Sirs
I have read the Discussion Paper and have several observations (and moans – my privilege as a grumpy old man in trousers – my daughter says "you're GROMIT" !)

My qualifications to comment? … >>

- I have spent a working lifetime in constructing and financing infrastructure facilities, including airports in London and the Middle East. I am now a visiting professor of infrastructure investment at one London university and a senior Teaching Fellow at another London University (not far from Heathrow! Or Windsor!).
- I am fully aware of the legalities surrounding noise issues, after working at Mowlem who developed City Airport and we then sold it "cum-claims" for noise complaints by local (and not so local) residents. I knocked on 3000+ doors to beat the ambulance-chasers to it, to see if noise claims were about to flood in – they didn't, but it was a river
- I was a shareholder in BAA before its sale to the Spanish (who have made a fortune since their initial investment from the refinancings alone), AND:
  I am still perturbed enough by Ferrovial's actions since acquisition to worry there really was a conspiracy theory, and not a cock-up (pardon the colloquialism!) when Ferrovial acquiesced so softly (loud bluster by Colin Matthews at the time; not by his shareholders) to the Competition Commission's "forced" sale of their assets at Edinburgh and Gatwick. The conspiracists would intimate there was a deal done by the (Labour) Government) with a nod-&-wink to the Spanish, who by the way were still benefiting from an undisclosed VAT avoidance wheeze allowing them to pay £10bn in 2006. The nod&wink was regarding a 3rd runway at Heathrow being promised in recompense for the Competition Commission's insistence on selling Gatwick + 1 Scottish airport. One wonders now if those rumours 6 years ago had any merit.
- But these are hearsay noises, whereas my real worries are based in facts (my involvement in selling a London airport subject to noise claims).

The 'facts' as they affect me are:

- On a personal (unevidenced) note, I live on Kingston Hill, and at the weekends notice a marked noise increase when flights take off eastwards. I try and log the airline names; they are always low even by the time they reach Richmond Park. One thing that has disturbed me is nightflights coming/going at midnight or later. I have worked and lived in dozens of countries, often near an airport, but the night flying has never been so bad as now – or so it seems. I attended a community meeting in a church in Richmond a year ago when three extraordinarily smug English-speaking (cf Spanish) Heathrow executives said night flying after the "watershed" did not occur, which was palpably rubbish (not to say deceitful).
- Noise levels as exposed in your discussion document are measured on a basis that ignores my experienced view regarding averaging.
- Noise on a single plane basis, which ignores the numbers (quantum) of noise-generative flights per hour, gives a false response to "annoyance factors". I get annoyed by frequency. In the days when Concorde landed twice a day, you could set your watch by it and not get annoyed because it was indeed only twice a day (nevermind the plane's iconic status!).
- In your clause 2.38 you mention studies having been done. There were a couple at Heathrow/Hounslow but the respondent-base was limited (340 children?) and much more needs to be shown to have been done in this area of cognitive impairment to produce a reliable conclusion

- Having earned a living financing “hush-kits” for planes in the ‘80s, I know only too well that some planes are quieter than others, but not all “quiet” planes are flown with the sensitivity other pilots achieve with noisier planes, so simply stating “less noisy planes are an option” does not ring true and you have not evidenced this from a satisfactory (to me) set of data.
- Steeper approach/take-offs worked at City Airport when we flew Dash-7s because of that aircraft’s configuration, but at the old Hong Kong airport the noise levels were horrendous!
- I spent nearly 5 years as a CEO within an Australian infrastructure business, and regularly used Sydney. It was not my experience that the 3pm runway switch did one jot of good to employees who lived near the airport, and the levels of empirical evidence are insufficient to make inferred conclusions as you seem to do on page
- In your Clause 5.38, you tread dangerous ground! My exclamation mark reflects experience in 1995/6 in the House of Lords when the defendants (TfL) were explaining to the 3 law lords that noise abatement measures for the DLR could include secondary glazing. It was explained that this type of 2-pane glazing required an air-gap of c8mm and not the 0.8mm found in “double-glazing” units sold to householders, which creates a thermal insulation but not a noise insulator. After 2 days of hearing an exasperated bench declared it was all too technical and ordered TfL to pay for triple glazing!
- On page 51 you ask 3 questions, to which I respond as follows:

1. *To what extent is the use of a noise envelope approach appropriate, and which metrics could be used effectively in this regard?*
   I question this approach for the reasons hinted at above re pilot capability, and airport operator enforcement strength. We had a lot of talk in Sydney about this and with its private ownership there, comes a lack of forceful incentive to dissuade their customers (airlines) from submitting to any measurement at all other than State measurements which did not satisfy/curb impacts on residents in certain neighbourhoods;
2. *To what extent should noise concentration and noise dispersal (as described in paragraph 5.17) be used in the UK? Where and how could these techniques be deployed most effectively?*
   This 2-part question needs elaboration to be more precise about the different UK airports referred to. There is a big variation between e.g. Sumburgh, Birmingham (has that town *got* an airport anymore??!!) and Heathrow. Before answering the 2nd part, I need to know who is listening, who is judging etc.
3. *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 designing compensation arrangements?*
   I’m unclear why you are asking non-cognate members of the public to respond to this within the Discussion document framework you’ve chosen. First, I am uninterested in noise compensation schemes abroad; we should be developing our own ‘best practice’ in the UK (if it is a united kingdom much longer – please please say no to Scottish independence – and notice my surname which I am proud to say stretches back 700 years (next year sees the wonderful celebration … check out: http://battleofbannockburn.com/) but the economy is different now! Getting back to the point: There is a wealth of data available from the Courts and elsewhere on the application of e.g. the McCarthy Rules (LCCA1845Sec68, LCA1973Sec44 and so on) and these have worked well to date. However, the noise/vibration *measurement system* needs reassessment in the case of e.g. Heathrow due to the frequency of

airplane movements and all the other extraneous, and partly-controlled factors I've listed above.

Turning now to the catalogue of queries you raise in your Section 6, I think individuals views are unlikely to be noticed or recorded by you, so I wonder if there's a real purpose, but as you're faceless, and I am too, I'll have a quick go at answering each one, despite it being 5th Sept. I might be an old professor in my 60s, but I have absolutely no pension so must work 80 – 100 hours each week to find employment, so fitting in these responses in my schedule is tough, but necessary!!

1. *What is the most appropriate methodology to assess and compare different airport noise footprints? For example:*
   - i) *What metrics or assessment methods would an appropriate 'scorecard' be based on?*
   - ii) *To what extent is it appropriate to use multiple metrics, and would there be any issues of contradiction if this were to occur?*
   - iii) *Are there additional relevant metrics to those discussed in Chapter 3 which the Commission should be aware of?*
   - iv) *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?*
   - v) *How should we characterise a noise environment currently unaffected by aircraft noise?*

   In a short-form research paper in 2009, Manchester Metro Uni said:
   In summary, the focus groups were undertaken with both sensitised and non-sensitised members of the public and also Local Authority Officers who have an interest in aircraft noise issues and revealed:
   - Considerable variation in the interpretation of different metrics used to illustrate the same noise environment.
   - General dissatisfaction and indeed mistrust in some cases among members of the public with the aggregated indictors such as Leq and Lden.
   - All the aggregated indicators (Leq, Lden, Lnight, N60 and N70) required considerable explanation in the latter part of the focus groups before participants understood the illustrations.
   - An affinity for metrics that disaggregate key elements of aircraft noise; namely, time, frequency of events and individual sound levels.
   - A desire for a wider range of noise exposure illustrations, especially among members of the public living close to airports.
   - Universal acknowledgement that bar charts, for specific locations illustrating the numbers of events within ranges of maximum sound levels for given periods of the day, were the most informative and easiest to interpret of all the metrics viewed.
   - Consensus that the flight path densities maps were the most visually attractive despite the lack of specific noise data contained therein. To combat this, a number of participants suggested that this image could be overlaid on aggregated noise footprints such as N70 or Leq contours.
   - That the public is more interested in site specific information that is easy to interpret in relation to their own personal exposure, rather than more complex images that may provide a comprehensive overview of the whole noise environment around an airport as conventionally used by planners and decision-makers.

   Given the small sample size and the exploratory nature of this research, care must be taken when attaching significance to these findings; nevertheless, the results point to the potential value of:

A more substantive UK study to 'test' these preliminary findings. Providing appropriately differentiated information to different user groups depending on their individual requirements.
More detailed investigation of the supplementary noise indicators such as those developed in Australia and the novel location-specific histograms evaluated here for the first time, in terms of their:
Contribution to improved understanding of aircraft noise exposure.
Potential to aid in establishing effective dialogue with the communities most affected by aircraft noise and most cynical about the conventional metrics.
Contributing to the development of future noise metrics in such a way as to enhance public acceptance of future aviation development.

What's clear from this paper is that my concerns above, generally, re insufficient data, still hold true

2. *How could the assessment methods described in Chapter 4 be improved to better reflect noise impacts and effects?*
   Wider range continuous monitoring
3. *Is monetising noise impacts and effects a sensible approach? If so, which monetisation methods described here hold the most credibility, or are most pertinent to noise and its various effects?*
   Yes, but take the calcs away from Defra and get a proper body performing the CBA (Infrastructure UK??, or OBR ?? someone with skill, not a bunch of farmers)
4. *Are there any specific thresholds that significantly alter the nature of any noise assessment, e.g. a level or intermittency of noise beyond which the impact or effect significantly changes in nature?*
   Obviously yes, and there is so little solid data on this (but it could be mined easily) that to proceed with any decisions (esp' @ Heathrow) would be stupid
5. *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?*
   No difference LCA1973 still applies, and it is no more or less intrusive by virtue of history
6. *To what extent is the use of a noise envelope approach appropriate, and which metrics could be used effectively in this regard?*
   Again, see above, not enough reliable data yet for certain airports (Heathrow's figures do seem skewed!) and so a noise envelope is inappropriate- until frequency and measurement methods and transparent benchmarks are independently established
7. *To what extent should noise concentration and noise dispersal be used in the UK? Where and how could these techniques be deployed most effectively?*
8. *Tongue in cheek answer would be Sumburgh, but I am mindful of the dreadful helicopter crash(s) there recently and want only to pray for those poor victims. I don't think an "hours-of-day" based management system to limit the issue is appropriate – we have already seen (and heard admitted) Heathrow's increasing propensity to allow post-midnight flights for "operational necessity".*
9. *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?*
   Already essayed a response above, current compensation schemes derive from other transport modes (road, rail) and are not always applicable to airports … more research needed before decisions are taken