

Dr Jim Conboy
The Chesham Society
Via email: cheshamsociety@jimconboy.com

16 November 2015

Dear Dr Conboy

FOI15-1422 – Response

Thank you for your information request received via email on 19 October. Your request has been considered under the *Environmental Information Regulations 2004* (the Regulations).

In your email, you requested information as detailed in the extracts below::

This enquiry relates to the changes in road junction capacity assessments as published in the AP4 Environmental Statement, when compared with the assessments published in the original Environmental Statement. May I remind you that this society observed (in our response to the original ES) that the queues predicted at the B485-A413 and A4128-A413 junctions (in CFA9) were far below those currently observed. The queues predicted in the AP4 ES are, significantly larger, and possibly consistent with what we observe on the ground. This query seeks to establish why the original ES predictions were significantly lower, and in all probability incorrect. As it relates to Environmental Statements I presume that it falls under the Environmental Information Regulations (2004) right of access procedures.

In order to define the problem precisely, I would like you to explain the changed capacity assessment relating to the B485-A413 junction.

The Questions

- 1. To what do you attribute the change in predicted junction capacity between the original and AP4 statements ?**
- 2. What are the predicted Flow and capacity figures which result from applying the AP4 methodology to the ES flow figures ?**
- 3. Which "Industry Standard Software" (and which version) was used to calculate the ES and AP4 results ?**
- 4. Are there any other junction assessments in the original ES where significant changes might be anticipated, if the analysis was repeated using the AP4 methodology ?**

I can confirm that we do hold information that falls within the description of your request. The answers to your questions are provided below:

- 1. To what do you attribute the change in predicted junction capacity between the original and AP4 statements?**

There are two reasons for the change in traffic modelling results, between the main HS2 Phase One Environmental Statement (ES) and the Additional Provision (AP) 4 ES at the B485-A413 and A4128-A413 junctions:

- There is a change in forecast construction traffic flows through these junctions as a result of AP4-009-001 (Chiltern Tunnel extension). The reason for this is outlined in Section 5.1 of the Supplementary ES 3 and AP4 ES, October 2015, Volume 2 (Community Forum Area 9 – Central Chilterns), with revised forecast construction flows presented in Section 3.3 of the Supplementary ES 3 and AP 4 Environmental Statement, October 2015, Volume 5 – Technical appendices, Transport Assessment (TR-001-000). The AM and PM peak flows along this section of A413 and B485 Chesham Road are shown in tables 7-45 and 7-46, respectively in both the SES and AP2 Transport Assessment and the SES3 and AP4 Transport Assessment.

The changes between the AP2 and AP4 Transport Assessment for links affecting the two junctions can be summarised as follows:

- Decrease in forecast construction traffic flows on the B485 Frith Hill / Chesham Road (between the Chesham Road Vent Shaft and the A413) and the A413 (south of B485 Frith Hill / Chesham Road).
- Increase in forecast construction traffic flows on the A413 (north of B485 Frith Hill/ Chesham Road).

This change in construction traffic flows through the junctions alters the forecast ratio of flow to capacity and queue lengths.

Also, an additional arm has been added to the A4128-A413 junction to replicate the proposed new access road to the Chiltern Tunnel North Portal satellite compound, which impacts upon the junction's dynamics and operation.

- A refinement to the traffic model (as well as forecast 2021 baseline flows) has been made at these two junctions with regard to simulating existing conditions i.e. observed queuing. Queue length data was collected at time of the classified turning count surveys, to enable model adjustments and validation to be made, as necessary.

2. What are the predicted Flow and capacity figures which result from applying the AP4 methodology to the ES flow figures?

Traffic modelling at a number of junctions, where undertaken for the original scheme, is presented in the main ES and can be used for comparison with the AP4 ES results. Where further junction assessment (modelling) has been carried out for inclusion in the Supplementary ES 3 and AP4 ES (October 2015), this has been undertaken using the most recent forecast traffic flows only (accounting for SES, AP2 and AP4 amendments to the original scheme). It has not been undertaken with original scheme forecast flows, as this would not provide an accurate portrayal of the current stage of design.

3. Which "Industry Standard Software" (and which version) was used to calculate the ES and AP4 results?

The junction assessments in Country South has been undertaken using the appropriate industry standard software below, based on junction type:

- LinSig 3 (for individual signalised junction assessed).
- Junctions 9 (for individual priority junctions/ roundabouts assessed). Note that Junctions 8 was used for the main ES.

- TRANSYT (for a network of signalised junctions assessed).
- VISSIM (micro-simulation of a network of signalised junctions assessed).

Junctions 9 software was used for the B485-A413 and A4128-A413 junctions.

4. Are there any other junction assessments in the original ES where significant changes might be anticipated, if the analysis was repeated using the AP4 methodology ?

The assessment of junctions by traffic modelling in the AP4 ES covers approximately 60 junctions. Buckinghamshire County Council and Atkins identified these junctions for detailed assessment, where construction traffic is considered to have potential to have a significant impact upon junction operation (or where these junctions are currently considered to be under operational pressures).

In addition, further assessment of approximately 20 junctions may be carried out in Country South, following discussions with Buckinghamshire County Council on additional junctions deemed to be operationally 'sensitive' or are considered to potentially be impacted by traffic re-assignment.

Junctions omitted from further analysis were done so on the basis that the assessment in the main ES indicated that they were not forecast to be under operational pressure, either with or without construction traffic. Therefore, it is not anticipated that applying the AP4 methodology to other junctions assessed within the main ES would significantly alter the conclusions presented.

Conclusion

If you are unhappy with the way we have handled your request or with the decisions made in relation to your request, you may complain in writing to HS2 Ltd at the above address. Please also see attached details of HS2 Ltd's complaints procedure and your right to complain to the Information Commissioner.

Please remember to quote reference number FOI15-1422 in any future communication relating to this request.

Yours sincerely

Jane Ivey

Freedom of Information Manager
High Speed Two (HS2) Limited

Your right to complain to HS2 Ltd and the Information Commissioner

You have the right to complain to HS2 Ltd within two calendar months of the date of this letter about the way in which your request for information was handled and/or about the decision not to disclose all or part of the information requested.

Your complaint will be acknowledged and you will be advised of a target date by which to expect a response. Initially your complaint will be re-considered by the official who dealt with your request for information. If, after careful consideration, that official decides that his/her decision was correct, your complaint will automatically be referred to a senior independent official who will conduct a further review. You will be advised of the outcome of your complaint and if a decision is taken to disclose information originally withheld this will be done as soon as possible.

If you are not content with the outcome of the internal review, you have the right to apply directly to the Information Commissioner for a decision. The Information Commissioner can be contacted at:

Information Commissioner's Office
Wycliffe House
Water Lane
Wilmslow
Cheshire
SK9 5AF