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DfT Consultation 3: 26th July 2022

I am an independent scientist and environmental consultant, working at the intersection of science, policy, and law, particularly relating to ecology and climate change. I work as a consultancy called Climate Emergency Policy and Planning (CEPP).

In so far as the facts in this statement are within my knowledge, they are true. In so far as the facts in this statement are not within my direct knowledge, they are true to the best of my knowledge and belief.

SUMMARY

1. It is not legitimate to presume that the NZS, or the TDP whose policies are closely linked, will inevitably succeed. The NZS legal case has highlighted that the risks of delivery of the policies were left unknown at publication of the NZS, and remain unknown.
2. In considering, the A47NTE scheme, the SoST cannot make a reasoned conclusion and decision, under the EIA Regulation 21(1)(b), on the significant effects of the proposed development on the environment:
 - if any presumption is made on the inevitable success of the NZS, and by implication the inevitable delivery of the TDP, NDC and 6th carbon budget, by the applicant in the Environmental Statement or the ExA in the recommendation report; or
 - if he makes any presumption on the inevitable success of the NZS, and by implication the inevitable delivery of the TDP, NDC and 6th carbon budget.
3. In responding to Item 5, the applicant fails to do what it was asked to do. It fails to respond to the SoS' invitation to provide an assessment against the carbon targets contained within the Plan (ie the Local Transport Plan 4). Apart from being obstructive, this: fails to meet the requirements of NPSNN 4.4 for local and regional carbon assessment; ignores **three** different, and readily accessible sets of existing data on local carbon budgets; ignores a **fourth** set of targets provided the LTP4.

4. The applicant makes lame excuses for not doing an assessment against the LTP4.
5. My own assessment at the previous consultation round, showed quite clearly that an assessment against the LTP4 demonstrates very significant effects, so significant, as to fail the NPSNN 5.18 test. **The assessment shows a clear, and significant risk to the delivery of the national 6th carbon budget, and to delivery of the Climate Change Act.** Should National Highways construct and operate the A47NTE scheme, then the LTP4 IP carbon targets for Norfolk are undeliverable.
6. The applicant has introduced data from the so-called “TDP Sensitivity test”. This is not a sensitivity test at all, but a fudge factor method. The “TDP Sensitivity test” method has no creditability and should be withdrawn. As currently presented, it is bad science. It is unacceptable that it should even be considered plausible as a method and shows bad judgement on the part of the applicant.
7. **Further, in considering the A47NTE scheme, the SoST cannot make a reasoned conclusion, under the EIA Regulation 21(1)(b), on the significant effects of the proposed development on the environment if any reliance is made upon data from the so-called “TDP Sensitivity test”.** The data presented by the applicant under Item 5 should therefore be ignored.
8. With respect to **the absence of an assessment of cumulative carbon impacts of the A47NTE scheme,** the SoST cannot make a reasoned conclusion, under the EIA Regulation 21(1)(b), on the significant effects of the proposed development on the environment as a significant, and mandatory, part of the required information is missing from the ES.
9. The applicant’s descriptions on the traffic modelling conflicts between the case for the scheme, and evidence later given at ISH2. The differential quantification of carbon in the applicant’s methodology is now in question. **Does DS-DM represent the A47NTE in isolation, or does it represent the A47NTE and the NWL in combination? The SoST cannot make a reasoned conclusion, under the EIA Regulation 21(1)(b), on the significant effects of the proposed development on the environment until this conflicting information is resolved.**
10. The applicant has not satisfactory answered issues around how the different traffic models used by the applicant and NCC produce different results, including a major loss of traffic from one model which remains unexplained. Further information on “Calibration and inconsistency errors in traffic modelling” submitted at the last consultation round has yet to be answered too. **The SoST cannot make a reasoned conclusion, under the EIA Regulation 21(1)(b), on the significant effects of the proposed development on the environment until the coherence between and reliability of the traffic models has been demonstrated.**

Contents

SUMMARY	1
Contents	3
1 INTRODUCTION	4
1.1 Response to consultation, 26th July 2022.....	4
1.2 Scope	4
1.3 Acronyms	5
1.4 Definitions	5
1.5 Overview of consultation submissions.....	5
2 UPDATE SINCE SECOND CONSULTATION	7
2.1 Net Zero Strategy legal case	7
2.2 NZS case implications for Applicant’s case.....	8
2.3 NZS case implications for the decision-making process	8
2.4 Climate Change Committee (CCC) Progress Report.....	9
3 COMMENTS ON THE APPLICANT’S RESPONSE ON ITEM 5	9
3.1 Local and regional assessment	9
3.2 “TDP Sensitivity test” – discredited and unreliable.....	11
4 ASSESSMENT OF THE CUMULATIVE IMPACTS OF CARBON EMISSIONS	13
5 CONFLICTING TRAFFIC MODELLING ON THE A47NTE SCHEME.....	15
6 TRAFFIC MODELS (DIFFERENT MODELS BY THE APPLICANT AND NCC).....	16
7 CONCLUSIONS	17

1 INTRODUCTION

1.1 Response to consultation, 26th July 2022

- The Secretary of State (SoS) issued a third consultation letter on 19th July 2022. This submission responds to Item 2, and in particular, responses to Item 5 of the SoS' letter of June 27th.
 - Item 5 as reproduced below:

THE NORFOLK LOCAL TRANSPORT PLAN 4

The Secretary of State received responses from two Interested Parties, Dr Andrew Boswell and Bryan Robinson, in relation to the Norfolk Local Transport Plan 4 ("the Plan"), which is due to be adopted in July 2022. In the light of those concerns, the Secretary of State invites the Applicant to provide an assessment against the carbon targets contained within the Plan.

1.2 Scope

- I refer to these documents from the PINS website for this scheme and other schemes:

Reference in document	
DERBY-EXP-REP-1	My first expert report on the A38 Derby scheme, referenced on the PINS A38 Derby website as " <i>Derby Climate Coalition, Response to the Secretary of State's Consultation of 23 September 2021 - Expert Report of Dr Boswell, published 27/10/2021</i> ".
A47NTE/CEPP_CONS_1	My submission on June 15 th 2022 to the SoS's <u>first</u> A47NTE consultation.
A47NTE/CEPP_CONS_2	My submission on July 8 th 2022 to the SoS's <u>second</u> A47NTE consultation.
A47NTE/REP3-014	Environmental Statement, Chapter 14 – Climate
A47NTE/REP4-015	"9.20 Applicant's Written Summary of Oral Submissions at ISH2"
A47NTE/REP10-005	"9.35 Applicant's Response to the Rule 17 Request in February 2022" submitted on the final day of the examination
A47NTE/ APP-140	"7.1 Case for the Scheme"

1.3 Acronyms

AST	Appraisal Summary Table
EFT	Emissions Factor Toolkit
NDC	Nationally Determined Contribution
NPSNN	National Policy Statement for National Networks
NZS	Net Zero Strategy
TDP	Transport Decarbonisation Plan
LTP4 (Strategy)	The Local Transport Plan 4 adopted in part in November 2021 by Norfolk County Council (NCC)
LTP4 IP	The Local Transport Plan IP proposed to be adopted by NCC on July 19 th 2022, and containing local transport carbon reduction targets
NWL	Norwich Western Link
LSB	Long Stratton Bypass
A47BNB	A47 Blofield to North Burlingham
A47NTE	This scheme. “A47 North Tuddenham to Easton”
A47THI	A47 - A11 Thickthorn Junction

1.4 Definitions

3 For scientific precision, I use the following additional definitions:

- **Absolute emissions** – carbon emissions which are expressed in terms of **an absolute quantity** of emissions. The value of the absolute emissions, as released into the atmosphere, quantifies the real measure of the impact of greenhouse gases as an environmental factor (or receptor).
- **Differential emissions** – carbon emissions, with an associated value which has been **derived by differentiation of absolute emissions**. The differentiation is usually performed by the difference between two traffic scenarios, one with a transport intervention and one without. Differential values derived this way do not quantify the real impact of atmospheric greenhouse gases by the transport intervention within its transport system, and therefore do not represent the real global heating impact.

1.5 Overview of consultation submissions

- 4 Section 2 provides an update since the second consultation, particularly on the legal case on the Net Zero Strategy against the Defendant, the Secretary of State for Business, Energy and Industrial Strategy (BEIS)

- 5 Section 3 provides my comments on the applicant's response on Item 5.
- 6 Section 4 is on assessment of the cumulative impacts of carbon emissions.
- 7 Section 5 is on conflicting traffic modelling on the A47NTE scheme.
- 8 Section 6 is traffic models (different models by the applicant and NCC).
- 9 My conclusions are given in Section 7.

2 UPDATE SINCE SECOND CONSULTATION

2.1 *Net Zero Strategy legal case*

- 10 On July 18th 2022, the High Court issued a judgement¹ and an Order² in the legal case on the Net Zero Strategy against the Defendant, the Secretary of State for Business, Energy and Industrial Strategy (BEIS). Paragraphs 3 and 4 of the Court's Order are reproduced below:

3. In determining that the proposals and policies set out in the Net Zero Strategy will enable carbon budgets set under the Climate Change Act 2008 ("the Act") to be met, the Defendant failed to comply with section 13(1) of the Act by failing to consider (i) the quantitative contributions that individual proposals and policies (or interrelated group of proposals and policies) were expected to make to meeting those carbon budgets; (ii) how the identified c.5% shortfall for meeting the sixth carbon budget would be made up, including the matters set out at [216] of the judgment and (iii) the implications of these matters for risk to delivery of policies in the NSZ and the sixth carbon budget.

4. The Net Zero Strategy of 19 October 2021 failed to comply with the obligation in section 14(1) of the Act to set out proposals and policies for meeting the carbon budgets for the current and future budgetary periods (i) by failing to include information on the quantitative contributions that individual proposals and policies (or interrelated group of proposals and policies) were expected to make to meeting those carbon budgets and (ii) by failing to address the matters identified in [253] of the judgment.

- 11 The NZS order highlights that the BEIS minister had not considered several things, especially **the risk to delivery of the policies** in the NZS (and TDP) for meeting the 6th carbon budget, and that he failed to include information of the quantitative contributions that individual proposal and policies were expected to make in meeting the 4th, 5th and 6th carbon budgets. Not knowing each policy's contribution meant he couldn't decide what the risk of non-achievement was, which was an obviously material consideration (Judgement 204). The same applies to the missing information around how the 5% shortfall would be achieved (Judgement 217).
- 12 The only conclusion is that until the issues in the NZS are remedied, it is not legitimate to presume that the NZS, or the TDP whose policies are closely linked, will inevitably succeed. The risks of delivery of these were left unknown at publication of the NZS, and remain unknown.
- 13 This judgement is now an obvious material consideration that the SoS must consider for the A47NTE scheme. I have previously made submissions on the relevance of the NZS case to the carbon assessment for the A47NTE. My comments have related both to the applicant's case and to the decision-making process and are summarised below.

¹ May be found at: [REDACTED]

² Published by Good Law Project at: [REDACTED]

2.2 NZS case implications for Applicant's case

- 14 The applicant makes reliance of the TDP and the NZS in various places. For example, in REP2-014 at Q4.0.1 (as referenced in the applicant's July 8th consultation response), the applicant refers to the TDP and says, "*The plan outlines a number of commitments by the Government to remove all emissions from road transport to achieve net zero target by 2050*".

The statement implies that there will be inevitable success in removing "*all emissions from road transport*" for the net zero target date of 2050. Meeting the national emissions reductions in the crucial period before 2037, under the NZS, is vital if the later 2050 target is to be reachable, as the 2037-2050 period will build on the 2022-2037 period.

- 15 Further in its latest submission of July 8th, the applicant introduces new figures which are "the results of a sensitivity assessment using the TDP's trajectory". The TDP policies are those in the transport sector for the NZS and TDP Figure 2 and NZS Figure 21 essentially plot the same data, as pointed out in previous submissions. The TDP trajectory is clearly not secured, nor validated, given that the risks of delivering the NZS have not yet been considered.
- 16 I have previously said that the applicant can't rely upon the inevitable success of the TDP or NZS in presuming that the clear additional emissions created by the scheme will be offset up in other parts of the economy or by other geographical areas of the UK. The NZS judgement entirely supports my points above. In considering, the A47NTE scheme, the SoST cannot make a reasoned conclusion, under the EIA Regulation 21(1)(b), on the significant effects of the proposed development on the environment if any presumption is made on the inevitable success of the NZS, and by implication the inevitable delivery of the TDP, NDC and 6th carbon budget, by the applicant in the Environmental Statement or the ExA in the recommendation report.

2.3 NZS case implications for the decision-making process

- 17 In my consultation response on the A47NTE of June 15th 2022, section 3.1 made comments on the recent decision on the M54 to M6 Link Road (decision letter referred to here as M54-M6-DL). In particular, that:
- M54-M6-DL/31 incorrectly relies upon the inevitable success of the NZS (and TDP);
 - M54-M6-DL/37 incorrectly relies upon the inevitable success of meeting the UK NDC (which itself depends upon the success of the NZS);
 - Negative weight was given to increasing carbon emissions in the planning balance (M54-M6-DL/54); however, this was "offset" by the assertion that the Government could still meet their carbon reduction targets (ie under NPSNN 5.18). However, as above, it is premature to rely on this assertion.

- 18 The NZS judgement entirely supports my points above. In considering, the A47NTE scheme, the SoST cannot make a reasoned conclusion and decision, under the EIA Regulation 21(1)(b), on the significant effects of the proposed development on the environment if he makes any presumption on the inevitable success of the NZS, and by implication the inevitable delivery of the TDP, NDC and 6th carbon budget.

2.4 Climate Change Committee (CCC) Progress Report

- 19 This report in June 2022 on which I commented in my July 8th submission also confirms the above concerns.
- 20 The report finds that overall “credible plans” exist for only 39% of the required emissions reduction to meet the Sixth Carbon Budget (CCC _2022_PROG/page 22) under the NZS. This means that 61% of the required emissions reductions for the 6th carbon budget are not even secured “on paper” yet. As I reported in my July 8th submission, for the surface transport sector about half of the required emissions reductions for the 6th carbon budget are not even secured “on paper” yet, revealing the true extent of the “delivery gap” in transport decarbonisation policy from the Government’s own advisors on climate change delivery.
- 21 Again, in considering, the A47NTE scheme, the SoST cannot make a reasoned conclusion or decision, under the EIA Regulation 21(1)(b), on the significant effects of the proposed development on the environment if he makes any presumption on the inevitable success of the NZS, and by implication the inevitable delivery of the TDP, NDC and 6th carbon budget.

3 COMMENTS ON THE APPLICANT’S RESPONSE ON ITEM 5

- 22 The applicant does two main things which are taken in turn below:

1. It fails to respond to the SoS’ invitation to provide an assessment against the carbon targets contained within the Plan (ie the Local Transport Plan 4);
2. It introduces further figures including results of “a sensitivity assessment using the TDP’s trajectory”.

3.1 Local and regional assessment

- 23 I laid out in my response of June 15th that local and regional carbon assessment is:

- required by NPSNN 4.4;
- and also strongly recommended by the EIA guidance, and the IEMA guidance (see A47NTE/CEPP_CONS_1/section 4);
- and the IEMA version 2 guidance (see A47NTE/CEPP_CONS_1/section 5.1).

- 24 The applicant has shown repeatedly that it is obstructive and fails to respond to genuine and best effort requests by parties for relevant information. Lamentably, it is, once again, purely uncooperative in refusing the SoST's invitation.
- 25 The issue of non-compliance with NPNSS 4.4, and the applicant refusal engage with it, goes deeper than the LTP4. As an interested party, I suggested sub-national targets from early in the DCO examination of the scheme, as given below. Further, it is beside the point that only 'emerging' rather than adopted or statutory budgets were available at a sub-national level during the examination which the applicant sometimes states. If, as I contend, such an assessment is necessary to understand the true significance of emissions from the development, then it has to be carried out, regardless of whether the budgets were finalised, or have a statutory underpinning or not. The applicant has had ample opportunity to make such an assessment, and was provided genuine pointers and assistance, via submissions, by me to do so.
- 26 At the outset of the examination, **three** different, and readily accessible sets of data existed, and I not only pointed out these data sets, but made indicative assessments against them across the relevant local authority areas of Broadland, Breckland, South Norfolk and Norwich ("BBSNN"). Please see my REP1- 023, sections 4, 5 and 6 in which a local indicative assessment was made against each of these data sets, and was provided early in the examination period on September 1st 2021. Two of the data sets were based on official Government data: the BEIS local authority carbon emissions data, showing carbon emissions trends across sectors and sub-sectors including road transport since 2005; and national carbon budgets scaled by population and the recent road transport emissions share in the local authority areas. The third dataset was a set of carbon budgets for local authorities to assess scientific compliance with the Paris Agreement, developed by the Tyndall Centre at the University of Manchester under financial support of BEIS.
- 27 Further NCC indicated in November 2021 that it would provide carbon budgets in its Fourth Local Transport Plan ("LTP4"), the LTP4 budget was thus a near-final one and suitable for the purposes of assessment. It is a significant omission that the applicant never even referred to this emerging set of sub-national carbon targets. The Secretary of State has now been advised of the local carbon targets in the emerging Local Transport Plan (LTP4), which has now been formally adopted by Norfolk County Council on 19 July 2022, and this provides a **fourth** possible set of sub-national carbon targets for assessment.
- 28 The applicant makes lame excuses to avoid doing what it has been asked to do. In its July 8th submission, it says "*Although LTP4 sets out a target trajectory, it has not presented a methodology to determine what would or would not be a significant impact for either EIA or planning purposes.*" The impacts are quite obvious, and as I laid out in my July 8th 2022 submission include:
- If the A47NTE is built, there is **then no remaining LTP4 IP budget available for any other part of the Norfolk transport network after 2032;**

- When the analysis is scaled to the A47NTE study area, then **314%** of the scaled LTP4 IP carbon target is used by the A47NTE in 2037;
- By the 2037, the A47NTE scheme will have overspent the scaled LTP4 IP carbon budget by 53%, corresponding to an additional 4MtCO₂e in the A47NTE study area. This overspend must be seen in context for the national NZS targets for transport of 34.0 MtCO₂e (low ambition targets) and 19.7 MtCO₂e (high ambition). **This poses a significant risk to the delivery of the national 6th carbon budget, and to delivery of the Climate Change Act.**
- In short, my assessment of the Environmental Statement against the LTP4 IP shows that the A47NTE scheme is not consistent with the LTP4 IP, and that **should National Highways construct and operate the scheme, then the LTP4 IP carbon targets for Norfolk are undeliverable.**

29 The impacts are **so significant** that whilst a methodology might be desirable, it is not required to see the obvious truth. Of course, it is an Inconvenient Truth, which is the real reason for the applicant's obstructiveness.

3.2 "TDP Sensitivity test" – *discredited and unreliable*

- 30 I noted on June 15th at A47NTE/CEPP_CONS_1/section 9.8 that the applicant had not yet, at that time, presented data purporting to be a "TDP Sensitivity test" as it had on other schemes. It has now provided this data under Item 5 of its July 8th response.
- 31 As I have laid out previously, the method is **not** a sensitivity test at all, but rather the application of unproven factors to the traffic model data outputs, and that there is an explicit contradiction between the case made for the "need" of the scheme, and the policies in the TDP and the application of TDP Policy factors to the scheme. See A47NTE/CEPP_CONS_1/Appendix C for more detail.
- 32 Further, no information has been published about the method so interested parties are excluded from being able to scrutinise it.
- 33 This does not comply with EIA Regulation Schedule 4(6) which requires "*a description of the forecasting methods or evidence, used to identify and assess the significant effects on the environment, including details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved*" in the Environmental Statement making the ES inadequate.
- 34 There is a more fundamental problem that the TDP policies are inconsistent with the A47NTE traffic modelling, as built on the case for the Scheme. They act in different directions. Please see A47NTE/CEPP_CONS_1/bullets 79-81 on this. The method has been introduced in an ad-hoc way into recent carbon assessment in road scheme DCOs. It is clearly immature, and not fit for purpose.

- 35 The applicant has not introduced the usage of the method in an integrated, consistent or holistic way into the carbon appraisal process. If the TDP policies are to be modelled, then several precursor steps should have occurred, including:
- the policies themselves are properly modelled and quantified (eg under the NZS process which the Govt now have to undertake following the legal case);
 - the policies **should be integrated into the traffic model for the scheme**, not applied as a post-processing fudge factor as they are currently. This would mean that the real impact of the policies are modelled within the particular scheme traffic network. This would start to resolve the issue highlighted above that the TDP policies contradict the assumptions built into the current generation of traffic model, and the case of the scheme.
- 36 Even if applying speculative factors based on future policy was consider because it might possibly provide useful information, say as an interim measure before a proper method fully integrated in the traffic model (as above), then to apply reliable factors, the factors involved would require that the TDP policies are guaranteed to succeed. The NZS case decision has shown that the TDP policies have not been properly quantified, and as a result no consideration has been given to the risk of failing to deliver them. **The factors therefore are unreliable and the “TDP Sensitivity test” has no credibility as a methodology** when the risks for the delivery of the policies within the TDP has not even been considered, let alone quantified properly.
- 37 The factors applied are not just what scientists call “fudge factors”, **they are “fudge factors” that are not even remotely reliable.**
- 38 The “TDP Sensitivity test” method has no creditability and should be withdrawn. As currently presented, it is bad science. It is unacceptable that it should even be considered plausible as a method and shows bad judgement on the part of the applicant.
- 39 Further, in considering the A47NTE scheme, the SoST cannot make a reasoned conclusion, under the EIA Regulation 21(1)(b), on the significant effects of the proposed development on the environment if any reliance is made upon data from the so-called “TDP Sensitivity test”. The data presented by the applicant under Item 5 should therefore be ignored.

4 ASSESSMENT OF THE CUMULATIVE IMPACTS OF CARBON EMISSIONS

- 40 Cumulative assessment of carbon does **not** exist in the A47NTE Environmental Statement. Just to be absolutely clear, it is not a matter of whether it has been done inadequately or not, it is matter of whether it has been done at all. It has not been done at all.
- 41 If there is any doubt about this is the ExA's or SoS' minds, then it may have been introduced by the extremely poor and confusing presentation in the Chapter 14 of the ES, REP3-014, which I now unravel and explain.
- 42 Table 14-9 of the ES presents some carbon **quantification** data:
1. Construction emissions of 87,727 tCO₂e;
 2. Operation emissions summed over the 4th, 5th and 6th carbon budgets (as indicated by the footnote under the Table. The first column of figures is absolute emissions from the DS scenario, the second column of figures is differential emissions from the DM scenario subtracted from the DS scenario;
 3. Totals for both the absolute and differential emissions over the 3 budgets. For example, +194,095 tCO₂e is the differential emissions total.
- 43 There then follows 14.8.8 which would appear to refer to data in the Table 14-9, and states that *"the increase in carbon emissions resulting from the Proposed Scheme represents up to approximately 0.004% of the UK's Fourth, Fifth and Sixth Carbon Budgets over their **respective** periods."*. However, the 0.004% figure is derived from data in Table 14-10 later. The use of the word **respective** also indicates that individual carbon budgets are being referred to, and conglomerate value over 3 carbon budgets are given for the scheme in the Table 14-9.
- 44 The above text at 14.8.8 is the single and sole statement of **assessment** in the ES.
- 45 There then follows an empty paragraph 14.8.9.
- 46 There then follows 14.8.10, two lines on a page on its own.
- 47 Table 14-10 is then presented on the next page. This displays the data, now broken down for each of the 4th, 5th and 6th carbon budgets, the period from 2038-2087, and the 60-year appraisal period (2025-2084). DM, DS, and DS-DM data is shown.
- 48 The first scenario DM estimates the GHG emissions which result from other land-based developments and road schemes in the traffic model, including the three other large road schemes planned for the same 2023-2025 construction period (the A47 Blofield to North Burlingham, A47 - A11 Thickthorn Junction and Norwich Western Link), APP-140. The

second scenario DS adds in the effect of the GHG emissions from the DCO Project to DM.

- 49 It is crucial to understand that no assessment(s) are made of the DM or the DS scenarios against any carbon budgets or targets in the ES. Perversely, the ES calculates a differential quantity referred to as DS-DM, and then takes **solely** that value forward to the **only** assessment made in the ES. The assessment is in fact shown below for each carbon budget:

tCO ₂ e	4CB	5CB	6CB
Budgets as given in Table 14-9	1,950,000,000	1,725,000,000	965,000,000
DS-DM from Table 14-10	111,626	40,695	41,774
Assessment against national budget	0.0057%	0.0024%	0.0043%

- 50 In fact, the statement at 14.8.8 is erroneous “*represents up to approximately 0.004% of the UK's Fourth, Fifth and Sixth Carbon Budgets over their **respective** periods*” as two of the budget periods exceed 0.004%; however the issue here is what is being assessed.
- 51 As above, it is the DS-DM estimate, and **only** the DS-DM estimate, that is **assessed** by calculation of a percentage against national whole economy carbon budgets. This is the **only** assessment made in the ES. This assessment is 'solus' and corresponds to EIA Schedule 4(5)(a) *'the construction and existence of the development, including, where relevant, demolition works'*, or the emissions that the DCO Project was adding to the total. The assessment does not correspond, nor cover, EIA Schedule 4(5)(e) *'the cumulation of effects with other existing and/or approved projects'* as these projects are all contain in the DM scenario.
- 52 It is important to understand that EIA Schedule 4(5)(e), and cumulative assessment, is not an optional add-on in EIA practice. It is a requirement of the regulations, and it has not been provided in the ES.
- 53 Throughout the course of the examination, I have made detailed, clear and informed submissions concerning the issue of that an assessment of cumulative carbon impacts has not been done by the applicant.
- 54 With respect to the absence of an assessment of cumulative carbon impacts of the A47NTE scheme, the SoST cannot make a reasoned conclusion, under the EIA Regulation 21(1)(b), on the significant effects of the proposed development on the environment as a significant, and mandatory, part of the required information is missing from the ES.

5 CONFLICTING TRAFFIC MODELLING ON THE A47NTE SCHEME

55 The core scenarios for traffic models are presented in the Case for the Scheme, APP-140. Table 4.3 “DM/DS network assumptions” shows that the DM model contains A47 Blofield to North Burlingham, A47 - A11 Thickthorn Junction and Norwich Western Link. The A47NTE is added in for the DS scenario. Later at 4.4.9, DS is also referred to DS0, and another scenario DS1 is introduced with the NWL, and this summarised in Table 4.4. No DS2 is referenced in APP-140.

56 However, REP4-015 “9.20 Applicant's Written Summary of Oral Submissions at ISH2” introduces inconsistent information at Annex A, as shown below.

Scenario	NDR	A47BNB	A47NTE	A47THI	NWL	Honingham Lane
APP-140/DM	Y	Y	N	Y	Y	Open
APP-140/DS – also DS0	Y	Y	Y	Y	Y	Open
APP-140/DS1	Y	Y	Y	Y	N	Closed
REP4-015/DN	Y	?	N	?	N	Open
REP4-015/DS0	Y	?	Y	?	Y	Open
REP4-015/DS1	Y	?	Y	?	N	Closed
REP4-015/DS2	Y	?	Y	?	N	Open

57 I presume that DN is used in REP4-015 instead of the more standard DM. If so, this is sloppy, but not significant.

58 However, the descriptions of the DM/DN scenario at REP4-015, Annex A is quite different to APP-140. The status of the two other A47 schemes is not given, so represented here by a ?.

59 APP-140/DM contains the NWL whereas REP4-015/DN appears not to, as the NWL is only added in to the REP4-015/DS0 scenario. From the description in REP4-015, the DS-DM(DN) scenario of REP4-015/DS0- REP4-015/DN **is different to** APP-140/DS- APP-140/DM. The difference is APP-140 is the A47NTE schemes; the difference in REP4-015 is both the A47NTE scheme and the NWL scheme.

60 As it is the differential quantity of carbon emissions, DS-DM, that is taken forward to the assessment of climate impacts, there must be a further consultation in which the applicant clears up this very confusion situation. **Does DS-DM represent the A47NTE in isolation, or does it represent the A47NTE and the NWL in combination? The SoST cannot make a reasoned conclusion, under the EIA Regulation 21(1)(b), on the significant effects of the proposed development on the environment until this conflicting information is resolved.**

61 A further difference is that the REP4-015/DS2 scenario is not given in the APP-140 at all.

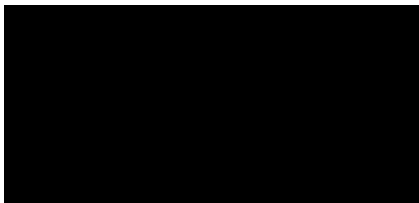
6 TRAFFIC MODELS (DIFFERENT MODELS BY THE APPLICANT AND NCC)

- 62 This section refers to the paragraph under the same heading under section 6 of the applicant's July 8th response.
- 63 The applicant continues to be untransparent about this issue. Whilst stating that "checks have been made", the applicant has published no information on this issue. Interested parties have submitted significant information on this issue. A major loss of traffic from one model which remains unexplained, first submitted by me at REP1-023 (see section 4.2). I note the applicant relies upon its REP1-013 which was written before my REP1-023 was submitted.
- 64 Further information on "Calibration and inconsistency errors in traffic modelling" was submitted by myself on July 8th, and also by Mr Bryan Robinson. It is understood that the applicant was not able to comment on that in their July 8th submission. So this issue is still outstanding as of writing.
- 65 **The SoST cannot make a reasoned conclusion, under the EIA Regulation 21(1)(b), on the significant effects of the proposed development on the environment until the coherence between and reliability of the traffic models has been demonstrated.**

7 CONCLUSIONS

1. It is not legitimate to presume that the NZS, or the TDP whose policies are closely linked, will inevitably succeed. The NZS legal case has highlighted that the risks of delivery of the policies were left unknown at publication of the NZS, and remain unknown.
2. In considering, the A47NTE scheme, the SoST cannot make a reasoned conclusion and decision, under the EIA Regulation 21(1)(b), on the significant effects of the proposed development on the environment:
 - if any presumption is made on the inevitable success of the NZS, and by implication the inevitable delivery of the TDP, NDC and 6th carbon budget, by the applicant in the Environmental Statement or the ExA in the recommendation report; or
 - if he makes any presumption on the inevitable success of the NZS, and by implication the inevitable delivery of the TDP, NDC and 6th carbon budget.
3. In responding to Item 5, the applicant fails to do what it was asked to do. It fails to respond to the SoS' invitation to provide an assessment against the carbon targets contained within the Plan (ie the Local Transport Plan 4). Apart from being obstructive, this: fails to meet the requirements of NPSNN 4.4 for local and regional carbon assessment; ignores **three** different, and readily accessible sets of existing data on local carbon budgets; ignores a **fourth** set of targets provided the LTP4.
4. The applicant makes lame excuses for not doing an assessment against the LTP4.
5. My own assessment at the previous consultation round, showed quite clearly that an assessment against the LTP4 demonstrates very significant effects, so significant, as to fail the NPSNN 5.18 test. **The assessment shows a clear, and significant risk to the delivery of the national 6th carbon budget, and to delivery of the Climate Change Act**. Should National Highways construct and operate the A47NTE scheme, then the LTP4 IP carbon targets for Norfolk are undeliverable.
6. The applicant has introduced data from the so-called "TDP Sensitivity test". This is not a sensitivity test at all, but a fudge factor method. The "TDP Sensitivity test" method has no creditability and should be withdrawn. As currently presented, it is bad science. It is unacceptable that it should even be considered plausible as a method and shows bad judgement on the part of the applicant.
7. **Further, in considering the A47NTE scheme, the SoST cannot make a reasoned conclusion, under the EIA Regulation 21(1)(b), on the significant effects of the proposed development on the environment if any reliance is made upon data from the so-called "TDP Sensitivity test"**. The data presented by the applicant under Item 5 should therefore be ignored.

8. With respect to **the absence of an assessment of cumulative carbon impacts of the A47NTE scheme**, the SoST cannot make a reasoned conclusion, under the EIA Regulation 21(1)(b), on the significant effects of the proposed development on the environment as a significant, and mandatory, part of the required information is missing from the ES.
9. The applicant's descriptions on the traffic modelling conflicts between the case for the scheme, and evidence later given at ISH2. The differential quantification of carbon in the applicant's methodology is now in question. **Does DS-DM represent the A47NTE in isolation, or does it represent the A47NTE and the NWL in combination? The SoST cannot make a reasoned conclusion, under the EIA Regulation 21(1)(b), on the significant effects of the proposed development on the environment until this conflicting information is resolved.**
10. The applicant has not satisfactorily answered issues around how the different traffic models used by the applicant and NCC produce different results, including a major loss of traffic from one model which remains unexplained. Further information on "Calibration and inconsistency errors in traffic modelling" submitted at the last consultation round has yet to be answered too. **The SoST cannot make a reasoned conclusion, under the EIA Regulation 21(1)(b), on the significant effects of the proposed development on the environment until the coherence between and reliability of the traffic models has been demonstrated.**



Dr Andrew Boswell,
Climate Emergency Policy and Planning, July 26th 2022

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