



A response to:

Airports Commission

Discussion Paper 05:  
Aviation Noise

- July 2013

Noise Communication Solutions Ltd  
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## **Introduction**

As one of Europe's leading consultants in aviation noise management with over 25 years experience, NCS have worked with airports around the world offering strategic noise expertise. We have project managed airspace changes; reviewed noise strategies; advised on noise communications best practice; and organised dedicated airport noise seminars.

NCS have expanded their success, and now offer a world-first noise accreditation scheme – 'Environmental Noise Accreditation' (ENA). This accreditation programme recognises and accredits the efforts and achievements of airports to manage noise, and establishes a roadmap for continuous improvement.

We have signed a Memorandum of Understanding with the Noise Abatement Society, who raise awareness and educate about the measured, considered and responsible use of sound. We are working together to establish a 'standard' across aviation within noise management, as well as working on a way forward for alternative/supplementary noise metrics, general research and best practice within industry.





## **Scope of our response**

NCS Ltd is responding to the Airports Commission “Discussion Paper 05: Aviation Noise” released July 2013. We are responding to the questions emphasised in the conclusion of each section, as well as the overall conclusion.

### **The impact of aviation noise**

We were very pleased to note such statements within the Commission’s discussion paper as:

-  Noise will be a central issue for the Airports Commission; and
-  Recognising that there is still no firm consensus on how to approach issues around aircraft noise.

The aviation industry is in an unprecedented situation of review, and three significant ‘consultations’ are running: this Airport Commission Discussion paper; the CAA’s consultation on “Better information about UK aviation” and DfT’s consultation on “Guidance to the Civil Aviation Authority on Environmental Objectives”. It is important that all of these reviews work collaboratively together to form a consistent approach to the management of aviation noise, including Noise Communications, Operational Noise and Noise Mitigation.

We support ICAO and Sustainable Aviation’s approaches to noise and especially welcome Sustainable Aviation’s foresight to include Noise Communications within its noise roadmap. We cannot stress enough, the importance of providing clear and easy to understand information about noise for communities. Statistical information should be readily available and be appropriate; websites should be easily accessible and contain as much information as possible and be up to date; and information on noise should be made accessible to potential house-buyers.



Airports manage noise and noise impacts generally very well, but we believe there are significant opportunities for them to look to the future and build on what is currently done for, and with, communities to help them better understand noise and how they could be affected.

We believe that this responsibility lies with airports as a one-stop-shop for noise information, with other parties perhaps having that information on their websites and/or links to the airports' sites. We believe that the CAA has a role in regulating that information and providing clarity for the consumer/community that the information provided is correct and aligned to best practice, in order to bridge some trust deficits between communities and airports.

It should also be acknowledged that trust deficits do not always exist and there are airports where local communities have a very good relationship with the airport, and that the importance of that airport in terms of jobs, economy and growth is recognised.

We are in the unique position of working for airports, but understanding from a community perspective what is expected of that airport, and can therefore independently judge the balance that needs to be struck between an airport and its local community.

Each airport can only be judged on its own merits and unique issues, and one size does not fit all. However, how airports communicate with their local communities and their noise management practices vary widely. There are opportunities to further improve sharing of best practice and innovative communication methods, whilst delivering a framework that encourages objective, independent assessment.



## Questions and Answers

### Question

What is the appropriate methodology to assess and compare different airport noise footprints?

- a. What metrics and assessment methods would an appropriate score card be based on?
- b. To what extent is it appropriate to use multiple metrics and would there be any issues of contradiction if this were to occur?
- c. Are there additional relevant metrics to those discussed in Chapter 3 that the Commission should be aware of?
- d. What baseline should any noise assessment be based on? Should an assessment be based on absolute noise levels or on changes relative to the existing noise environment?
- e. How should we characterise a noise environment currently unaffected by aircraft noise?

### Answer

There needs to be much more simpler to understand descriptions of noise metrics and what they mean. In our experience, we have only ever heard negative comments from people in local communities around airports about noise contours and how they are so difficult to understand and plainly do not demonstrate how people are affected by noise. Comments have included 'if I'm not within a contour does that mean I am not affected/bothered by aircraft noise, because I am!'.



There is an opportunity to research supplementary noise metrics that can show sound quality characteristics within the noise environment, in context. We believe this would provide local communities with added support through creating more amenable environments. A 'Soundscape' – like a landscape for sound. This approach provides the opportunity to develop new metrics for measuring acceptability of sounds independent of decibel levels and, therefore, the opportunity for a wider variety of interventions and options than presently available.

This would provide the industry and communities with a supplementary suite of metrics that are more appropriate to them and better reflect their needs.

### Question

How could the assessment methods described in Chapter 4 be improved to better reflect noise impacts and effects?

### Answer

We believe the answer lies in the research into supplementary metrics detailed above.



### Question

Is monetising noise impacts and effects a sensible approach? If so, which monetisation method described here holds the most credibility or are most pertinent to noise and its various effects?

### Answer

We do not believe that monetising noise impacts and effects is the only answer to 'solving' noise issues. We agree that the science of noise monetisation is not well established and does not offer a practical or effective method of reducing noise exposure.

There needs to be more research into this subject to look for alternatives and supplementary options to noise insulation and mitigation. A 'standard' noise insulation scheme for an airport has a blanket approach that includes providing insulation, ventilation and double or secondary glazing to a property. We believe that there are many more opportunities to tailor an airport's insulation and mitigation approach, including energy efficiency, best practice within building homes and properties of the future, and sustainability methods.

### Question

Are there any specific thresholds that significantly alter the nature of any noise assessment, eg, a level or intermittency of noise beyond which the impact or effect significantly changes in nature?

### Answer

We believe the answer lies in the research into supplementary metrics detailed above.



### Question

To what extent does introducing noise at a previously unaffected area represent more or less of an impact than increasing noise in already affected areas?

### Answer

We cannot comment on this question.

### Question

To what extent is the use of a noise envelope approach appropriate, and which metrics could be used effectively in this regard?

### Answer

We believe there is a need for the use of a 'noise envelope' type approach, as currently noise contours do not adequately reflect effects. We would not wish to 'throw the baby out with the bath water', as there is a place for contours. We wholly believe, however, that there should be a balanced approach that reflects the need for the aviation industry to grow, in a sustainable manner, whilst recognising noise impacts should be reduced.

### Question

To what extent should noise concentration and noise dispersal be used in the UK? Where and how could these techniques be deployed most effectively?





### Answer

There should be a balance between concentration and dispersal where appropriate. The DfT are currently consulting through their “Guidance to the Civil Aviation Authority on the Exercise of its Air Navigation Functions”, which asks a specific question regarding concentration versus dispersal, in terms of testing stakeholders’ views on consideration of respite.

We believe that through the use of, and evolution, of technology both with satellite based navigation and aircraft equipment, there can be tailor made balances that can be achieved for communities, airports and airlines to deliver reduced noise impacts. Although, it should be recognised that there will always be ‘winners’ and ‘losers’ but impacts can be lessened and mitigated.

### Question

What constitutes best practice for noise compensation schemes abroad and how do these compare to current UK practice? What noise assessments could be effectively utilised when constructing compensation arrangements.

### Answer

We cannot answer this question.



## **Conclusion**

NCS are pleased to be able to contribute to this consultation, and we welcome the Commission's appetite to better understand noise and its effects.

The aviation industry does a great deal of good work within the noise communications field and there are many examples of best practice at airports within community engagement.

Going forward, we would welcome the opportunity to work with the Commission to assist and advise further should it wish, and we would also welcome the chance to review any proposals coming out of the process.





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