Submission by Stop Stansted Expansion to Uttlesford District Council on Scoping Report submitted by Stansted Airport Ltd on 2 June 2017

Stop Stansted Expansion – 14 July 2017

TOPIC		INFORMATION REQUIRED IN THE ENVIRONMENTAL STATEMENT	REASON
GENERAL			
1	Basis for assessment	• In view of the volatility of Stansted Airport's business over the past 20 years, it will not be sufficient to rely upon STAL's assessment of impacts alone, which are based solely on STAL's own forecasts for 2029, noting that STAL's forecasts are materially different from the Airports Commission and most recent Department for Transport (DfT) forecasts. • Longer term impacts need to be assessed and 2040 is an appropriate milestone for longer term assessment of the impacts of the proposed development, other than for climate change impacts (see below). • Impacts in intervening years need to be assessed, because of the known volatility of Stansted's business, because of uncertainty with regard to the delivery of improvements to surface access infrastructure and other planned mitigation, and because of the major (traffic-generating) housing developments which would take place in parallel. The most appropriate intervening assessment years are considered to be 2025 and 2033 (the latter to coincide with local plans). • Climate impacts need to be assessed to 2050 in line with the objectives set down in the Climate Change Act and the cap on UK aviation carbon emissions set down by the Government (< 37.5m tonnes CO_2 by 2050). • In each case (and throughout the ES) the forecasts and projected impacts should be shown in comparison to the base year - which should be 2016 wherever possible, and otherwise 2015 - and the base case (see below).	To enable assessment of impacts in intervening years and longer term assessment of economic, employment and environmental effects of the development. Issues which need to be considered in intervening years and longer term include: • The DfT convention for aviation forecasts, is to provide projections for at least 20 years ahead, at 5-10 year intervals. STAL has followed this convention in the past, for example, the G1 and G2 applications provided projections to 2030. The ES should follow this convention. • The timing of the road improvement schemes to support the development, noting the projection (by interpolation) of 38.5mppa by 2025; • The timing of the mitigation measures; • Post-Brexit effects; • implications of new capacity at Heathrow and possibly elsewhere over the next 15-20 years; • to enable comparison with local plans; • to enable comparison with Airports Commission and DfT forecasts and previous STAL forecasts.
2	'Best use'	The ES should include an explanation, showing the main assumptions and calculations as to why 44.5mppa and 285,000 ATMs constitutes best use of the existing runway.	The applicant's 2006 planning application for 35mppa was described as making best use of the existing runway.
3	Base case	The Scoping Report (SR) seems to suggest that the main comparison to be made is between the limit of the existing permissions and the proposed development. The existing permission granted in October 2008 has still not yet been implemented (as at 30 June 2017). It was based on an Environmental Statement (ES) which relied	• Conditions have materially changed over the last 14 years, not least in relation to local road traffic congestion.

		upon projections, modelling and other data mostly from 2004/05 but which in some instances (including much of the surface access data) dated back to 2003. The SR states (at para 1.8) "*The existing (or baseline) environmental conditions at the Airport will be collated as part of the EIA process and presented in the ES. This information will be used in the modelling and extrapolation of data to inform the impact assessment work, or otherwise be presented for the purpose of context. The Baseline Year for different topics will be either 2015 or 2016, depending on the availability of full calendar datasets."* Greater clarification is required as to the basis for the ES. Simply put, STAL intends to submit a planning application to UDC which STAL believes will enable it to make best use of the existing runway. This will include amending the current passenger cap of 35mppa and the current annual aircraft movements cap of 274,000. The proposed development would increase those caps to 44.5mppa and 285,000 respectively. Current actual levels (2016) are 24.3mppa and 180,400 aircraft movements which represent the 'baseline' for comparison. Thus, the increases on current numbers are 83% (mppa) and 58% (aircraft movements). It will be for the Planning Statement, which will accompany the application, to make the case for the increased levels and justify the claim that they represent 'making the best use of the existing single runway'. However, STAL's case will need to be based on an unbiased assessment provided by the EIA/ES which will, for each topic, assess and compare the existing, permitted and proposed impacts. It will not be acceptable for the EA to rely upon assessments carried out, and assumptions made, up to 14 years ago for the G1 planning application. In many cases the reality has turned out to be significantly different from the assumptions made at that time. Many of the assumed improvements and mitigation factors in the 2006 ES, and implicit in the 2008 permission, have simply not materialised.	• The local community and others need to know 'what would be the impacts of the proposed development compared to the current level of activity'. • There needs to be clarity regarding the scale of the proposed development compared to the current level of activity at the airport. • Effective comparisons are best made against real situations rather than imaginary or theoretical ones. The ES should avoid making misleading comparisons against outdated and untested assumptions about the impacts of Stansted Airport when handling 35mppa and 274,000 aircraft movements per annum. • Insofar as the 2008 planning permission has not yet been triggered and Stansted Airport is still operating below 25mppa (as at 30 June 2017) the 12-14 year old assessment of the impacts of Stansted handling 35mppa and 274,000 aircraft movements are a matter of conjecture.
4	Implementation of the 2008 permission	With reference to para 3.1 of the Scoping Report, the ES should list the elements of the October 2008 planning permission which the applicant considers to have been implemented and the conditions attached to the October 2008 planning permission which the applicant considers to have been discharged.	For the avoidance of doubt with regard to the base case.
5	Reliability of STAL forecasts	The ES should show the number and types of passengers and aircraft movements handled by Stansted in 2016, compared to the forecasts submitted by STAL in support of its 2006 G1 application. As with the G1 forecasts, this should sub-divide	To assist in assessing the reliability of STAL forecasts.

		passengers between UK and foreign, business and leisure, transfer/non-transfer, domestic, short haul and long haul, using CAA classifications. It should sub-divide aircraft movements by passenger ATMs, cargo ATMs and General Aviation (GA).	
6	Definition of the base case	So far as passenger traffic is concerned the base case should be 24.3mppa (as achieved in 2016) rising to 35mppa, in line with the 2008 permission. So far as aircraft movements are concerned, the base case should be 180,400 rising not to 274,000 but to 247,000 which is the number shown in the Scoping Report (Table 2.2) at the time the airport reaches its 35mppa cap.	For the avoidance of doubt with regard to the base case.
7	Sensitivity test	The ES should include a 50mppa sensitivity test.	At 52 aircraft movements per hour the theoretical capacity of the Stansted runway is at least 20% more than 285,000 annual movements* based on a 17.5 hour a day and the potential for 13,700 night flights. Even allowing for growth in CATMs and GA, 50mppa appears within reach by 2030. [*52 x 17.5 x 365 = 332,150 + 13,700 night flights = 345,850 theoretical annual movements.]
8	Cumulative Effects	The Scoping Report recognises the need to take account of cumulative effects and lists (Table 4.1) a number of housing and other developments which will be taken account of in the ES. This list needs to be expanded to take account of further developments set down in the latest draft Local Plans which are both significant new drivers of local traffic growth to be included in the transport assessment and major residential areas on which an expanded Stansted Airport will impact. These include the emerging new local plans for Uttlesford, East Hertfordshire, Harlow, Braintree, Cambridge and South Cambridgeshire. In particular, account should be taken of the impact from several proposed new garden towns or garden communities close to the M11 and A120 and proposed major expansions of Bishop's Stortford and Harlow. All of these developments will impact on Stansted Airport and vice versa. Whilst principally a matter for the Planning Statement, it should be noted that the UDC Draft Local Plan does not support the growth proposed, but provides the basic planning context as "utilising the permitted capacity of the existing runway" (Section 2 Objective 2C)	To enable cumulative impacts to be assessed, particularly with regard to the road traffic implications at key junctions and on sensitive local roads, and also with regard to air quality modelling.

AIR TRAFFIC FORECASTS			
9	Basis for the forecasts	The main forecasting assumptions should be explained and any significant variances in the STAL forecasts compared to the most recent forecasts published by the DfT and the Airports Commission should also be explained. Sources of data should be stated and how the data have been interpreted and applied should be clearly explained. Any computer modelling should be capable of review and verification, and all calculations should be clear and auditable.	To assist in assessing the robustness and reliability of the forecasts.
10	Forecasting sensitivities	In the DfT air traffic forecasting model the key sensitivities are GDP growth (UK & foreign), growth in UK consumer expenditure and oil prices. STAL should advise what assumptions it has made in each of these areas over the forecasting period, if different from the official projections made by HM Treasury and Department for Business, Energy and Industrial Strategy. The ES should include sensitivity analysis for different market capacity scenarios over the period to 2040.	Over the past decade, Stansted has shown itself to be more vulnerable to an economic downturn than any other major UK airport. It is therefore important to assess the reliability and robustness of the forecasts and to consider the key sensitivities.
11	Competitor airports	The ES should include an explanation of the extent to which STAL's growth projections for Stansted are sensitive to the development and utilisation of capacity, including new capacity, at other airports serving London and the south east, including the Government's intention that there should be a third Heathrow runway by the late 2020s. The ES should state the passenger throughput assumptions made for the other main London airports for the assessment years 2025, 2033 and 2040.	To be able to assess the reliability and robustness of the forecasts and to consider the key sensitivities.
12	Reasonable alternatives	The Town & Country Planning (EIA) Regulations 2017 (s.18(3)(d) and Schedule 4) require reasonable alternatives to the proposed development to be assessed, and an indication to be given of the main reasons for the option chosen, taking into account the effects of the development on the environment. The Government's clear support for the development of Heathrow requires that a third Heathrow runway be factored in to the consideration of 'reasonable alternatives'.	In a written statement to Parliament on 13 July 2017 the Secretary of State for Transport re-confirmed the Government's support for a third Heathrow runway and notified Parliament that the Government expects to lay a final NPS in Parliament in the first half of 2018 for a vote in the House of Commons.
13	Reliability of forecasts	Confidence levels should be provided for the air traffic forecasts, noting that: i. the Department for Transport provides a range of + or – 20% for its UK air traffic forecasts) together with a range which equates to a 95% confidence level for each of the forecasts; and ii. STAL's past forecasts have been highly unreliable.	To enable assessment of the reliability of the STAL forecasts and to provide a sound basis for sensitivity analysis.

14	Brexit	The ES should also include a BREXIT sensitivity test taking account of the warnings given by its two major airline customers and having regard to the popularity of Stansted amongst EU migrants whose home visits – together with friends and relations travelling to the UK to visit them – constitute a significant proportion of Stansted's passengers.	Stansted has the highest dependency on EU air travel of any major UK airport. In 2016, 86% of all Stansted passengers were flying to/from EU destinations, 9% to other UK destinations and only 5% to destinations outside the EU. This compares to just 34.5% of Heathrow passengers travelling to/from EU destinations in 2016.
15	Terminology	The term 'General Aviation' appears to be used in the Scoping Report to describe all aircraft movements except passenger air transport movements (PATMs) and cargo air transport movements (CATMs). However, the term 'General Aviation is often used to describe private recreational flying. The ES needs to make it clear that the term 'General Aviation' means all non-ATMs including but not limited to: • Air taxis • Helicopter flights • Aircraft repositioning • Training and testing flights • Local movements • Aero club flights • Private flights; • Business aviation • Military, official and diplomatic flights. It should also be made clear that 'Aircraft Movements' means the combined total of all passenger and cargo ATMs and General Aviation (GA).	To avoid any ambiguity or misunderstanding.
16	Constituent elements of forecasts	For the base year, the base case and each of the assessment years, the air traffic forecasts should provide the following information: • ATM forecasts should be sub-divided to show the split between domestic, international short haul, and long haul – separately for PATMs and CATMs. • The passenger forecasts should be sub-divided to show the split between domestic, international short haul, and long haul. • The forecasts for 'general aviation' should specifically identify helicopter traffic in view of its very different noise characteristics and different flight paths.	For clarity, and to assist in the assessment of economic, employment and environmental impacts, and potential risks and benefits to the local economy and employment market. Stansted Airport is said to be "the biggest single-site employer in the East of England, providing over 12,000 jobs", even before the additional jobs arising from the expansion of the airport beyond 44.5mppa. It is therefore important to

		• Cargo tonnage should be sub-divided to show the split between domestic, international short haul, and long haul, in each case split between belly-hold and freighter. Mail should be included in the cargo forecasts, both in respect of ATMs and tonnage. • Passenger forecasts should be sub-divided to show the number of passengers in each of the following five (CAA) categories: UK Business and UK Leisure, Foreign Business and Foreign Leisure, and Transfer passengers. • The market share of Stansted passengers should be provided for: ➢ the largest airline; ➢ the combined share of the largest two airlines; ➢ the combined share of the largest three airlines. • Average load factors should be provided for PATMs, shown separately for domestic, international short haul, and long haul. • Aircraft types should be provided, in each case showing seating capacity. • Aircraft types should be provided, classified by noise category.	consider the resilience of the airport to potential changes in its airline customers' business plans/priorities, and to wider strategic challenges which may arise.
17	Long Haul	The CAA definition of 'long haul' should be used throughout.	For the purposes of consistency and comparison.
18	Airside Infrastructure	An explanation should be provided for the need for nine additional aircraft stands, and the additional Rapid Exit Taxiway (RET) and Rapid Access Taxiway (RAT), when the requested increase in the aircraft movements limit is claimed to be just 3.9%.	For clarity and as evidence of the need for this element of the proposed development. Also, it is noted that in the past STAL has refused to consider local residents' compensation claims under the Land Compensation Act 1973 until every element of the permitted development has been completed.
19	Runway capacity	The ES should state the maximum number of aircraft movements per annum that could be handled, assuming no change in the permitted number of night flights: (a) when all of the taxiway, aprons, stands and runway-related developments that have already been approved are completed; and (b) when the nine additional stands and the additional RET and RAT are completed.	For clarity with regard to the potential future capacity of the airport.
20	Landside Infrastructure	It is noted that no increase is being sought for approved car parking spaces, whereas STAL previously assessed that the current permitted number of car parking spaces was needed for a throughput of 35mppa. The ES should include an explanation as to what now enables a throughput of 44.5mppa without any further car parking spaces.	For clarity and for reassurance that additional car parking spaces will not be the subject of a subsequent planning application.

SURFACE ACCESS			
21	Modelling	In accordance with the Institute of Environmental Assessment (IEA) Guidelines, the ES should identify the worst environmental impacts that can reasonably be expected, in addition to the average or typical impacts. The Transport Assessment (TA) should follow this principle. The surface access impacts should be assessed for the assessment years and presented, for ease of comparison, against the standard yardsticks of the base year and the base case.	To improve the quality of the ES & the TA.
22	Methodology	The SR makes no reference to the basis for converting passenger numbers and employee numbers into vehicle movements. The assumptions, methods and workings for calculating, e.g. average vehicle occupancy for different types of vehicle at different times of year and different times of day will need to be clearly explained. The threshold for detailed assessment should at most be a 10% increase in traffic flows, inclusive of the impact of housing and other traffic-generating development under construction and planned. A zero percent threshold will be appropriate where a junction or stretch of road has already reached capacity, or will have reached capacity in any assessment year.	To provide evidence and transparency for the assumptions and calculations in the ES & the TA.
23	Passenger travel to/from airport	For the base year, the base case and each of the assessment years, the surface access mode share should be provided, showing the percentage of air passengers travelling to/from the airport by: • Rail • Bus/Coach • Kiss & Fly • Park & Fly • Taxi/Minicab • Rental car	To inform the assessment of surface access impacts.
24	Employee travel	For the base year, the base case and each of the assessment years, the employee mode share should be provided for travel to/from work by: • Car Driver • Car Passenger • Motorcycle • Public bus or coach • Rail	To inform the assessment of surface access impacts.

		• Taxi/minicab • Works bus/other company transport • Walk, bicycle, other The above breakdown should be applied to the average number of employees on site to show the resultant number of employee road journeys, other than by public transport.	
25	Cargo traffic	The ES should include an assessment of the impact of cargo-related road traffic for the base year, the base case and each of the assessment years.	To inform the assessment of surface access impacts.
26	Contractors	The ES should include an assessment of the impact of contractors' vehicles in the base year, the base case and each of the assessment years.	To inform the assessment of surface access impacts.
27	Progress in past 10 years	As part of the G1 application in 2006/07, STAL made a range of projections for reduced car use by airport passengers and employees. The ES should show the results that have been achieved between 2006 and 2016, compared to the G1 projections.	To inform the assessment of surface access impacts.
28	Local roads	Para 7.8 of the Scoping Report refers to "more sensitive local roads", which are to be subject to detailed assessment of traffic flows. In addition to the M11, as a minimum the following local roads and their main junctions and roundabouts should be included: • The A120 from the A10 to Colchester • the B1256 from J8 of the M11 to Gt Dunmow • the A1250 from its junction with the A120 at the Birchanger roundabout 300 yards west of J8 to its western junction with the A120 • the A1184 and B1383 from Bishop's Stortford to Sawbridgeworth • the B1383 from Bishop's Stortford to its junction with High Lane, Stansted Mountfitchet • Church Road, Grove Hill, Forest Hall Road and Chapel Hill, Stansted Mountfitchet • the B1051 from Stansted Mountfitchet to Elsenham • Parsonage Road, between the airport and Takeley • Church Road, from Start Hill through Gt Hallingbury to the A1060 • Birchanger Lane • Bury Lodge Lane	

		• Hall Road from the Cooper's End Roundabout to Elsenham When reporting actual and forecast traffic movements at key junctions and on highways, distinction should be made between airport-related traffic and other traffic. Airport-related movements should be split between passenger-related movements, cargo-related movements and employee/contractor related movements. HGV and PSV movements should be separately identified. Reporting should be for the morning and evening peaks (as defined below) for busy days of the week, at busy weeks of the year. Increases in traffic flows should be expressed numerically and as a percentage of the available capacity at the baseline date so that the key impacts at the margin can be properly assessed.	
29	Hockerill AQMA	The TA needs to examine the traffic impact and consequential air quality impact on Hockerill junction, Bishop's Stortford, noting that this is a designated Air Quality Management Area.	In view of the sensitivity of this AQMA to any increase in road traffic emissions.
30	Lead and lag times	In the modelling of surface access impacts the ES should state the assumptions made on lead times for departing passengers and lag times for arriving passengers.	To assist in the assessment of surface access impacts and to enable verification of the modelling.
31	Hourly aircraft movements and passenger flows	For the base year, the base case and the assessment years the ES should include the following information on hourly aircraft and passenger movements for the 17½ hour day. (This information need not be provided for the controlled night period.): i. The average number of aircraft arrivals and aircraft departures for each hour between 0600 and 2300 and for the ½ hour from 2300 to 2330. ii. The 'busy summer weekday' (i.e. analogous to noise impact assessment methodology) number of aircraft arrivals and aircraft departures for each hour between 0600 and 2300 and for the ½ hour from 2300 to 2330. iii. The average number of passenger arrivals and passenger departures for each hour between 0600 and 2300 and for the ½ hour from 2300 to 2330. iv. The 'busy summer weekday' number of passenger arrivals and passenger departures for each hour between 0600 and 2300 and for the ½ hour from 2300 to 2330.	To assist in the assessment of surface access impacts and to enable verification of the modelling.
32	Daily & peak traffic flows	In addition to projecting average daily traffic flows by type of vehicle, the road traffic modelling should cover the 3-hour morning peak (7am – 10am) and the 3-	To enable more thorough assessment of peak hour impacts on key local roads and junctions.

		hour evening peak (4pm–7pm) for a busy summer weekday. In accordance with DfT guidelines for TA, The counts should be conducted at 15 minute intervals.	
33	Queue length surveys	Queue length surveys should be carried out on both the eastern and western approaches to J8 of the M11, at the (four) approaches to the inter-section of the A120 and the B1383, and on the A120 eastbound and westbound at Little Hadham traffic lights, at its junction with Albury Road and Hadham Road.	To enable more thorough assessment of the impacts on sensitive junctions.
34	Key road junctions	Where a junction is already approaching its full capacity the scale of the potential change (referred to in para 7.15 of the Scoping Report) should be stated numerically and as a percentage of the available capacity of the junction at the baseline date. The Scoping Report refers to the airport having "direct access available from the M11 and A120" (7.5). The M11/A120 junction (J8) is already under stress for much of the day and so the ES should set out what mitigation measures – and the timing thereof – are relied upon to deal with the capacity problems on J8 of the M11 noting that there will be substantial increase in airport road traffic if the '44.5mppa' application were to be approved. Account needs to be taken of traffic growth arising from all significant housing developments in the pipeline (referred to above), not only the Uttlesford developments listed in the Scoping Report, and of the general increase in traffic flows predicted for the East of England over the assessment period.	So that the key impacts at the margin can be properly assessed.
35	Analysis of traffic flows	The ES should include an analysis of passenger UK origins & UK destinations in the same format as in the CAA Passenger Survey Reports, for the base year, base case and the assessment years.	To inform the assessment of surface access impacts.
36	Potential mitigation measures	With a view to mitigating traffic impacts the ES should include feasibility studies of: • Off-site strategic park and ride • Freedom for licensed taxis dropping off passengers at the airport, to be able to pick up passengers for the outward journey (as per Heathrow etc) rather than the present exclusivity arrangement which allows only one taxi firm to operate from the airport terminal and forecourt, creating unnecessary 'empty running'; • Providing free public transport passes for airport employees and simultaneously introducing significant monthly car parking charges for	To ensure proper consideration of alternative approaches to mitigating the growth in airport-related road traffic.

		airport employees (as per the surface access strategy at other European airports, e.g. Frankfurt.)	
37	Fly Parking	The ES should address the issue of fly parking by airport users in local towns and villages setting out any mitigation measures proposed.	Fly parking is already a serious problem for local residents and any increase in passenger numbers is likely to worsen the problem.
38	Public transport services	The Scoping Report asserts that "Public transport services will inevitably increase as a result of additional demand, which will in turn support currently marginal or uneconomic services. Other services will be extended or enhanced and predicted future services will be outlined in the TA and ES. The future intensification of use of the airport site will provide even greater opportunities for effective travel planning." For the purposes of the TA and ES, this assertion needs to be supported with specific explanations as to how rail and bus/coach services will increase to meet additional demand, over and above the requirements that were deemed necessary to support the G1 permission. Network Rail is currently preparing its funding bid for CP6 (2019-24). The TA and the ES should make clear the assumptions that have been made with regard to the capacity improvements relevant to Stansted Airport rail services, in particular which improvements have been assumed will be included in the CP6 programme.	To assess the adequacy of public transport services to support 44.5mppa throughput at Stansted Airport.
39	Rail services	The ES and TA should specifically deal with the following questions: • What extra rail services are expected to be provided to cater for the increase in passenger throughput at the airport? • In order to meet the additional demand for rail services, to what extent will reliance be placed on train lengthening, to what extent on increased frequency of services and to what extent on increased infrastructure capacity? The assumed timing of these expected capacity increases should be stated. • In the case of rail infrastructure, it will be important for the ES and the TA not only to identify the specific schemes relied upon, for example, a second airport rail tunnel and increases in platform capacity at the airport to enable more frequent services, but also to state how and when they are expected to be funded, including by the applicant.	To assess the implications for rail services and any risks associated with timing or funding.

40	Tottenham Hale	Transport for London (TfL) need to be consulted with regard to the increase in air passenger usage of Tottenham Hale mainline rail station and its interchange with London Underground that would arise from the proposed development, and the capacity of Tottenham Hale to accommodate this.	To ensure that adequate capacity exists at Tottenham Hale, which is already at or close to capacity at peaks.
41	Bus/coach services	The ES and TA should describe the additional local bus and long distance coach services (destinations and frequencies) that would be provided to cater for the increase in passenger throughput at the airport and state what alterations, if any, would need to be made to the bus/coach terminal facilities at the airport to cater for them.	To assess the implications for bus/coach services.
AIR NOISE			
42	Assessment framework	In addition to the list of documents at para 8.3 of the Scoping Report, the ES should also have regard to: • Aviation Policy Framework ('APF'), March 2013; • UK Airspace Policy Consultation, February 2017; • Directive 2002/49/EC, 25 June 2002 relating to the assessment and management of environmental noise; and • The Professional Practice Guidance on Planning and Noise, May 2017. Importantly, the 2013 APF, which post-dates the 2008 permission by some five years, states: *"The Government recognises that noise is the primary concern of local communities near airports and we take its impact seriously. As a general principle, the Government therefore expects that future growth in aviation should ensure that benefits are shared between the aviation industry and local communities. This means that the industry must continue to reduce and mitigate noise as airport capacity grows".* The ES should also attach due weight to the draft UK Airspace Policy, February 2017, which has proposed lowering the limits for adverse effect levels of aircraft noise for both day and night.	To ensure comprehensive and thorough assessment of the impacts of aircraft noise, in the light of current Government policy and guidance.
43	Air noise baseline	In view of the significant change in Government policy on aircraft noise that has taken place since 2008, a 2013 baseline should be included in the ES for all noise impacts so that adherence to the principle of sharing the benefits (as above) can	To assess compliance with the 2013 APF.

		be assessed, noting that in 2013 the 57dB LAeq 16hr contour at Stansted enclosed 20.0 kms^2 and included an estimated 1250 people (CAA data).	
44	Complaints analysis	The ES should include mitigation proposals aimed at reducing the number of noise complaints.	So that mitigation options are explored.
45	Noise monitoring	The locations proposed in Table 8.2 for additional noise monitoring are insufficient to adequately establish the baseline noise survey for the area. The ES will also need to assess the impact on locations further away from the airport where people are living under flight paths, particularly under the Clacton and Buzad departure routes and the arrival routes to runway 04 which does not have Continuous Descent Approach (CDA) implemented. Representative locations under these flight paths should be added to the proposed list in Table 8.2. The analysis of complaints should be used to inform the selection of the additional locations. Special attention should be paid to vulnerable groups of the population in sensitive buildings, for instance in schools and hospitals close to the airport and under flight paths. Noise assessments should be undertaken on a 24-hour basis so that cumulative impacts can be assessed.	To enable proper assessment of the noise impacts, including cumulative impacts.
46	Ambient noise	The Scoping Report (para 8.14) indicates that consideration will be given to measuring ambient noise levels. The rural location of Stansted means that each aircraft overflight is clearly heard against low background noise levels. The ES will therefore need to include measurements of ambient noise. In this regard LA90 indices should be used.	To ensure that noise impacts are properly assessed.
47	Noise Indices	As proposed in the 2017 UK Airspace Policy consultation, the EA should include the 51dB LAeq.16hr as the Lowest Observed Adverse Effect Level ('LOAEL') for daytime noise and 45 dB Lnight as the LOAEL for night time noise. LAmax indices for individual noise events should also be included in the assessment. Sound Exposure Level (SEL) noise footprint indices for a selection of the most commonly operated aircraft (passenger and cargo) should be provided.	To ensure that noise impacts are properly assessed.
48	Spatial Scope	Having regard to the known impacts, including the evidence from noise complaints, the air noise studies should consider an area of not less than 25 miles x 25 miles centred on the midpoint of runway 04–22.	To ensure that noise impacts are assessed across the relevant geographical area.
49	Helicopter noise impacts	The EA should include a specific assessment of helicopter noise, recognising (as does the DfT) that helicopters have different noise and vibration characteristics	To ensure that helicopter noise impacts are properly assessed.

		compared to fixed wing aircraft. Moreover the impact of low flying helicopters is currently concentrated on communities to the west of Stansted Airport.	
GROUND NOISE			
50	General methodology	The ES should include ground noise contours for on-airport activity including aircraft taxiing, revving up engines before take-off, engine and braking noise on landing (including use of reverse thrust), use of APUs and GPUs, vehicular movement inside airport boundary, including from freight, and increased surface access movements on local roads. The cumulative impact of all of the foregoing needs to be assessed from the perspective of key receptors, namely local residents close to the airport, e.g. Molehill Green and Burton End, and there should be separate assessment of ground noise impacts for the day, evening and night periods. Again, the ES should show impacts for the base year, the base case and for 2025, 2033 and 2040.	To ensure that noise impacts are properly assessed.
51	Noise Indices	LAmax indices for individual noise events should also be included in the assessment.	To ensure that noise impacts are properly assessed.
52	Ambient noise	While the Scoping Report implies that consideration will be given to measuring ambient noise levels, this is not specifically stated. The rural location of Stansted means that each aircraft ground movement is clearly heard against low background noise levels. The ES will therefore need to include measurements of ambient noise. In this regard LA90 indices should be used.	To ensure that noise impacts are properly assessed.
53	Spatial Scope	The airport is situated on high ground (348ft above average mean sea level) relative to the surrounding area. Having regard to the known impacts, including the evidence from noise complaints, the ground noise studies should consider an area of not less than 5 miles x 5 miles centred on the midpoint of runway 04–22.	To ensure that noise impacts are assessed across the relevant geographical area.
AIR QUALITY			
54	General	In view of the potentially serious health impacts on the local population and potential damage to local ecosystems, the AQ assessment needs to thoroughly assess levels of NOx, SOx, PM10, PM2.5 and other harmful emissions. It will not be sufficient to rely upon G1 monitoring results and modelling, undertaken 10 or more years ago.	• Nitrogen oxides in particular can not only cause irritation but can have adverse long term effects on those suffering from chronic lung conditions, high blood pressure and/or cardiac disease, as well as on infants and young children.

			• Even at relatively low levels, NOx and SOx have damaging effects on vegetation growth, notably the ancient trees in protected ancient woodland, such as Hatfield Forest and Elsenham Woods, both of which are (in part) adjacent to the airport and under the flight path. • Particulates are known to cause long term damage to the respiratory system. They need to be routinely monitored and any potential increase needs to be assessed.
55	Impact on the adjacent SSSIs	The ES should include an assessment of the combined impact of aircraft and vehicular emissions of NOx, SOx, PM10, PM2.5 and other emissions which can cause eutrophication at Hatfield Forest SSSI and NNR and Elsenham Woods SSSI, for the base year, and modelling predictions for the base case and the assessment years (2025, 2033 and 2040). The EIA of AQ impacts should include: • Monitoring at three sites: (i) to the north west of Hatfield Forest; (ii) near Shell House in the centre of Hatfield Forest; and (iii) near the centre of East End Wood (which is part of Elsenham Woods); • Assessment of cores from Hatfield Forest lake to establish emission trends; • Survey of lichens and bryophytes in Hatfield Forest and Elsenham Woods; • Tree health surveys in Hatfield Forest and Elsenham Woods to assess die back and other effects on ancient trees as a result of eutrophication by NOx and SOx.	• Monitoring undertaken for the G1 application highlighted NOx impacts at these SSIs both of which are (in part) adjacent to the airport. • Modelling undertaken for the G1 application needs to be updated, not least because the anticipated reductions in vehicle emissions are unlikely to have met the reasonable expectations at that time, particularly with regard to diesel emissions.
56	Impacts on other nearby SSIs	In accordance with the advice provided to UDC by Natural England on 7 July 2017, a Habitats Regulations Assessment (HRA) is required to adequately assess the plan for likely significant effects upon Epping Forest SSSI. In addition, Natural England have specifically identified Quendon Wood SSSI and High Wood Dunmow SSSI as designated nature conservation sites where assessment is needed to determine the degree to which additional air pollution arising from the proposed expansion of the airport could cause damage to ecosystems.	To comply with the expert advice of Natural England.
57	Study area	As well as specifically studying the local SSSIs referred to above, the general study area should be no less than a 5km radial sweep from both ends of the runway, i.e.	To provide an adequate assessment of AQ impacts.

		to include Bishop's Stortford and all local villages and other settlements within 5km of either end of the runway, and local access roads.	
58	AQ monitoring	The ES should provide the details of the AQ monitoring carried out 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, the type of analyser(s) used and the results of the monitoring. Similarly, the ES should provide the details of the AQ the monitoring carried out to the north east of the airport, for example at East End Wood, Philipland Wood and Tilty, stating the duration of the monitoring, the type of analyser(s) used and the results of the monitoring.	To enable proper assessment of the air quality impacts and the reliability of the baseline data.
59	Hockerill AQMA	As stated under 'Road Traffic' heading above, the TA needs to examine the AQ impact on Hockerill AGMA	In view of its sensitivity to any increase in road traffic emissions.
SOCIO-ECONOMIC IMPACTS			
60	Employment data	The ES should set out the actual number of airport related jobs for the base year, and the forecast number for the base case and for 2025, 2033 and 2040. The total number of jobs should be subdivided in the following 4 ways: • <u>By Category</u> ➢ Direct on-airport ➢ Direct off-airport ➢ Indirect ➢ Induced • <u>By Geography</u> ➢ The estimated net additional jobs in each district in the Study Area. ➢ The impact on the level of regional employment (i.e. Essex, Herts, Beds, Cambs, Norfolk & Suffolk combined). ➢ The impact on the level of national employment (UK). • <u>By Post-holder nationality</u> ➢ UK nationals ➢ Other EU ➢ Non EU • <u>By Type of Job</u> ➢ By SOC2000 major groups (9), as per ONS.	To provide the requisite database for proper assessment of the employment impacts.

		➢ By STAL Employment Survey categories (8) – i.e. ○ Airlines & Handling Agents ○ Government Services ○ STAL/MAG ○ Catering & Retail ○ Other Public Passenger Services ○ Cargo, Freight/Courier Services ○ Building & Maintenance Contactors ○ Other Companies ** The ES should show average annual earnings for each category.	
61	Opportunity costs	Potential adverse employment impacts should be considered, e.g. on rival airports and on local, regional or national employment in the tourism and leisure industries.	To enable proper assessment of the employment impacts.
62	Unemployment data	The ES should show unemployment numbers, the unemployment rate (%) and claimant count data for each of the LA areas in the employment study area.	To enable proper assessment of the employment impacts.
63	Impact on local labour markets	Having regard to the minimal unemployment in Uttlesford and East Herts, the ES should include an assessment of the impact of the additional airport jobs on the local jobs market, addressing the supply side and potential inflationary pressures.	To enable proper assessment of the employment impacts.
64	Available local skills and qualifications	The ES should show supply side projections of the skills/qualifications of the workforce in each of the LA areas in the study area for 2025, 2033 and 2040, as well as for the base year and base case.	To consider the suitability of airport jobs to meet the needs/aspirations of the local working population.
65	EU employees	The ES should include an assessment of the stricter immigration controls which will apply post Brexit.	To enable full and proper assessment of the overall employment impacts.
66	Employee retention	For the base year, the ES should provide the average employee retention rate[1] for UK nationals, other EU and non-EU, by STAL Employment Survey categories. *[1]The number of employees who left during the previous calendar year as a percentage of the number employed at the end of the calendar year.*	To assist in assessing the impact of stricter immigration controls, post Brexit, on the airport's ability to recruit staff and on the local employment market.
67	Local employment market	The impact on the local labour supply and rates of pay in Uttlesford and East Herts should be assessed, particularly in relation to those types of jobs where the airport would be active in the recruitment market, competing directly for employees with local firms and the public sector.	To consider the impact of the proposed development on the local economy.
68	Security of employment	Noting that Stansted Airport claims to be the biggest single site employer in the East of England and 86% of its passengers are flying to and from the EU (2016), the	One EU airline accounts for 4 out of 5 Stansted passengers and so the loss of that airline, or a

		employment impact of a 'hard' Brexit and a 'no deal' Brexit should be assessed at a sub-regional level (i.e. the Employment Study Area) whereby EU airlines lost some, or even all, of their freedoms to operate from UK airports, and vice versa.	significant part of its business, is a risk which must be assessed, especially since the airline in question has shown itself to be footloose in the past, on at least three occasions removing all its aircraft from an established operating base, almost overnight.
HOUSING			
69	Impact on demand	The ES should include an assessment of the impact of the proposed development on the demand for housing, including the rented sector in Uttlesford and East Herts districts, analysed between different types of housing, for example 'affordable', flats, 1-2 bedroom houses, and 3+ bedroom houses.	To inform the overall assessment and to assist in planning.
70	Cost of housing impact	The impact on the housing market in Uttlesford and East Herts should be assessed, including the rented sector.	To consider the impact of the proposed development on the local economy.
ECONOMIC IMPACTS			
71	Regional and national impacts	The EIA should assess potential negative as well as positive effects, including: • At a national level, the impact of the proposed development on the UK balance of payments current account; • At a regional level, the opportunity costs of the proposed development in relation to alternative economic activities foregone or displaced. • Displacement effects on other London airports and other airports in the East of England. • The displacement impact on the UK domestic tourism industry.	Stansted mainly caters for UK residents taking leisure trips abroad and its 2015 throughput of 22.5mppa gave rise to an estimated trade deficit of £1.4 billion on the UK balance of payments current account. Doubling Stansted's throughput is likely to have a significant adverse impact on the UK trade deficit. It is also likely to adversely impact the domestic UK tourism industry since an increase in airport capacity will, *ceteris paribus*, result in cheaper air travel. Conversely, if there is no net increase in UK airport capacity this will mean that there has been a displacement effect, i.e. an opportunity cost for the development.
72	Economic resilience & sensitivity	In addition to assessing the employment impacts of a 'hard' Brexit and a 'no deal' Brexit (item 67 above), the wider economic impacts will also need to be assessed, in the event that EU airlines lost some, or even all, of their freedoms to operate from UK airports, and vice versa.	The impacts could be very significant since: • Stansted's main airline, accounting for 4 out of every 5 passengers, is an EU airline;

			• Stansted has the highest dependency on EU air travel of any major UK airport with 86% of its passengers flying to/from the EU in 2016.
CLIMATE CHANGE			
73	Impact on CO_2 and other emissions	The ES should provide a breakdown of carbon dioxide (CO_2) and other greenhouse gas (GHG) emissions in the base year and predictions for CO_2 and GHG emissions in the base case and for 2025, 2033 and 2040. For reasons explained below, the assessment of carbon emissions should also be carried out for 2050. In addition to aircraft emissions the assessment should include CO_2 emissions from: - vehicular traffic on site and airport surface access traffic; - total energy use on the airport site; - energy use in rail access; - water supply, and sewage disposal; and - energy use in construction, including manufacture and transport of materials to site.	To inform the assessment of CO_2 and other GHG emissions.
74	Government policy	The ES should include an explanation as to how the proposed development can be reconciled with: • The recommendations of the Climate Change Committee that UK aviation carbon emissions should be no higher in 2050 than they were in 2005 (i.e. 37.5mtCO2), "*without the use of international credits".* • The legally binding commitment under the Climate Change Act to reduce overall UK carbon emissions by 80% by 2050, compared to the 1990 baseline. • The 2016 Paris Agreement on tackling climate change which the UK Government has signed and now also ratified.	To examine the proposed development in the context of UK Government policy on tackling climate change.
75	Framework for UK aviation emissions	The ES should state the assumptions that have been made about carbon emissions to 2050 at other UK airports, with reference to the UK aviation emissions forecasts to 2050 produced by the DfT and the Airports Commission.	To examine the proposed development in the context of UK Government policy on tackling climate change.
76	ETS	The ES will need to provide the estimated split between flights covered by the EU Emissions Trading Scheme (ETS) and those not covered. The details should include numbers of movements, distances travelled and forecast carbon emissions. Again, this will need to be assessed for 2050 as well as the other assessment years.	To inform the assessment of climate impacts.
77	Post-Brexit ETS	The ES should state the assumptions made with regard to the applicability of the EU ETS, post Brexit.	To inform the assessment of climate impacts.

78	CORSIA	The ES should state the assumptions made concerning the operation of the ICAO Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) which is due to begin in 2021 on a voluntary basis and on a mandatory basis from 2027.	To inform the assessment of climate impacts.
HEALTH & WELLBEING			
79	Health impacts of aircraft noise	In considering the adverse health impacts of aircraft noise, the HIA must address the extensive body of academic evidence that people who are repeatedly disturbed by aircraft noise suffer sleep loss, fatigue and accidents from concentration failure, particularly when undertaking complex tasks, as well as a reduction in productivity. More recently, peer reviewed publications have shown that noise can adversely affect the cardiovascular system, inducing hypertension and vascular disease.	To inform the assessment of health and wellbeing impacts.
80	Children's education	Peer reviewed multinational studies show an adverse impact of aircraft noise upon cognitive development among primary school children living near airports, including the effects of 'jet pause'. Noise impacts on individual local primary and secondary schools should be identified and an assessment undertaken, which should include interviews with school staff, to establish the degree to which aircraft noise impacts may be impairing their teaching work and what mitigation may be possible.	To inform the assessment of health and wellbeing impacts.
81	Health impacts of aircraft pollution	The HIA should consider all of the evidence regarding the impact of particulate and other emissions that result from aircraft and airport-related road traffic in the vicinity of airports and assess the impact on cardiorespiratory morbidity and mortality.	To inform the assessment of health and wellbeing impacts.
82	Local impacts including stress and anxiety	The HIA should include profiling of local communities and should identify vulnerable groups and individuals. The views of local residents and other stakeholders should be sought and taken into account. For those living close to the airport and under flight paths, there should be specific assessment of the stress and anxiety impacts arising from the very presence of, as well as all the activities of, a large, busy airport.	To inform the assessment of health and wellbeing impacts.
83	St Elizabeth Centre	As part of the assessment of impacts upon vulnerable groups, there should be specific assessment of the effect upon the residents of the St Elizabeth Centre, Perry Green, Much Hadham.	It is known that, over the years, aircraft noise impacts have been problematic for residents of St Elizabeth's centre.
84	Mitigation	The HIA should identifying and recommend potential mitigation measures for each of the above aspects.	To examine the scope for mitigation.

QUALITY OF LIFE			
85	Assessment	The SR is dismissive of the value of a Quality of Life Assessment (QLA), but the Airports Commission considered this a valuable tool and the DfT has endorsed this approach. It is to misunderstand the nature of a QLA for RPS to claim that the EIA and HIA will cover all the same points. A QLA should therefore be carried out for the proposed development in line with the principles developed jointly by the Countryside Agency, English Nature, Historic England and the Environment Agency.	QLA is a valuable assessment tool and is particularly relevant in this case where there is a proposal for major airport development in a largely rural location.
PUBLIC SAFETY & RISK			
86	PSZs and vortex risks	Updated third party risk contours should be produced to show the 1 in 10,000 (10^{-4}) and 1 in 100,000 (10^{-5}) public safety zones (PSZs). Incidence of vortices and associated vortex strikes also needs to be assessed.	So that the risks to local residents are clear, having regard to past events at Stansted.
87	Home purchase	The ES should state whether STAL would offer to purchase properties from homeowners within the new 1 in 100,000 risk contour and, if so, on what terms.	For clarification.
WATER & SEWAGE			
88	Water consumption	The ES should provide details of potable water consumption on the airport site for the base year, the base case and each of the assessment years. Monthly demand projections should be provided. The ES should also include estimates of the indirect and induced effects of the proposed development on water consumption and of cumulative impacts across the region, having regard to the scale of housing development currently underway and planned.	To enable the strategic water consumption implications of the proposed development to be assessed, taking account of the wider demands that will be placed upon scarce water resources across the region over the period to 2040.
89	Peak water demand	The ES should show peak day and peak week demand for potable water	To ensure adequate potable water supply arrangements are in place.
90	Water availability	The ES should provide evidence that any increase in the need for potable water at the airport can be supplied without detriment to other users.	To ensure adequate potable water supply arrangements are in place.
91	Efficient use of water	The ES should set out the measures that will be introduced to improve water efficiency (litres per passenger) across the airport site.	To encourage efficient use of a scarce regional resource.
92	Airport tenants	The ES should explain the measures that STAL would introduce to improve water efficiency not only within its own operations but also in relation to the operations of airport businesses such as hotels, offices, cargo warehouses, maintenance hangers etc.	To encourage efficient use of a scarce regional resource.
93	Climate change - rainfall effects	The EIA should consider the forecast impacts of Climate Change on rainfall patterns across the region, having regard to the modelling studies carried out by the Climatic Research Unit at the University of East Anglia.	To ensure that the longer term outlook for regional water resources is taken into account in the EIA.

94	Waste water	The ES should provide evidence that adequate capacity exists, or will be put in place, to deal with any increase in sewage and waste water discharges arising from the proposed development.	To ensure adequate waste water capacity is in place.
95	Consultees	Confirmation should be sought from Thames Water Utilities Ltd and Veolia UK Ltd that they have the capacity to support the proposed development and are content to support it, subject to any conditions they would wish to attach (with any such conditions to be stated).	To have confirmation that adequate potable water and waste water capacity is in place.
ENERGY & WASTE			
96	Efficient use of resources	The ES should include an assessment of energy usage and of the implications for waste. The ES should state what measures are intended to improve energy efficiency and to improve on waste recycling.	To encourage efficient use of resources.
97	Airport tenants	The ES should explain the measures that STAL would introduce to improve energy efficiency and reduce waste not only within its own operations but also in relation to the operations of airport businesses such as hotels, offices, cargo warehouses, maintenance hangers etc.	To encourage efficient use of resources.
98	Waste from aircraft	The ES should set out what proportion of waste left by passengers on aircraft is currently recycled and what new measures are planned to improve the rate of recycling of waste left by passengers on aircraft.	To encourage increased waste recycling.
ARCHAEOLOGY			
99	Investigation	The recommendations of the Principal Historic Environment Advisor, Essex County Council, in his letter of 8 June 2017, should be followed.	To ensure appropriate archaeological investigation of the sites for the RET, RAT and new apron and stand developments.
NATURE CONSERVATION – see also items 55 & 56 under the AIR QUALITY heading (above).			
100	Duty to protect biodiversity	In line with the ecology advice provided by Essex County Council and to comply with the local authority's statutory duty to protect biodiversity under s.40 of the Natural Environment and Rural Communities Act 2006, a survey and assessment must be carried out of priority habitats and both protected and priority species. The assessment needs to include not only the land area within the airport boundary but also Hatfield Forest SSSI and NNR and Elsenham Woods SSSI.	To comply with the local authority's statutory duty to protect biodiversity under s.40 of the NERC.
101	Important habitats inside the airport boundary	Important habitats inside the airport boundary, which will need to form part of the assessment, include: - an eight-acre 'Wildlife Area' established as a mitigation measure some 30 years ago;	To comply with the local authority's statutory duty to protect biodiversity under s.40 of the NERC.

		- a small area of ancient woodland; - more recent woodlands and copses; - ancient and other hedges; - a small fen; - several ponds, some of which support great crested newts; and - a small area of long established grassland.	
102	Scope of the ecology survey	In line with earlier surveys carried out on behalf of Stansted Airport Ltd by Penny Anderson Associates (PAA) the features and species which need to be surveyed should include: - breeding birds; - badgers; - water voles; - bats; - brown hares; - deer; - reptiles; - amphibians; - aquatic and terrestrial invertebrates; and - plants, including mosses and lichens.	To comply with the local authority's statutory duty to protect biodiversity under s.40 of the NERC.
103	Audit	The ecological habitat audit for the airport, previously carried out for STAL by PAA should be updated and included in the ES.	To ensure that all likely ecological issues are included in the survey and assessment.
104	Mitigation	The ES should include mitigation measures to minimise the impacts as well as identify compensation and offsetting measures, including the establishment of new habitats outside of the present airport boundary.	To mitigate the ecological impacts and seek to protect biodiversity.
LANDSCAPE & VISUAL IMPACT			
105	Visual impact	The ES should include an assessment of the visual impact of the new works associated with the application, including the construction of the new RAT, RET and aircraft stands. As a minimum this should show north, south, east and west viewpoints. Any loss of landscape features should be identified.	To ensure that the landscape and visual impacts are clearly understood.
106	Impacts at night	The ES should include an assessment of the night-time visual impact of the new works associated with the application, again for a minimum of north, south, east and west viewpoints.	To ensure that the landscape and visual impacts are clearly understood.

107	Light pollution	The ES should include an assessment of light pollution and set out any proposed mitigation	To understand the impact on light pollution and to seek to mitigate this.
108	Cumulative impacts	The assessment of landscape and visual impacts should also include the impacts of the new airport arrivals building, which STAL intends to build over the next three years.	So that the cumulative impact is assessed.
109	Mitigation	The ES should set out all the intended measures to mitigate the landscape and visual impacts of the proposed development.	To assess the extent to which landscape and visual impacts can be mitigated.