CAGNE Surface Access Transport Update Sterling Transport Consultancy Limited 15th May 2024

CAGNE WR Issue	Applicant Response (if any) D3		CAGNE based on D3 material
Failure to apply relevant guidance documents	No specific comment in response to IP RR's.	Refer to detailed comments below Also the applicant's revised ES Chapter 12: Traffic and Transport (REP 3-016) offers no change in substance only a clerical exercise in revising cross-referencing.	No change in CAGNE view The applicant is still failing to apply the requirements of key policies in the surface access space. The WR makes clear that the scheme transport impacts are used to generate a series of further assessments relating to environmental matters. The failure to apply the relevant policy framework to these assessments must place in doubt their validity. The statutory bodies responsible for transport matters in the application are noted to have raised concerns in relation to the application of policy by GAL.
Traffic Modelling Scope	The modelling work is considered adequate and in keeping with guidance as set out in the responses above.	National Highways (REP3-137 etseq)Now pursuing additionalconstruction traffic VISSIMmodelling.Assumptions still not agreed	No change in CAGNE view CAGNE commented that the scope of the local traffic modelling is too limited in nature to be useful in terms of assessing community level impacts.

Definitive list of NH schemes	All three highway authorities remain
submitted	concerned about traffic model with
	its scope and assumptions not
NH comment that no clear link	agreed by any of the three
between airport usage (mppa) and	authorities. This is despite the
traffic levels is demonstrated	applicant claiming 'comprehensive
"However National Highways notes	scoping and engagement took place
that any increase in mppa does not	leading to the development of the
directly correlate to a corresponding	TA"
increase in road user traffic on the	
Strategic Road Network, or indeed	The NH comment on the link (or lack
detrimental impacts on network	of between generated mppa and
performance"	traffic volumes) shows the flawed
	nature of the approach taken.
ESCC / JLA (Rep 3-118)	
See note below on validation. Also	
query re inclusion / or not of the	
2500 robotic car parking spaces.	
WSCC (rep 3-150)	
Further information is needed to	
satisfy stakeholders correct levels of	
mitigation have been put in place	
through the lengthy construction	
phase, including traffic	
management.	
Concerns remain that the level of	
growth assumed by the Applicant is	
too high, these concerns are	
supported by the assessment made	
by York Aviation (see Chapter 6 and	
Appendix F of the Joint West Sussex	

		LIR). This could be resulting in an over forecast of the demand and therefore over provision of car parking and highway elements of the infrastructure. The Applicant should provide realistic forecasts for airport capacity and resultant demand	
		Surrey County Council (rep 3-146 and 147) Still in the process of undertaking a detailed review of the Project's wider impacts on the local highway network.	
Traffic Modelling Uncertainty log	The modelling that has been undertaken is in accordance with guidance provided in the DfT's Transport Appraisal Guidance and is explained in the Transport Assessment [AS-079] and detailed information is provided in Transport Assessment Annex B - Strategic Transport Modelling Report [APP260].	See comment on lack of exposure of the LVMR and other modelling documents below made by ESCC / JLA (rep 3-118) in particular.	No change in CAGNE view The CAGNE position remains that the uncertainty log and the scenarios for low and high traffic growth which evolve from it are not truly reflective of how uncertainty should be dealt with in DfT TAG Unit M4. It is noted that further work has now been completed by GAL (AS-121) that deals with the matter of covid- 19 effects. This analysis has removed certain schemes from the

Traffic Validation Incomplete	Model	The modelling that has been undertaken is in accordance with guidance provided in the DfT's Transport Appraisal Guidance and is explained in the Transport Assessment [AS-079] and detailed information is provided in Transport Assessment Annex B - Strategic Transport Modelling Report [APP260]. Sensitivity testing results (AS-121) 7.6.1 The reference case demand shows that highway demand would be 14% lower by 2047 than forecast in the DCO Application at a 24-hour level. Reference case rail demand is projected to be 15% lower by 2047 at a 24-hour level than forecast in the DCO Application.	ESCC / JLA (Rep 3-118) As set out within the LIR the Highway Authority would still wish to see any modelling reports produced including the Local Model Validation Report, Forecasting Report and the model files for the various scenarios, to be able to fully appraise the modelling. WSCC No explicit comments	 'committed' list of schemes included in the traffic model. The sensitivity test (AS-121) shows less rail use and concern over mode No change in CAGNE view CAGNE notes that the LMVR for the strategic transport model has not been exposed to examination. It is noted that following parameters / values have been updated in the covid sensitivity test AS-121) Road Traffic Forecasts 2018 (RTF) has been updated with National Road Traffic Projections (NRTP) 2022 National Trip End Model (NTEM) 7.2 has been updated to the latest version 8.0 TAG Databook has been updated from version 1.17 to 1.21 The revised FY DM models now conveniently show less background traffic than previously but with certain previously 'committed' schemes removed from the modelling (e.g. Lower Thames crossing) removed.
				The worker data has been revised in the covid test but with employee

			numbers below previous estimates; again this reduces traffic impacts in the FY DM scenarios. The jobs analysis seeks to claim that numbers of jobs FY DM to DS is a negligible change due to the application. This emphasises the impact of the additional jobs / parking consented by non-DCO means. The sensitivity test still springs from the unverified base model – no LMVR etc as noted above.
Scope of local traffic modelling	The modelling work is considered adequate and in keeping with guidance as set out in the responses above.	National Highways (REP3-137 et seq) Additional VISSIM modelling of construction traffic requested – with scope to be agreed.	No change in CAGNE view CAGNE has recorded in its RR and WR the view that the coverage of local traffic modelling is inadequate.
(Traffic) Growth Factors to 2029,2032 and 2047	The modelling that has been undertaken is in accordance with guidance provided in the DfT's Transport Appraisal Guidance and is explained in the Transport Assessment [AS-079] and detailed information is provided in Transport Assessment Annex B - Strategic Transport Modelling Report [APP260].	No comment from the IPs. As noted above the ESCC / JLA have again asked for the supporting documents to the traffic analysis be released to the Examination.	No change in CAGNE view All three highway authorities share concern about traffic model with its scope and assumptions not agreed by any of the three key highway authorities. CAGNE agrees with these positions and awaits further detail including exposing to the examination the LVMR for the strategic model. CAGNE is conducting a detailed
			review of AS1-121 which details new assumptions etc.

Non-incinerating	Increases in freight movements have been considered as		No change in CAGNE view
waste disposal plant,	set out in Chapter 16 of the Transport Assessment [AS079]		
freight movements	and these movements are included in the strategic		CAGNE has highlighted the
	modelling work. Overall, the strategic modelling shows		limitations of the freight analysis in
	that the additional traffic demand associated with the		respect of the revised scheme
	Project, taking into account the highway improvement		scope.
	works which form part of the Project, can be		
	accommodated on the wider highway network and no		The TfSE / ESCC position appears to
	significant effects are identified.		suggest that use of public transport
			by airport users and staff has a
			positive effect on freight
			movements generated by the
			scheme. This is not demonstrated by
			the GAL analysis other than in the
			most general of terms.
Rail capacity	The Project includes surface access improvements, as	Network Rail (REP 3-142)	No change in CAGNE view
	summarised in Section 2.2 of the Transport Assessment		
	[AS-079]. These improvements include new and improved	Raise concerns relating to "assumed	The applicant does not address the
	layouts for the South Terminal, North Terminal and	train capacities, including train	points made by CAGNE.
	Longbridge roundabouts, as well as enhancements to the	lengths, formation and seated and	
	A23 London Road and M23 Gatwick Spur.	standing densities. The	The responses made by the sector
		requirements for airport	participants reflect the CAGNE
	A comprehensive assessment has been undertaken for rail	passengers, particularly those with	concerns in respect of capacity,
	capacity and this is set out in Chapter 9 of Transport	luggage, have a material impact on	contractual certainty and funding.
	Assessment [AS-079] and the full set of rail data, including	passenger experience and reduce	The applicant has delegated
	off-peak loading information, is included in Environmental	effective available capacity."	responsibility for delivery of these
	Statement - Appendix 12.9.2 Rail Passenger Flows [APP-		vital mode shift outcomes to third
	154]		parties with no financial or other
			mechanism to guarantee delivery.
	Rail assessments have been undertaken for two peak		
	periods, Network and Project peak, as described in		The question of passenger capacity
	paragraph 9.3.21 of the Transport Assessment [AS-079].		and constraints on the BML is
	The Project peak reflects the hour with the highest increase		understood to be under
	in rail passengers as the result of the Project, which tends		examination by Network Rail. Whilst
	to be outside the network peak.		this may identify issues with rail
			operations it does not address the

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	The assessment shows that the Project would increase the	funding and delivery challenges
	number of rail passengers across the day and across the	highlighted by CAGNE.
	assessment years, but no significant increase in crowding	
	on rail	The lack of commitment by GAL to
		-
	services is expected as a result of the Project. Where	consider serving by rail locations
	standing is expected, spare standing capacity would	other than on the BML is clear as are
	remain available. The rail crowding assessment indicates	the challenges the relevant
	that no mitigation is required.	stakeholders identify.
	that no mugation is required.	stakenolders identify.
		The attempt by GAL to focus on off
		peak travel is flawed in CAGNE's
		view. Whilst marginal gains in
		capacity may be possible off peak
		this does not address peak time
		issues. The GAL view that scheme
		related peak hour rail travel is likely
		to be marginal in operational
		capacity terms is unsubstantiated.
		capacity terms is unsubstantiated.
		The transport authorities identify
		the concern made by CAGNE that
		rail access outwith the BML is not
		possible at times of airport demand
		to use rail to meet both passenger
		and staff travel requirements.
		This therefore places in doubt
		whether the rail service proposition
		advanced is sustainable and capable
		•
		of delivering the mode share
		anticipated.
		As indicated by National Highways a
		failure to secure and then meet the
		GAL claimed mode share has further
		and unassessed consequences for

		the highway network. CAGNE's view is that this exposes analysis in othe areas, notably noise and air quality to a high degree of circumspection in respect of surface access.
Airport has no or limited influence on the rail timetable	No comment – applicant solely comments on the BML issues as set out above. A comprehensive assessment has been undertaken for rail capacity and this is set out in Chapter 9 of Transport Assessment [AS-079] and the full set of rail data, including off-peak loading information, is included in Environmental Statement - Appendix 12.9.2 Rail Passenger Flows [APP- 154]	CAGNE notes that the loca authorities have significan concerns about the deliverability of the proposed rail service changes This reflects the CAGNE stated concerns in our RR and WR Network Rail have only provided their views in respect of rai infrastructure and potentia timetable options. The reasonable and proportionate contribution does not guarantee that the train GAL expect will be operational i only seeking funding for the infrastructure capability to operate the level of capacity suggested Ultimately, it remains CAGNE's view that only the Secretary of State can guarantee the services whethe through contractual commitment o by way of requirement in the DCO.
Lack of east-west rail connectivity and the fixed hours of operations	No comment – applicant solely comments on the BML as set out above. A comprehensive assessment has been undertaken for rail capacity and this is set out in Chapter 9 of Transport Assessment [AS-079] and the full set of rail data, including off-peak loading information, is included in Environmental Statement - Appendix 12.9.2 Rail Passenger Flows [APP- 154]	No change in CAGNE view CAGNE provided a detailed assessment of this limitation in REP1-139. The concern has no been addressed by GAL but has been commented by the relevant IPs.

			The comments above about GAL's
			level of commitment to rail service
			delivery, above, is repeated.
Market forces will	ES Appendix 5.4.1: Surface Access Commitments [APP-		No change in CAGNE view
dictate service	090] sets out the bus and coach improvements identified		
delivery for bus and	and included in the modelling work, and GAL is committed		The local transport authorities have
coach	to provide reasonable financial support in relation to these		notable concerns that the bus and
	services, or others which result in an equivalent level of		coach offer is at best reactive to
	public transport accessibility.		events.
			Each has requested that bus
			improvements are in place prior to
			the development becoming operational through a clear DCO
			requirement.
			In the alternative, the Councils have
			suggested a sustainable travel fund
			is established to guarantee the
			proposed level of bus service.
			CAGNE believes that the bus and
			coach service offer is not sufficiently
			developed in scope or commitment
			to ensure that the proposed mode
			share targets are achieved.
Sustainable transport	Active travel routes benefiting from the surface access	ESCC / JLA	No change in CAGNE view
mitigations are	improvement works (as set out in Section 2.2 of the		
limited in scope and	Transport Assessment [AS-079]) include those between	Suggest surface access	CAGNE has highlighted the local and
local in nature	Longbridge roundabout, North Terminal and South	commitments should be a DCO	limited nature of the proposed
	Terminal; southern Horley and the Airport; and between	requirement.	sustainable travel mitigations.
	Balcombe Road and South Terminal. They also offer further	Further active and sustainable travel	The real issue is surface access
	benefits for active travel users on and around Longbridge	Further active and sustainable travel	The real issue in surface access
	roundabout and those travelling between Longbridge	mitigation is also considered	terms is the mechanism to deliver
	roundabout and Riverside Garden Park.	necessary to maximise the level of	surface access by non-car modes. At
		trips to and from the airport via sustainable modes.	present inadequate security exists

The proposed facilities selected for active travel routes		to ensure the (self selected by GAL)
have been based on expected demand levels and guidance	We wish to support the comments	targets are met.
in the DfT's Local Transport Note 1/20 has been applied to	made by West Sussex and Surrey	
determine the appropriate widths provided for cyclists.	County Councils in their Deadline 3	
	response on 'National Highways	
	annotated commentary on the	
	Surface Access Commitments	
	[REP2-056]' and the comments	
	contained therein, notably Table 1	
	which relates to reflections on the	
	Surface Access Commitments	
	document [APP-090] and comments	
	on National Highways comments	
	and proposed amendments	
	WSCC (rep 3-150	
	Further active and sustainable travel	
	mitigation is also considered	
	necessary to maximise the level of	
	trips to and from the airport via	
	sustainable modes.	
	There is considered to be a lack of	
	detail and robustness to the SACs	
	and lack of clarity or suitable control	
	should the SACs not be met. The	
	Highway Authority is advocating an	
	alternative approach similar to that	
	adopted by Luton Airport to control	
	growth against meeting surface	
	access modal splits. The specific	
	concerns, relating to the SACs, are	
	set out in the Joint West Sussex LIR.	
Applicant's flawed The modelling work is considered adequate and in keeping	Comments made in detail by	No change in CAGNE view
transport analysis has with guidance as set out in the responses above.	relevant statutory IPs on each	

material implications	affected discipline. From these it is	CAGNE has made clear in its RR and
	•	
for other parts of the	clear that the IPs do not agree to the	WR the crossover between
ES, including air	applicant's approach in affected	assessments and the need for an
quality and noise	areas of the analysis.	accurate analysis of the surface
		transport impacts of the
		development.
		GAL seek to reassure the ExA that
		the analysis presented is robust yet
		fails to expose to the examination
		critical information such as the
		LMVR for the strategic traffic
		analysis. It is therefore unclear how
		the applicant can confidently claim
		that the assessments in other area
		of analysis are based on a robust
		foundation of transport evidence.

Analysis

CAGNE has, within its WR and subsequently, submitted its view on the scope and outcomes from the surface access analysis conducted by the applicant. Our review of the Deadline 3 submissions has re-confirmed our concerns. The applicant still has not exposed to examination its full suite of traffic modelling documents, does not demonstrate agreement to the analysis by the highway and transport authorities, and continues to rely unduly on third parties for much of its public transport related mitigation. We note with concern that National Highways has now concluded (**REP3-137 et seq**) that it cannot verify the link between predicted airport passenger numbers, the level of development traffic generated and the modelled traffic impacts anticipated on their network. This uncertainty raises concerns about the validity of the transport analysis conducted by GAL and the follow on potential implications for local communities who will be exposed to the adverse consequence of inadequate or poorly targeted airport transport provision.

CAGNE has reviewed the latest version of the GAL surface access commitments (SAC) document (Environmental Statement Appendix 5.4.1: Surface Access Commitments – Tracked Version. **REP 3-029**).

CAGNE has concern about the proposed movement to moving annual averages (MAA) for measuring mode share as set out in Paragraph 4.1.3. An annual average will understandably damp out seasonal variation but fails to react quickly to emerging trends that many require prompt attention by GAL. CAGNE notes the mode share targets recorded in Paragraph 4.2.1 but considers these to lack ambition (i.e. The sustainable travel and public transport mode shares

should be higher in our view) and do not recognise for the sustainable travel mode share the geography within which the airport is located. We would expect higher sustainable travel mode shares for staff travel within the 8km distance and indeed substantially higher sustainable travel mode shares in closer proximity to the airport where sustainable travel should be the first choice for staff access.

The lack of detail for the proposed new and improved bus routes set out in the SAC give no confidence that the interventions would play a substantive role in reducing car travel to the airport. Critically, commitments 5 and 6 of the SAC appear to be commitments to negotiate with providers only not commitments to deliver. We are unclear how commitment 7 would operate given the need to translate the global mode share targets to one specific bus route in a wider network. Given the stance of Network Rail and Southern Railways in their respective WRs we are concerned that the SAC has no commitment relating to investment in rail services. CAGNE noted in its WR the lack of control that GAL has over rail services without financial contribution and contractual commitment.

In terms of the parking commitments (Nos 8 to 11) CAGNE sees no incentive for GAL to reduce the level of staff parking to reflect the transport outcomes sought and changing work habits. We concur that the level of staffing parking should be capped but the commitment should be expanded to prevent a transfer of staff parking spaces to public parking. The commitment covering the setting of parking charges in our view is simplistic and fails to consider the wider context within which surface access and its funding operate. We would wish to see the applicant demonstrate commitment to link parking charge levels directly to the need to increase non-car based access to the airport.

CAGNE notes the commitment 12 to reduce single occupancy car trips but without a defined target the commitment is meaningless in terms of informing the GAL actions to secure this. This lack of certainty also creates uncertainty in the analysis of non-transport effects in the ES.

The sustainable travel fund committed to through commitment 13 has no mechanism to encourage a reduction in parking capacity in response to successful operation of the sustainable travel approach by GAL. We would encourage the development of such a mechanism that also maintains the level of funding.

The monitoring component of the SAC has the weakness that it does not seek further setting of stretched targets if the DCO approved outcomes are secured.