross border links to Manchester (Northern Powerhouse) and Birmingham
- Ticketing and fare levels; market based offers e.g. advanced purchase and how will these be made simple without the loss to passengers of low cost fares. This will test the ODP principle and co-ordination of WG and TOC / ODP interface. One option is a Netherlands style fares system with WG and regional transport authorities determining fares and with a national ticket (Chipkaart) for all trains (and buses – please see integration below)
- Stations strategy for improved facilities – waiting areas, ticket sales, cleanliness.
- Fleet strategy for diesel (the majority of services); electric train and tram / light rail
- Community rail (mainly deep rural e.g. Heart of Wales Line)
- Links to Cardiff Airport (despite WG already having its TrawsCymru airport express
- Managing solutions which were carbon friendly and environmentally positive and were compliant with the future generations and active travel legislation and WG policy. How will these be measured and what is the WG target.
- Human resources policy

The questions would form the criteria for selection – journey time; frequency; energy efficient; environment. In effect the *Sell to Wales* contract note which sets out the procurement process and has a section on the Wales & Borders rail franchise procurement. They would have to flesh out issues on infrastructure and rolling stock.

Normally this is done through internal working on the operational implications of the new structure. In Valley Lines there is a vertical integration management process. How does NR fit into that or, if it doesn't, how is the InfraCo to be set up 'from scratch'

Overall it is a sound process for supply side competition (Supplementary Note 4). It enables WG to establish what it wants in general from the franchise but requires considerable input from the TfW team. It has however placed a more than usual financial burden on the bidders.

## **6. Process Timetable**

The procurement timetable for determining the new OpCo / TOC / ODP as I understand it is currently:

October 2016: Pre-qualify with criteria –

- can the bidder deliver the franchise - what experience in rail operation
- financial position of the bidder or parent company
- technical position – are the skills available
- construction element in relation to Metro

December 2016: Short list bidders' outline solutions

Jan / Feb 2017: Assessment of outline solutions by TfW

Feb – June 2017: Competitive Dialogue

June 2017: Invitation to submit final bids

January 2018: Selection of Operational Development Partner

October 2018: New OpCo / TOC takes over the franchise

This is a tight timetable and has slipped from the original by a few months. What one might also say is that the process began about two years later than it should have with TfW being set up in January 2014 and full time staffing put in place.

## **7. Bidder Flexibility**

The SWML date of electrification between Cardiff and London is expected to be December 2018 but extension to Swansea is uncertain.

So each bidder will need to be flexible in providing:

- The change from diesel to electric trains
- Will there be hybrid / bimodal for pre and post electrification
- From where will they get the compliant rolling stock for pre electrification
- Persons of Reduced Mobility (PRM) compliance is required by 2020. The EU date was 2023. The Westminster Department for Transport DfT is not mindful at present to allow derogation until new rolling stock is available. There are compliance problems in other franchises which are also not PRM compliant.

- Are there compliant fleets available?
  - Northern have new build diesels
  - WG may get bidders to suggest a hybrid (heavy rail) for conversion to electric only later (as in Great Western Main Line IEP trains)
  - Light rail on VL presents a serious challenge as interim stock will have a short life in the new W&B franchise.
- Lease on current rolling stock runs out in October 2018:
  - WG could purchase trains or enter a leasing arrangement between WG, a train manufacturer and a finance house / PWLB.
  - Leasing companies (ROSCOS) have been reducing their prices since Scottish Government began buying their own r/s
  - Northern – a bidder could join into another order for new build more efficient diesel or diesel / electric bi – modal trains and achieve a lower cost per train unit. These might initially be less efficient but could be the future proof option
  - Some diesel rolling stock could be made compliant but the economics is difficult.
  - ROSCOS not really interested in diesel new build but might be forced to or purchase the hybrid bi – modal trains

## **8. Integration bus / rail / cycling / walking**

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

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

is a key aspect of the post 2018 rail franchise. This requires some form of planned integration of train / bus services / active travel in Wales on which bus companies have not been inclined to move forward on bus / rail / active travel integration. The establishment of a Traffic Commissioner exclusively to Wales will assist in setting up such a scheme. TfW could then prepare the ground for legislative changes regarding the bus industry.

The ScotRail franchise currently operated by Abellio has the provision of cycle storage and routes to stations as a contractual obligation. To assist in implementing the Active Travel Act such conditions will need to be included in the W&B franchise

There is no control by TfW over adjoining franchises other than through negotiation with DfT or with the companies (currently – GWR (First Group), West Coast Main Line (Virgin) and Cross Country (DB Arriva UK).

TfW has no control over bus operations but can provide infrastructure (e.g. bus / rail interchanges; bus stations; bus stop waiting facilities. While this is important nationally, the higher frequency of bus and train service along Valley Lines makes it a facility which to date has been largely ignored

Integration between bus and rail services has been difficult since the 1980's bus competition legislation (seen by transport planners as providing a disservice to the traveller). There are success stories such as WG's TrawsCymru operations which are physically aligned to rail stations. Several bus stations are adjacent to rail (e.g. Rhyl, Caerffili, Aberystwyth) but integrated ticketing is limited to e.g. Plus Bus, rover tickets. A south east Wales ticket system would be a positive element in the proposals for the Metro and a south east Wales joint transport authority on a statutory basis (under the Transport (Wales) Act 2006) should be established to franchise bus operations and integrate with WG's TfW and TrawsCymru services.

The Go Cymru multi operator / ride ticket experiment has lost momentum. It should now be a requirement for the new franchisor to introduce the basis of such scheme nationally and for TfW to introduce it to bus operators as agreement / legislation allows. The Oyster (London region) or Chipkaart (Netherlands national) and Over 60's card (Wales national) shows a payments formula can be agreed between government and operators. TrawsCymru services (owned by WG) can be used from the start

TfW should expand its present position of one director alone to a core team for integration. It does not at present appear to be a priority activity

## **9. Risk – Funding**

WG have to source the capital expenditure for Valley Lines electrification if DfT / NR are not prepared to increase their infrastructure contribution above £125m out of a possible £700m. NR has said that the Wales Route may not be able to deliver all that the WG want with NR's constraints from the centre. Any funding WG can provide (including Welsh block grant provision, City Deal funding and post Brexit funding guarantees to replace EU funds) enables WG to provide more investment or subsidy.

EU structural funding has been generous to Wales' transport system through its clear financial and economic criteria against which successful bids could be made. These funds were specifically targeted at low income and low economic growth areas such as the south east valleys and rural Wales. Such fixed criteria become variable in negotiating the increases in block grant funding with HM Treasury.

Track / signalling maintenance costs and the cost of subsidy will of course be additional to the infrastructure loan repayments.

## **10. Risk – Revenue**

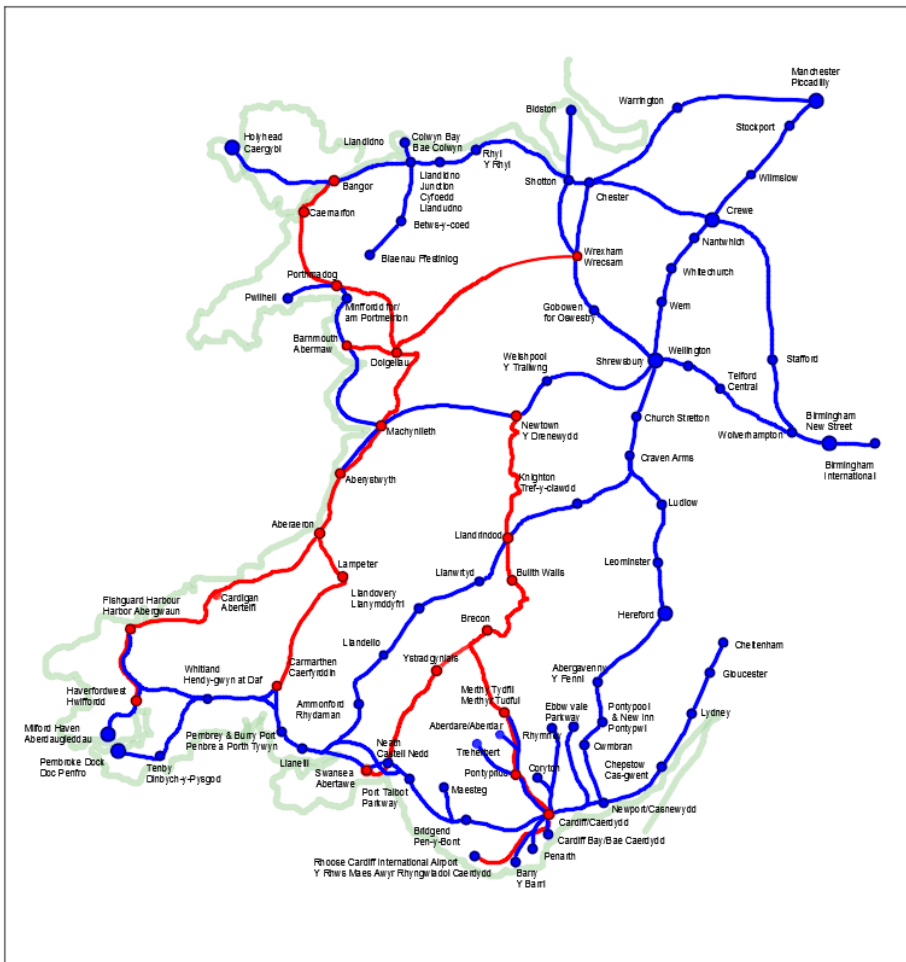
There is an assessment of risk transfer of course but which company takes the revenue risk – the franchisor (Government) or the franchisee train company).

- TfW could, as does TfL, take all the revenue paying the TOC a management fee. The TOC would then only have the cost risk to bear

- The TOC could take the revenue and cost risk. This would be based on its expertise in the market as a private centre company which should be its strength

So a decision has to be made by Welsh Government on whether franchising is possible without the transfer of revenue and /or cost risk when TfW could become the ‘train operator of last resort’. 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.

### 11. Risk – Franchise map Map of current rail franchise and TrawsCymru services



### TrawsCymru routes // Wales & Borders rail franchise routes

The majority of the Wales and Borders franchise should remain intact. There has been considerable delay in transferring the Wales & Borders rail franchise from DfT to WG. That this has not been achieved despite being discussed for over a year presents serious problems for WG. WG cannot be expected to acquire skilled

permanent staff and set up financial arrangements for train procurement (purchase or leasing) or electrification when DfT remains the prime franchisor

The routes from the Canolbarth and north Wales into England (in particular Manchester and Birmingham) have to be retained as they meet Welsh train journey patterns. They also provide a net contribution to the W&B subsidy budget

The operational logic also applies to the marcher line from Newport to Chester. This is the only link between the three east – west main lines and provides the backbone of Wales' network (see Supplementary Note 2)

## **12. Risk – Vision**

While competitive dialogue has advantages (see above) there is also the risk that in place of one WG vision there may be four different visions. Rail franchise procurement requires a vision leader and where it has not been present in depth; plans have not come to fruition.

## **13. Risk – Division of resources**

As the journey numbers split between south east Wales and the 'rest' is 50 – 50, TfW should ensure the successful bid has criteria for sharing both capital and revenue accounts fairly across Wales. Services to Aberystwyth, south west Wales, NWML, and community rail lines such as Borderlands and Heart of Wales have passenger demand potential which could be realised by a radical approach to operations and investment taken within the franchise agreement, and not on an ad hoc basis (as takes place now).

The north east Wales Metro can only be so named if there is an electrified core rail network from Chester – Wrexham – Bidston with an integrated bus network. This would provide a through commuter route into key employment areas and interchange with an electrified NWML at Shotton. (See Supplementary Note 2)

## **14. Risk – Infrastructure**

This only applies to a position where WG takes on responsibility for the Valley Lines or part of that network. It involves a major property purchase / lease by TfW and involves depreciation of assets, maintenance and potentially large structures. The question of who takes liability for these structures arises – is it the ODP or TfW. A successful bidder might put forward a case that for a 10 – 15 year franchise it would be unable to do so. The high level of risk and the negotiations for transfer of ownership and inherited liabilities would not be viable for under 25 years (as the Severn Crossing concession indicates).

Each of the four bidders has a civil engineering partner with appropriate experience and skills



This partner will be responsible on VL for construction of electrification system and the maintenance of the network. This may only relate to part of the VL network to the north of Queen Street station and the Cardiff Bay line but this is unclear. This network could either be procured from NR through purchase or leasing.

Insurance covering network maintenance and major rebuild (of many 150 year old structures) would be an expensive process through commercial channels. Actuarial advice to British Railways and to its successor Network Rail was to self – insure most structural rebuilding with other aspects insured commercially. NR has suggested the proposed sections of network if taken over, are too small for self – insurance and that commercial insurance costs may be prohibitive.

NR could lease the structures / formation to TfW and NR would discharge major repair liabilities (e.g. rebuild costs or closure compensation to passengers / TOC) which could be included in negotiations for reimbursement by TfW. Major capital infrastructure repairs would be outside the current TOC / ODP tender; day to day maintenance costs would be included in the tender.

## **15. Risk – protection of lines of routes.**

On several occasions land suitable for reopening for rail use has been taken for commercial retail / housing development often but inadequate statutory planning procedures and lack of vision at the time have prevented protection. Examples are

- Cardiff Bay station – a current proposal affecting further rail extension southwards
- Danescourt – housing on an old railway formation limits a link from Creigiau into City Line
- Llanidloes to Builth – developments lie on a potential route between the Heart of Wales and Cambrian lines
- Aberystwyth to Carmarthen retail and a new road form obstacles to reopening the line between the towns

## **16. Risk – Staffing Skills**

There is a small number of permanent staff in place currently. Advice given in 2013 (by Professor Stuart Cole) indicated a need for a high level permanent team with experienced support staff covering the rail franchising processes (to TOC's), interface with Network Rail and procurement options for new or cascaded rolling stock. The consultants currently seconded and contracted to the team form an experienced 'interim' management with high quality skills for assessing the bidders' plans. However a permanent team is required to take forward this large enterprise and one might ask why the delay in doing so. The Scottish model is ideal with staffing of 25 providing the range of skills in a permanent team

The competitive dialogue process is used in some industries (e.g. construction) but has not previously been tried in railway franchising. The risk for WG is that it has

never let a rail franchise tender in the past and now faces an untried method with very limited past experience on which to draw.

This is a major challenge for WG in its biggest ever single procurement valued at about £3.5 bn

### **17. Value for money**

The tight timetable increases the risk of hurried decision making and scrutiny. The objective is value for money for public funding balanced with an improved passenger experience – reduced journey time, increased frequency, capacity (track and passenger) reliability and passenger numbers (to reduce road congestion and energy benefits).

As the final proposals for tendering are not currently available it is not possible to make any judgement

### **18. Rolling stock and station waiting requirements**

New rolling stock is needed for the new franchise if journey quality is to improve as this with station waiting quality are the primary passenger experience factors.

Before any move is made to procure rolling stock the analytical process below has to be completed:

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

- Demand – how many passengers, growth rates, journey origin / destination; what mode or integrated modes
- Capacity – how many seats / standee space is required
- Services – frequency, reliability
- Rolling stock – train types, tram, ~~tram-train~~ (see below and Supplementary Note 1)
- Depots – primary maintenance which may as in the case of GWML require new construction, new depots for overnight stabling.

The rolling stock procurement process is considered in more detail (supplementary note 2) but a specific risk arises from the high percentage (estimated 70%) of the current ATW fleet is not usable after 2020 as these trains are not compliant with PRM legislation. DfT has made clear it is not minded to provide derogation (reference to flexibility for bidders above). In evidence to the National Assembly in 2013 both Professor Stuart Cole and Porterbrook, the train leasing company, indicated that new trains required for a 2018 franchise would have to be ordered in 2014 (diesel) or 2015 (electric) unless there is a possibility of being added to another order e.g. the order for new DMU's for the Northern franchise through DfT.

Depending on the operational options chosen the choices of rolling stock are between

- cascaded and new trains
- bi – modal electric / diesel

The rolling stock to match the service requirements outlined in Section 2 is:

- 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
- trams / light rail
- tram trains (but this technology is nowhere near sufficiently low risk per se and particularly when the process and the radical potential changes in track ownership (VL) and traction type are taken into account,

### **19. Core Valley Lines – definition and consequences**

Most commuters see Valley Lines as the whole of the commuter network extending from Treherbert, Aberdare, Merthyr, Rhymney, Barry Island, Penarth, Bridgend, Maesteg and Ebbw Vale.

However reference has been made by WG to the *core Valley Lines*. This is restricted to services from Treherbert, Aberdare, Merthyr, Rhymney and Cardiff bay into Queen Street. It appears to exclude the City Line from Radyr to Cardiff Central and the line between Cardiff Central and Queen Street. If this is an option, it should be reconsidered as it would require passenger interchange inconvenience and passenger transfer infrastructure (bridges and platforms currently providing inadequate capacity) at Queen Street station.

## **SECTION 2**

### **PRIORITIES FOR THE FRANCHISE SPECIFICATION AND METRO DELIVERY ENSURING RAIL SERVICES MEET THE NEEDS OF CURRENT AND FUTURE TRAVELLERS OVER THE WHOLE FRANCHISE DELIVERING VALUE FOR MONEY TO PASSENGERS AND TAXPAYER**

#### **20. Current franchise passenger experience**

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 (subsequently the Department for Transport).

Trains such as Pacers and Class 150's are 35 years old and it is to the credit of Arriva Trains Wales engineering staff that the reliability figures are so good.

Annual passenger growth varying between 8% and 13% over the network is a positive move but it was not forecast and providing additional capacity through the contractor Arriva Trains Wales has resulted in an additional subsidy cost for the for the Welsh Government. No allowance in the block grant is apparently made for this.

Further additional capacity cannot be provided at present because no suitable diesel trains are available.

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 have been alleviated with the use of 3 – car sets on this great western franchise. Turbo trains (5 – cars) currently operating GWR Thames Valley trains are a possible source of additional capacity following electric train operation between London and Reading.
- Certain school time journeys
- Summer services to west Wales

## **Passenger service improvements expected in 2018 franchise**

### **21. Passenger Forecasts**

Passenger demand forecasts should 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 new OpCo (train operating company) against risks of lower or higher demand affecting increased capacity provision or revenue shortfalls.

Demand growth is expected to continue at 8% per annum so the DfT assumptions of 2.5% are unrealistic though the use of more realistic demand figures can increase costs of future provision and may reduce the short term benefit cost ratio

The franchise has to be specified in terms of demand and rolling stock both diesel and electric (please see later section). The working relationship between the train operating contractor and Network Rail who operate the infrastructure makes this

easier with the Network Rail Wales Route (division) now in place and for south Wales the presence of NR / ATW staff at Canton control room.

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.

## **22. Franchise Specification**

The franchise specification should improve the passenger experience, including for example franchise length, targets / incentives and the core service standards which should be included;

The key justification for any changes – electrification, re-signalling, 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:

- Improve reliability and timekeeping
- 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
- Improved passenger satisfaction
- Increases in train frequency
- More modern, more comfortable trains
- Increasing in passenger demand (peak and off-peak; rural, urban and inter-urban) as a franchise condition
- 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

- Any significant aspects of the present system which are shown to be deficient which one of the alternative structures will remove

Specific schemes upon which improved passenger services depend, These are infrastructure schemes to be primarily funded by Network Rail / DfT or by other means for electrification / light rail on Valley Lines. WG can 'do what they want to but It is possible that NR Wales Route will not be able to provide all that WG have asked for'. There are constraints from the centre and are dependent on funding for the rail network. Possible infrastructure investments (Supplementary Note 2) are:

- North Wales Main Line electrification
- North east Wales Metro based on electrification of Chester – Wrexham – Bidston to provide a loop through bi directional rail service between north east Wales and employment centres at Airbus, Chester and Liverpool. Interchange between NWML and the Metro at Shotton
- Double track Wrexham – Chester to increase services
- South east Wales Metro

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.

The objective of this is to ensure that the passenger obtains the best service, that shortcomings are put right, that good quality is rewarded and that the Government gets what it pays for.

However all these expectations are limited by affordability connected to adequate provision for rail services in the block grant, both capital and revenue

**23. Bus Integration** - please see section 1