Looking ahead - how the Airports Commission’s work on noise mitigation for the new London runway may impact other UK airports

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There is a long history in the UK of airport noise policy being developed by government at the Designated London airports (Heathrow, Gatwick and Stansted) and this has consequences for equivalent noise management standards being expected at other airports.

In July 2015 the Airports Commission (AC) submitted its final report to government recommending a new runway should be built at Heathrow if certain conditions can be met. The government is considering the Commission’s recommendations through to May/June 2016, and whilst Heathrow and Gatwick airports will be directly affected by the outcome, how could other airports be affected, and what should they be doing to prepare?

Changing the way we look at noise impacts

Since the Appraisal Framework to assess new airport runways was developed in 2014 following widespread consultation, the AC have been studying the local and national noise impacts of two runway options at Heathrow and one at Gatwick in great detail. The framework itself has set new standards for the assessment of noise and includes new methods to quantify its health effects, for example, Number Above (N60 and N70) contours (which count the number of aircraft that exceed a given noise peak threshold, eg 60 or 70 dB, as the fly overhead) may now be required in the assessment of noise from airport expansion plans. It is looking likely to become standard practice to quantify health impacts to monetise predicted community annoyance, effects on sleep, and effects of learning rates in schools and increased rates of hypertension and strokes in affected communities.

Mitigation and compensation – a new approach

In 2013 the AC shortlisted three options for London Airports; 1) a second runway at Gatwick, 2) a third North West runway at Heathrow and 3) an extended northern runway at Heathrow. Once shortlisted, the promoters of these schemes refined their proposals, each competing for the AC’s preference. Having quantified the inevitable noise impacts of their scheme, each promoter set about working up mitigation proposals to minimise the negative aspect of their proposal. For example, for the first time ever, compensation (as opposed to mitigation to reduce noise) was offered by the Heathrow and Gatwick promoters, and Heathrow in particular committed to new methods of reducing their noise impact. This included the testing of increased approach slopes and shifting approach thresholds to raise the heights of arriving aircraft flying over affected communities. Additional departure and curved arrival routes are to be designed into radically revised airspace proposals using precision navigation technologies to fly aircraft over less populated areas. And perhaps the most controversial is Heathrow’s proposal to alternate these new and old routes to provide periods of relative quiet, or ‘respite’, on a regular basis, with the new routes overflying thousands of previously undisturbed people for the first time.
A regional effect

The AC’s final report weighs up the pros and cons of the preferred options acknowledging that the noise impact of a third runway at Heathrow would be considerably greater than that of a second runway at Gatwick. To address this, the report lists out several conditions of its recommendation, requiring Heathrow to reduce its noise impacts:

- a ban on night flights,
- more reliable respite for overflown communities,
- a legally-enforced “noise envelope”,
- a statutory independent aviation noise authority,
- minimum compensation funds,
- a noise levy to fund a far stronger and more generous set of compensation and mitigation schemes,
- No 4th runway ever.

The AC presents the case that a ban on flights from 2330 to 0600 hours could be accommodated at Heathrow because the 16 or so flights in this period could be accommodated after 0600 hours with the extra capacity in this hour that would be provided by a third runway. The AC understands how valuable these relatively few long haul arrivals are to Heathrow’s business, but it has recommended stopping them because of the scale of the sleep disturbance and consequential health impact they create. This raises the likelihood of tighter night restrictions or bans are other airports.

There has been much discussion on the value of respite at Heathrow, and the AC believes it should be pursued. There are at least three types of respite; 1) from runway alternation, 2) from flight route alternation and 3) from moving flight paths within routes, facilitated by new precision navigational systems allowing aircraft to fly preferred routes more accurately. Respite is not excluded from single runway airports, and pressure may begin to build for it to be introduced at other regional airports; the airspace consequences would need careful planning.

Many regional airports already operate with noise caps as some form of noise envelope, but often these have been set from historical contours and they do not limit air traffic growth or drive noise reduction. The form and size of the noise envelope at Heathrow could change this.

The introduction of an independent Statutory Noise Authority would press Heathrow on new noise reduction initiatives, but it may also have powers outside London, and may decide to roll out noise levies across the UK. The AC recommends a noise levy based on a charge per passenger proportionate to the numbers of people affected by noise at the airport, so levies would be significantly different across regional airports which could raise competition concerns.

However, perhaps the greatest implication from the competition to limit noise impacts at Heathrow and Gatwick could be the compensation that may be offered to those affected. The AC Final Report states:

“HAL should be held to its commitment to spend more than £1 billion on community compensation, including £700 million on noise insulation, and should be prepared to go further. Support for schools should be a priority.”
The AC distinguishes between ‘mitigation’ that reduces noise and ‘compensation’ that does not. Gatwick has expanded its noise insulation (mitigation) scheme beyond the statutory minimum and committed to pay £1,000 compensation toward the annual Council Tax bill of all households that come within the $L_{eq,16\text{ hr}} 57\text{dB}$ contour (the noise threshold above which ‘significant community annoyance’ begins) as a result of a second runway. For the first time compensation, not to reduce noise, but rather to offer financial compensation for its effects, is being offered and committed to, similar to the compensation payable to those affected by noise from new roads or railways. Stakeholders affected by noise from other airports will be keeping a close eye the outcome in case they feel it is applicable to their situation.

Find out more
To find out more about how airports may be affected by a change in approach to impact mitigation and compensation and what they could be doing to prepare for this, please contact Steve Mitchell on +44 (0)20 3206 5210 or steve.mitchell@erm.com.

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1 https://www.gov.uk/government/consultations/airports-commission-appraisal-framework