# NNF22

# Response to RSP's response to ExA4WQ Ns.4.3 Noise contours produced by the Civil Aviation Authority for No Night Flights

5<sup>th</sup> July 2019



#### Introduction

- 1. We write in extreme haste. RSP's Technical Note which comments on the noise contours submitted by No Night Flights was published by PINS on its website at close of business on Wednesday 3<sup>rd</sup> July 2019. The deadline for responding to RSP's document is midnight on 5<sup>th</sup> July 2019. We write without having had the opportunity to seek follow up validation directly from the CAA of the approach that it took to the production of noise contours for NNF.
- We wish to place on record the quite extraordinary disadvantage which this inflicts on ordinary residents. None of us is employed to comment on this application. We are not in a position to use working days to do this. Two working days clearly gives inadequate time to comment on RSP's latest responses. This means that the voice of those whose life will be severely impacted should this DCO be awarded is going unheard. It also means that we have inadequate time in which to champion the objective and expert input of the CAA to this DCO process.
- We have been told time and again by PINS, by the Applicant, and by the Applicant's cheerleader, Sir Roger Gale, that this DCO application process is front-loaded, meaning that the vast bulk of the work should have been completed before the application was submitted. RSP has manifestly failed to do this and was allowed by PINS to submit its application and begin the examination process despite the fact that there were substantial gaps in the evidence that it should have produced.
- 4. During the process itself, RSP has also manifestly failed to produce the information that the ExA and the public need to be able properly to understand the potential impact of RSP's proposals. As a result of the poor quality of RSP's application and its disorganised, partial and inadequate responses through the examination period, local residents are left hard up against the end of the examination period, still without a full set of professionally-produced noise contours from the Applicant. This is completely unacceptable.
- 5. It is NNF's position that, given the poor quality work carried out by the Applicant to identify to the noise impact from aviation operations associated with its proposal, the ExA should give weight to the independent, expert evidence produced by the CAA for NNF. It is the CAA who will assess the potential noise impact of RSP's proposals as part of RSP's future application for an Airspace Change. The CAA will use ANCON to do this the modelling system that it used for our work. The CAA will use its in-house experienced noise modellers to do this as it did when it produced the NNF contours.
- The ExA has a simple pragmatic choice to make when it compares RSP's noise contours with NNF's. Does it prefer the work of the developer, carried out by someone who has never done this before, using a system that is not used in the UK by the CAA? Oliver Bewes, the acoustics consultant responsible for producing RSP's noise contours, is a specialist in railway noise. There is no trace in his CV of any experience in aviation noise. Similarly, does the ExA prefer RSP's noise contours, carried out for the specific purpose of demonstrating to the ExA that there is little noise nuisance associated with its proposal and little or no need for the developer to pay for expensive noise mitigation measures? It is telling that RSP has not produced input files that are properly time and date stamped for the ExA following the ExA's request for it to do so. The ExA can therefore have no confidence that the few noise

contours that the Application has produced reflect the fleet mix described in the Applicant's ES.

- Alternatively, does the ExA prefer the work of the CAA who has used its professional expertise to provide an objective set of noise contours based on inputs produced by NNF that have been clearly and transparently set out in the CAA's document? What weight is the ExA going to give to the substantial amount of evidence from local residents from the coastline in Ramsgate to the coastline west of Herne Bay that they experienced significant noise nuisance from the airport when it was operational (a much smaller airport than RSP wants) and that this had a significant and detrimental effect on their daily life? How will the ExA assess this evidence against the noise contours produced by RSP that suggest that many of these people could not possibly have heard any aircraft noise because the noise contours do not even reach them? Is the experience of these people to be dismissed as fantasy? What weight will the ExA give to the evidence submitted about previous noise monitor readings that demonstrate that noise levels far in excess of those suggested by RSP were experienced as a matter of course in central Ramsgate?
- It is NNF's submission that the RSP aviation noise contours are insufficiently expert to be given weight in the determination of this DCO application. They are also incomplete. We genuinely cannot understand why RSP did not provide in its application a full set of noise contours, in 3dB steps, for single aircraft footprints, for Lden and for LAeq for day and night, for operations 100% to the east and 100% to the west (which is the day-to-day reality) as well as for its most optimistic annual average of 70:30. Its consistent failure to do this throughout the examination period tells us that RSP did not want this information to be available to the ExA.
- In short, we submit that the CAA contours produced for NNF (and, for that matter, for Five10Twelve) are more expert and are objective assessments of the likely noise impact that would be produced by RSP's proposals. We submit that they are to be preferred and we urge the ExA to give them significant weight in its deliberations.

#### NNF's comments on the RSP Technical Note

10. RSP's Table 1 compares the assessments by RSP, Five10Twelve and NNF. For ease, in our response below we follow the order of RSP's document.

#### **Prediction Model**

- 11. RSP says that the difference in the model used is unlikely to result in a difference in results.
- 12. In the CAA's ECAC Doc.29, 4th Edition, December 2016, the CAA says:
- "Although many acoustical consultants have the understanding of aircraft noise characteristics and propagation that is necessary to use a noise contour model and interpret the results, the noise modelling practitioner usually needs to have, or have access to, knowledge and expertise in airport and aircraft operations to achieve reliable results. This is because aircraft noise levels heard on the ground depend on the flight path of the aircraft (position vs. time) as well as its flight

<sup>1</sup> Already submitted by Five10Twelve for D9

configuration - its weight, engine and flap settings, speed and rate of climb or descent. These in turn are determined not only by individual airline operating procedures but also by air traffic control requirements." [our emphasis]

- 14. It is clear from the evidence that he gave to the ExA at the ISH in March that Oliver Bewes, RSP's consultant who was responsible for doing the noise modelling for the developer, did not have previous experience in using the modelling tool that RSP is relying on, nor does he appear to have had the required "knowledge and expertise in airport and aircraft operations to achieve reliable results." This gives the ExA considerable reason to doubt the accuracy of the RSP noise contours.
- 15. Like Five10Twelve (in its submission to D9) NNF does not understand why the Applicant used the third edition of the ECAC Doc.29 instead of the fourth edition. The third edition was published in 2005, and the fourth in 2016. This is a "signature" failure by the Applicant as it has done with the WHO reports, the Applicant once again prefers to use out of date guidance. We respectfully refer the ExA to the submissions made by Five10Twelve on this issue in section 3 of its submission to D9 in response to RSP's comments on the Five10Twelve contours.
- 16. When the CAA comes to consider RSP's airspace change application, the CAA will be using ANCON to assess the noise impacts of that application, and to determine flight paths. ANCON is the default tool for the CAA the relevant statutory body and UK subject experts. It is clear from this that ANCON is a more relevant model to use than the INM model used by RSP.

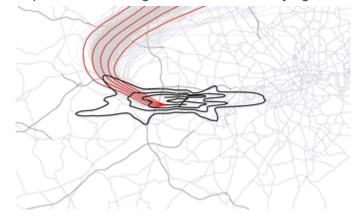
#### **Aircraft Noise Data**

17. On its website, the CAA explains its aircraft noise profile data. The CAA says:

#### Analysis of flight tracks and profiles from radar data

Where feasible, we analyse local airport radar data to ensure the highest degree of modelling accuracy. Extensive in-house radar analysis tools are used to generate mean flight tracks and the associated lateral dispersions for each route, and average flight profiles of height, speed and thrust for different aircraft types.

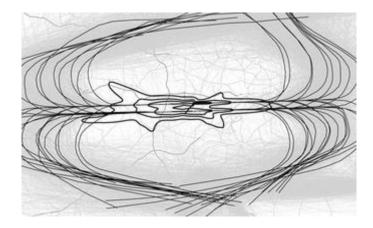
The diagram below shows a typical representation of a departure route at Heathrow using mean and dispersed tracks, together with the underlying radar data.



Typical departure mean tracks © Crown copyright

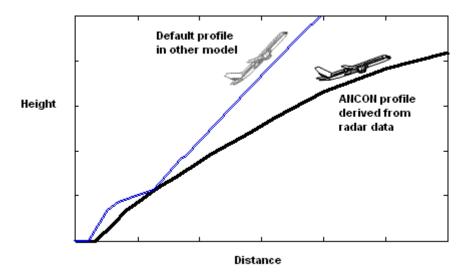
<sup>2</sup> https://www.caa.co.uk/Consumers/Environment/Noise/Features-of-the-ANCON-noise-modelling-process/.

A typical representation of arrivals at Heathrow using multiple 'spur' tracks is shown below:



Typical arrival mean tracks © Crown copyright

It is important to determine flight profiles for the noise dominant types at an airport using local radar data, since they may differ significantly from the 'default' profiles supplied in some noise models. For example, the following diagram shows the difference between the average departure height profile for the Boeing 767 as measured at the London airports, and a 'default' profile contained within another noise model.



Comparison between ANCON and another noise model's default profile for Boeing 767

#### Noise database verification

ANCON's noise database is checked and updated on an annual basis by taking several hundreds of thousands of noise measurements around Heathrow, Gatwick and Stansted airports each year. The noise database contains data for specific airframe/engine combinations in the form of 'noise-power-distance' (NPD) curves, thus it is applicable to any airport. In particular, the database contains extensive noise information for the majority of aircraft types that operate from UK airports, unlike other noise models. [our emphasis]

- 18. Key points to take from this explanation by the CAA is that the ANCON flight profiles may differ significantly from the default profiles in some noise models. The diagram above which compares the ANCON-derived profile for a B767 to another noise model's default profile for the same aircraft, would have a significant impact on the assessment of the actual noise nuisance that would be experienced on the ground. The default profile shows the departing plane reaching a greater height much sooner than the profile generated by the CAA. The CAA's profile captures the reality of a longer, lower, and therefore noisier, take off. It is the CAA's model that will be used to determine eventual flight paths should this DCO be awarded. The CAA's model is therefore to be preferred.
- The second key point to take from the explanation on the CAA's website is that its system is updated annually using **actual** noise measurements. It is our understanding that the INM system is no longer being supported and updated. As RSP says in its ES [APP-057], section 12.3 Aircraft Noise Modelling:
- "However, in 2015 INM was replaced by AEDT, also produced by FAA. Both AEDT and INM are produced by FAA, however due to the release of AEDT the FAA stopped supporting INM and therefore will not update the model or its associated database with new aircraft technology."
- 21. The CAA specifically says that the ANCON model is **applicable to any airport**. This contradicts the Applicant's assertion in Table 1 that ANCON data is relevant only to extant airports.
- The third key point is that "In particular, the database contains extensive noise information for the majority of aircraft types that operate from UK airports, unlike other noise models." [our emphasis] Again, this suggests that the CAA's outputs using ANCON are more robust and are to be preferred.

# **Takeoff and Approach Flight Profiles**

- The Applicant says that there may be a difference between its profiles and NNF's because the ANCON database assumes average weights. In Appendix 12.3 to the Applicant's ES [APP-057], the Applicant says that the INM system that it used does not have a setting for aircraft weight. It relies instead on assumptions about the length of the stage that the aircraft has flown. It says that that stage length is only applicable to departing aircraft. For example, if an aircraft is going to the US, it will be heavier than if it were going to Norway (all other variables being equal) because it will be carrying more fuel. This suggests that in the Applicant's model no account is taken of the fact that the Applicant's own operating assumption is that a disproportionate amount of cargo that would be handled by its proposed airport would be imported, therefore would be relevant to arrivals. Our contention is therefore that RSP's contours underestimate the weight of arriving freight aircraft.
- 24. By contrast, the CAA contours specifically deal with "the expected high proportions of freight traffic". The CAA has taken **real** noise data of freight arrivals and departures at Stansted using average weights. Where real data for a specific freighter was not available in the Stansted database the CAA used real data for those freighters from Heathrow, or Gatwick. This is set out in NNF18 [submitted 14 June 2019] on p30. The CAA contours are therefore a more accurate reflection of reality.

## Flight Path

- The Applicant asserts that it is highly unlikely that the CAA would adopt the same flight path as was previously used by the airport. The Applicant offers no evidence to support this view. The Applicant then says that the previous flight paths would not be supported "because of the likely worsening of the noise impacts." This "likely worsening" is exactly what NNF is trying to get across in its own submissions.
- 26. It is a fact that the CAA approved the previous flight paths as being the best balance between safety the over-riding factor and the noise impact.
- 27. It is a fact that the CAA re-approved the previous flight paths in every subsequent update of the airport's AIP.
- It is more likely than not that the CAA would approve the previous flight paths for use again, should the DCO be awarded. Given that the CAA is still guided by the same considerations of safety and noise impact, any deviation from the previous flight paths can only be small. There simply is not that much that leeway, given the geography.
- It is extremely difficult to identify from the indicative flight paths provided by the Applicant in what way it thinks its flight paths are fundamentally different to the previous flight paths as submitted by NNF. Both RSP and NNF have provided arrival flight paths that follow a straight-line approach from either the east or the west. Both RSP and NNF have provided departure flight paths to the west that turn either north or south to avoid overflying Herne Bay. Both RSP and NNF have provided a departure flight path to the east that turns south. RSP has added an additional departure flight path to the east that then turns north. That flight path does not turn north over the sea until the whole of Ramsgate has been overflown and so the noise that it would generate over Ramsgate is catered for in the NNF path that departs east and then turns south, after clearing Ramsgate.
- 30. In its ES, RSP says under the title Track Proportion:
- "Typically, aircraft arrive and depart into wind and therefore to determine the future runway direction historical weather data was assessed. The historical weather data suggests that for an average year approximately 70% of arriving aircraft will arrive over Ramsgate and 30% will arrive over Herne Bay. For departing aircraft approximately 70% will depart to Herne Bay and 30% towards Ramsgate. For aircraft departing to the west there are two likely flight paths, one turning north and one turning south and it is assumed that there will be a 50/50 traffic distribution. Table A12.3.41 presents the traffic distribution along each flight path as a percentage of the total aircraft movements."
- The possible 70W:30E split that RSP describes in its ES is modelled in the NNF contours, as is a possible 50:50 split between north turn and south turn for those departures to the west. Again, it is difficult to see how NNF's use of previous operational flight paths differs from the indicative flight paths used by RSP in this regard. Yet RSP says in its response to the contours produced by the CAA for NNF that the difference in flight paths "is considered to be the most likely cause of difference between outcomes."

- We note in RSP's Figure 4 of its comments on the CAA contours that the centre line for the more southerly of the two departure paths to the east assumes that the turn to the south begins almost as soon as the aircraft clears the runway. The path then overflies Cliffsend and Pegwell Bay. This is wholly inconsistent with what the Applicant says about this flight path in its ES [APP-057]. On p13 of the Aircraft Noise Modelling section the Applicant says that "that early turn before Ramsgate was discounted after it became apparent the route was not operationally feasible given the location of the Pegwell Bay RAMSAR." Given this, the logical conclusion is that RSP should not have modelled the noise impact of a flight path that it will not use and that it had already rejected. RSP's other departure path to the east would therefore match the departure path that was used previously, and therefore would match the departure path that NNF gave to the CAA.
- Given this inconsistency between the statement in RSP's ES, and the visual representation of its indicative flight paths in its Figure 4 in its recent response to our contours, the ExA can have no confidence in the noise contours produced by RSP. If that flight path was rejected, why is it still shown? Was this flight path modelled in the noise contours or not? If it was, then the noise generated over Ramsgate has been underestimated by RSP as it is relying in its calculations on an (unusable) departure path over Ramsgate that tracks south east from the runway rather than overflying Ramsgate.
- It is also hard to ascertain what weight RSP is putting on its sixth flight path the departure path to the east that then turns north. It is hard to see in what way that flight path would diminish the noise impact of departures on Ramsgate. It is hard for NNF to make any further comment on this purely indicative flight path as we can find no record that it was used operationally previously.
- 36. In its ES, in the Aircraft Noise Modelling section, RSP says:
- "The aircraft flight paths define the ground tracks taken by aircraft in the INM model 37. and hence locations of noise emissions from aircraft in flight. The exact airspace options and aircraft flight paths will be formalised through an Airspace Change Proposal (ACP), which is a separate consenting regime. The ACP will be submitted through the CAA's airspace change process and the potential noise effects will be assessed following the CAA guidance within the Civil Aviation Publications (CAP). The ACP will therefore provide opportunities for communities to engage on future flight paths through an extensive consultation process. The assessment of aircraft air noise for ES has therefore considered six indicative airspace route options within a design swathe as provided by the airspace consultant Osprey Consulting Services Limited. The design swathe has taken into account the 'knowns' of the local airspace, including airways and navigational aids. The route swathe and indicative flight paths are presented in Figure A12.3.1 and show the different routes within the design swathe for future departure and approach routes and Table A12.3.39 presents the six design principles considered."
- "As described above, the route options will not be finalised until an ACP is completed. This will not occur until after the powers to build and operate the airport are obtained under the DCO process. The assessment of the noise impact of the airport in the ES is based on an indicative route. The noise impact of the Airport may be different to that presented in the ES following the finalisation of the

**ACP**. The purpose of the options appraisal presented here is to provide an indication of the potential variability in the noise impact which remains until the routes are finalised in the ACP." [our emphasis]

This makes it clear that the "indicative" flight paths modelled by RSP in its noise contours are just that. In contrast, the NNF flight paths reflect 15 years of operational reality, as well as reflecting flight paths previously approved by the CAA. The NNF flight paths are clearly to be preferred.

### **Modal Splits**

- 40. RSP says in Table 1 "When comparing like with like, this should influence the difference." We have no idea what this means.
- As RSP has noted, the CAA produced noise contours for NNF for operations 100% east and 100% west, and 70W:30E and 30W:70E. What RSP did was to produce an average contour which assumes a 70W:30E split for each of the 365 days of the year. As we say in NNF18 [submitted on 14 June and accepted as an additional submission by the ExA], TDC's noise consultants, Ricardo, identified this average of an average as a flaw in RSP's modelling in their submission to D6.
- 42. NNF's noise conoutrs are to be preferred because they show the noise impact that is created for days at a time when operations are in one direction or the other. RSP's contours do not reflect operational reality. RSP's contours reflect:
  - Annual ATMs averaged almost evenly over 365 days
  - ATMs averaged evenly throughout a 16 or 8 hour period, for day or night
  - That average is then split 70:30 and 30:70 as if every day and every night has this operational modal split
  - Lastly, RSP then adds the 70:30 hypothetical to the 30:70 hypothetical, divides by two, and says that this reflects the noise nuisance created on an average winter's day. It does not.

#### Fleet Mix

- 43. RSP says that "NNF used an alternative commercial fleet mix". This is true. The RSP fleet mix, as is well recorded, has not been updated since the ES was submitted in the summer of 2018. In Table 2 of RSP's response to NNF's contours, RSP shows that that fleet mix includes 4,310 ATR-72 ATMs. RSP has accepted, in evidence, that its current "plan" relies on "new" integrators, and that these airport customers would **not** be using ATR-72 aircraft. Despite this, RSP continues to assert that its ES is robust and that it will reflect a likely worst case scenario. This is not supportable. The NNF contours reflect the evidence that RSP gave to the ExA in the March and June ISHs. The NNF contours are to be preferred.
- 44. The fleet mix in RSP's ES is at the heart of its assessment of the noise, the pollution, and the traffic impacts of its aviation operations. This fleet mix is out of date and is not in line with RSP's latest operational "forecast".

- 45. We note with increasing disbelief and horror that far from introducing a ban on night flights, RSP is seeking an even greater level of flexibility for night flights in the latest iteration of its Noise Mitigation Plan. The night noise contours produced for NNF by the CAA do not in any way begin to capture the night noise impact that would be generated by the operational freedom that RSP is now seeking to apply its suggested annual quota count to just one hour of an 8 hour night. We will say more about this in our response to the latest Noise Mitigation Plan.
- 46. The NNF contours include 38,000 GA ATMs. RSP appears to have included 35,040 GA ATMs.<sup>3</sup> In the Aircraft Noise Modelling section of its ES in Appendix 12.3 at xxxiv, RSP says:
- "General Aviation (GA) traffic was added, comprising of a worst-case daily scenario of 40 arrivals and departures, eight circuits flight comprising six circuits per flight and eight touch and go operations. General Aviation flights will only occur during the daytime and therefore there is no change in-terms of night-time contours."
- 48. In its ES, RSP says:
- 49. "The modelling shows that when General Aviation flights are considered there is a negligible change in the LOAEL contour however because the circuits routes overfly new areas there is a noticeable change in the SOAEL contours."
- RSP has not set out the aircraft assumptions that underpin its modelling of GA ATMs in the ES. NNF produced a fleet mix that included some of the types of GA aircraft that were previously in use at the airport and that RSP has said it would like to attract to a new airport, including executive jets. RSP's comment about the potential impact of such flights on the SOAEL suggests that the RSP noise contours do not reflect the likely worst case noise impacts.

# **RSP's Commentary for Ns.4.3 NNF**

- 51. RSP says at 3.2.3 that NNF has:
- "... presented contours which they state will more closely relate to the nuisance they believe will result from the airport, which the Applicant does not believe are required to enable consideration of the application with respect to policy."
- This is the most extraordinary statement. It appears that the Applicant has not grasped the need to assess the likely noise nuisance that would be generated as a result of its proposal so that the ExA can determine whether or not the claimed benefits of the application are outweighed by the likely dis-benefits. This balancing act will still need to be carried out despite the fact that there is now no need for a CPO of the land that was owned by Stone Hill Park (although other parts of the proposed site owned by others will still require a CPO if RSP is to carry out its plans). The ExA is obliged to consider as part of its determination the likely negative impact of RSP's proposals on the human rights of local residents. The ExA will also need to take a view as to what level of noise mitigation would be appropriate if the ExA decided to award a DCO to RSP. Of course the ExA will need to consider relevant policy. It is also the duty of the ExA to consider relevant evidence put in front of it about the likely negative impacts of the proposal.

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<sup>3 (8</sup> circuits flights x 6 circuits each) + 40 + 8 multiplied by 365 days p.a.

- At 3.2.4 RSP says that its following five paragraphs address why it has used 16 hour and 8 hour contours, average day, and modal splits "rather than taking NNF's approach." We are puzzled by this. We too have used 16 hour and 8 hour contours, average day and modal splits.
- At 3.2.5 RSP says that "the noise information that should be presented for a new airport is not mandated in England." It says it has provided information about the areas and populations exposed to the LOAEL, the SOAEL, and also to LAmax. Of course, RSP's use of LAmax for an assessment of night awakenings is adulterated by its idiosyncratic use of the work of Dr Basner to suggest that there will be no additional awakenings as a result of 18 80dB noise events every night. NNF has commented exhaustively on the evidence from previous operations at the airport, as well as from up-to-date guidance from the WHO that demonstrates that RSP's approach is, at the politest, an outlier. The WHO talks about individual noise events causing harm at 45dB LAmax whereas RSP suggests that 18 individual noise events of 80dB will cause no harm and generate no awakenings. RSP has also produced a paucity of evidence about the substantial harm to health that can be caused by night noise without necessarily producing an awakening.
- 56. On its website, the CAA says:
- "Occasional loud noise is measured in the UK by Sound Exposure Level (SEL). Studies have found that SEL above 90dBA generally leads to sleep disturbance. SEL footprints can be used to work out the areas where take-off creates an SEL over 90dBA to inform decisions about whether or not a particular type of aircraft should be permitted to operate at night, or to influence airport construction or extension in populated areas. An SEL footprint shows the geographical area in which a particular SEL is reached from a single noise incident (e.g. a plane taking off). [our emphasis]
- 58. NNF has submitted evidence previously from the noise monitors in use while the airport was operational demonstrating that SEL above 90dBA was regularly captured by the noise monitor at the Clarendon School in Ramsgate.
- Also in 3.2.5 RSP says that it is not relying on a "Rochdale envelope approach" for its application. This is a new development. It is hard to see how RSP can claim that it has accurately assessed the likely worst case if RSP has chosen to put itself beyond the reach of the "Rochdale envelope approach".
- 60. In answer to a query last year from NNF to PINS about the inadequacy of RSP's consultation, PINS replied:
- "Applicants can assess the likely significant impacts of a proposed development using the 'Rochdale Envelope' (RE) approach; this is used to assess a likely or reasonable 'worst case scenario'. This approach is consistent with the objective of the EIA Directive, and the Planning Inspectorate acknowledges the Rochdale approach is a way of dealing with an application comprising EIA development where details of a project have not been resolved at the time when an application is submitted."
- 62. PINS then referred to Advice Note 9 which says:

- 63. "...Taken with those defined parameters of the project, the level of detail of the proposals must be such as to enable a proper assessment of the likely environmental effects, and necessary mitigation if necessary considering a range of possibilities:
- 64. ....The level of information required is: "sufficient information to enable 'the main', or the 'likely significant' effects on the environment to be assessed... and the mitigation measures to be described..." (Para.104 of the Judgement)
- 65. ...The 'flexibility' referred to is not to be abused: "This does not give developers an excuse to provide inadequate descriptions of their projects."
- 66. Care will be needed by the developer to ensure that the project description is clear so that the developer can demonstrate that the statutory requirements regarding consultation have been met."
- 67. We take RSP's comment here as tacit recognition that it has failed to meet the standards expected of it with regard to the Rochdale envelope. We are astonished by the assertion that the Rochdale envelope has no relevance to the assessment of the likely significant impacts of this application.
- In 3.2.9 RSP says that its anticipated modal split is the norm for presentation of aviation noise contours. It cites noise contours produced for Heathrow in 2015. RSP appears not to have caught up with what the operator at Heathrow airport is now suggesting is relevant and appropriate in its current noise consultation. At 5.245 of the Airports NPS, there is the following commitment:
- "In addition to statutory requirements, Heathrow Airport has publicly committed to a community compensation package comprising a number of more generous offers:
- 70. [...]
- Following a third-party assessment, to provide full acoustic insulation for residential property within the **full single mode easterly and westerly 60dB LAeq,16hr noise contour** of an expanded airport;
- Following a third-party assessment, to provide a contribution of up to £3,000 for acoustic insulation for residential properties within the full single mode easterly and westerly 57dB LAeq,16hr or the full 55dB Lden noise contours of an expanded airport, whichever is the bigger; and
- To deliver a programme of noise insulation and ventilation for schools and community buildings within the 60dB LAeq,16hr contour." [our emphasis]
- 74. In addition, the Aviation 2050 consultation published in December 2018 proposes the following noise insulation measure:
- "for airspace changes which lead to **significantly increased overflight**, to set a new minimum threshold of an increase of LAeqT 3dB, which leaves a **household in the LAeq,16hr 54dB contour or above as a new eligibility criterion** for assistance with noise insulation." [our emphasis]

- 76. The implication of this is clear for RSP's proposal. The Government is suggesting that, for communities which would experience significant overflight and this clearly includes everyone who lives under the flight paths for a new airport at Manston the threshold for noise insulation grants should be 54dB LAeq where the increase over the previous noise environment is LAeqT 3dB. We urge the ExA to adopt this measure for the RSP proposal. It is entirely in line with current Government acceptance that the onset of significant community annoyance is now 54dB LAeq.
- 77. The Draft UK Airspace policy published by the Department for Transport (DfT) in February 2017 and the consultation response that the DfT published in October 2017 says:
- "Consistent with the Noise Policy Statement for England, our objectives in implementing this policy are to: ... limit and, where possible, reduce the number of people in the UK significantly affected by the adverse impacts from aircraft noise." (Para 2.69 Oct 2017)
- "The government acknowledges the evidence from recent research which shows that sensitivity to aircraft noise has increased, with the same percentage of people reporting to be highly annoyed at a level of 54dB LAeq,16hr as occurred at 57dB LAeq,16hr in the past." (Para 2.72 Oct 2017) [our emphasis]
- 80. The Heathrow consultation document says at 2.9.5
- "We have also made a commitment to use a combined contour based on both full, single mode contours, namely the easterly and westerly mode contours. This will produce a noise contour area larger than the area for the actual averaged east-west operations and effectively will treat areas impacted by one mode as if it occurred for the entire year."
- This means that all properties within the single mode easterly and westerly 60dB LAeq, 16 hour noise contour will have the full cost of all noise insulation and ventilation costs covered by the airport operator. In addition, all properties within the single mode easterly and westerly 57dB LAeq, 16 hour noise contour will receive a grant of £3,000 towards noise insulation costs, as will all properties within the 55Lden contour. We have made submissions before on the approach to noise insulation being taken by the planning authority at Stansted. Uttlesford DC has set as a planning condition the requirement to extend a sound insulation grant scheme of £5,000 to households in the 57 dB LAeq,16h noise contour and to those in the 90dB SEL footprint for night noise.
- 83. We see no reason why Thanet and Canterbury residents should be treated less well than London residents in this regard. Indeed, we should be offered better noise mitigation given that we are a population that has not been habituated to aviation noise.

#### Conclusion

- At 4.1.1 RSP says that noise from airport operations will be limited by the noise contour cap and "as such, the adverse effects of the proposed development are limited to those reported in the ES". Firstly, of course, the ExA would need to accept that RSP's noise contour cap is a sensible and appropriate way of managing the noise nuisance that would be generated by airport operations.
- Secondly, RSP is confusingly conflating two separate ideas here. The noise contour cap was invented by RSP in May 2019 [REP-021] post-dating the publication of the ES by almost a year. In addition, a noise contour cap of 50dB will not prevent a 747-400 from being heard the length of Ramsgate and into Herne Bay. It will do nothing to avoid or mitigate the noise impact of aviation operations.
- Furthermore, it is clear that the adverse effects of the proposed development will not be limited to those in the ES. The ES does not reflect the likely fleet mix that will be in operation. The ES does not model the Applicant's latest request for QC4 aircraft to be operated 23 hours a day. The ES does not model the likely noise impact from unlimited other "late" arrivals between 2300 and 0600. The ES has not included the full number of GA ATMs. The ES offers an average of an average in its noise contours. In short, the ES comes nowhere near reporting the potential adverse effects of the development when it comes to aviation noise.
- 87. The Airports NPS says at 5.68:
- "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;
- 90. 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." [our emphasis]
- RSP's proposal does not do this. The NNF noise contours, together with other evidence submitted by us during the course of this examination, demonstrate conclusively that there will be significant adverse impacts on health and quality of life from the noise that would be generated by RSP's new airport. There will also be adverse impacts on health and quality of life that RSP's NMP does not even begin to mitigate. We strongly urge the ExA to reject RSP's application for a DCO for this proposal as it neither avoids significant adverse effects, nor mitigates and minimises adverse impacts, and certainly does not contribute to any improvement in health and/or quality of life.
- 93. We will deal with the Noise Contour Cap in our comments on the latest Noise Mitigation Plan.