PCF Quality Control

Trans-Pennine Tunnel Strategic Study +

PCF Product Sign Off Sheet

Version 05 - 09th May 2017

Product Title	Combined Modelling and Appraisal Report	
Document by (author)	**Name**	**Role**
	[redacted]	Associate Director – Strategic Modelling
Document Status	*Final Draft Version 1.4*	

Consulted With

Name	Role	Date Consulted	Date of Final Comments
[redacted]	HE Project Manager	18/03/20	
[redacted]	HE Transport Planning Group	18/03/20	05/06/20
[redacted]	HE Economics	18/03/20	09/06/20

Comments

[redacted] *issued the ComMA or document entitled "1-551 TPTS+TFR and EAR v1.1.dox" to the HE Project Management team,* [redacted] *and* [redacted] *on the 18th March.*

[redacted] *provided a series of comments and queries by email to the study team on 1st April. The study team (NN) responded with proposed amendments to these comments on 2nd April which was accepted by NA.*

[redacted] *stated on 1st April that she had reviewed the document and commented that "They are fit for purpose as they are."*

The ComMA was updated in May to action the comments provided by [redacted] *and to add in a section on the tolling analysis.*

This resulted in an updated final draft Version 1.3

Comments received from NA and AC regarding consistency between AST GHG impact and ComMA GHG impact. The ComMa has been updated to reflect the TAG methodology and AST values for GHG emissions.

As requested by HE, an Incremental BCR table has also been added. Based on the above two modifications a final version 1.4 has been produced.

Technical and Operational Approval

In addition to the mandatory final sign off, some products also require a prior 'technical' approval by one or more technical specialists (such as Transport Planning Group or Environment Group) or 'operational' approval from Operations Directorate.

To provide a clear audit trail, a minute / email should be obtained from each of the technical / operational approvers listed under the Roles and Responsibilities section of the PCF Product Description page, which should include a statement confirming the extent to which the product is fit for purpose and adheres to relevant guidance, procedures or legislation.

A physical signature of this minute / e mail is not required as it is acknowledged that it is often time consuming and logistically difficult to obtain physical signatures from technical / operational approvers located in different offices and that merely signing a sheet of paper does not enable the approver(s) to comment on the extent to which the product is fit for purpose and adheres to relevant guidance, procedures or legislation.

List of Required Approvals	Copy attached? (Y/N)

[redacted] HE PM	Y
[redacted] HE Economics	Y
[redacted] HE Transport Planning Group	Y

Final sign off by individual named under 'Accountable and Signed Off By'

As the individual accountable* for this product you are required to sign off to confirm that:

- The product has been produced and is PCF compliant (e.g. in line with the product description)
- PCF process has been correctly followed e.g. you are assured that the correct consultation has taken place
- You are content with the overall content and quality of the product

Name	Signature	Title	Date
[redacted]	[redacted]	HE Deputy SRO	13/08/20

*Every product is subject to a mandatory final sign off by the individual named as 'Accountable'. This is often the SRO but varies depending on the product.

PCF Quality Control

Correct Title/PCF number displayed on the Sign-off Sheet and in Product?	
Correct consultee(s) listed?	
Date consulted / Signatures (if appropriate) boxes completed?	
SRO/Sign-off approval name correct?	

Way We Work: is the structure of document in line with the Way We Work template? (as displayed on Supply Chain Portal) (Please attach)	
Is the format correct & consistent throughout the report and also meets the PCF content requirements?	
Spelling/Grammar check?	
Are you content that the document is in a satisfactory state for submission to SRO/Sign-off?	

Any Comments:

Designer Quality Sign-off:

Product Owner	Name:		Date:		Signed:	
PCF Reviewer	Name:		Date:		Signed:	

Back office use only:

Document on Supply Chain Portal: ☐ Document placed in SHARE (HE): ☐

Sign-off Sheet placed in SHARE (HE): ☐ PowerSteering updated (HE):

Version Control and Feedback Loop

Version Control and Feedback Loop

Product: Regular Reporting

Comments & Responses

Comment / Query	Study Team Response / Action
NA: 7.2.1 The latest Highway interventions costs for the TPTS Only and the Optimised Package were provided by Highways England in May 2019, with outturn costs of £9.00bn and £11.88bn" – This does not reflect the latest outturn cost. Could you please ensure the latest assessment is included here? 7.2.7 The costs were provided by the Highways team for the 60-year appraisal periods…." – Just to double-check was OPEX applied for a 60-year period post-opening? 7.2.7 It was then discounted to 2010 values using the WebTAG discounting method (i.e. 3.5% pa)." - I assume this means 3.5% for the first 30 years and then 3%? If yes, please make it clearer. 7.7 WIDER IMPACT BENEFITS – STATIC CLUSTERING" - I assume all wider economic impacts have been assessed using WITA1.2, is that correct?	This chapter summarises our previous works on the Optimised package (2 years ago) before testing the sub-packages, therefore the costs, Scheme opening years and PVB, BCR are not the latest ones. The updated costs, opening year, PVB and BCR is reported in chapter 10. I will make it clearer in this section. Yes, you are correct, OPEX applied for 60 years post-Opening year. Yes, 3.5% for the first 30 years then 3%. I will make it clearer in the report.

7.7.7 Table 7-14 below provides summary of WITA level 2 benefits, with and without 20% adjustment factors." - Has the same 20% reduction been applied to the sub-packages 1/2/3?	Yes, they have been assessed using WITA 1.2 as agreed when we did the work with Jeremy Clark on the HE Economy model.
9.3.8. The analysis is robust enough to achieve this, but once a package is selected, there is scope to further refine the schemes and improve the VfM." A bit confusing as I thought the sub-packages are phased approaches towards the optimised package (not alternatives to it)?	Yes, they all have been applied 20% adjustment factors. Yes the sub-packages are phased approach toward the optimised package, but during our modelling tests with the individual packages we noticed that in order to maximise the benefits we needed to include M60 J24-J25 to packages 2 and 3, which was not included in the original package selection. I will make it clearer in the COMMA.
Table 10-1 TUBA and WITA Summary - Proposed Packages (2041 Opening Year)" – Mixing £k's with £m's on the same table. Please use either/ or consistently. Table 10-3 TUBA Summary of Packages with Updated Opening Years (£000s)" – Please include the breakdown of the WITA benefits on this table.	Thanks for spotting this out, will update the tables. Yes, will update the COMMA to include breakdown of WITA benefit.
10.8 OPTIMISED PACKAGE WITH TOLL– This section needs to make more explicit the key caveats/ uncertainties of this analysis; 10.8.3. I assume the toll values for car/ LGV/ HGV were translated from 2020 prices to a consistent price base for the economic appraisal in line with other assumptions? If yes, please specify here. On the point 10.8.3. I was rather referring to the fact that the toll prices are at 2020 levels whereas CAPEX/ OPEX will be either 2016 or 2018 prices.	Yes, will update COMMA to reflect this. At a high-level, some caveats/uncertainties are around lack of modelling by income bands therefore user's willingness to pay cannot be modelled; and freights only subject to route choice and not VDM responses as a result of toll. Yes, toll values were converted to 2010 prices for consistency with the economic appraisal, I will update COMMA.
10.8.8. Please clarify here what assessment specific assumptions have been considered (e.g. short/ medium/ long term inflation etc.); 11.2.2 What are the differences/ assumptions on SOW/ OFT dates between P2.5/ P50/ P97.5 (assuming they do consider different SOW/ OFT dates for each estimate)?	Re: point 10.8.3, yes tolls are assumed at 2020 prices whilst CAPEX/OPEX are at 2018/2016 prices. However, for the purpose of the economic appraisal, they all have been discounted and deflated to the same price base (2010) using appropriate discount and deflator adjustments to ensure like for like at 2010 prices and values with other economic appraisal such as TUBA, WITA. For the assessment, we assumed general inflation of 2.5% p.a over the 60-year appraisal periods, then deflated and discounted to 2010 prices and values. From the Highway Commercial EO, I can see that the start of work data is the same for all the estimates but there are some variances in the OFT date. For the P2.5 and Pmean, the difference is negligible but the P97.5 pushes the end date by around 1 year.
The GHG figures between ASTs and '1-551_1-988 TPTS+ TFR and EAR v1.3 June 2020' do not match. All ASTs and the latest	Updated as per v1.4 to show consistency in

EAR need to be re-checked and updated accordingly. Also, please note that I have raised a query with WSP on the impacts outlined in these ASTs. If we present them as alternative options to the Optimised Package then these are correct. If we present them as delivery phases then these are not the numbers we should be using/ referring to, i.e. we will need EAR and ASTs to refer also to the below figures.	GHG values. Values as per TAG analysis. Updated in v1.4.
MP Programme Management Office	Response