

Public Document Pack

# Special Meeting of Planning and Rights of Way Panel

Tuesday, 28th January,  
2020

at 6.00 pm

**PLEASE NOTE TIME OF MEETING**

Council Chamber - Civic Centre

This meeting is open to the public

## **Members**

Councillor Savage (Chair)  
Councillor Mitchell (Vice-Chair)  
Councillor Coombs  
Councillor G Galton  
Councillor L Harris  
Councillor Vaughan  
Councillor Windle

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## **PUBLIC INFORMATION**

### **ROLE OF THE PLANNING AND RIGHTS OF WAY PANEL**

The Panel deals with various planning and rights of way functions. It determines planning applications and is consulted on proposals for the draft development plan.

### **PUBLIC REPRESENTATIONS**

Procedure / Public Representations

At the discretion of the Chair, members of the public may address the meeting on any report included on the agenda in which they have a relevant interest. Any member of the public wishing to address the meeting should advise the Democratic Support Officer (DSO) whose contact details are on the front sheet of the agenda.

The Southampton City Council Strategy (2016-2020) is a key document and sets out the four key outcomes that make up our vision.

- Southampton has strong and sustainable economic growth
- Children and young people get a good start in life
- People in Southampton live safe, healthy, independent lives
- Southampton is an attractive modern City, where people are proud to live and work

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### **Dates of Meetings: Municipal Year 2019/2020**

<b>2019</b>	
4 June	17 September
25 June	15 October
16 July	12 November
6 August	10 December
31 August	

<b>2020</b>	
14 January	31 March
11 February	21 April
10 March	

## CONDUCT OF MEETING

### TERMS OF REFERENCE

The terms of reference of the Planning and Rights of Way Panel are contained in Part 3 (Schedule 2) of the Council's Constitution

### BUSINESS TO BE DISCUSSED

Only those items listed on the attached agenda may be considered at this meeting.

### RULES OF PROCEDURE

The meeting is governed by the Council Procedure Rules as set out in Part 4 of the Constitution.

### QUORUM

The minimum number of appointed Members required to be in attendance to hold the meeting is 3.

## DISCLOSURE OF INTERESTS

Members are required to disclose, in accordance with the Members' Code of Conduct, **both** the existence **and** nature of any "Disclosable Pecuniary Interest" or "Other Interest" they may have in relation to matters for consideration on this Agenda.

### DISCLOSABLE PECUNIARY INTERESTS

A Member must regard himself or herself as having a Disclosable Pecuniary Interest in any matter that they or their spouse, partner, a person they are living with as husband or wife, or a person with whom they are living as if they were a civil partner in relation to:

- (i) Any employment, office, trade, profession or vocation carried on for profit or gain.
- (ii) Sponsorship:  
Any payment or provision of any other financial benefit (other than from Southampton City Council) made or provided within the relevant period in respect of any expense incurred by you in carrying out duties as a member, or towards your election expenses. This includes any payment or financial benefit from a trade union within the meaning of the Trade Union and Labour Relations (Consolidation) Act 1992.
- (iii) Any contract which is made between you / your spouse etc (or a body in which the you / your spouse etc has a beneficial interest) and Southampton City Council under which goods or services are to be provided or works are to be executed, and which has not been fully discharged.
- (iv) Any beneficial interest in land which is within the area of Southampton.
- (v) Any license (held alone or jointly with others) to occupy land in the area of Southampton for a month or longer.
- (vi) Any tenancy where (to your knowledge) the landlord is Southampton City Council and the tenant is a body in which you / your spouse etc has a beneficial interests.
- (vii) Any beneficial interest in securities of a body where that body (to your knowledge) has a place of business or land in the area of Southampton, and either:
  - a) the total nominal value of the securities exceeds £25,000 or one hundredth of the total issued share capital of that body, or
  - b) if the share capital of that body is of more than one class, the total nominal value of the shares of any one class in which you / your spouse etc has a beneficial interest that exceeds one hundredth of the total issued share capital of that class.

## **OTHER INTERESTS**

A Member must regard himself or herself as having an, 'Other Interest' in any membership of, or occupation of a position of general control or management in:

Any body to which they have been appointed or nominated by Southampton City Council

Any public authority or body exercising functions of a public nature

Any body directed to charitable purposes

Any body whose principal purpose includes the influence of public opinion or policy

## **PRINCIPLES OF DECISION MAKING**

All decisions of the Council will be made in accordance with the following principles:-

- proportionality (i.e. the action must be proportionate to the desired outcome);
- due consultation and the taking of professional advice from officers;
- respect for human rights;
- a presumption in favour of openness, accountability and transparency;
- setting out what options have been considered;
- setting out reasons for the decision; and
- clarity of aims and desired outcomes.

In exercising discretion, the decision maker must:

- understand the law that regulates the decision making power and gives effect to it. The decision-maker must direct itself properly in law;
- take into account all relevant matters (those matters which the law requires the authority as a matter of legal obligation to take into account);
- leave out of account irrelevant considerations;
- act for a proper purpose, exercising its powers for the public good;
- not reach a decision which no authority acting reasonably could reach, (also known as the "rationality" or "taking leave of your senses" principle);
- comply with the rule that local government finance is to be conducted on an annual basis. Save to the extent authorised by Parliament, 'live now, pay later' and forward funding are unlawful; and
- act with procedural propriety in accordance with the rules of fairness.

## **AGENDA**

### **1 APOLOGIES AND CHANGES IN PANEL MEMBERSHIP (IF ANY)**

To note any changes in membership of the Panel made in accordance with Council Procedure Rule 4.3.

### **2 DISCLOSURE OF PERSONAL AND PECUNIARY INTERESTS**

In accordance with the Localism Act 2011, and the Council's Code of Conduct, Members to disclose any personal or pecuniary interests in any matter included on the agenda for this meeting.

### **3 STATEMENT FROM THE CHAIR**

### **4 SOUTHAMPTON INTERNATIONAL AIRPORT (Pages 1 - 32)**

Report of Head of Planning and Economic Development setting out considerations relating to the Council's response to Eastleigh Borough Council's consultation in relation to Southampton Airport.

Monday, 20 January 2020

Director of Legal and Governance

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# Agenda Item 4

## Planning and Rights of Way Panel 28 January 2020 Planning Application Report of the Head of Planning & Economic Development

<b>Application address:</b> Southampton International Airport			
<b>Consultation from Eastleigh Borough Council regarding a planning application at Southampton Airport for the following development proposal:</b> Construction of a 164 metre runway extension at the northern end of the existing runway, associated blast screen to the north of the proposed runway extension, removal of existing bund and the reconfiguration and extension of existing long stay car parking to the east and west of Mitchell Way to provide an additional 600 spaces. (This application is subject to an Environmental Impact Assessment)			
<b>Application number</b>	19/02021/CONSUL	<b>Application type</b>	Consultation
<b>Case officer</b>	Andrew Gregory	<b>Public speaking time</b>	15 minutes
<b>Last date for determination:</b>	03 February 2020	<b>Ward</b>	N/A Eastleigh Borough
<b>Reason for Panel Referral:</b>	At the Full Council meeting on 20 November 2019 it was advised that the final decision on this consultation response would be made by the Planning and Rights of Way Panel.	<b>Ward Councillors (Swaythling and Bitterne Park Wards)</b>	Cllr Fuller Cllr Harwood Cllr White Cllr Mintoff Cllr Bunday Cllr Fielker

<b>Applicant:</b> Southampton International Airport Ltd	<b>Agent:</b> Savills
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<b>Recommendation Summary</b>	<b>Holding Objection</b>
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<b>Appendix attached</b>	
1	Peer Review of Noise Impact Assessment by 24 Acoustics

### Recommendation in Full

Instruct the Head of Planning & Economic Development to:

1. Prepare and submit a holding objection on behalf of Southampton City Council to Eastleigh Borough Council ahead of them determining their planning application ref F/19/86707. The response shall include this report including Appendices and the redacted comments of residents received by Southampton City Council and seeks an opportunity to comment further should the application be significantly amended ahead of its determination.
2. To respond to any subsequent consultation from Eastleigh Borough Council in consultation with the Chair of the Planning and Rights of Way Panel.

## **Holding Objection**

### Reason for holding objection

The National Planning Policy Framework indicates that social, economic and environmental objectives are interdependent and need to be pursued in mutually supportive ways in order to achieve sustainable development. Southampton City Council supports the sustainable growth of Southampton Airport to ensure it remains a competitive and viable regional airport within the South East and welcomes the associated benefits to the regional economy and tourism. However planning applications for development which facilitate this growth must be assessed against these three interdependent social, economic and environmental objectives of the National Planning Policy Framework.

The proposed runway extension would facilitate a level of forecasted growth in Air Transport Movements (ATMs) that would be at odds with the Independent advice to government from the Committee on Climate Change on building a low-carbon economy and preparing for climate change. Furthermore the forecasted amount and frequency of aircraft departing to the south and arriving from the south over Southampton, would have a predicted significant adverse noise effect on 350 households by 2021 and 700 households in 2037, with the majority of these households located within Southampton.

The proposed mitigation measures/controls relating to forecasted carbon emissions and noise impact are not alone sufficient in order to address these concerns. Southampton City Council recommends that robust control measures should be put in place to limit Air Transport Movements to achieve better alignment with the recommendations of the Committee on Climate Change and improved clarification on noise mitigation arrangements is sought to reduce the noise impact on residents of Bitterne Park. It should be noted that other airports, such as London Southend Airport, are subject to controls on ATMs through a S106 legal agreement, which do not require the Local Authority to close the airport, prevent tickets being sold or aircraft taking off.

Finally, it is evident from the Council's own consultation in respect of local residents and relevant consultees, as set out in this report, that the planning application requires further clarification, as set out within paragraph 6.2 of this report, before a fully informed planning decision can be made.

### Background

Southampton Airport Ltd have submitted a planning application to Eastleigh Borough Council (EBC) for development to facilitate the first phase of its masterplan growth up to 2027. The majority of the airport site and the land associated with this planning application (as defined by the red line boundary) falls within the administrative boundary of Eastleigh Borough Council. The southern part of the airport falls within the administrative boundary of Southampton, however this part of the airport is outside of the planning application site and is shown as blue land (land owned by the airport but not forming part of the development site). Southampton City Council have been consulted as a neighbouring authority which is adjacent to the application site and have until the 03 February to provide formal comments to EBC.

EBC will determine the application in line with their own Development Plan taking into account any other material considerations. Southampton City Council response will be one such material consideration and should be afforded due weight as part of EBC decision making process.



As Southampton City Council is a consultee, rather than the determining authority, the council is not under any statutory obligation to undertake any public consultation. Generally the Council's consultation responses to developments in neighbouring authorities are carried out under delegated authority and are not informed by public comments. However, in this instance, the scale and extent of the residual effects of the airport expansion (having particular regard to noise, climate change and air pollution) is such that it will have significant impacts on Southampton and its citizens. The Panel should note that the Environmental Statement supporting the Planning Application indicates that 5,400 households are currently affected by adverse noise impacts from the airport, 13,350 households would be affected by adverse noise impact from the first phase of master plan growth from 2021 and a total of 18,400 households would be affected up to 2037, with the majority of households predicted to experience an increase in aviation noise located to the south of the airport in Bitterne Park.

The Council has undertaken its own public consultation to allow the public to provide comments to inform the Council's consultation response. The extent of the public consultation included sending notification letters to 287 addresses, including residents to the south of the runway that would be most affected by the forecasted change in the noise environment and some members of the public who attended the Full Council meeting on 20 November 2019 (those who registered and left contact details).

At the Full Council meeting, the Council's Solicitor advised that the appropriate process to consider and decide on the Council's consultation response should be at a public meeting of the Planning and Rights of Way Panel.

## **1 The site and its context**

- 1.1 Southampton Airport is located to the north of the north of the M27 with the majority of the airport site and site access within Eastleigh Borough. The southern end of the airport site falls within the administrative boundary of Southampton (this area located outside of the planning application site but is within the control of Southampton Airport). The airport has good transport connections with Southampton Parkway Railway Station located adjacent to the western side of the airport and vehicular access is located close proximity to junction 05 of the M27.
- 1.2 Public open space is located due south of the M27 (Itchen Valley Country Park, Mansbridge Recreation Ground, Marlhill Copse and Riverside Park. Residential properties are located further south within Bitterne Park Ward and to the south west within Swaythling Ward.
- 1.3 Planes taking off/arriving to/from the south track over a significant area of housing within Bitterne Park Ward between the airport and the River Itchen. Bitterne Park School is also located within this area of housing. The application submission indicates there are approximately 5, 400 households currently effected by aircraft noise (above a contour noise level of 54db), the majority of these households are located in Bishopstoke to the north–east (within EBC boundary) and Townhill Park/Bitterne Park/Swaythling to the south.

## 2 **Proposal**

- 2.1 The planning application seeks permission for an extension to the northern end of the runway, associated blast screen and additional 600 long stay car parking to facilitate the first stage of the proposed airport masterplan growth up to 2027.
- 2.2 Southampton Airport Masterplan sets out the airport operator's vision for growth up to 2037 as set out within Table 1 below. Please note that the planning application has revised down the forecasted growth in passenger numbers up to 2027 to 3 million (50% increase over 2017). The employment forecasts set out within the planning application have also increased the employment figures to 1350 staff up to 2027 (42% increase over 2015).

**Table 1 – Summary**

	<b>2017</b>	<b>2027</b>	<b>2037</b>
<b>Air Transport Movements (ATMs)</b>	39,300	53,100 (35% increase over 2017)	57,800 (47% increase over 2017)
<b>Passenger Forecasts</b>	2 million	4 million (100% increase over 2017)	5 million (150% increase over 2017)

	<b>2015</b>	<b>2027</b>	<b>2037</b>
<b>Economic Contribution</b>	£161 million	£325 million (101% increase over 2015)	£400 million (148% increase over 2015)
<b>Staff employed at the airport</b>	950	1,200 (26% increase over 2015)	1,500 (58% increase over 2015)

- 2.3 The airport masterplan indicates that due to the short length of the existing runway, Southampton Airport currently has a limited route network range with services primarily provided by regional airlines such as Flybe operating medium sized (70-120 seats) regional aircraft such as Bombardier Q400 and Embraer 175/195 jets. The main assumption made for the medium term forecast is that a runway starter extension would allow larger narrow-body aircraft, such as the Airbus A319/A320 and Boeing 737-800 with 150-190 seats, to operate without major restrictions to a more distant and much wider route network from Southampton Airport, covering a range of European destinations.
- 2.4 With the provision of a runway starter extension and opportunity for larger aircraft, Southampton Airport seek to capture a much larger proportion of the demand from its catchment area for the short-haul European market.
- 2.5 The proposed runway extension would extend the runway by 164 metres, at the northern end. This would allow larger aircraft such as the Airbus A320 and Boeing 737 passenger from taking off in a southerly direction, across Southampton, to reach wider holiday market and business destinations within southern Europe.

- 2.6 The application submission indicates the runway extension would only facilitate the first phase of the masterplan growth up to 2027. The airport indicate that extension to the terminal building and further car parking beyond the 600 spaces proposed would be required to facilitate growth beyond 2027 up to 2037 and that these works, along with increased capacity of supporting infrastructure would be considered as part of a future separate planning application. That said, the current submission indicates that the proposed extended runway would accommodate the forecasted 57,800 ATM's by 2037 without requiring any further Terminal extension and, therefore, this current application assesses the ecology, air quality and noise impacts up to the 2037 growth scenario.

### **3 Relevant Planning Policy**

#### SCC Planning Policy Team

- 3.1 The Planning Policy Team considers that the proposal to extend the airport will not present any significant harm to the strategic gap between Southampton and Eastleigh and acknowledges the fact that the development is likely to have a positive impact upon the economic growth of both Southampton and Eastleigh. In light of this, the Planning Policy Team supports the proposal as a whole.
- 3.2 However, given the proximity of the site to the River Itchen, which is of both national and international conservation importance, as well as consideration towards the existing congestion experienced on both the M27 and A335, which surround the site and provide a key transport network to and from the airport, the Planning Policy Team request that conservation and highways impacts are thoroughly assessed by Eastleigh Borough Council during the decision-making process, in partnership with Highways England and Hampshire County Council and Southampton City Council Transport/Highways departments where necessary. Furthermore, in the interest of promoting and enhancing sub regional economic growth the runway extension, if it includes a northern extension, should safeguard the physical ability to provide the Chickenhall Lane Link Road so as to enable what is a significant new employment allocation north east of the site to be opened up.
- 3.3 Finally, as the site is situated between two distinct residential areas (north and south of the site) careful consideration should be made to the increased noise, vibration and late night disturbance that may result from the airport hosting larger aircrafts; any increase to flight frequencies over time; and the additional vehicular traffic on the surrounding road networks and how these may affect the amenity of local residents.
- 3.4 In light of the above, the proposal for 'development of a 170 metre starter strip, new taxiway, tunnel safeguarding works, terminal expansion and additional car parking on Mitchell Way' is supported by the Planning Policy Team, subject to the considerations aforementioned. All other considerations relating to the proposal are for Eastleigh Borough Council to address.

#### National Planning Policy Framework (2019)

- 3.5 The National Planning Policy Framework (NPPF) indicates that the purpose of the planning system is to contribute to the achievement of sustainable development which, at a very high level, can be summarised as meeting the needs of the present without compromising the ability of future generations to meet their own needs to pursue interdependent.

In order to achieve this the planning system is required to pursue interdependent overarching economic, social and environment objectives in mutually supportive ways. In the context of this proposal, the economic benefits of the airport expansion, which includes contribution to employment and tourism, needs to be balanced with its impacts on the health and well-being of local communities and environmental impacts on biodiversity and climate change.

- 3.6 Paragraph 24 of the NPPF indicates that Local planning authorities are under a duty to cooperate with each other, and with other prescribed bodies, on strategic matters that cross administrative boundaries. This is particularly important because the benefits and dis-benefits arising from this airport expansion have significant impacts beyond the administrative boundary of Eastleigh Borough Council, particularly on Southampton and its citizens. Therefore Eastleigh Borough Council must consider the wider impacts and have regard to other material considerations and not just development policies which relate to Eastleigh Borough alone.

Aviation Policy Framework (2013)

- 3.7 The aviation policy framework (AVP) sets out the government's policy to allow the aviation sector to continue to make a significant contribution to economic growth across the country, whilst respecting the environment and protecting quality of life. Para 5.6 of the AVP indicates that this policy framework may be a material consideration in planning decisions depending on the circumstances of the case.
- 3.8 Paragraph 05 of the AVP indicates:  
*"The Government's primary objective is to achieve long-term economic growth. The aviation sector is a major contributor to the economy and we support its growth within a framework which maintains a balance between the benefits of aviation and its costs, particularly its contribution to climate change and noise. It is equally important that the aviation industry has confidence that the framework is sufficiently stable to underpin long-term planning and investment in aircraft and infrastructure."*
- 3.9 In respect of the environmental impacts on aviation the AVP acknowledges that the environmental impacts from aviation are both global (climate change) and local (primarily noise, as well as air pollution and surface access traffic congestion). In respect of climate change the AVP seeks to ensure the aviation sector makes a significant and cost effective contribution towards reducing global emissions (para 12 refers).
- 3.10 The AVP indicates that the overall objective on noise is to limit and where possible reduce the number of people in the UK significantly affected by aircraft noise. The AVP makes clear that the acceptability of growth in aviation depends to large extent on the industry continuing to tackle its noise impact and confirms that the Government expects the industry at all levels to continue to address noise.
- 3.11 The AVP provides guidance on the noise levels which should be used when assessing the impact of aviation noise on communities. The Government treats the 57db LAeq 16 hour contour as the average level of day time aircraft noise making the approximate onset of significant community annoyance.

Acoustic insulation mitigation should be offered to noise-sensitive buildings such as schools and hospitals, and can include households, which are subject to noise levels of 63db LAeq 16h. The AVP goes on to indicate that the Government expects operators to offer households exposed to noise levels of 69db LAeq, 16h or more, assistance with the costs of moving.

3.12 Airports National Policy Statement: new runway capacity and infrastructure at airports in the South East of England (2018)

The Airports NPS provides the primary basis for decision making on development consent applications for a Northwest Runway at Heathrow Airport, and will be an important and relevant consideration in respect of applications for new runway capacity and other airport infrastructure in London and the South East of England. Other NPSs may also be relevant to decisions on airport capacity in this geographical area.

3.13 The Airports NPS indicates that on 25 October 2016, the Government announced that its preferred scheme to meet the need for new airport capacity in the South East of England was a Northwest Runway at Heathrow Airport. This is an important factor when deciding on the weight to give to the need for expansion of this regional airport as part of the overall planning balance.

3.14 The Airport NPS provides guidance on the assessment of planning applications in relation to key issues such as carbon emissions, noise, air quality, surface access and biodiversity.

In respect of Noise impacts, paragraph 5.68 of the Airport NPS indicates: *“Development consent should not be granted unless the Secretary of State is satisfied that the proposals will meet the following aims for the effective management and control of noise, within the context of Government policy on sustainable development:*

- *Avoid significant adverse impacts on health and quality of life from noise;*
- *Mitigate and minimise adverse impacts on health and quality of life from noise; and*
- *Where possible, contribute to improvements to health and quality of life.”*

3.15 In respect of Carbon emissions, paragraph 5.82 of the Airport NPS indicates that:

*“Any increase in carbon emissions alone is not a reason to refuse development consent, unless the increase in carbon emissions resulting from the project is so significant that it would have a material impact on the ability of Government to meet its carbon reduction targets, including carbon budgets.”*

Noise Policy Statement for England (March 2010)

3.16 The Noise Policy Statement (NPS) is the overarching noise policy for England and introduced the three concepts for the assessment of noise in the UK:

- NOEL – No Observed Effect Level – this is the level below which no effect can be detected.
- LOAEL – This is the level above which adverse effects on health and quality of life can be detected.
- SOAEL – Significant Observed Adverse Effect Level – this is the level above which significant adverse effects on health and quality of life occur.

- 3.17 These levels are not defined numerically in the NPS but they are included within the Planning Practice Guidance for Noise (PPG) as an example of a way in which noise may be categorised and assessed.

### **Other material considerations**

- 3.18 Committee on Climate Change Letter: International aviation and shipping and net zero (September 2019)  
The Committee on Climate Change (the CCC) is an independent, statutory body established under the Climate Change Act 2008. Their purpose is to advise the UK Government and Devolved Administrations on emissions targets and report to Parliament on progress made in reducing greenhouse gas emissions and preparing for climate change.
- 3.19 On 24 September 2019 the CCC wrote to the Secretary of State for Transport responding to the Governments request on how to bring international aviation and shipping emissions formally within the UK' net zero target by 2050. The letter indicates that zero carbon aviation is highly unlikely to be feasible by 2050. However emissions could be reduced by around 20% from today to 2050 through improvements in fuel efficiency, some use of sustainable biofuels and by limiting demand growth at 25% above current levels.
- 3.20 The CCC indicate that measures should be put in place to limit growth in aviation demand to at most 25% above current levels by 2050. These could include carbon fixing, a frequent flyer levy, fiscal measures to ensure aviation is not undertaxed, reforms to Air Passenger Duty or management of airport capacity.
- 3.21 The letter goes on to indicate that the Government should assess its airport capacity strategy in the context of net zero carbon. Indicating that current planned additional airport capacity in London, including the third runway at Heathrow, is likely to leave at most very limited room for growth at non-London airports.

### **Green City Charter for Southampton**

- 3.22 The Council's Green City Charter sets out the challenging goals to make Southampton a cleaner, green, healthier and more sustainable city. This includes goals to reach carbon neutrality by 2030 and to see a reduction in emissions with nitrogen dioxide levels of 25 µg/m<sup>3</sup> as the norm by 2025.

## **4 Consultation Responses and Notification Representations**

- 4.1 Following receipt of the application, and their own consultation, Eastleigh Borough Council erected 4 site notices within the administrative boundary of Southampton, providing notification of the public consultation on the planning application. The planning application submission indicates the airport also carried out pre-application public consultation, including a meeting at Bitterne Park School on 29.10.19, it is however unclear whether the airport have carried out any targeted consultation to households that will be affected by a change in noise environment within the city boundary.

4.2 This Council has undertaken its own public consultation to allow the public to provide comments to inform the Council's consultation response. The extent of the public consultation included sending notification letters on 05 December 2019 to 287 addresses, including residents to the south of the runway that would be most affected by the forecasted change in noise environment. Notification was also given to those that attended the Full Council meeting on 20 November 2019 and registered with contact details. In response to SCC's notification a total of **82 objections** have been received which are summarised as follows:

- More noise pollution (5600 local people are already living with levels of noise that are double those recommended by the WHO for airport emissions);
- Increased air pollution (from both flights and associated traffic increases);
- Worse road congestion;
- Increased greenhouse gas emissions (inconsistent with achieving zero net carbon by 2050 - flight numbers need to be cut, not increased, to prevent climate breakdown);
- Few, if any, benefits for Southampton residents (we get a worse quality of life to enable more flights);

In addition:

- The promise of low-paid jobs is not enough to cover the cost to us, as council tax payers, of all the above;
- Flights from Southampton are decreasing anyway, and if Heathrow is expanded regional airports will lose traffic, making expansion of Southampton unnecessary;
- More flights will undermine Southampton City Council's own Green City Charter and make a mockery of the Council's efforts to achieve a low carbon future for our city.

4.3 A redacted copy of all 82 representations received will be forwarded to Eastleigh Borough Council as part of the Council's consultation response.

### **Consultation Responses**

#### **4.4 SCC Highways: Holding Objection**

Connected Southampton 2040 Transport Strategy (LTP4) sets out the long-term transport vision and strategy to support sustainable economic growth in Southampton. It identifies Southampton Airport as one of the main Economic Drivers for the City Region as an international gateway. For sustainable economic growth the Airport needs to have improved access by public transport and active travel.

More information is required in order to determine the impact that the proposals would have on the local highway network. The application states that the proposals would facilitate an increase of passengers using the airport from 2 million passengers per annum (mppa) to 3mppa and the Solent Sub-Regional Transport Model (SRTM) has been utilised to determine the level of trip generation that would result from such an increase.

However, this estimated trip generation has not been corroborated with existing data and as such this is required before the impact of the increased passenger numbers can be fully assessed.

Furthermore the impact of the 600 space car park has not been considered within the Transport Assessment. This significant increase in parking spaces at the airport will have an impact on travel behaviour which hasn't been addressed within the assessment. In particular the justification for using the SRTM 'DS3' scenario uses the modal split reported from a 2018 travel survey. This was a key element in determining that the modelled 2.66mppa in the SRTM is comparable to the new projected increase to 3mppa. Should travel behaviour to and from the airport change as a result of the car park then these assumptions may not be correct. Other assumptions have been made in determining that the SRTM DS3 scenario includes traffic associated with 3mppa that require additional justification or clarification should this be used as a basis for assessment, including:

- It is not clear how the modal split data has been used to revise the mppa covered by the SRTM traffic flows. It is noted that the surveyed modal split shows a higher public transport share than the SRTM assumptions, however the assessment then goes on to retain the total mppa using highway trips whilst using the surveyed modal split proportion to add additional mppa using public transport. The reasoning behind this is not set out.
- The assessment notes that the SRTM does not determine which trips are two-way (for example someone dropping off a passenger by car so arrives and departs within an hour) and which are one way (a passenger parking at the airport) which could underestimate the number of passengers per trip and to address this a 50/50 split in the taxi mode share between two-way trips and one way trips has been assumed. This is on the basis that all 'off site' taxis (i.e. not airport based) would be one way trips however it is not clear what this is based upon, for example is it assumed that all taxis drop off one fare and then wait at the airport to pick up another fare?
- Finally the assessment then considers vehicle occupancy rates between when the SRTM was constructed and now which show a 16% increase in occupancy. It would be useful to show vehicle occupancy rates for other years if available in order to understand if this is part of a trend for an increase in vehicle occupancy at the airport or whether one or both figures are anomalous and therefore whether using the 16% figure is appropriate. In addition more information on the surveys (and the 2018 survey on which the modal split data is based) is required, for example were the vehicle occupancy surveys undertaken at the same times of year (as occupancy rates could be higher during school holidays) and how was the data collected.

The majority of the junctions assessed are in Hampshire or affect the M27, and we would expect Hampshire County Council and Highways England to comment on these. Whilst the A27/Wide Lane and the Wide Lane/A335/Wessex Lane/Stoneham Way junctions in Southampton have been modelled as requested there is no current year baseline in order for the models to be validated. As such turning count data and queue length surveys are required and a current year baseline model should be provided to demonstrate that the model is predicting the impact of future traffic growth and the proposals accurately. In addition the model for the A27/Wide Lane junction should be reviewed. Whilst it is acknowledged that the junction could be impacted upon by the operation of the Wide Lane/A335/Wessex Lane/Stoneham Way junction, the LinSig model as it



stands does not seem to accurately model the roundabout junction, particularly underestimating queuing on the Mansbridge Road in the AM peak.

More information is needed on sustainable travel – walking, cycling, bus and rail – given the proximity of the Airport to Southampton Airport Parkway station which has frequent connections to Southampton Central Station. Likewise, there is little on staff journeys to work who may be coming from Southampton to work at the Airport – this can be covered within a staff travel plan but commitments of action/delivery plans should be considered to further reduce the need for private car travel.

Whilst mitigation options cannot be determined given the impact of the proposals is not confirmed, it is expected that further information on sustainable and active travel access for both passengers and staff and a Travel Plan be provided as part of this application as requested at the pre-application scoping stage.

It is noted that the Transport Assessment includes a commitment to prepare a Travel Plan however a document should be submitted setting out the targets for sustainable travel mode share and how the current mode share can be improved upon.

It is noted that the runway extension will allow sufficient aircraft movements to accommodate 5mppa. However due to the size of the current buildings, only 3mppa can be accommodated and therefore impact from only 3mppa have been assessed. There is little information on why this is and whether flight schedules or management can affect how many passengers can be accommodated by the current buildings. Sufficient measures should be included to ensure that passenger numbers do not exceed 3mppa and to allow for the assessment of 5mppa when it appropriate - whether that would be a suitably worded condition and/or assurance this would be assessed if a future application is submitted for the building expansions.

At this stage without further information, Highways cannot support the application.

#### **4.5 SCC Economic Development Manager: No objection**

Economic Development response to 'The Economic Impact of Southampton Airport' – October 2019 by Steer Davies Gleave (SDG).

SDG use a standard desk-based methodology based on direct, indirect and induced impacts. The study also partly considers catalytic impacts. It is widely agreed that such impacts are more difficult to assess and so SDG has sought to rely on qualitative evidence. In addition business representations into the consultation process may describe some catalytic benefits.

Based on direct, indirect and induced impacts analysis in Figure 5.3 of the value (£ millions) of the 'expansion of air services' (section 5.8) in the years 2019, 2020 and 2021 is marked as the value of these services increases from the 'Future baseline' trajectory to nearly £300 million. This circa £100 million value uplift is significant and it is questionable if this sum can solely correspond to a projected 'expansion of air services' alone. The capital investment associated with construction works for value may support this marked projected uplift if accounted for in these calculations as direct impact.

The main point is that a £100m uplift in the value of services over such a short period of time is contingent on the delivery of the wider masterplan which, we assume, is also contingent on an additional application to expand the terminal and new transport investment.

The analysis does not describe if any new pipeline or current transport investments on the M27, by Highways England, will contribute or support the 'Future vision' based on wider master plan delivery. An indication of an intermediate scenario might help to balance the baseline and visionary positions.

On catalytic benefits SDG could potentially have provided more clarity by describing the relationship between business investment, wages and productivity growth particularly in terms of Foreign Direct Investment (FDI). FDI could reenergise the office market in Southampton, helping to diversify and further rebalance the economy toward higher value private sector services.

Overall Southampton is a small regional airport requiring investment to ensure new air services are offered to support the future growth of the Solent and the city regions to compete with other major employment centres in the South East or the rest of the UK.

#### 4.6 **Environmental Health (Noise): Objection**

Southampton City Council's environmental health service investigates complaints about noise from residents and businesses within the city. The service also acts as a consultee to the development control service to advise on the potential noise impacts of developments as part of the planning process.

The environmental health service seeks to ensure that residents and businesses within the city are not subjected to unreasonable noise which could constitute a statutory nuisance. The Council has powers to control such noise through the Environmental Protection Act 1990 but these powers do not extend to noise caused by aircraft (see Section 79(6) of the Act). This means that in the event of planning permission being granted for the runway extension, Southampton City Council would not be able to use the usual enforcement powers to control unreasonable noise affecting residents or businesses within the city.

The noise impact of the proposed extension to the runway at Southampton International Airport on residents and businesses within the city boundary has been carefully considered by the environmental health service.

In addition, the environmental health service has commissioned an acoustic consultant to undertake a peer review of the noise impact assessment submitted by the applicant in support of their application for the runway extension.

Chapter 11 of the Environmental Statement submitted by the applicant considers noise and vibration. The statement considers the impact of various types of noise and vibration associated with the development, but the only significant impact on residents or businesses within Southampton is due to noise from the operation of aircraft.

The runway extension will facilitate operation of larger jet aircraft from the airport, many of which will take off in a southerly direction towards Southampton, over Bitterne Park and Townhill Park. This has the potential for residents and businesses within these parts of the city to experience additional noise from the operation of these larger jet aircraft.

The Environmental Statement recognises this, and states that ‘the sensitivity of receptors, both households and the school [Bitterne Park School], is considered to be high, and the magnitude of impact, is considered to be high. Therefore, there is likely to be a direct, long-term, adverse effect of major significance prior to the implementation of mitigation measures. (See paragraph 11.6.14). The majority of the impacted premises are situated within the city of Southampton, within Bitterne Park and Townhill Park.

The applicant will seek to mitigate this noise impact by providing financial assistance for sound insulation to the occupiers of impacted premises. However, this will not fully mitigate the impact of the additional noise, for example on domestic gardens or school play areas. The peer review recognises this, advising that ‘the limitations of sound insulation should not be overstated. They will benefit internal areas at receptors providing residents keep windows closed (which may lead to ventilation and overheating issues). They will clearly be of no benefit to external amenity areas’. (24 Acoustics Paragraph 7.6)

It should also be noted that the peer review by the acoustic consultant has considered the data used to prepare the Environmental Statement and considers this to underestimate the noise impact over Southampton (24 Acoustics – paragraph 7.2).

It is the opinion of the environmental health service that because the proposed runway extension will lead to a ‘direct, long-term, adverse effect of major significance’ to some residents and businesses within the city which cannot be fully mitigated through sound insulation, it is recommended that the Council object to the application on these grounds.

#### 4.7 **SCC Sustainable Development Officer: Objection**

##### Climate emergency

Whilst the economic importance of the airport is recognised, the proposed expansion will lead to a massive increase in carbon dioxide emissions and this is simply incompatible with addressing the climate emergency which has been declared by Southampton City Council (and National Government, and Eastleigh Borough Council). Southampton’s Green City Charter states, “Our vision is to create a cleaner, greener, healthier and more sustainable city”. Supporting this expansion would seriously undermine Southampton’s climate mitigation efforts.

The UK has legally committed to net zero emissions by 2050. This development goes directly against this legal obligation; aviation is in the ‘hard to de-carbonise’ category and expansion should be limited to support the 2050 goal. The Committee on Climate Change (CCC) has said that we cannot achieve carbon neutrality without restraining aviation, which by 2050 will be the single largest emitting sector in the UK. The CCC’s calculations suggest that the necessary level of passenger demand in 2050 is an increase no more than 25% over 2018 levels. However Southampton airport is seeking growth of 150% up to 2037.

To put it into context, in 2017, according to the Department for Business Energy & Industrial Strategy, carbon emissions for homes and industry in the entire city of Southampton (excluding the port) equated to 528,000 tonnes. The Airport's own estimate is that carbon emissions will rise on average by 350,000 tonnes per year.

There is no way of offsetting this level of emissions, and the airport is proposing mitigation for only the carbon emissions during the construction phase and for its own operations, this excludes the most significant carbon emissions which are from the aircraft themselves.

The reduction to travel to London is a tentative argument, as emissions saved from cars on these (assumed) journeys will be easily outweighed by the increase in airplane emissions. London airports are unlikely to be reducing their flights in response to Southampton expansion. Looking ahead in the 2017 document, the Department for Transport consider that these trends will continue and without constraints to airport growth, demand is forecast to rise.

The effects of climate change on Southampton will be felt more acutely than other places, this will have an economic impact in addition to the impacts on the environment and on people. Given its coastal location, the effects of sea level rise will necessitate more investment in flood defences. In addition extreme weather events including summer heatwaves will be more severe due to the urban heat island effect.

#### Traffic/ surface access

Traffic impacts will be assessed in depth by the Transport team, but it seems that there will be an inevitable traffic increase, and despite encouraging public transport use, parking is still to be increased by 600 spaces in the first phase. This will lead to more traffic on the roads, and more emissions from the cars as well as the flights. The negative effects on traffic appear to be underplayed relative to the claimed economic benefits.

#### Environmental Statement

NEF Consulting on behalf of EBC reviewed the Environmental Statement and found that Climate Change was not considered holistically or throughout the EIA or considered within the iterative design process. They state that there is a strong case for including efforts to achieve decarbonisation of aviation in the Council's strategic approach on climate change.

#### Summary

In the submission, NPPF paragraph 38 is quoted, "secure development that will improve the economic, social and environmental constraints of the area," and paragraph 117 "safeguarding and improving the environment and ensuring safe and healthy living conditions." It has not been adequately demonstrated that the proposed development will meet these requirements.

The proposed expansion of the airport and consequential fossil-fuel consumption is considered to be fundamentally unsustainable at a time of climate crisis and unjustifiable against Southampton City Council's Green City goals.

#### 4.8 **SCC Tree Officer: Holding Objection**

The only arboricultural information that has been supplied with the application is in relation to the trees that may be impacted by the construction of the additional parking. These trees have no impact to the City and therefore this will be dealt with locally by the tree officer at Eastleigh Borough Council.

I have concerns as to whether the extension to the runway will change the aerodrome reference code which may alter the obstacle limitation surfaces around Southampton. Information is requested as to whether such change would occur and if so, what impact this will have on Southampton.

Any change to the current obstacle limitation surfaces may increase the geographical area on the ground which in turn will increase the amount of tree work expected for the take off and approach of aircraft. Historically, there has been work undertaken to trees within Southampton in relation to the flight surfaces, such as can be seen around Stoneham Cemetery and Frogs Copse. More recently there is a focus on Marhill Copse in relation to aviation. Any further increase in tree related work will have a negative impact to the local amenity and result in lower carbon sequestration. If there is an increase in the parameters of the obstacle limitation surfaces, details should also be provided on how this may impact future tree planting within the extended zone.

Details are requested of any potential tree work required for the flight paths if permission is granted and larger aircraft can use the airport. This information would be hand in hand with any change to the obstacle limitation surfaces plan.

It is clear that the most pollution caused by the aircraft is during the take off and climb where the engines would be running between 85% to 100%, therefore this will produce the highest proportion of harmful emissions, and given that over 60% of the air traffic movements occur to the south, this will have a negative impact on the city, especially if tree work is required in relation to the proposed extension and larger aircraft. Therefore I would strongly oppose any application that results in additional tree related works.

I therefore wish to lodge a holding objection on the proposed runway extension until the additional information has been provided and assessed.

#### 4.9 **SCC Ecologist: Holding Objection**

Having reviewed the ecology chapter of the environmental statement I am of the view that the ecological assessment is generally robust.

I do, however, have two principal concerns regarding potential impacts on ecological features with Southampton. Firstly, a number of Sites of Importance for Nature Conservation (SINC) located within Southampton, which lie within the Zone of Influence, have not been considered in the ecological assessment, these sites are as follows:

- Marhill Copse SINC
- Frogs Copse
- Frogs Copse Meadow
- Land south of Monks Path
- Riverside Park

These sites lie under the flightpath and will be subject to higher levels of noise and emissions the impacts of which have not been assessed.

In addition, Frogs Copse and Frogs Copse Meadow SINC's have already experienced impacts as a consequence of tree removal to safeguard protected airspace and Marhill Copse SINC is also likely to be affected. Removal of substantial trees will have adverse impacts on ecological value of these sites however, the ecology reports makes no mention of whether larger planes will necessitate additional tree removal and the likely ecological consequences.

I also have concerns about the robustness of the air quality assessment which is based on assumptions of reductions in emissions. As it is not possible to predict guaranteed reductions in emissions, further information should be provided detailing what measures will be put in place to prevent adverse air quality impacts if nitrogen emissions do not decline as predicted. In addition, the conclusion in paragraph 9.6.72 that deposition of nitrogen onto mudflats won't lead to significant adverse effects due to tidal inundation does not appear to be appropriate. The nitrogen in question will be added to a system that is already experiencing adverse impacts as a consequence of excess nitrogen levels. Any further additions will likely exacerbate the problem and should therefore be considered as an in-combination impact.

- 4.10 **SCC Air Quality:** The Council's Environmental Health Team have appointed a consultant to review the impacts of the development on the City's Air Quality. At the time of writing this report no comments had been received and an update will be provided ahead of the Panel meeting.

## 5 **Planning Consideration Key Issues**

- 5.1 The key considerations in determining the Council's position on the consultation response to Eastleigh Borough Council are set out below and seek to strike a balance between sustainable growth at the airport alongside robust protection of the environment and residential amenity.

### 5.2 **Economic Growth**

Southampton City Council would support a sustainable level of growth of Southampton Airport to ensure it remains a competitive and viable regional airport, whilst balancing the benefits of associated economic growth with the need to avoid significant adverse impacts on health and quality of life from noise and air pollution. Furthermore the level of growth should be managed to ensure that the carbon emissions resulting from the project are not so significant that it would have a material impact on the ability of the Government and this Council to meet its carbon reduction targets.

- 5.3 The airport currently has a limited route network because the existing short length of the runway constrains the size of aircraft which can currently operate from the airport. The opportunities to allow larger planes to service from the site as a result of the proposed runway extension would have significant benefits to the regional economy and tourism and would provide increased choice and services for residents who live within the airport catchments, which includes citizens of Southampton. The airport seek to capture a much larger proportion of the demand from its catchment area for the short-haul European market and this may have sustainability benefits with customers within the catchment avoiding longer journeys to airports which are outside of the catchment such as Gatwick, Heathrow, Stanstead.

Furthermore the opportunity to attract a greater range of operators to the airport may assist in future proofing the airport having regard to the recent difficulties facing FlyBe which currently account for a significant number of passengers using Southampton Airport.

5.4 The Council’s Economic Development Manager has queried the forecasted uplift in economic growth in the years 2019-2021. The main point is that a £100m uplift in the value of services over such a short period of time and is contingent on the delivery of the wider masterplan which, we assume is also, contingent on an additional application to expand the terminal and new transport investment. Clarification should be sought on this point in order to determine the level of weight the economic benefits of the scheme should be given as part of the overall planning balance.

5.5 Noise Impacts

The Council’s environmental health service have raised an objection because the proposed runway extension will lead to a ‘direct, long-term, adverse effect of major significance’ to some residents and businesses within the city which cannot be fully mitigated through the scheme of mitigation measures offered, including the offer of acoustic insulation to households and other noise sensitive buildings subject to noise levels over 63dB LAeq. This objection follows a peer review of the noise issue by consultants on behalf of Southampton City Council which is attached as **Appendix 1**.

5.6 It is considered the scheme should be assessed against the noise contour thresholds laid out by Government within the Aviation Policy Framework which requires acoustic insulation measures to be offered to households and noise sensitive buildings, which includes Bitterne Park School.

5.7 The submission indicates that the 63db LAeq 16 hour noise level is marked as the SOEL (Significant Observed Adverse Effect Level) – This is the level above which significant adverse effects on health and quality of life occur. Housing and noise sensitive properties such as school or hospitals subject to noise levels at 63db LAeq 16 hour would trigger a scheme of acoustic insulation.

**Table 2: Comparison of households within aircraft noise contour bands (as set out within the submitted Environmental Statement Chapter 11: Noise and Vibration)**

Contour Level LAeq 16hr dB(A)	Number of households in 2016	Number of households in 2021	Number of households in 2037
>54	3,800	8,100	10,800
>57	1,250	3,750	5,100
>60	350	1,150	1,800
>63	0	350	650
>66	0	0	50
>69	0	0	0

5.8 As table 2 indicates 350 households would be subject to the SOEL level in 2021 with a further increase to 700 households by 2037.

5.9 It is noted that the Peer review by Acoustics 24, supporting the comments from the Council's Environmental Health Team, has also identified the following shortcomings in the noise assessment and proposed noise mitigation measures:

- The ES states that this split was 76/24 in 2016 (meaning that the majority of departures occurred over Southampton and approaches over Eastleigh). For reasons unknown, however, a split of 64/36 has been used for the future scenarios. This will have the effect of underestimating the noise impact over Southampton and should be clarified by the Airport/ WSP;
- It would be helpful if contours showing the number of events exceeding (for example) 65 and 70 dB LAMax,s (N65 and N70) could be provided. In practice the noise level associated with a regional jet arrival may be slightly lower than that from a turbo-prop aircraft which may be of some benefit to residents living under the approach path in Southampton (such as those in Bitterne Park). Departure noise levels, however, are significantly greater.
- WSP's determination of the noise levels that relate to LOAEL and SOAEL for aircraft movements are higher than the levels reported in the AECOM/ Defra publication. In addition, the Airport's NAP defines a lower level for LOAEL. As a result it is our opinion that the ES has significantly underestimated the full extent of the likely noise impact.
- The limitations of sound insulation cannot be over-stated. They will benefit internal areas at receptors providing residents keep windows closed (which may lead to ventilation and overheating issues). They will clearly be of no benefit to external amenity areas.
- It is considered that the Airport's Noise Preferred Routes, whilst potentially suitable for the existing operations, may not go far enough for the new proposals. It is considered that the Airport should be asked to consider new noise abatement procedures/ routes to reduce the number of households affected by the proposals.

5.10 It is unclear from the application submission as to how the proposed scheme of acoustic mitigation would be delivered to affected households in practice to ensure that acceptable internal ambient noise limits are met in accordance with British Standards (BS8233). The delivery of improved building acoustic performance through improved building fabric and glazing specification may be costly to ensure full compliance with BS8233. It is noted from the Peer Review by Acoustics 24 that Bristol Airport offers a grant of £7,500 to residents in/above the 63dB contour and £3,750 for residents in the 57 and 60dB contours. Gatwick Airport offers £3000 towards double glazing for households within the 60dB contour. Heathrow offer the full costs of insulation for residents in the 60dB contour.

5.11 It is requested that the applicants should address the above queries and if necessary re-run the noise modelling to accurately show the noise impacts of the scheme.



Further details are also required in relation to the scheme of acoustic mitigation, and Southampton Airport is strongly encouraged to offer the full costs of mitigation to households both within the 60 and 63db contours to ensure households maintain acceptable internal ambient noise levels in accordance with BS 8233. This would require mitigation for an additional 1,150 households in 2021.

5.12 Given the modelled noise impact on Southampton residents, it seems appropriate that the airport has a clear and transparent strategy to both monitor the noise impact and to reduce it over time as aircraft types become quieter (i.e. an approach to phasing out the noisier aircraft types over time). This would also assist in minimising the risk of more properties being affected by noise as activity at the airport increases. It may also be appropriate for the airport to consider specific and regulated noise monitors and noise thresholds such that any ATM that is over the threshold can lead to a penalty against the operator.

5.13 Climate Change

Objection has been received from the Council's Sustainable Development Officer and legitimate concerns have been raised from members of the public and action groups regarding the impacts of the aviation industry on climate change.

5.14 In the UK, aviation emissions account for about 6% of greenhouse gases from the transport sector. However emissions from the aviation sector are set to rise and aviation is likely to be the largest emitting sector in the UK by 2050. The Committee on Climate Change (the CCC) who advise the government on climate change have indicated that even with industry improvements in fuel efficiency, some use of sustainable biofuels, growth in the aviation sector should be limited to 25% above current levels. Therefore Eastleigh Borough Council are encouraged to impose a control on Annual Transport Movements (ATMs) to bring the level of growth closer in line with the advice from the Committee on Climate Change with remodelling required to determine acceptable costs. The proposal currently seeks growth of 35% above current levels up to 2027, and 47% up to 2037.

Highways

5.15 More information is required in order to adequately determine the impact that the proposals would have on the local highway network based on the forecasted growth in passenger numbers and 600 car parking spaces proposed.

## 6 Recommendation

6.1 It is recommended that Southampton City Council submit a holding objection and request that EBC should submit a request for further information under Regulation 25 of the Town & Country Planning (Environmental Impact Assessment) Regulations 2017. That further information is required in relation to noise, climate change issues, biodiversity, highways, economic development and tree matters as set out within this report and the peer review by Acoustics 24, as appended. An update on Air Quality will be given at the Panel meeting.

6.2 To summarise the following further information is requested:

### **1. Traffic and transportation**

- corroboration of trip generation forecasts with existing data in order to enable the impact of the increased passenger numbers to be fully assessed;
- modelling of the impact of the 600 additional car parking spaces within the Transport Assessment and justification of the modal split assumptions;
- greater detail on sustainable travel modes and how these will be achieved through employee and passenger travel plans;
- justification for the occupancy rates considered, including information on the surveys undertaken.

### **2. Noise**

- Further information and sensitivity testing needs to be provided in terms of the types of aircraft (including load factors from passengers and fuel) that will be enabled to operate with the runway extension;
- The worst case scenario in terms of air transport movements (ATMs) needs to be assessed, calculating the maximum number of passengers that could pass through the current terminal, the fleet mix and the contours that would be generated;
- Appropriate mitigation measures need to be proposed, including: noise envelopes as recommended in the APF and being prepared in association with Heathrow's third runway DCO; and sound insulation schemes sensitive receptors (both residential and non-residential); taking into account best practice at other airports, any growth in capacity should be linked to reduction in noise contours taking into account the GOvts policy of communities sharing the benefits of airport expansion (noting that noise envelopes are meant to provide a degree of certainty for those impacted by aviation);
- Modelling should include sensitivity testing, taking into account the introduction of new generation aircraft (such as the Airbus NEOs and the Boeing MAX, but also considering other factors that may alter the performance;
- Assumptions between the split that has been modelled for take-offs between runways 02/20 needs to be justified, with sensitivity testing given the data for 2016 and the forecasts for future years, sensitivity testing should be undertaken to determine the potential for further households to be significantly affected by noise, falling within the SOAEL, based on historic trends (or the 2016 split);
- Individuals experience noise in different ways, the use of LAeq to provide average figures is the main metric advocated by Government, however other metrics, such as those relating to the number of overflown events (i.e. the N65 and N70 metrics) should be provided;
- Sensitivity testing is required in relation to the LOAEL and SOAEL levels, the ES uses 51 and 63 LAeq16hr as the LOAEL and SOAEL respectively for the daytime noise levels and 45 and 55 LAeq8hr respectively for the night time LOAEL and SOAEL, however, the DEFRA report "Possible Options for the Identification of SOAEL and LOAEL in Support of the NPSE" advocated lower measures, namely 52 and 60 for LOAEL and

SOAEL in the daytime and 41 and 53 for LOAEL and SOAEL at nighttime;

- Additional abatement procedures or revised noise preferential routes should also be assessed in the ES to determine if the number of households exposed to adverse noise levels can be reduced;
- Details of a sound insulation scheme, using best practice, should be included at this stage within the proposal.

### **3. Climate change and Air Quality**

- Greater clarity is needed as to how future potential changes in Government policy on climate change and the reduction in greenhouse gas emissions could be taken on board as part of the airport's growth especially given the CCC's recommendations to the Govt in Lord Deben's letter of 25 Sept 2019;
- A fuller assessment of how the current proposal accords with paragraphs 38 and 117 of the NPPF is required;
- Since the ES is based on assumptions about reduction in aircraft emissions from new generation aircraft, the growth in ATMs should be limited/connected to the provision of the new generation aircraft so that improvements in air quality that have been relied upon in the ES can be achieved;

### **4. Trees and Ecology/Biodiversity**

- Assessment of safeguarding in terms of trees that may infringe obstacle limitation surfaces within Southampton is required in order to fully assess the impact of the development upon trees in the City and whether further mitigation, with contributions towards off-site tree planting and air quality initiatives will be required;
- Ecological assessments of Sites of Important Nature Conservation within the identified Zone of Influence need to be undertaken to fully understand the impacts of the additional aircraft activity and determine any appropriate mitigation.

### **5. Economic benefits**

- Clarification should be provided on the uplift calculation in the short term (to 2021) in order to determine the weight that should be given to the forecast economic benefit

6.3 Without the above information being provided it is not possible to fully assess the significant impacts of the proposed development and therefore the Environmental Statement in its current form is inadequate.

6.4 Ultimately, if improvements in the noise environment are not secured and growth in ATMs limited to better reflect the advice from the Committee on Climate Change then this application should be recommended for refusal.

6.5 However if Eastleigh Borough Council are minded to approve the application, following receipt of this response, they are encouraged to secure the following controls through planning conditions or S106 obligations, in addition to the control measures and mitigation offered within the planning application submission:

- Noise monitoring system;
- The introduction of noise envelopes;
- Public Noise Complaints Handling Service;
- Sound Insulation Grants Scheme;
- Night noise provisions;
- Aircraft restrictions to restrict size and movement of aircrafts to include a maximum number of ATMs with 10% buffer. This should include a provision whereby if the number of ATMs is exceeded, the quota is reduced by the same amount the following year;
- Aircraft restrictions to tie the growth of the number of movements to the introduction of new generation aircraft (such as the A320NEO or Boeing 737MAX) to ensure the benefits of reductions in noise and emissions identified in the ES are achieved;
- Introduction of a Quota Count system, used as other airports (such as the designated airports [Heathrow, Gatwick and Stansted], London City and Luton) to seek to encourage the use of quieter aircraft;
- Total per annum passenger restriction; and
- Controls on shouldering to prevent excessive concentrations of ATMs taking off/landing when the airport first opens during morning hours at 6am Mon-Sat and 7.30am on Sundays.

6.6 Officers are working with a number of consultants experienced in airport development and will look to draft some detailed wording for these conditions/S106 obligations that will be forwarded to Eastleigh Borough Council as part of the Council's consultation response.

6.7 Whilst looking at options that promote severe penalties for any breach. Delegation is sought for the Head of Planning and Economic Development to prepare the response on this basis, as informed further by the Panel debate, and to comment in the event that further consultation arises from EBC,

### **Conclusion**

Further information is requested in relation to the benefits and dis-benefits and measures to mitigate against the impacts of the airport expansion.

Without this additional information the Council cannot be satisfied that this airport scheme maintains an appropriate balance between the benefits of aviation and its costs, particularly in relation to its contribution to climate change and noise.

### **Local Government (Access to Information) Act 1985** **Documents used in the preparation of this report Background Papers**

1 (a) (b) (c) (d), 2 (b) (d)  
**AG for 28/01/2020 PROW Panel**

Mr Gavin Derrick  
Southampton City Council  
Civic Centre,  
Southampton,  
SO14 7LY

## By email

Date: 5th January 2019  
Reference: R8315-1 Rev 0

Dear Gavin

### **RE: Proposed Runway Extension, Southampton International Airport Peer Review of Noise Impact Assessment**

Thank you for your recent instruction. I am pleased to provide our peer review of the noise impact assessment relating to the proposed runway extension at Southampton International Airport (Eastleigh Borough Council planning application Reference F/19/86707) below.

#### **1.0 PROPOSED WORKS**

- 1.1 The application is for construction of a 164-metre runway extension at the northern end of the existing runway, associated blast screen to the north of the proposed runway extension, removal of existing bund and the reconfiguration and extension of existing long stay car parking to the east and west of Mitchell Way to provide an additional 600 spaces.
- 1.2 An Environmental Impact Assessment has been undertaken by Savills and WSP. Chapter 11 and associated appendices of the Environmental Statement (ES) relate to noise impact (undertaken by WSP).
- 1.3 It is understood that the extended runway will make provision for larger jet aircraft, such as the Boeing 737 and Airbus A319/320. The same aircraft are currently capable of flying from the airport, however, the existing runway length provides weight restrictions and hence limits the range and destinations that these aircraft can fly to. The ES identifies that, over time, aircraft movements will grow (by approximately 19% in 2021 and by 36% by 2037) and that the mix of aircraft will change with a significantly greater proportion of jets as described above. There is no planned change to night flights, with currently no scheduled flights but an allowance for up to 100 per year.
- 1.4 The ES advises that the extended runway will allow the larger jet aircraft to take off in a southerly direction. In practice, of course, it will also accommodate landings from the south and approaches and departures from/ to the north (over Eastleigh).

## 2.0 SCOPE OF PEER REVIEW

- 2.1 This peer review relates to noise impact that may affect receptors within the city of Southampton.
- 2.2 Noise from groundborne operations and construction noise impacts are considered highly unlikely to affect Southampton receptors and therefore have not been considered. In addition, the construction and the operation of the proposed car park should not affect receptors in Southampton and have also not been considered.
- 2.3 This peer review therefore relates to noise from aircraft departures on runway 20 and arrivals on runway 02 only (relating to aircraft arrivals and departures over Southampton).

## 3.0 SIGNIFICANCE OF THE PROPOSALS

- 3.1 The ES describes operational scenarios in the baseline year (taken as 2016), opening year (2021) and future year, 2037. The proposals will facilitate twin engine jet aircraft including the Boeing 737 and Airbus A319 and A320. The table below summarises the split of aircraft types identified in the ES (based upon an average Summer day).

Aircraft Type	Current (2016)	Opening Year (2021)	Future Year (2037)
Twin turbo-prop (eg Dash 8-400, Tristar)	84.3	72.1	72.1
Twin Engine Jet (e.g. B737, A319/A320)	16.8	52.2	74.9
Other	36.1	39.5	39.5
Total	137.2	163.8	186.5

**Table 1:** Total One-way Aircraft Movements, Average Summer Day

- 3.2 The figures indicate that at the current time the airport operations are dominated by large twin turbo-prop aircraft (Bombardier Dash 8-400 and Britten Norman Tristar). These currently reflect around 61% of aircraft movements on an average Summer day. This will reduce to around 44% in 2021 and 39% in 2037. The use of jet aircraft will grow substantially and they will dominate in 2037 (representing approximately 40% of the total aircraft using the airport). The figures do indicate that large twin engine turbo prop aircraft will make up only a marginally smaller proportion.
- 3.3 It is evident, that whilst the use of the Dash8-400 in particular will reduce, this will only be a small reduction as the aircraft will still continue to operate, however, the airport growth will be driven by the use of the new jet aircraft which will be able to operate over the increased runway length.
- 3.4 The analysis indicates approximately 93 2-way movements by the Summer of the year 2037 and a total of 5 million passengers per annum. This compares with Stanstead Airport which had 475 aircraft movements per day over the Summer of 2017 and has aspirations for 50 m passengers per year. Bristol Airport served 8.6 m passengers in 2018 with approximately 200 aircraft movements. Furthermore, records indicate that Gatwick Airport had 775 Summer movements and accommodated 46.1 m passengers in 2018.
- 3.5 The above stresses that, regardless of the potential increased capacity, Southampton Airport's proposals are to remain a relatively small regional airport (providing they grow only within the constraints that they have identified).

#### 4.0 NOISE ASSESSMENT CRITERIA

4.1 The ES makes reference to the National Planning Policy Framework (NPPF), the Noise Policy Statement for England and the Planning Practice Guidance (PPG). The guidance of the PPG contains a noise exposure hierarchy table which is reproduced below.

<b>Response</b>	<b>Examples of Outcome</b>	<b>Increasing Effect Level</b>	<b>Action</b>
Not present	No Effect	No Observed Effect	No specific measures required
<b>No Observed Effect Level (NOEL)</b>			
Present and not intrusive	Noise can be heard, but does not cause any change in behaviour, attitude or other physiological response. Can slightly affect the acoustic character of the area but no such that there is a change in the quality of life	No Observed Adverse Effect	No specific measures
<b>Lowest Observed Adverse Effect Level (LOAEL)</b>			
Present and intrusive	Noise can be heard and causes small changes in behaviour, attitude or other physiological response, .g turning up the volume of the television, speaking more loudly, where there is no alternative ventilation, having to close windows for some of the time because of the noise. Potential for some reported sleep disturbance. Affects the acoustic character of the area such that there is a small actual or perceived change in the quality of life.	Observed Adverse Effect	Mitigate and reduce to a minimum
<b>Significant Observed Adverse Effects Level (SOAEL)</b>			
Present and Disruptive	The noise causes a material change in behaviour, attitude or other physiological response, e.g. avoiding certain activities during periods of intrusion; where there is no alternative ventilation, having to keep windows closed most of the time because of the noise. Potential for sleep disturbance resulting in difficulty in getting to sleep, premature awakening and difficulty in getting back to sleep. Quality of life diminished due to change in acoustic character of the area.	Significant Observed Adverse Effect	Avoid
Present and Very Disruptive	Extensive and regular changes in behaviour, attitude or other physiological response and/or an inability to mitigate effect of noise leading to psychological stress, e.g. regular sleep deprivation/awakening; loss of appetite, significant, medically definable harm, e.g. auditory and non-auditory.	Unacceptable Adverse Effect	Prevent

**Table 2:** Noise Exposure Hierarchy Table

- 4.2 In making reference to the table it is 24 Acoustics' opinion and experience that a noise impact greater than the Lowest Observable Adverse Effects Level (LOAEL) and as high as the Significant Observed Adverse Effect Level (SOAEL) is acceptable providing it is mitigated to a minimum. An impact greater than SOAEL but lower than the Unacceptable Adverse Effects Level should be avoided. This means that an impact at this magnitude is undesirable but not unacceptable.
- 4.3 The PPG does not define LOAEL and SOAEL in objective terms. The ES has defined LOAEL as 54 dB  $L_{Aeq, 16 \text{ hr}}$  and SOAEL as 63 dB  $L_{Aeq, 16 \text{ hr}}$ . In practice the objective definition of these regions probably cannot be accurately defined and are often likely to be the subject of disagreements between different parties, however, the LOAEL level is particularly important as it defines the minimum noise level at which mitigation should be offered. It is worth referring to the AECOM/Defra report *Possible Options for the Identification of SOAEL and LOAEL in support of the NPSE* which defines the following for aircraft noise:
- LOAEL: 50- 54 dB  $L_{Aeq, 16 \text{ hour}}$ , averaging 52 dB  $L_{Aeq, 16 \text{ hr}}$ ;
  - SOAEL: 58-62 dB  $L_{Aeq, 16 \text{ hour}}$ , averaging 60 dB  $L_{Aeq, 16 \text{ hr}}$ .
- 4.4 In addition, the Survey of Noise Attitudes (SoNA 2014) found that the degree of annoyance (based on the percentage of respondents highly annoyed) previously occurring at 57 dB  $L_{Aeq, 16 \text{ hr}}$ , now occurs at 54 dB  $L_{Aeq, 16 \text{ hr}}$ . It is considered that residents 'highly annoyed' would experience noise impact at a level greater than the LOAEL and therefore LOAEL should potentially be regarded as lower than 54 dB  $L_{Aeq, 16 \text{ hr}}$  used in the ES. The same is considered of the SOAEL region on the basis of the findings of the Defra report.
- 4.5 Some airports also produce further noise contours in the form of N65 or N70. These are the number of aircraft movement events (in an average Summer day) in which the noise level exceeds a noise level of 65 dB  $L_{Amax, s}$  or 70 dB  $L_{Amax, s}$ . On the basis that the human ear does not integrate (average) noise levels from intermittent aircraft movements over a 16 hour period it is considered that it would also be useful to see the noise data expressed in this format.

## 5.0 CALCULATION OF AIRCRAFT NOISE

- 5.1 The characteristics of any particular aircraft noise event are controlled by aircraft type (especially its engines and propulsion system), weight at the time, mode of operation (ie flight configuration, especially whether it is taking off or landing), its power settings, flight path, speed, atmospheric conditions (temperature, humidity, wind speed and direction and turbulence), the surrounding terrain and ground cover, including the presence of obstacles (natural and/or man-made, particularly if these are close to the receiver position). To avoid the difficulties of considering the latter, it is usual to confine attention to 'free-field' sound, ie a few feet above the ground away from obstructions which affect sound propagation.
- 5.2 The issue of local topography is particularly important in relation to the noise impact in the Bitterne Park area which is elevated above the airport. Aircraft approaching over the city have a particularly low relative altitude when flying over this area.
- 5.3 Aircraft usually take off and land into the wind in order to maximise lift. The ratio between takeoff/landings in each direction is known as the modal split. The modal split for the 2016 baseline year (based on true data) was 76/24 (meaning 76% of departures occurred on runway 20, over Southampton). We note that WSP's predictions for aircraft noise levels in 2021 and 2037 have used a modal split of 64/36. No explanation is given for this difference (which would undoubtedly affect the noise contours and potentially indicate an artificially low noise impact over Southampton. This must be clarified by the Airport/ WSP.



- 5.4 WSP has used the CAA noise modelling software ANCON v2.3 to calculate receptor noise levels for an average Summer day for the 2016, 2021 and 2037 operational year scenarios. The input data for the model (types of aircraft etc.) has been provided to WSP by Southampton Airport and is detailed in an appendix. Whilst I stress that we do not challenge these figures we have no means of ratifying their accuracy. 24 Acoustics also has no means of verifying that the noise predictions are correct, without undertaking detailed calculations of our own. We can verify, however, that we consider ANCON an appropriate software for the purpose and that we have no reason not to believe the results.
- 5.5 The model results are expressed graphically in the form of acoustic contours in 3 dB steps commencing at 54 dB  $L_{Aeq, 16 \text{ hour}}$  and ending at 69 dB  $L_{Aeq, 16 \text{ hour}}$ . The data has then been analysed and has determined the number of households within each contour and the estimated population within each contour. This is reproduced below.

Contour Noise Level, dB $L_{Aeq, 16hr}$	Operational Year & No Households		
	2016 Baseline	2021 Starter Year	2037 Future Year
>54	3800	8100	10,800
>57	1250	3750	5,100
>60	350	1150	1,800
>63	0	350	650
>66	0	0	50
>69	0	0	0

**Table 3:** Comparison of Households in Each Noise Contour, Average Summer Day

- 5.6 The assessment indicates that an additional 3,950 households will be drawn into the region between LOAEL and SOAEL (as defined in the ES) between 2016 and 2021 and 6,300 households by 2037. 350/ 650 new households will fall into the SOAEL region in 2021 and 2037 respectively.
- 5.7 As discussed in Section 4 it is considered that LOAEL probably falls below 54 dB  $L_{Aeq, 16 \text{ hr}}$  and therefore it would be helpful if a further contour (at 51 dB  $L_{Aeq, 16 \text{ hour}}$ ) could be added with the associated householder/ population analysis. It is noteworthy that Southampton International Airport's Noise Action Plan (dated 2018) defines 51 dB  $L_{Aeq, 16 \text{ hr}}$  as LOAEL.
- 5.8 If it is considered that LOAEL should be defined as 51 dB  $L_{Aeq, 16 \text{ hour}}$  and SOAEL 60 dB  $L_{Aeq, 16 \text{ hour}}$  this will mean that the number of households affected will have been significantly underestimated within the ES. For example the number of households experiencing a significant adverse noise impact would be 1,800 in 2037, rather than the 650 quoted.
- 5.9 The ES concludes that the proposals will result in a direct, long-term, adverse effect of major significant prior to the implantation of mitigation measures. 24 Acoustics concurs with this conclusion.

## 6.0 NOISE MITIGATION

- 6.1 The ES considers mitigation for the noise impact in the region between LOAEL and SOAEL and also in the region greater than SOAEL.
- 6.2 For the region greater than SOAEL (which in Southampton applies to dwellings primarily in Bitterne Park) mitigation is to be offered through a noise insulation policy which, in itself, will be secured through a noise action plan which will form part of the Section 106 agreement with Eastleigh Borough Council.

- 6.3 No details are provided, however, it is evident that the proposals will probably relate to grants to households for sound insulation. It should be noted that, whilst sound insulation (e.g. upgraded window systems) can reduce the level of noise breaking into a dwelling, in order to be effective alternative means of ventilation and measures to prevent excess overheating in dwellings are also required (allowing the residents to occupy their properties at all times without needing to open windows). Clearly, such measures will also offer no benefit to private amenity areas (gardens, balconies and terraces). It is therefore 24 Acoustics' opinion that this mitigation should be offered as a last resort after only all other potential measures have been considered.
- 6.4 The ES states that the noise impact will reduce to 'moderate' after mitigation, however, we disagree. It is our opinion that noise mitigation at source should be considered.
- 6.5 The ES refers to the Airport's existing Noise Action Plan for mitigation to properties within the LOAEL and SOAEL region. This states the following:
- Operating a differentiated aircraft charging system to discourage noisier aircraft classed as Chapter 3 Noise Standard, Annex 16 of ICAO;
  - Banning noisier Chapter 2 aircraft i.e. those which do not meet the standards of ICAO Annex 16 Chapter 3;
  - Restrict aircraft operations during the night time period from 23:00 – 06:00 hrs (Mon – Sat) and 23:00 – 07:30 hrs (Sundays). The Section 106 Planning Agreement restricts movements in the night time period to 10 movements per month or a maximum of 100 per year. This will not be affected by the Proposed Development and this restriction will remain in place;
  - Application and monitoring of agreed Noise Preferred Routes (NPRs) for aircraft. Aircraft track keeping systems are monitored and off-track occurrences are reported to airlines and the airport's Technical Working Group;
  - Operation of the Noise and Flight Evaluation Unit which logs and responds to complaints and enquires, including further investigation where required and providing statistics to be reported to the Airport Consultative Committee;
  - Engagement and communication with the stakeholders through the Airport Consultative Committee on noise issues such as aircraft routing, results from noise monitoring, reporting on progress of actions set out in the NAP; and
  - Use of noise monitors at the direction of the Technical Working Group to address any specific noise related issues.
- 6.6 It is also stated that the airport will publish a Local Operating Procedure to outline the process of addressing aircraft which deviate from the Noise Preferred Routes (NPRs), including the use of financial penalties.
- 6.7 24 Acoustics has reviewed Southampton International Airport's Noise Action Plan and, in particular, the airport's 'Noise Preferred Routes'. This stipulates the following for arrivals and departures over Southampton:
- Aircraft Departing to the South (Runway 20). Aircraft taking off to the south will climb straight ahead to 500ft above mean sea level and then turn right to follow a 217° heading. This heading will direct aircraft towards the path of the River Itchen and the track will be maintained until reaching Southampton Water or 2000ft above mean sea level, whichever is reached first. The exact point, at which aircraft reach 500ft and subsequently turn, will vary depending on many factors, such as engine type, aircraft weight and weather conditions.

- Aircraft Arriving from the South (Runway 02). For a visual approach, the point at which aircraft are required to be on alignment with the runway's centre line, when making a visual approach is four miles. Aircraft join the approach path over the less densely populated Southampton Water area to manoeuvre onto the runway centre line for arrival. The aircraft are then required to follow a 30 angle of approach for operational reasons.
- It is noteworthy that there is no description for non- visual approaches onto Runway 02.

6.8 Given the extent of the noise impact expected over the City it is considered that Southampton International Airport should be asked to give further consideration to their noise abatement procedures and routes. In particular it is not clear if the proposed jet aircraft would have a steeper climb potential than the turboprop aircraft. This could mean that they would reach an altitude of 2000 ft earlier and then turn over the city. Measures that could be considered (which are used by other airports) include the following:

- Steeper angle of approach for landings onto Runway 02 (maintaining the existing continuous descent approach). This would keep the aircraft at greater altitude and would reduce noise impact at Bitterne Park in particular;
- For approaches into Runway 02 lowering the undercarriage at the last possible moment (to reduce turbulent noise on the airframe);
- For take-offs from Runway 20 a procedure to reduce from take-off power to climb power at a defined attitude;
- For take-offs from Runway 20 a departure track at a heading of 217 degrees until Southampton Water is reached (regardless of altitude) to prevent early turns over the densely populated areas of the city.

6.9 Provision of insulation to householders should be considered a last resort and needs to be sufficient to allow residents to occupy their properties at all times with windows closed. For benchmarking purposes, a brief review of the insulation offered by other airports is summarised below:

- Bristol Airport. Offers a grant of £7,500 to residents in/ above the 63 dB  $L_{Aeq, 16 \text{ hour}}$  contour and £3,750 for residents in the 57 and 60 dB contours;
- Gatwick Airport offers residents within the 60 dB  $L_{Aeq, 16 \text{ hr}}$  noise contour £3,000 towards double glazing and loft insulation for newly affected homes;
- Heathrow Airport offers 'full costs' for insulation to residents in the 60 dB  $L_{Aeq, 16 \text{ hr}}$  contour.

6.10 It would therefore appear that if sound insulation is to be offered to local residents as a means of noise mitigation it should potentially be at a level lower than the 63 dB  $L_{Aeq, 16 \text{ hour}}$  level proposed.

## 7.0 SUMMARY

7.1 The ES states that the runway extension will make provision for larger/ heavier jet aircraft to takeoff in a southerly direction over Southampton. It will also facilitate northerly landings in particular as well as northerly departures and southerly landings.

- 7.2 Aircraft usually take off and land into the wind to maximise lift. The prevailing wind in this part of the country is south-westerly meaning the majority of departures will occur over Southampton and the majority of approaches over Eastleigh. The ES states that this split was 76/24 in 2016 (meaning that the majority of departures occurred over Southampton and approaches over Eastleigh). For reasons unknown, however, a split of 64/36 has been used for the future scenarios. This will have the effect of underestimating the noise impact over Southampton and should be clarified by the Airport/ WSP.
- 7.3 The proposals will accommodate a 36% growth in aircraft movements between 2016 and 2037. They will also accommodate a change in aircraft type which is currently dominated by the DHC800 to the B737/A319/A320 which are estimated to represent 40% of all movements by 2037.
- 7.4 Aircraft noise levels have been expressed as 16 hour  $L_{eq}$  levels during an average Summer day. It should be noted that humans do not integrate (average) noise levels over 16 hours and the 'real world' noise impact may relate to the maximum noise level associated with each aircraft movement together with the number of daily events. It would be helpful if contours showing the number of events exceeding (for example) 65 and 70 dB  $L_{Amax,s}$  (N65 and N70) could be provided. In practice the noise level associated with a regional jet arrival may be slightly lower than that from a turbo-prop aircraft which may be of some benefit to residents living under the approach path in Southampton (such as those in Bitterne Park). Departure noise levels, however, are significantly greater.
- 7.5 24 Acoustics does not agree with WSP's determination of the noise levels that relate to LOAEL and SOAEL for aircraft movements. Levels reported in the AECOM/ Defra publication are lower. In addition, the Airport's NAP defines a lower level for LOAEL. As a result it is our opinion that the ES has significantly under-estimated the full extent of the likely noise impact. Regardless, the noise predictions do not indicate that there will be an unacceptable adverse impact and, in planning terms, this means that the noise impact may be acceptable if mitigated to a minimum. It is our opinion, however, that the mitigation offered (particularly for noise impact between LOAEL and SOAEL) is inadequate.
- 7.6 The Airport has offered to provide sound insulation to receptors which fall at/above (their definition of) SOAEL and to continue with the existing mitigation defined in their Noise Action Plan for receptors with a noise impact between LOAEL and SOAEL. The limitations of sound insulation cannot be over-stated. They will benefit internal areas at receptors providing residents keep windows closed (which may lead to ventilation and overheating issues). They will clearly be of no benefit to external amenity areas. Therefore, the provision of sound insulation to properties should be considered only as a last resort.
- 7.7 It is considered that the Airport's Noise Preferred Routes, whilst potentially suitable for the existing operations, may not go far enough for the new proposals. It is considered that the Airport should be asked to consider new noise abatement procedures/ routes to reduce the number of households affected by the proposals.

I trust you will find the above to your satisfaction. Should you have any further queries please do not hesitate to contact me.

Yours sincerely,  
**For 24 Acoustics Ltd**

A handwritten signature in black ink that reads "Reuben Peckham". The signature is written in a cursive style with a large initial 'R'.

Reuben Peckham BEng MPhil CEng MIOA  
Director & Principal Consultant

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