



Applicant: BAA Ltd and Stansted Airport Ltd. Planning Applications: UTT/0401/08/OP, UTT/0400/08/FUL, UTT/0402/08/FUL and UTT/0403/08/FUL (together 'the G2 applications' or 'G2').

Additional Information Required

The following additional information is considered necessary in order to comply with The Town and Country Planning (Environmental Impact Regulations) (England and Wales) Regulations 1999 (particularly Schedule 4) including:

- 1) Outline of the main alternatives studied by the applicant or appellant and an indication of the main reasons for his choice, taking into account the environmental effects.
- 2) Description of the aspects of the environment likely to be significantly affected by the development, including, in particular, population, fauna, flora, soil, water, air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the inter-relationship between the above factors.
- 3) Description of the likely significant effects of the development on the environment, which should cover the direct effects and any indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects of the development, resulting from: (a) the existence of the development; (b) the use of natural resources; (c) the emission of pollutants, the creation of nuisances and the elimination of waste; and the description by the applicant of the forecasting methods used to assess the effects on the environment.

Where the information required does not directly relate to Schedule 4 of the EIA Regulations a more detailed reason has been provided.

Note: This information request is based on our review of the planning documents to date, which is not yet complete. Additional points may arise when we have completed our review of the (voluminous) documents provided by the Applicant, with some still to be provided.

Stop Stansted Expansion
4 July 2008

Information required		Reason
General		
1.	An economic impact assessment should be provided, to include an assessment of the displacement impacts and opportunity costs of G2. Displacement impacts should address employment implications and opportunity costs and potential limitations on airspace capacity in the south east in the period to 2030. The economic impact assessment should include a competition impact assessment and should address the impact upon the UK trade balance.	To enable assessment of the economic impacts. (It is accepted that the Applicant is not legally obliged to provide an economic impact report until 15 weeks after the Secretary of State has given a direction under section 76A(2) of the Town and Country Planning Act 1990. However it is reasonable to assume that such direction will be given in the near future.)
2.	A description of the methods used to evaluate measurement uncertainty and test the robustness of the data and predictions provided. Wherever possible a statement of measurement uncertainty and confidence intervals should be provided for measured and predicted data for each topic area.	To understand the Applicant's forecasting methods and the robustness of the data and predictions provided.
3.	A map based on Ordnance Survey 1:25,000 (or larger) should be provided, clearly marked to show all land take associated with the G2 project, namely the airport development site and land take for the associated road and rail projects, offsetting and mitigation. The map should include Great Dunmow and Bishop's Stortford to the East and West, and extend to Henham to the North and Hatfield Broad Oak to the South.	To show the scale and give context to the proposals.
4.	A map based on Ordnance Survey 1:25,000 (or larger) should be provided, showing all airport-related land 'before' and 'after' the last round of physical expansion of the airport site in the late 1980s.	To enable consideration of the cumulative impacts of the airport expansion to date.
Introductory Volume (ES1), Appendix 15 (Forecast Data)		
5.	Confidence levels should be provided for the air traffic forecasts together with a range which equates to a 95% confidence level for each of the G2 forecasts.	To enable assessment of the reliability of the forecasts and to provide a sound basis for sensitivity analysis (noting that the DfT provides a range for its UK air traffic forecasts which widens steadily to + or – 15% of the total by 2020).

6.	The assumed oil price and level of GDP growth used by BAA in arriving at its G2 forecasts should be provided together with two sensitivity tests: (i) showing the impact of 50% higher oil price on the G2 2030 forecast; (ii) showing the impact of 1% lower GDP growth on the G2 2030 forecast.	To enable proper assessment of the Applicant forecasts and to understand the key sensitivities.
7.	Air traffic forecasts (for passenger and freight throughput and for PATMs and CATMs) should be provided for BAA's Heathrow and Gatwick airports for 2021 and 2030.	To assist in understanding BAA's forecasting methods, assumptions made and the interactions in the BAA forecasting model.
8.	The capacity and throughput assumptions made for competitor airports at Luton, London City, Norwich and Southend should be provided (for passenger and freight throughput and for PATMs and CATMs) for 2021 and 2030.	To assist in understanding the Applicant's forecasting methods, assumptions made and the interactions in the BAA forecasting model.
9.	BAA's long term air traffic forecasts for Stansted, Heathrow and Gatwick (beyond 2030) should be provided. It is understood that BAA has produced long term forecasts to around 2040.	To assist in understanding the potential long term scale and impacts of the proposed development.
10.	An explanation is required of the basis for arriving at the hourly distribution of non-transfer passengers (Table 12) and 'sensitivity' projections should be provided for the G2 case in 2030 to show the hourly distribution of airport-related road and rail traffic if: (i) the hourly distribution of non-transfer passengers remained at the 2006 profile; and (ii) the proportion of transfer passengers remained at the 2006 level.	To understand the sensitivity of the forecasts provided.
11.	A breakdown should be provided of the forecasts for transfer passengers to show the estimated numbers transferring between short haul and short haul and the estimated numbers transferring between short haul and long haul.	To assist in understanding the basis for the Applicant's forecasts.
Introductory Volume (ES1), Appendix 16 (Emissions data)		
12.	CO2 emissions forecasts should be provided for maximum use of the existing runway for 2015 and 2030 and for maximum use of two runways in mixed mode for 2030 (or later than 2030 if it is forecast that maximum use would not be reached by 2030).	To enable comparative assessment of the carbon emissions impacts.
13.	Confirmation is required that the CO2 emissions forecasts that have been provided make no allowance for radiative forcing. If they do make allowance for radiative forcing, the factor should be provided.	Clarification.
14.	The basis for assessing road traffic CO2 emissions should be provided and sub-totals are required for cars/LGVs, HGVs and PSVs.	To assist in understanding the method of forecasting and the sensitivities of the surface access emissions impacts.

Agricultural Resources (ES2)		
15.	Loss of agricultural jobs has not been included in the employment assessment (ES7). This should be rectified, including an assessment of indirect agricultural job losses.	To enable proper assessment of employment impacts.
16.	Quantification and monetization of the loss of agricultural production for the G2 project, including offset land and land required for the G2 road and rail projects (e.g. based on estimated 2007 production quantities and values).	To enable proper assessment of agricultural impacts.
17.	Separately identify the quantum of agricultural land required for G2 car parking, hotel sites and associated access roads.	To enable informed consideration of alternatives.
Air Noise (ES3)		
18.	A constant baseline, no earlier than 2006, should be provided for all noise data.	To enable proper assessment of the air noise impacts.
19.	An assessment is required of the air noise impacts of maximum use of the existing runway for 2021 and 2030 and for maximum use of two runways in mixed mode for 2030 (or later than 2030 if it is forecast that maximum use would not be reached by 2030).	To enable comparative assessment of the air noise impacts.
20.	Sensitivity analysis should be provided to show the predicted noise contours on the basis of existing flight paths and on the basis of the new flight paths proposed by NATS for the TCN area.	To enable more reliable assessment of the noise impacts, noting that the Applicant's assessment is neither based on the current flightpaths or the new flight paths proposed by NATS for the TCN area.
21.	Noise contours should be provided for 54dBA Leq _{16hour} and 50dBA Leq _{16hour} for the baseline and for each of the assessed cases and the following should be shown in each case: (i) the size of area affected, in square kilometres; (ii) the number of households within the noise contour; (iii) the population within the noise contour.	To enable proper assessment of the community noise impacts.
22.	Noise contours should be provided for 55dBA Leq _{30min} and 50dBA Leq _{30min} for the period between 0800 hours and 1600 hours and a noise impact assessment should be provided for all schools within the 50dBA Leq _{30min} contour.	To enable proper assessment of the noise impacts upon local schools (in accordance with Building Bulletin 93, Table 1.1).
23.	As an alternative to item 22 above, predicted Leq _{30min} dBA values should be provided for all schools for the period between 0800 hours and 1600 hours close to the airport. Values should be given for outside classrooms and inside classrooms (windows open for ventilation).	To enable proper assessment of the noise impacts upon local schools.

24.	A noise impact assessment should be provided for places of worship within the 50dBA Leq_{30min} noise contour for the period between 0800 hours and 1600 hours.	To enable proper assessment of the noise impacts upon local places of worship.
25.	N65 and N70 (i.e. Australian DOTARS metric) contours should be provided showing the number of events above a peak noise level of 65 dBA and 70 dBA, respectively, for average 16 hour day using LA_{max} fast time response values. Contours should be provided for 20, 50, 100, 250 and 500 events per day.	To enable a proper assessment of the noise impacts that sufficiently weights the number of aircraft movements.
26.	N60 (i.e. Australian DOTARS metric) contours should be provided showing the number of events above a peak noise level of 60dBA for average 8 hour night using LA_{max} fast time response values. Contours should be provided for 10, 20, 30, 40 and 50 events per night.	To enable a proper assessment of the noise impacts that sufficiently weights the number of aircraft movements.
27.	All LA_{max} data should be provided on a fast time response basis (as recommended by the WHO 'Guidelines for Community Noise').	To enable proper assessment of the community noise impacts.
28.	L_{den} contours in accordance with the Environmental Noise (England) Regulations 2006 should be provided for the baseline and for each of the assessed cases and the following should be shown in each case: (i) the size of area affected, in square kilometres; (ii) the number of households within the noise contour; (iii) the population within the noise contour.	To enable proper assessment of the community noise impacts for the three (L_{den}) periods of the 24 hour day.
29.	A 'sensitivity' assessment should be provided to show the impacts upon night noise during the period 2330 hours to 0600 hours in the event that flights during this period continued to account for the same proportion of aircraft movements in the G2 2030 case as in the 2006 baseline case.	To enable proper assessment of the community noise impacts and provide an informed basis for sensitivity analysis (noting that the present limit on the number of flights at Stansted between 2330 hours and 0600 hours ends in October 2012).
30.	A cumulative noise impact assessment should be provided for 'sensitive receptors' (as identified in ES3 and ES10) aggregating air noise, ground noise, road traffic noise and construction noise, for the years 2011-2015, 2021 and 2030 and the 2006 baseline.	To enable more detailed assessment of the aggregate noise impacts upon those most adversely affected.
Air Quality (ES4)		
31.	Assessment of air quality impacts of maximum use of the existing runway for 2021 and 2030 and for maximum use of two runways (in mixed mode) for 2030 or later than 2030 if it is forecast that maximum use would not be reached by 2030.	To enable comparative assessment of the impacts.

32.	Information on baseline monitoring carried out in 2006/07 to the south and south west of the airport, for example at Thremhall Priory, Start Hill and Hatfield Forest, stating the duration of the monitoring carried out, the type of analyser used and the results of the monitoring.	To enable proper assessment of the air quality impacts and the reliability of the baseline data.
33.	Information on baseline monitoring carried out in 2006/07 to the east and north east of the airport, for example at East End Wood, Philipland Wood, Great Easton, Little Easton and Tilty, stating the duration of the monitoring carried out, the type of analyser used and the results of the monitoring.	To enable proper assessment of the air quality impacts and the reliability of the baseline data.
34.	Benzene and 1,3-butadiene levels need to be assessed and the results provided.	To enable proper assessment of the air quality impacts. (It is accepted that CO, SO ₂ and lead can reasonably be excluded from the EIA but this is not the case for benzene and 1,3 butadiene which are extremely harmful volatile organic compounds, are closely associated with airport operations and are subject to limits set down in the AQ regulations.)
35.	The 2008 assessment methodology report (Underwood B Y et al, 'Stansted G2 Air Quality Assessment Methodology AEAT/ENV/R/2497 Issue 1') should be provided.	To enable properly informed assessment of the air quality impacts.
36.	A map showing the location of the receptors listed in ES4, Table 25 should be provided (with 8 digit grid references).	Clarification of the locations.
37.	An assessment is required of the combined effects upon air quality arising from construction and operational activities (including road and site traffic impacts in both cases) for each year during which G2 construction work is taking place.	To enable proper assessment of the air quality impacts. (This information has so far only been provided for 2014.)
38.	Confidence levels should be provided for the air quality projections together with a range which equates to a 95% confidence level for each of the projections.	To enable assessment of the reliability of the projections and to provide a sound basis for sensitivity analysis.
39.	ES4, para 9.3.30 suggests that 'a ban could be imposed on HGV movements through [Bishops Stortford] town centre' in order to reduce the increases in NO ₂ concentrations predicted for the G2 development case. Clarification is requested together with a more detailed assessment as to how the relevant AQ statutory limits could be achieved in Bishop's Stortford town centre if the G2 development were to be approved.	It is understood that Bishops Stortford town centre is already subject to an HGV ban (above 7.5 tonnes MGW), except for access.
40.	The baseline and 2030 base case should be provided for Table 57 in ES4.	To enable proper assessment of the air quality impacts.

Community and Population (ES5)		
41.	An assessment should be provided of the impacts of the G2 proposal at 2015, 2021 and 2030 beyond the frontline parishes assessed in ES5 and the HIA to incorporate anticipated noise, visual intrusion and surface access impacts within a 30 mile radius of the airport site.	The assessments in ES5 ignore the wider adverse impacts which would be experienced as a result of G2 project. While a 30 mile radius is not the limit of the likely impacts, this should ensure that the areas most adversely affected are properly assessed.
42.	An assessment should be provided of the perceptions of local residents of the benefits and services arising from life at present in all the frontline market towns and villages described in the ES5 assessment area in order to provide quantification of how local amenity including the natural environment, community cohesion and connectivity are valued within the limited catchment of the assessment area.	To complement the quantification provided under 'community resource' sections, to ensure that the community impacts are properly assessed and that proper consideration is given to potential mitigation measures for those most directly affected.
43.	A copy of the Enfusion report evaluating QoLA methodology referred to in ES5, paras 4.1.8-9 should be provided.	To review the QoLA methodology evaluation report.
44.	A map based on Ordnance Survey 1:25,000 should be provided, without loss of clarity of present features, that clearly shows proposed temporary and permanent road closures, proposed new roads and proposed routes for new fuel, water, electricity and gas pipelines. The map should indicate the anticipated dates of closure, opening or re-opening, and in the case of pipelines the anticipated dates of construction. Outlines of the proposed land take for the existing airport site, proposed airport project and related applications should be shown.	To enable proper assessment of the community (and) landscape impacts.
45.	A map based on Ordnance Survey 1:10,000 should be provided, without loss of clarity of present features, that clearly shows temporary and permanent proposed closures of public rights of way and proposed new public rights of way. The map should indicate the anticipated dates of closure, opening or re-opening. Outlines of the proposed land take for the existing airport site, proposed airport project and related applications should be shown.	To enable proper assessment of the community impacts.
Cultural Heritage (ES6)		
46.	Details of technical advice taken on the practicality of reproductive rebuilding of Listed and historic buildings having regard to current building regulations, fire safety regulations and energy efficiency standards.	To assess the likelihood of being able to maintain the character of the Listed buildings.

47.	Details of technical advice taken on the practicality of moving Listed and historic buildings intact rather than taking down and rebuilding together with comparative cost estimates for the two options.	To enable informed consideration of alternatives.
48.	Assessment of the habitability of Listed and historic buildings inside the 63dBA _{Leq16} noise contours, not intended for demolition but which would be compromised by the G2 development.	(Ref ES6, paras 8.4.3 and 8.4.4) To enable proper assessment of the impacts on cultural heritage.
49.	An inventory of the Listed and historic buildings owned by the Applicant as at 31 December 2003, the Listed and historic buildings acquired and disposed of by the Applicant since 31 December 2003 and the Listed and historic buildings currently owned by the Applicant that would be required for the G2 project showing those presently occupied and unoccupied.	To enable proper assessment of the community and cultural heritage impacts.
50.	The Applicant should advise its intentions with regard to the Listed, historic and other buildings acquired during the period from December 2003 to March 2007, before the G2 site boundary was reduced, and which are no longer affected in the way previously assumed.	To enable proper assessment of the community and cultural heritage impacts.
51.	Details of the assessment carried out (including financial data) which led to the determination of which Listed and historic buildings merited relocation and which did not.	To understand the forecasting methods used.
52.	An assessment of the reversibility of the impacts upon cultural heritage should be provided.	As per Schedule 3 of the EIA Regulations noting that no formal screening or scoping was carried out prior to the EIA.
53.	The G2 application documents state that 'In the spirit of conservation design, modern improvements may be made to the reconstructed property that depart from the form of the original design'. The meaning of this statement should be clarified. What criteria will be applied? Does this only relate to room layouts or also to building methods and materials? What assurances can be provided to ensure that the end result would not be essentially new buildings which incorporate some of the original materials?	To enable proper assessment of the community and cultural heritage impacts.
54.	The Applicant should explain where all of the Listed buildings previously taken down are now and what safeguards will be put in place to ensure that any buildings dismantled in the future do not go 'missing' in a similar way.	To enable proper assessment of the community and cultural heritage impacts.
55.	Details should be provided of any sustainability assessment carried out on the plans to demolish and, in some cases, reconstruct Listed and historic buildings, given that there is a finite supply of such buildings/their fabric.	To enable proper assessment of the community and cultural heritage impacts.
56.	Details of the analysis undertaken to assess the age and heritage value of the non-Listed historic buildings which would be demolished.	To enable proper assessment of the community and cultural heritage impacts.

57.	Which Listed buildings other than Le Knells are to be retained in situ?	To clarify text at para 2.3.1 of ES6.
58.	An assessment should be provided of the number of man hours of field archaeologists for site excavation required during Phase 1, showing the hours and programme on a month by month basis.	To enable proper assessment to be made of the quality of the archeological excavation and the feasibility of the Applicant's proposals within the overall construction timetable.
59.	Further information should be provided about the Applicant's intentions regarding the nature of the archaeological examination to be carried out under the Listed buildings to be demolished or moved.	Clarification.
60.	An assessment should be provided of the impact which the proposed pipeline would have on Takeley Street with respect to Listed and historic buildings on the North side of The Street.	To enable proper assessment of the community and cultural heritage impacts.
Employment (ES7)		
61.	Confidence levels should be provided for the employment forecasts together with a range which equates to a 95% confidence level for each of the G2 forecasts.	To enable assessment of the reliability of the employment forecasts and to provide a sound basis for sensitivity analysis.
62.	Assessment of employment impacts of maximum use of the existing runway for 2021 and 2030 and for maximum use of two runways (in mixed mode) for 2030 or later than 2030 if it is forecast that maximum use would not be reached by 2030.	To enable comparative assessment of the impacts.
63.	An up-to-date Stansted Airport employment survey report should be provided together with the employment baseline for 2008.	The 2002 survey results may not now be reliable.
64.	Demand-side employment projections for G2 in 2021 and 2030 showing the type of jobs (by description and Standard Job Classification ('SJC') together with the baseline, the G1 base case and full use scenarios for one and two runways.	Inadequate information has been provided on the type of jobs that would be created or the extent to which the jobs created would meet the future employment needs of the assessment area. A range and/or a statement of confidence levels should be provided in each case.
65.	Supply-side forecasts of the skills/qualifications of the workforce in the inner and outer assessment areas for in 2021 and 2030.	
66.	An assessment of displacement employment impacts beyond the inner assessment area for G2 in 2021 and 2030 together with the baseline, the G1 base case and full use scenarios for one and two runways.	To enable assessment of the wider employment impacts.
67.	Assessment of the impacts upon the housing market within the UDC area, including the rented sector and on the demand for affordable housing.	To enable proper assessment of the local housing impacts.

68.	Analysis of the change in house prices for UDC postcode sectors since the accepted BAA baseline of July 2002 to date compared to the index for the County of Essex as a whole (as per the HVGs scheme).	To enable proper assessment of the local housing impacts.
69.	Analysis of employee commuting, based on vehicle kms, for 2021 and 2030 and showing the baseline, the G1 base case.	To enable assessment of the commuting impacts.
70.	Details of the Tribal methodology for categorising jobs to SJs.	To understand the forecasting methods used.
71.	Details of the calculations supporting the productivity growth shown in ES7, Table 36.	To understand the Applicant's method of forecasting.
72.	Sensitivity analysis is provided for 10% over-achievement on house-building in the assessment area (vs East of England Plan) to 2021 and 2030. Sensitivity analysis should also be provided for 10% under-achievement on house-building.	To enable proper assessment of employment impacts over a range of possible supply-side outcomes.
73.	Data for the UDC area in the same format as ES7, Table 55.	To enable proper assessment of employment impacts.
74.	ES7, Table 57 provides unemployment numbers and rates for Local/Unitary Authority areas outside the assessment area. This information needs to be provided for the assessment area and should include claimant count data.	To enable proper assessment of employment impacts.
75.	If the Applicant intends to rely upon labour supply from Local/Unitary Authority areas outside the assessment area (e.g. those referred to in ES7, Table 57) labour supply and demand projections should be provided for those areas for 2021 and 2030 in the same format as ES7, Tables 47 & 49.	To enable proper assessment of employment impacts.
76.	ES7, Appendix 3, para 1.1.28 explains that two alternative approaches were considered for arriving at 2030/2031 projections for economic activity and the 'constant 2020' alternative was chosen. Projections based on the second alternative should be provided.	To examine the sensitivity of the assumption made.
Energy (ES8)		
77.	An explanation of the difference between a 'sustainability target' and a projection.	Clarification.
78.	An explanation as to how the Applicant would ensure that airport tenants such as hotels, offices, cargo warehouses, maintenance hangers etc. would achieve the predicted energy savings.	Clarification.
79.	An assessment of the CO2 emissions that would arise from the manufacture of the G2 construction materials.	To enable a more comprehensive assessment of the CO2 emissions arising from the G2 development.

Ground Contamination (ES9)		
80.	To follow.	
Ground Noise (ES10)		
81.	A constant baseline, no earlier than 2006, should be provided for all ground noise data.	To enable proper assessment of the ground noise impacts.
82.	An assessment is required of the ground noise impacts of maximum use of the existing runway for 2021 and 2030 and for maximum use of two runways in mixed mode for 2030 (or later than 2030 if it is forecast that maximum use would not be reached by 2030).	To enable comparative assessment of the ground noise impacts.
83.	A detailed explanation should be provided of the methodology and assumptions underlying the predictions provided for ground noise including assumptions made on the use of APUs and GPUs, use of reverse thrust, engine testing, assumed times-in-mode, noise from airside vehicles and landside traffic and allowances made for engine deterioration. The assumed number of cargo aircraft and HGVs to service the cargo traffic should be separately identified.	To understand the Applicant's method of forecasting and to enable proper assessment of the ground noise impacts.
84.	Separate upwind and downwind assessments should be provided for ground noise (as in the case of the G1 planning application).	To enable proper assessment of the ground noise impacts.
85.	All LA _{max} data should be provided on a fast time response basis (as recommended by the WHO 'Guidelines for Community Noise') for the 6½-hour and 8-hour night periods.	To enable proper assessment of the ground noise impacts.
86.	A 'sensitivity' assessment should be provided to show the impacts upon ground noise during the period 2330 hours to 0600 hours in the event that flights during this period continued to account for the same proportion of aircraft movements in the G2 2030 case as in the 2006 baseline case.	To enable proper assessment of the ground noise impacts and provide an informed basis for sensitivity analysis (noting that the present limit on the number of flights at Stansted between 2330 hours and 0600 hours ends in October 2012).
87.	Tonality adjustment (as per BS4142) should be provided for each of the 'sensitive receptor' sites.	To enable proper assessment of the ground noise impacts.
88.	As per point 30 above ('Air Noise'), a cumulative noise impact assessment should be provided for 'sensitive receptors' (as identified in ES3 and ES10) aggregating air noise, ground noise, road traffic noise and construction noise, for the years 2011-2015, 2021 and 2030 and the 2006 baseline.	To enable more detailed assessment of the aggregate noise impacts upon those most adversely affected.

Landscape & Visual (ES11)		
89.	Two relief (3D) models of the airport site and surrounding area should be provided to show the 'before' and 'after' scenarios with one showing the baseline and the other showing the G2 case in 2030. The scale of the models should be approximately 1:2500 to provide sufficient detail of the proposed development within a rectangular area from J8 of the M11 in the south west to Tilty in the north east (inclusive).	To assist examination of the visual and landscape impacts in the course of the anticipated public inquiry.
90.	Assessment of the economic cost and the landscape benefits of locating airport car parking below ground.	To enable informed consideration of alternatives.
91.	Assessment of the economic cost and the landscape and community effects of maintaining the direct road link Parsonage Lane between the B1256 and the B1051 (linking Takeley and Elsenham) by building a road tunnel beneath the proposed new runway (see also Q133 below).	To enable informed consideration of alternatives.
92.	An assessment of the reversibility of the landscape and visual impacts of the G2 project should be provided.	As per Schedule 3 of the EIA Regulations noting that no formal screening or scoping was carried out prior to the EIA.
93.	Quantification of the total level of illumination from all activities on the airport site should be provided (expressed in lux) for the baseline (2006), the assessment cases in 2015, 2021 and 2030 and for the remainder of the main G2 construction phase (2011-2014).	To enable assessment of the light pollution impacts of the proposed development.
94.	Quantification of the skyglow on the airport site measured at the 12 viewpoints used for the G1 application should be provided (expressed in nanolamberts) for the baseline (2006), the assessment cases in 2015, 2021 and 2030 and for the remainder of the main G2 construction phase (2011-2014).	To enable assessment of the light pollution impacts of the proposed development.
95.	Evidence should be provided to support the assumptions made on the effectiveness of planting (including assumed growth rates) in screening the visual impacts of the airport site, including during the construction phases.	To understand the methods used by the Applicant to assess the effects on the environment.

96.	ES11, para 2.6.20 describes a number of 'measures to prevent or reduce construction effects' including (our emphasis): <ul style="list-style-type: none"> - 'temporary soil storage mounds established at the earliest opportunity to serve both visual and noise screening'; - 'advance planting to be undertaken where no conflict with the construction programme exists'; - 'haul routes to be aligned away from sensitive receptors if practicable' - 'detailed alignment of temporary construction haul routes would be considered to minimise effects on retained vegetation'. More specific wording is requested on these statements.	To enable proper assessment of the landscape and visual impacts during the construction phases.
Nature Conservation (ES12)		
97.	Information should be provided on the methodology proposed by the Applicant for the translocation of woodlands and grasslands together with any evidence that is available to show the success rate of this methodology in previous examples of translocation.	To enable an assessment of the mitigation that is proposed.
Third Party Risk (ES13)		
98.	A detailed explanation should be provided of the model which has been used to arrive at the 1 in 10,000 and 1 in 100,000 risk contours and details of the input data including the weightings attached to each aircraft type.	To understand the forecasting methods used.
99.	Sensitivity analysis should be provided showing the 1 in 10,000 and 1 in 100,000 risk contours in the event that general aviation and helicopter traffic continued to account for the same proportion of aircraft movements in the G2 2030 case as in the 2006 baseline case.	To assist in understanding the sensitivity of the risk contours to changes in the fleet mix.
100	The 1 in 10,000 and 1 in 100,000 risk contours for 2030 should be provided for the alternative of mixed mode and for maximum use of two runways in mixed mode.	To enable proper assessment of the third party risk and consideration of the mixed mode alternative.
101	The wake vortex contour for 2030 should be provided for the alternative of mixed mode and for maximum use of two runways in mixed mode.	To enable proper assessment of potential wake vortex damage and consideration of the mixed mode alternative.
102	Clarification as to whether the Applicant would offer to purchase properties from homeowners within the new 1 in 100,000 risk contour using the HVGS scheme or some other scheme with similar terms.	Clarification.
103	Clarification as to whether the Applicant's proposal to introduce the 'Heathrow re-roofing scheme' for homeowners affected by vortex damage at Stansted is conditional upon the G2 project being approved.	Clarification.

Surface Access (ES14)		
104	A 2006 baseline should be provided throughout and more recent data for 2007 provided wherever available.	It is acknowledged that it may be impractical to use a 2007 baseline throughout but 2003 is unsuitable because it predates a number of significant road changes including the opening of the new dual carriageway A120 between the M11 and Dunmow, new A10, Lt Hadham lights phasing and various changes to J8 of the M11. In addition, in 2003 Stansted handled significantly fewer passengers and less freight compared to the present day.
105	Assessment of surface access impacts of maximum use of the existing runway for 2021 and 2030 and for maximum use of two runways (in mixed mode) for 2030 or later than 2030 if it is forecast that maximum use would not be reached by 2030.	To enable proper assessment of the surface access impacts.
106	Confidence levels should be provided for the surface access projections together with a range which equates to a 95% confidence level for each of the projections.	To enable assessment of the reliability of the projections and to provide a sound basis for sensitivity analysis.
107	Where the presentation of data and forecasts is in a different format to that presented with the G1 application, G2 information should also be shown in that format.	To permit review against data and forecasts that were tested at the G1 PI.
108	The number of passengers carried by the Stansted Express (STEX) to and from the airport should be provided for 2003 to 2006 with subtotals showing the (est.) number who were air passengers, airport employees and 'others'.	To enable an understanding of the baseline.
109	Projections for STEX passengers to and from the airport for 2015, 2021 and 2030 should be provided for each of the assessment cases - again with subtotals showing the projected number who would be air passengers, airport employees and 'others'.	To enable meaningful comparison with the baseline.
110	The number of passengers carried by the Central Trains service to and from the airport should be provided for 2003 to 2006 with subtotals showing the (est.) number who were air passengers, airport employees and 'others'.	To enable an understanding of the baseline.
111	Projections for passengers carried by the Central Trains service to and from the airport for 2015, 2021 and 2030 should be provided for each of the assessment cases - again with subtotals showing the projected number who would be air passengers, airport employees and 'others'.	To enable meaningful comparison with the baseline.

112	The number of passengers carried by bus and coach to and from the airport should be provided for 2003 to 2006 with subtotals showing the separate bus and coach numbers and a breakdown in each case showing the estimated number who were air passengers, airport employees and 'others'.	To enable an understanding of the baseline.
113	Projections for passengers carried by bus and coach to and from the airport for 2015, 2021 and 2030 should be provided for each of the assessment cases - again with subtotals showing the projected number who would be air passengers, airport employees and 'others'.	To enable meaningful comparison with the baseline.
114	The total number of car journeys to and from the airport should be provided for 2003 to 2006 with subtotals showing private car, taxi and car hire vehicles separately and a breakdown showing the number of car journeys attributable to the arrival/departure of air passengers, airport employees and 'others'.	To enable an understanding of the baseline.
115	Projections for the total number of car journeys to and from the airport for 2015, 2021 and 2030 should be provided with subtotals showing private car, taxi and car hire vehicles separately and a breakdown showing the number of car journeys attributable to the arrival/departure of air passengers, airport employees and 'others'.	To enable meaningful comparison with the baseline.
116	The number of LGV and HGV journeys (shown separately) to and from the airport should be provided for 2003 to 2006.	To enable an understanding of the baseline.
117	Projections for the number of LGV and HGV journeys (shown separately) to and from the airport for 2015, 2021 and 2030 should be provided.	To enable meaningful comparison with the baseline.
118	Two sensitivity tests should be provided to show surface access impacts in the event of: (i) a 20% rail mode share being achieved by 2030; and (ii) a 40% rail mode share being achieved by 2030. Details of the additional capital costs associated with the 40% option should also be provided.	To enable informed consideration of alternatives.
119	Provide total number of car parking spaces within the airport perimeter assessed for the G2 scenario in 2021 and 2030, showing separately: public spaces, employee spaces, hotel spaces, car hire spaces and others – and explain the basis for arriving at these numbers.	Clarification.
120	Detailed explanation of how total airport traffic figures have been derived and the basis and calculations upon which the regional impact conclusions set out in ES14, para 2.3.3 have been reached.	To understand the forecasting methods used.

121	ES14, para 6.3.5 states that the number of vehicle-kms on the SRTM network would increase by 1.8% in the morning peak hour under the G2 scenario and 2.2% in the average inter-peak hour, with no change in the evening peak hour. Para 6.3.63 states annual traffic volume in 2015 would increase by 0.8% to 25.4bn vehicle-km. The equivalent figure for 2030 should be provided together with details of the calculations for each of these periods and an explanation of the variances.	Clarification.
122	Information on when the various highways schemes are assumed to become operational for the purpose of traffic forecasts in ES14. Para 5.5.2 explains that schemes have been classified either as 'base case' or 'increased supply', but it is not clear which schemes have been incorporated into the Applicant's modelling for which scenarios.	To understand the forecasting methods used.
123	Paras 5.5.5 and 5.5.6 refer to the lists of schemes in Appendix H. Please confirm that references to Table 13 in Appendix H should be to Table 9 and references to Table 14 should be to Table 10.	Clarification.
124	Information on what steps the Applicant intends take to ensure that construction traffic adheres to designated routes.	To assess the likelihood of compliance.
Transport Assessment (ES14)		
125	Explain how the economic indices for car fuel and light goods vehicle fuel have been calculated from the February 2007 issue of WebTAG.	Clarification (Ref: ES14, App1, Table 44).
126	Appendix E of ES 14, para E4 states that group sizes 'are readily calculated' from information in the CAA data whereas para E9 states that 'the estimation of group size from the CAA data is not straightforward'. Please provide detailed workings and a clear explanation of the adjustments that have been made to the CAA data.	To understand the forecasting methods used.
127	In comparing the 35mppa base case with the G2 case in 2030: (i) average September weekday passenger arrivals are shown respectively as 51,000 (Table 46) and 87,000 (Table 108); (ii) evening peak hour arriving passengers leaving by private car and taxi are shown respectively as 1,522 (Table 50) and either 2,943 (Table 112) or 2,860 (Table 143) depending on whether the SAS is adopted; and (iii) evening peak hour air passenger related private vehicle departures are shown as 983 (Table 51) and either 2,010 (Table 113) or 1,856 (Table 144) depending on whether the SAS is adopted. An explanation is required of how each of the figures in points (i), (ii) and (iii) above have been arrived at.	To understand the forecasting methods used. (Note: an explanation of these specific points is sought in order to understand the general approach and assumptions made in this area of the Transport Assessment).

128	In comparing the 35mppa base case with the G2 case in 2030: (i) typical weekday employee arrivals between 7am and 7pm are shown respectively as 6,160 (Table 55) and 9,330 (Table 117); (ii) employee arrivals by private car between 7am and 9am are shown respectively as 2,125 (Table 55) and either 3,666 (Table 117) or 3,510 (Table 146) depending on whether the SAS is adopted; and (iii) arrivals of employee-related vehicles between 8am and 9am are shown respectively as 1,044 (table 56) and either 1,441 (Table 118) or 1,370 (Table 147) depending on whether the SAS is adopted. An explanation is required of how each of the figures in points (i), (ii) and (iii) above have been arrived at.	To understand the forecasting methods used.. (Note: an explanation of these specific points is sought in order to understand the general approach and assumptions made in this area of the Transport Assessment).
129	An explanation should be provided for the variation in the assumed employee vehicle occupancy ratio between the base case and the G2 scenarios.	To understand the forecasting methods used.
130	The assumptions and calculations underlying the figures shown in ES14, Tables 128 and 129 should be provided.	To understand the forecasting methods used.
131	Technical advice on the option of providing rail facilities for freight should be provided together with the economic analysis undertaken.	To enable informed consideration of alternatives.
132	Confirmation that there is public access to the golf course and sand quarry at Elsenham.	Ref ES14: Figure 75 (page 311).
133	The option of a tunnel beneath the proposed new runway to maintain the connection between Chapel End with Parsonage Road has been dismissed on cost and environmental grounds. Details of the economic and environmental assessments undertaken should be provided.	To enable informed consideration of alternatives.
134	An explanation should be provided of the reasons for the assessed variations in journey times on the A120, including the significant changes from the 35mppa G1 forecasts for 2014 and the G2 forecasts for 2015.	To understand the forecasting methods used.
135	Data on average bus and coach seat utilisation for 2006 together with projections for 2015, 2021 and 2030 for the G1 35mppa case, for the G2 case and for maximum use of two runways (in mixed mode) for 2030 or later than 2030 if it is forecast that maximum use would not be reached by 2030.	To enable proper assessment of the proposed surface access strategy.
136	An assessment of the comparative emissions (per passenger km) for bus, coach, rail and private car modes of travel to/from the airport and for HGV traffic relating to the movement of freight to/from the airport.	To enable proper assessment of the proposed surface access strategy.

137	It is stated that construction delivery vehicles are expected to be on site from 0600 hours to 2000 hours Monday to Friday and from 0600 hours to 1300 hours Saturday whereas the site is stated to operate only from 0700 hours to 1900 hours. An explanation should be provided.	Clarification.
138	ES14, para 16.5.4 provides an assessment of additional westbound road traffic on Church Road. Please also provide the assessment for eastbound traffic.	To enable proper assessment of the surface access impacts.
139	Further explanation is required of the statement in ES14, para 17.6.7: 'Whilst there is no expectation of an improvement in freight mode share, the adoption of more sustainable distribution would support more sustainable travel.'	Clarification.
140	Quantification of the benefits assumed to arise from the establishment of a retail logistics consolidation centre (ES14, para 9.2.38.)	To enable proper assessment of the surface access impacts.
141	Airport-related HGV traffic forecasts for the projected scenarios and a 2006 baseline for comparative purposes.	To enable proper assessment of the surface access impacts.
142	Further explanation is required of the statement in ES14, para 17.6.8: 'The integration of proposals and funding with policy at a national and regional level is demonstrated by the fact that the proposals to increase capacity of the M11 and of the West Anglia Main Line have both been brought forward in part by the G2 Airport Development, and are based on funding from BAA and revenues from air passengers.'	Clarification.
143	Confirmation that the base case scenarios assume implementation of the G1 enhanced SAS.	Clarification.
144	Confirmation that the G2 Transport Assessment is based on the corrected TEMPRO 5.3 data.	Discovery of an error in TEMPRO 5.3 data during the G1 public inquiry.
145	A copy of the October 2007 Mott MacDonald report referred to in the Transport Assessment (para 10.1.9 and footnote 162) should be provided ('A report on responses to Stansted G2 rail schemes consultation for BAA').	To enable properly informed assessment of the surface access impacts.
146	A reconciliation should be provided between the current levels of patronage and future forecasts of demand for Stansted Airport and other parts of the West Anglia route contained in Network Rail's RUS (Dec 2007) and the data provided in ES14.	To understand the forecasting methods used by the Applicant in the Transport Assessment and to seek to reconcile the data in ES14 with the RUS data.
147	A sensitivity test should be provided to show the impact of 50% higher fuel prices on the modal split between public and private transport for journeys to/from the airport.	To enable properly informed assessment of the surface access impacts.

148	The strategy assumes that all STEX and Cambridge services will have been lengthened to 12 cars by 2015 (see e.g. ES14, App 1, para 6.5.3). However, the TWA application appears to assume that the works will not be completed and brought into service until 2017. Without the works, according to BAA, a 12 car service cannot use the airport station. The Applicant should explain which target date is the correct one and why.	Clarification
Transport Assessment (ES14) Appendix A, Volume 1 (also Highways Agency ES1)		
149	An assessment should be provided of the economic cost and environmental benefits of inverted rather than elevated junctions for the proposed M11 J8b and A120 airport link junctions.	To enable informed consideration of alternatives.
150	HA ES1, para 11.50, states that traffic flows on certain roads have been omitted from the calculation as 'they are not material to the assessment of the scheme in terms of traffic flow characteristics'. An assessment should be provided of noise (forecast changes and new absolute levels) for receptors on minor roads where traffic volumes are expected to increase as a result of the proposed road changes.	To enable proper assessment of the impacts.
Local Road Planning Application Supporting Statement		
151	Ordnance Survey grid reference is required for 'Round Coppice Wood' (ref para 4.1.5).	Clarification of location.
152	Reference is made to a number of proposed routes that would lie within the Countryside Protection Zone (para 5.3.26). These proposed routes require to be clearly identified.	To enable proper assessment of the impacts.
153	Details of the facilities proposed for cyclists and pedestrians along the new and re-aligned roads (ref para 6.2.4).	To enable proper assessment of the mitigation proposals.
154	Clarification of the measures intended to ensure that the proposed local replacement roads would retain the character of country lanes (e.g. grass/vegetation verges rather paved kerbs, route alignment etc.)	Clarification.
Waste (ES15)		
155	An explanation as to how the Applicant would ensure that the Stansted airlines and airport tenants such as hotels, offices, cargo warehouses, maintenance hangars etc. would achieve the predicted improvements by reducing and recycling their waste.	Clarification.

Water Resources (ES16)		
156	Details should be provided of the location, design and capacity of the proposed new water tower together with an assessment of its landscape and visual impacts.	Concern about visual and landscape impacts.
157	Details of the Applicant's proposals for planting vegetated buffers alongside watercourses to reduce long term effects of diffuse pollution, including agreements reached on land management and proposed use of CPO powers to acquire watercourse buffer land for this purpose.	ES16 (Table 2) states that the Applicant 'has worked towards securing measures to prevent, reduce or offset effects through long term land management and Compulsory Purchase Orders' but provides no details of what has been achieved.
158	An assessment of the reversibility of the impacts on watercourses should be provided.	As per Schedule 3 of the EIA Regulations.
159	Monthly demand and supply projections should be provided for airport use of potable, non potable, and grey water for the G2 2030 case.	Concern about peak demand for potable water coinciding with periods of short supply of harvested water.
160	Projections should be provided for peak day and peak week demand for potable water for the G2 in 2030.	Assessment of peak impacts and adequacy of existing storage tanks.
161	Assessment of the increase in the demand for potable water within the TVW Zone 5 area arising from expected development in the period to 2021 (in line with the East of England Plan) extrapolated to 2030.	Assessment of cumulative impacts.
162	A summary table should be provided showing baseline potable water usage (most recent three years), the G1 base case, the G2 case, maximum use of the existing runway and maximum use of two runways. In each case the projections should be provided for 2015, 2021 and 2030.	Comparative assessment of the impacts and lack of clarity on meaning of a 'sustainability target' (ES16, para 8.6.35).
163	Confirmation is required that, in addition to no further water abstraction licenses being sought, there would be no increase in the quantum of water abstraction from existing licenses as a result of the G2 project.	Clarification.
164	Confirmation is required that the quantum of water discharged into local watercourses would not reduce as a result of the G2 project. If it would reduce, comparative data should be provided for the baseline, base case and the G2 scenarios.	Clarification to enable proper assessment of the impacts.
165	An explanation as to how the Applicant would ensure that airport tenants such as hotels, offices, cargo warehouses, maintenance hangers etc. would achieve the predicted savings in water usage.	Clarification.

166	Stansted Airport water consumption data should be provided for 2007.	To enable comparisons against the most recent baseline data.
Cumulative Effects (ES17)		
167	An assessment should be provided of the cumulative effects of the G2 project on sensitive receptors, as identified in the ES (particularly volumes 3,4,5,6,10 and 11), to show the aggregate environmental impacts upon those who would be most affected, and to include the impacts of the road and rail projects and construction impacts including all off-airport works.	To enable proper assessment of the impacts.

***Stop Stansted Expansion
June 2008***