

DAVID GREEN ADDITIONAL

WRITTEN REPRESENTATION

HIGHWAYS ENGLAND'S RESPONSE

1. *As an interested party I would like to draw the attention of the Inspector to a matter which I believe is germane to her deliberations and which has only just come to my attention. My apologies for a late supplementary submission in the form of this email. I am aware that the duration and length of road works on Motorways has become an issue nationally particularly following extensive and long duration works on the M1 similar in many ways to those proposed for the M4. So much so that the Secretary of State for Transport indicated recently (media reports dated 21/9/15 and subsequently) that the government was minded to instruct Highways England(HE) to limit works to 2miles max or 5 miles in very exceptional circumstances.*

Highways England Comment

- 1.1 Highways England is a separate, regulated business and not part of the Government. It has not received any instruction from the Government to place a specific limit on the length of roadworks, but is aware of related media reports such as those highlighted in this representation. Highways England notes that the press coverage suggests that that Government is "minded" (i.e. considering), rather than reporting that the Government had made an absolute determination.
- 1.2 As detailed in Chapter 5 of the Highways England Delivery Plan (2015-2020) (https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/424467/DSP2036-184_Highways_England_Delivery_Plan_FINAL_low_res_280415.pdf), Highways England “*aims to provide a much more free-flowing strategic road network, where all journeys are easier, safer and more reliable, and delays are less likely*”. Furthermore, the delivery plan acknowledges that “*listening to our [Highways England’s] customers we [Highways England] know they currently see the management of roadworks and resulting journey times as one of the least satisfactory aspects of the network we service*”. Therefore ‘planning and managing roadworks’ and ‘improving traffic information’ form two of the seven key areas that Highways England are looking to address via their delivery plan in order to reduce disruption whilst maintaining and modernising the Strategy Road Network, where major

projects such as the M4 junctions 3 to 12 smart motorway scheme (the "Scheme") are a key part of that modernisation.

1.3 In relation to planning and managing roadworks, Section 5.1.3 of the delivery plan states "*We [Highways England] will continue to carry out works at times of minimal inconvenience to our customers and neighbours. When this is not possible, we will explore new methods to optimise our occupancy of the network*", which demonstrates that Highways England's plan for adopting the most appropriate traffic management regime to suit the specifics of each individual scheme.

1.4 Although the use of shorter road works may be applicable for smaller and simpler schemes, its adoption on the Scheme would increase disruption and/or delay to the completion of the Scheme and the consequential benefits it provides (e.g. journey time reliability and safety benefits as details in the Appraisal Summary Table (Appendix B of the Socio Economic Report, Application Document Reference 7-2)).

1.5 Dividing the Scheme into 2 mile sections would require 16 work sites to allow its completion. The sequencing of these works would either create:

- Multiple sections of closely spaced road works – This would require multiple works taking place in parallel with the potential disruption of traffic slowing down to enter each section of roadworks along the length of the Scheme; or
- An increase in the overall construction period – Undertaking the works in a series of 2 mile sections would require the construction of each section (including ERAs, retaining walls, gantries and under and overbridges where applicable) to be completed prior to the construction of the next section. Simple reference to the outline construction programme (Annex B of the Engineering and Design Report ("EDR"), Application Document Reference 7-4) demonstrates the consequential delay of constructing the structures (the series of red and blue bars) sequentially.

1.6 Therefore, whilst Highways England aims to minimise the delay to its customers, an approach that limits works to very short distances on this Scheme is not appropriate as it would result in increased disruption, delay and cost .

2. *Whether this will or will not become a national standard remains to be seen but I believe that the Inspector may wish to ask HE how this very desirable outcome for all users is to be*

accommodated within the M4 scheme which as I recall is some 50 km in length and with a proposed construction period of some 5 years. I believe that it may also be appropriate to ask questions about the proposed duration which appears an outrageously long period of time to impose restrictive traffic management measures on a key strategic route which is already very heavily congested.

Highways England Comment

- 2.1 Highways England agrees that the M4 is a key strategic route that is heavily congested and seeks to implement the Scheme in order to relieve that congestion.
- 2.2 A number of options have been considered for the traffic management regime required for the construction of the permanent works and this is set out in Section 2 of the Construction Traffic Management Plan ("CTMP"). An outline version of the CTMP was provided at Annex E to Construction Environmental Management Plan, Appendix 4.2A to the Environmental Statement (Application Document Reference 6-3). The options identified are outlined below:
 - The full 52km of the Scheme under traffic management;
 - Splitting the works into two phases of traffic management (Phase 1 and Phase 2, as described below); and
 - Phased working with 4km under traffic management and 10km gaps.
- 2.3 The second option of splitting the work into two phases (Phase 1 and 2) was chosen as the optimum solution taking all relevant factors into account. Phase 1 is from junction 12 (Theale) to junction 8/9 (Holyport) - a length of 27km; and Phase 2 is from junction 8/9 to junction 3 (Hayes) - a length of 24km.
- 2.4 The philosophy behind the construction programme is based on experience gained on a range of previous and current smart motorway projects. It is aimed at allowing the works to be carried out in a safe and efficient manner with the minimum amount of disruption to the travelling public and local residents/businesses. The construction programme over five years has been planned to balance the cost and time taken to carry out the works with the length of traffic management outlined above and the associated 50mph speed restrictions in place at any time. The construction sequence is detailed within paragraph 8.3.7 of the EDR (Application Document Reference 7-3).

- 2.5 Highways England notes that the construction programme is for an extended period. This is due largely to the length of the Scheme. However, additional construction time is necessary to take account of the requirement for numerous infrastructure changes in order to implement the additional running lane, such as overbridge replacements or underbridge widening. Furthermore, as stated in paragraph 1.4 above, a change to the proposed traffic management regime to limit the works on the Scheme to 2 or 5 mile slots would be very inefficient, and would increase the construction period considerably.
3. *I have already commented in my main submission that the additional congestion caused by traffic management for the length and duration of the proposed scheme will inevitably have an adverse impact on the scheme business case and on the traffic generation forecasts for this construction period both of which are relied upon by HE.*

Highways England Comment

- 3.1 The proposed traffic management regime during construction maintains three lanes, slightly reduced in width, together with a 50mph speed limit. The effects of the traffic management have been assessed using the bespoke Highways England bespoke software program QUADRO (QUEues And Delays at ROadworks). Analysis of the delays predicted by the program shows that, during the majority of the day, traffic is able to pass through the roadworks without queueing. QUADRO is also an economic assessment program that calculates the dis-benefits arising to road users from their increased travel times. These dis-benefits have been included in the economic assessment of the Scheme (see the Appraisal Summary Table in Appendix B of the Socio-Economic Report (Application Document Reference 7-2), which demonstrates that the traffic flows forecast, to be using the M4 motorway during construction, and the effects of the proposed traffic management regime are fully accounted for in the business case.
4. *I recently suggested that the Inspector may care to make a site visit to Lower Earley to judge motorway noise for herself and of course would be delighted to accompany her. Is there any news on this?*

Highways England Comment

- 4.1 Highways England considers that this representation is directed to the Examining Authority and does not propose to comment further.

