20 <sup>th</sup> January 2015
James Syson (BwDBC)
Leighton Cardwell, Geoff Smith, Peter Hibbert (Jacobs)
Blackburn to Manchester Rail Scheme OBC

## Dear James,

Further to our review of the Blackburn to Manchester Rail Scheme Outline Business Case, we list below a number of key points of clarification, or where additional evidence is required to be provided to support the scheme.

We require answers, or detailed supporting evidence for the key points below by close of play on Friday 23<sup>rd</sup> January in order to meet the timescales for submission of the independent review 48 hours later.

Please note that these are not all of the comments we have, but are the key ones that we require a detailed response to by 23<sup>rd</sup> January, in order to demonstrate that the Business Case for the scheme is robust, and can therefore be presented in that light.

1. The Business Case assumes a third party will cover the operating costs of the Manchester-Bolton section of the additional service. Is there any demonstrable evidence of commitment for this funding, and indeed service, as it is clear that this assumption significantly drives the value for money position obtained.

James Syson (BwDBC): I have been provided with confirmation from the DfT and Rail North at a specification meeting this week that a Manchester to Blackburn service is being funded as part of the baseline specification for the next Northern Franchise. The ITT will specify an "additional 1tph off peak Manchester-Bolton-Blackburn".

The assumption used within the OBC was for the potential need for the service to be funded by BwDBC between Blackburn and Bolton following previous assurances made by DfT that the service between Manchester and Bolton would be available and supported by them. Whilst knowledge/evidence for this is currently not within the public domain due to sensitivities with the development of the replacement Northern ITT – you should be able to take reassurance from your recent conversation with Richard Watts who is part of the Rail North Team working with the DfT to ensure a transformational agenda for railways of the North.

Ultimately given this recent confirmation by DfT it is a case of just awaiting clarity about 'when' this service is introduced as opposed to 'if'. Whilst we will be pushing for an introduction of the service in December 2016 it would appear that the ultimate backstop date will now be December 2017 given the issues surrounding the delivery of North West electrification and Northern Hub works.

Jacobs: This position is understood, and will be able to be confirmed in the next 2 months. As the scheme value for money is critically dependent upon this, approval of the scheme is likely to be conditional on this being achieved. Any slippage to timescale will need to be reflected in the updated costs and benefits profile associated with the Full Business Case submission, subject to progression of the scheme at this Outline Business Case stage.

Any change in draw down on TfL funding needs to be made explicitly clear, given requirements for 2015/16 spend. It is assumed that construction dates remain unchanged, but confirmation of this would be welcomed.

2. TfL, as decreed in its assurance framework, cannot fund revenue spend. TfL monies can only fund capital spend. Any reference or assumption to this needs to be removed, and any shortfall in revenue will need to be funded from other local sources.

James Syson (BwDBC): As per response to Q1 this issue is no longer valid as operational costs will now be subsumed within the franchise and funded by the DfT. Moreover, whilst we were hopeful of reaching this position with the DfT the OBC was developed to ensure that BwDBC was committed to funding the revenue implication for the first 3 years of the service in line with DfT third party funded rail schemes. The Financial case clearly sets out in 5.8 the preferred funding arrangement noting the £1.489m local revenue contribution from BwDBC. Regards evidence for this decision this is based on a Report agreed by the Councils Executive Board in April 2014 and the signature from our Section 151 officer on the OBC.

## Jacobs: Agreed.

3. As revenue covers only 52% of the scheme operating costs there is an affordability question. The Business Case assumes that the local authorities will fund the Bolton- Blackburn off peak infill service between opening and the new franchise. There is no evidence of long term commitment to the additional operating costs in the franchise. Who will be funding the shortfall in operating costs?

James Syson (BwDBC): As per response to Q 1 & 2 the baseline specification for the next Northern franchise includes the off peak infill service and that it will be funded through the franchise by the DfT. Ultimately there will be no call on BwDBC to fund any revenue implications to the service enhancement. Moreover, as also set out in response to Q 2 BwDBC was fully committed to supporting the service for a minimum of 3 years which took account of the shortfall between revenue and operating costs.

Jacobs: Agreed, subject to ITT confirmation once released.

4. It is understood that alternative options were considered as part of the GRIPOS report. However, the Business Case submitted to TfL does not present any comparative value for money assessment of alternative options (a WebTAG Business Case would expect to see Next Best / Low Cost options included within the Business Case). Has any economic assessment been undertaken on the alternative options?

James Syson (BwDBC): The many options evaluated by Network Rail have subsequently been discounted as a result of the GRIP process in order to identify the optimal solution in terms of benefits and cost.

Ultimately, the most desirable option from a rail industry perspective has been agreed, tested and approved providing us with the most cost effective solution.

The GRIP process is designed to identify a single preferred option and we have managed to get to this stage by adopting an iterative process which goes back to 1999 and the SKM report commissioned by East Lancashire Partnership which looked at opportunities for the development of a rapid transit system for East Lancashire.

The OBC takes the reader through this in 3 Stages within the Strategic Case. The third stage highlights the different options investigated by Network Rail within GRIP 2 and Grip 3 –with a copy of GRIP 3 appended to the OBC.

As these options were discounted by the rail industry there was no further requirement to spend money and time trying to assess any economic impact associated with them given that the same goal is to be achieved but at a much lower cost with the option now being planned for delivery this summer.

Jacobs: This is agreed, and we recognise the reported development of the scheme, and timeframe over which options have been assessed.

However, WebTAG guidance in unit A5.3 Rail Appraisal is clear:

'The testing of alternatives is not an add-on to the appraisal but an integral part of the process of determining the preferred option. Any scheme for which the appraisal of alternative options is considered inadequate may not be accepted for funding.

The assessment of alternatives should start from an initial wide base of possible options. The Department requires a clear understanding of why some particular options are preferred to others and must be sufficiently robust to allow a detailed comparison between the preferred scheme and its alternatives. {Note this is achieved in the Bolton-Blackburn scheme}. The Department may wish to see ASTs and worksheets (including TEE tables) for the rejected alternatives, though the level of detail should be proportionate to the stage at which the rejected alternative was considered.

After a thorough justification has been given for the rejection of some of the initial set of options, {which has been done} the Department requires that all major schemes move toward a final appraisal of the preferred option and a 'fully worked up' lower cost alternative {this has not been done}. A scaled down version of this may be acceptable for smaller schemes {we are happy to discuss this}, however only after prior agreement with the Department. In these cases promoters should enter into discussion with the Department to determine the exact requirements for their scheme.'

No discussion has been held between the scheme promoter and TfL, or the independent assurers in this regard, therefore this aspect of the Business Case cannot be considered concluded.

For the Full Business Case approval, proof that this is the best value scheme when opex costs *and* capital costs are considered together, as is undertaken in a TEE, is required.

Given the models already in existence, this is not considered onerous for capital spend funded by TfL (DfT via the franchising process are only covering opex costs).

5. The scheme development work and strategic case shows that performance was a key measurement for sifting options and that detailed data is probably available. Has any analysis been undertaken to quantify the reliability benefits that the scheme could have?

James Syson (BwDBC): As per response to Q4 the identified option is the most desirable from a Network Rail and TOC perspective. The exercise was to identify what interventions would be required to enable the reliable operation of an all-day ½ hourly service. As noted in the appended GRIP 3 report further analysis of options raised in GRIP 2 identified that the implementation of Intervention 1 (passing loop at Darwen) alone when the additional off-peak services are introduced provides a reduction in delay per train of circa 5.4%.

Jacobs: Agreed. This was raised as it is an additional benefit source not captured in the Business Case by the scheme promoter or its consultants. Our analysis shows a significant level of peak hour minutes lost to reliability, which we will reference as part of the overview of benefits of the scheme to TfL.

We suggest this is formally monetised for the Full Business Case submission to further strengthen the case and the value for money achieved by the scheme.

6. Optimism Bias has currently been included at 6% on the track infrastructure costs. However the scheme is currently at GRIP 3 and therefore is not yet at 'Stage 3'. Therefore OB should be at 40%. Please could you provide an updated BCR based upon this assumption. In addition, some bridge work is detailed within the cost definition, what optimism bias level has been applied to this cost element as Bridges are key risk items.

James Syson (BwDBC): Whilst Network Rail have so far completed GRIP stages 1-3 given the minimal complexity with the scheme and the extensive knowledge of the engineering solution required the scheme has been developed to GRIP 4 level by Network Rail in terms of their identification of costs, risks etc.

Ultimately the assumed position from us in agreement with Network Rail is that the scheme is consistent with being at the GRIP stage 4 level and above especially given the comprehensive QCRA report undertaken by Network Rail back in Feb 2014 which has been continually monitored and reviewed. The QCRA was run through the Monte Carlo model and an 80% confidence level was included in the pricing schedule. GRIP 4 work since this time has reaffirmed these costs and sought to minimise risk.

If a 40% level of optimism bias was to be used this would therefore not be reflective of the confidence Network Rail have in the delivery of this scheme and would also be extremely detrimental to the overall business case.

Jacobs: There seems to be confusion between GRIP Stages and WebTAG Stages.

Even at GRIP Stage 4, WebTAG (Unit A5.3) still requires 18% optimism bias; and the Business Case has used 6%, where a minimum of 18% to the risk adjusted cost should be applied.

No response has been provided to the bridge element of costs.

Whilst it is clear that OB would reduce the current VfM position slightly (it only impacts capital costs), it is recommended that this is updated to a 6% level once GRIP Stage 5 is reached and target costs for the scheme are available at Full Business Case stage. Operating costs for the scheme will also need to be reviewed at FBC stage in light of the new Northern Franchise ITT.

7. WITA benefits have been included within the main BCR calculation. The BCR should be presented with and without economic benefits included throughout the Business Case.

James Syson (BwDBC): The appended refreshed business case for the service enhancement developed by Mott MacDonald notes the following: "The core Benefit-Cost Ratio (BCR) for the scheme under conservative assumptions and optimism bias adjustments, at a forecast capital cost of £13.4m lies between 1.6 and 1.4 (the latter under recently-revised lower growth forecasts for rail demand, driven by assumptions in central guidance of major reductions in future motoring costs). However this rises to 2.4 - 2.1 with the addition of Wider Economic Impacts benefits (which have a net present value of £14.7m) which thus moves the scheme from 'medium/low' to 'high' value for money. The detail therefore being requested is included in the appendices.

Regards the OBC and the use of the WITA benefits a degree of flexibility has to be exercised by the LEP to ensure that the capturing of the wider economic benefits which are lost in traditional transport modelling assessments are captured fully and promoted especially when you consider this is the exact approach being adopted by the DfT as they appraise service enhancements forming part of the baseline specification for the next Northern franchise. Moreover, the economic case for the removal of pacers is so poor using traditional modelling techniques that the DfT have admitted themselves they are instead developing a robust wider economic assessment and strategic case to ensure this can be delivered within the life of the next franchise.

Were it not for this flexibility in approach being adopted by the DfTs own economists many of the transformational benefits being pushed by the DfT / Rail North for the next franchise could not be justified.

The fact that the DfT are now happy to fund our service is testament to the wider economic appraisal we have undertaken and shared with them.

Jacobs: This was simply raised for consistency; sometimes in the Business Case it is presently correctly; others not. This should be made consistent for the Full Business Case.

The nature and appropriateness of WITA for Wider Impacts is not being questioned.

A high and low growth scenario should be presented in the Business Case to meet WebTAG requirements. Please calculate a BCR for change in the demand cap +/- 10 years, as recommended in WebTAG and given the proximity of the scheme to key value for money thresholds.

James Syson (BwDBC): Further to the recent acceptance gained from the DfT with regard to funding and the scheme's inclusion within the baseline specification of services, we are confident that the level of growth that is presented within the OBC is acceptable to the Department and that they are happy with the assumptions made. To include these additional growth scenarios would require significant additional work which, given the commitments already made, would appear to be ultimately redundant. We note the general recommendation of WebTAG to include these scenarios, however we consider that growth

applied in this case is realistic and robust and additional scenarios are not therefore required.

Jacobs: DfT work for inclusion in an ITT will assess any subsidy shortfall in relation to the scheme, and indeed mitigate against any local or TfL risk.

However, as the value for money case is presently supported by the Wider Economic benefits of the scheme in particular, an indication as to how these change in a low/high growth scenario will be important to understanding TfL's funding commitment to the scheme. Based on the current sensitivity work undertaken to date this is deemed relatively low risk but would otherwise be a standard expectation.

9. Please can you remove the demand inflation for 'underprediction' (5%) and community rail partnership (5%) and anything added for station improvements north of Blackburn and report the impact on the Business Case.

James Syson (BwDBC): As per the response to Q7 the use of demand inflation is something that is being supported by the DfT as it develops the service specification for the next franchise.

It is widely acknowledged that standard modelling techniques under estimate the demand impact of rail services – something which is highlighted in Appendix N (BCR report) which cites examples across the UK.

DfT have recently undertaken surveys as part of the re franchising process to highlight ticketless travel across the TPE and Northern Network. This research identified that ticketless travel could be within the range of 6.6% to 11.5% across the Northern Rail network. Manchester Nth however was one of the poorer performers with ticketless travel within the band of 7.5% to 13%. The lower level is greater than the assumption of 5% we include within our business case. Ultimately we feel the 5% figure applied is very much a minimum figure we can have justification to use.

To mitigate the issue of ticketless travel the new franchise will place emphasis on improved revenue protection measures which might be achieved through additional revenue protection staff, a further roll out of TVMs to more stations and the introduction of new ways to pre purchase tickets possibly using e-ticketing to mobile phones.

Work by 'Systra' into Station Quality Standards (SQS) identified that the potential passenger and revenue uplifts from station modernisations is undervalued in PDFH. The rule of thumb is that a single intervention may result in a5% uplift but little work has been done to estimate the impact of line of route and multiple station improvements – both of which are proposed for the Clitheroe Line as part of this major transport scheme bid. The Systra work for Rail North suggests using a range of between 5% and 10%. The use of this demand inflation is therefore able to present a valid assumption on the higher levels of growth anticipated on the line in a scientific manner.

As for the Community Rail Partnership uplift this has recently been reinforced by the publication of the 'Value of Community Rail Partnerships and the Value of Community Rail Volunteering report' which recognises that lines served by CRPs typically achieve a much higher than expected level of growth. Community Rail Lancashire has demonstrated over the last 7 years that it adds economic, social and environmental value to our local lines by bringing together stakeholders in a co-operative environment.

Jacobs: Agreed. We noted that the Business Case did not uplift for un-sold tickets, therefore uplifts applied are likely to be robust and not affect the value for money categorisation.

10. Please can you report the actual year on year growth in the model compared with Network Rail market assessments for regional services.

James Syson (BwDBC): Please refer to Appendix N (BCR Report) Table 5.2. This quotes the maximum Compound Annual Growth Rate CAGR (for 2012-2026) of 2.1%. In addition the Northern Route Utilisation Strategy (2011) quotes all-day growth into Manchester as 1.4% to 2.1%, CAGR to 2024.

Jacobs: Thanks and agreed.

11. Benefits / Costs calculation – please could you provide the relevant spreadsheets (and WITA input file) which have been used to derive the key figures used in the BCR calculation.

James Syson (BwDBC): The benefits / costs calculations are described in detail for a number of scenarios in Appendix N (BCR Report) in Section 6 and 7. The spreadsheets behind these can be supplied on request, however they are working files and have not been assessed or approved for release by Blackburn with Darwen Borough Council. To provide them in a comprehensible and annotated form is possible however it would take more time than is available to meet response timescales. In addition, the approval given by the DfT for the scheme and its inclusion in the baseline specification provides evidence that the Department accepts the presented application of WITA benefits and therefore this additional work may not be required. Please advise if, following the recent announcement, these spreadsheets are still required.

Jacobs: These will be helpful to review prior for Full Business Case approval, as we have not had the opportunity to check key details and values used in spreadsheets to date. Any updates to WebTAG values in this period will require updating for Full Business Case approval.

12. Given the predominance of shorter distance trips, and low levels of car ownership, further evidence needs to be provided that the 26% used in the marginal external cost approach and calculations is locally appropriate. Can the Eden Market analysis be used to help provide justification for the levels used in the Business Case?

James Syson (BwDBC): Section 4.3.4b of the OBC document provides details of the assumptions and justification behind the 26% figure for the marginal external cost impact. The Eden Market analysis approach could be used to provide additional justification, however it is considered that the recent announcements from the DfT that approve the scheme and its inclusion in the baseline specification render the need for this additional work redundant. It is clear that the Department consider the figure used as locally appropriate and we would therefore wish to avoid the requirement for unnecessary further justification work if possible.

Jacobs: This is a nationally accepted value. Just the strategic case for the scheme makes arguments that are counter intuitive to this, such as the area having lower than average car ownership.

These benefits are however a small % of overall benefits, so unlikely to materially alter the VfM position.

13. Wider Economic Benefits associated with the scheme will potentially accrue largely to Manchester, not Lancashire. The Business Case states that 85% of demand on the line is internal and therefore won't necessarily attract the same degree of benefits change. Within the WITA benefits what proportion of the benefits are realised in Lancashire?

James Syson (BwDBC): The appended refreshed business case report highlights that of the WITA benefits 34% are realised within Lancashire:

- 17% in Blackburn with Darwen
- 12% Lancashire South East
- 5% Lancashire West

Ultimately this indicates that the benefits will largely accrue, as would be expected, in the Blackburn with Darwen and Lancashire South-East zones gaining improved access to Manchester business locations from the scheme.

Jacobs: Agreed and thanks.

14. Environmental Impact. Page 3 of the Environmental Appraisal states that outputs of a transport model will be used to inform the Full Business Case submission. What approach or model is intended here?

James Syson (BwDBC): We need to be advised as to whether the existing Environmental assessment is sufficient – if greater detail is required we would welcome the advice. However this needs to be proportionate to the size of the scheme being put forward –given this is just a £14m scheme with full DfT support is any further detail really required?

Jacobs: We agree, and happy to help scope for Full Business Case submission.

15. Evidence for DfT support is stated on p6. Is any written evidence available which could be incorporated within the Business Case to physically demonstrate this?

James Syson (BwDBC): As per response to Q1 the DfT are incorporating the service into the base timetable specification therefore this should demonstrate sufficient support. We have also had very valuable support from the DfT over a number of years as we have progressed the various GRIP stages with Network Rail.

Jacobs: Complete.

16. The scheme construction is due to be completed by October 2015 yet the timetable changes don't take place until December 2016. Please could you confirm why this is the case?

James Syson (BwDBC): Given the North West electrification and Northern Hub programme the introduction of the scheme was always intended to be part of the major recast of timetables across the North set for December 2016. The issue now potentially presenting itself is the delay in delivery of Northern hub and electrification schemes which will mean the next franchise will be let on an inherited timetable specification with major changes implemented in Dec 2017 and Dec 2019. However the DfT have confirmed that where possible schemes can be introduced earlier if they are not affected by wider infrastructure works or do not require additional rolling stock which our scheme does not. Jacobs: Agreed, but note potential for update on scheme opening year in scheme benefits, and risk on TfL drawdown on funds allocated for 2015/16.

17. Although there are operating costs associated with the additional services no extra rolling stock has been specified for the new inter peak service. Please could you confirm that no additional rolling stock is required?

James Syson (BwDBC): No additional rolling stock is required. It has been confirmed by Northern Rail that the scheme would utilise the same resource during the inter peak as during the existing am/pm peak.

Jacobs: Complete.

18. Does a Risk Register covering key project risks exist? If not it is recommended that one is produced and appended to the Business Case.

James Syson (BwDBC): A comprehensive QRCA has been undertaken with Network Rail and is regularly updated and reviewed by them. A formal risk register can be provided following the initial meeting of the Project Board which is set for Friday 30<sup>th</sup> January. However all risks for the scheme have been identified and are being managed and with the recent announcement by the DfT any funding risks for operational costs have been removed. Whilst the Network Rail QRCA does not include the station enhancements element of the scheme given that these works have minimal complexity and have previously been delivered on time and to budget in partnership with the TOC and Community Rail Lancashire risk is very low.

Northern Rail is fully committed to our plans having agreed to facilitate the delivery of local station enhancements in line with other station improvements across the Northern network as part of the Direct Award.

Jacobs: Project Risk Register to be attached to Full Business Case, with updates since January 2015.

19. Possession Arrangements - It is understood that Northern Rail has formally objected to the combined possession of the line for the Darwen loop and Farnmouth Tunnel schemes, via industry processes, as they have concerns about the timetable proposals. Please could you provide an update on the latest position?

James Syson (BwDBC): The very latest position is that Northern are supportive of the possession/blockade. Recent communication between Network Rail and Northern has been to resolve the following points:

Can a timetable be made to work in conjunction with the Farnworth tunnel works?
Are Network Rail confident they have sufficient resources?

The answer to both questions is yes and Network Rail has now formally responded to Northern Rail.

Jacobs: To be reconfirmed at Full Business Case.

20. Delivery timetable – the Business Case states that the Delivery Programme will require further work as a signalling record risk issue will necessitate changes. Please advise on the likely impact of these changes?

James Syson (BwDBC): The Scheme Signalling Plan (SSP) has continued to be developed as we close out Grip Stage 4. The latest from Network Rail on this is that the SSP is viewed as being relatively risk free and will be submitted to the approving body (MSRP) on Tuesday 27th January – i.e. next Tuesday.

Jacobs: To be reconfirmed at Full Business Case.

21. Are you able to provide any clarification on how the governance arrangements for the scheme will link with the Farnmouth electrification project which the Darwen loop extension is sharing possession arrangements with?

James Syson (BwDBC): Network Rail has advised us that the Darwen loop can be delivered irrespective of the timescales for the Farnworth tunnel works. The resources and train plan etc. has been deliberately designed/planned to run independently of the Farnworth electrification works.

Jacobs: Complete.