

Application by National Highways for the Lower Thames Crossing Response to The Examining Authority's written questions and requests for information (ExQ2) Issued on 10 October 2023

**DPWLG** 

**IP Reference: 20035309** 

ExQ2	Question to:	Question:		
4.	Traffic and transportation			
4.1	Traffic modelling			
Q4.1.3	Applicant	HGV bans		
		In its Deadline 4 Submission 'Comments on Applicant's submissions at D3' Thurrock Council has raised concerns regarding the use of HGV bans in the Applicant's modelling [REP4-354, paras 11.2.16-23]. Can the Applicant please respond to these comments?		
		DPWLG Response:		
		DPWLG share the concerns of Thurrock in this regard. During pre-application discussions with the Applicant, DPWLG were assured that all relevant HGV bans (existing) where included within the modelling. If this position has changed, it clearly needs proper explanation, assessment and review.		
Q4.1.4	Thurrock Council	Orsett Cock: local traffic		
		While there are likely to be impacts on queuing and delay at the Orsett Cock Roundabout, Tables A.2 and A.3 in the Applicant's Deadline 4 post-event submissions [REP4-180] suggest that the majority of the affected movements would be accessing local routes (for example 75/80% in the 2030 AM/PM peak respectively) rather than accessing the A1089.		
		<ul> <li>Having considered this position, does Thurrock Council agree and if not, please explain it's outstanding reservations?</li> </ul>		
		<ul> <li>To what extent has Thurrock Council balanced adverse effects at Orsett Cock against the benefits to local people and businesses in terms of convenient access to the LTC?</li> </ul>		
		DPWLG Response:		
		This issue cannot be resolved until the full assessment work as set out in REP5-084 is progressed. The significant change in vehicles using local access routes is of particular concern to DPWLG as has been discussed at length previously. As set out in Paragraph 4.11 of REP3-154 there are significant increases in flow forecast for the A128 northbound. These are movements which, if they cannot use Orsett Cock might readily divert to Manorway Interchange because they appear to have a destination in Stanford Le Hope. The number of vehicles using the A1013 towards Stanford Le Hope is agreed at 582 PCUs. The Applicant suggests that "only" 201 of these are routing to Stanford Le Hope. It is not		

## Responses due by Deadline 6: Tuesday 31 October 2023]

		explained where the remaining 381 PCUs are routing and this needs to be clarified (given there are no other significant destinations on that route). However even if those are 'only' 201 PCUs as suggested in <b>REP5-077</b> (page 11), that would still, as previously identified, have a material impact on Manorway Interchange if they chose that junction as an alternative to congestion at Orsett Cock.
Q4.1.5	DP World London Gateway Port Ltd (DPWLG)	Orsett Cock: U-turns In light of the position described in [REP4-180], does DPWLG still stand by its position as set out in the DTA Report submitted at D1 [REP1-333 Annex A] which appears to suggest that the majority of U-turning vehicles were those trying to access the A1089? If so, which elements of the position as described in [REP4-180] are disputed by DPWLG and why?
		DPWLG Response: Since the publication of REP1-333 discussions have been ongoing with the Applicant to discuss and confirm the change in flows at Orsett Cock as a result of the development. Table 1 of DPWLG's response at D3 (REP3-154) sets out the changes as a result of the scheme at Orsett Cock. Not all of these movements are genuine U-turns (i.e. from the A13 Eastbound to the A13 Westbound) but the change is significant and, for the reasons set out in Section 2.1 of that report, are cause for significant concern in terms of the impacts both at Orsett Cock and for the propensity of vehicles to divert via Manorway Interchange.
		The Applicant provided a further spreadsheet by email on 16 <sup>th</sup> September 2023 of the flow input assumptions which appear to confirm these flows, although direct comparison is not possible because of the way the data has been provided.
		Further, the Applicant provided by email on the 17 <sup>th</sup> October 2023 their own Linsig Model of the junction. It is noted that the general form and basis of that model is based on one originally prepared by Thurrock to support the recent improvements at the junction. Notwithstanding the changes in input flows, the outputs of this model are broadly comparable with the conclusions reached in REP1-333, namely that there will be significant impacts in terms of queuing and delay on the A128 southbound approach, the A13 eastbound approach and the A13 westbound approach.
		Related to this matter, on the 20 <sup>th</sup> October 2023, the Applicant issued an updated Vissim model report in line with the agreed position set out in <b>REP5-084</b> . More time is required to consider the detail of this in consultation with other IPs but the headlines are as follows:

1) The conversion of input flows from Saturn to Vissim still need to be confirmed, but the revised model appears to have resolved most of the Latent Demand issues. However, there remain some significant levels of latent demand in the model:

Table 4.13 Latent demand [veh]

Scenario	AM 7-8	AM 8-9	PM 17-18
DM 2030	3	23	3
DS 2030	64	2	2
DM 2045	82	458	166
DS 2045	79	48	88

- 2) The overall conclusions of the modelling report are that:
  - Overall delays and queueing are forecast to increase at the junction with the implementation
    of the Project in 2030 and 2045, particularly in the PM peak period with an increase in delays
    and queues in the 2045 DS scenario on most of the approaches except Brentwood Road
    (South) approach.
  - Analysis of the traffic conditions at the A1013 Stanford Road/ Rectory Road junction shows that Rectory Road is over-saturated in the DM scenarios and the delays and queues are predicted to decrease in the DS scenarios.
- 3) The impact on Rectory Road in particular now identified needs specific consideration. The fact that the modelling suggests congestion will decrease here implies that vehicles are diverting elsewhere (and possibly away from Orsett Cock) as a result of congestion and as a wider point supports the concerns raised by DPWLG about the propensity for such a phenomenon to occur more generally.
- 4) Changes in vehicle times through the junction will remain significant, particularly in the PM Peak. The A13 eastbound shows a queue of 700m in 2030 rising to over 2km in 2045. Journey time increases of at least 60 seconds are forecast in 2030 and 200 300 seconds in 2045. There is no reported queue on the A128 southbound which conflicts with the conclusions of the Applicant's Linsig and also LTAM modelling (see below).

ExQ2: 10 October 2023
Responses due by Deadline 6: Tuesday 31 October 2023

5) This remains in conflict with the LATM outputs. The figure below was provided by the Applicant on 29th September 2023 and shows a zoomed in version of Table 7.27. It can be seen that the whilst the nodes are shown as being of moderate impact, there is no reference to the A13 eastbound approach or A128 southbound approach. Legend Farm Core Scenario PM peak Adversely affected turning nodes Minor adverse Moderate adverse Major adverse Adversely affected links Lofthall Farm Minor adverse Moderate adverse Major adverse Barrington's Nursery House Southfields Murrells The Red House Potash Old Kennels Cottages Farm Collingwood Five Chimney Cottages Mucking Heath Heath Place KD TA22 048 1 P7.25
Contains Ordnance Survey data € Crown copyright and database right 2022 DS 100030649

ExQ2: 10 October 2023 Responses due by Deadline 6: Tuesday 31 October 2023]								