

Question 7

Respondents

- a) Specific: 2M, EANAG, Hacan, HAL, Hammersmith & Fulham Council, Hillingdon Council, Kensington and Chelsea Council, LAANC, RHC, Richmond Council, Wandsworth Council, Windsor & Maidenhead Council, Mayor of London (13). CAA and Gatwick did not answer Q7.
b) Other: Reports submitted by AEF, NATS and Virgin Atlantic that are not question specific

Question

How would the proposed segregated mode respite periods operate with three runways, compared with the existing runway alternation arrangements (between 0700-2300 and 2300-0700)?

Background

Heathrow has operated a runway alternation procedure since the early 1970s, whereby all arrivals over London are routed to one runway between 0700-1500 and are switched to the other runway between 1500-2300. Runway alternation provides a half-day of relief from aircraft noise for many (but not all) of the residents overflowed by the two flight paths over London, and it has been HAL's intention to extend the benefit of alternation to air traffic arriving over Windsor. HAL's revised proposal for a third runway gives a commitment to operating periods of relief from aircraft noise even with three runways in operation. The question explores how the relief would operate and for how long each day with three runways in operation, and which of the communities that would be overflowed by arrivals would benefit and which would not.

Template updated 15 Dec 14 PJW

2M, Hillingdon Council and Kensington and Chelsea Council

The HACAN briefing paper indicates that the current respite periods experienced by communities with the existing two runway airport would be substantially reduced. For some communities this could be a reduction from a current 8 hours to just over 4 hours.

The HAL submission suggests that the impact of night flights is reduced by rotating the use of all three runways, with each approach used 1 night in 6 thereby providing respite for 5 nights out of 6 (para 4.3.3). However it does need to be recognised that will then include communities who will be exposed to night noise for the first time.

We are not clear what the health impacts would be of such measures. As an example, what are the health impacts associated with only being sleep disturbed 1 night in 6 against the impacts of losing respite periods or by being newly exposed to aircraft noise?

We do not believe the HAL submission for a third runway meets the Aviation Policy Framework objective "to limit and where possible reduce the number of people in the UK significantly affected by aircraft noise". (para 3.12)

As the local authorities which will be impacted by any future expansion options at Heathrow, we are concerned about the current lack of detail and clarity as to what the communities will actually experience. This detail is necessary to inform any future mitigation strategies.

EANAG

Unless very substantial changes were made to Noise Preferential Routes, no respite would be available on departures.

Hacan

We've taken these two questions [6 & 7] together.

At present people in West London enjoy a half day's break from the noise when planes landing at Heathrow switch runways at 3pm. This will change if a third runway is built. For some people this will be cut to just over 4 hours.

How the flight paths will work if a third runway is built

- **Planes will land on the new runway for 12-13 hours a day**
- **Planes will land on the current northern runway for 6-7 hours a day**
- **Planes will land on the current southern runway for 12-13 hours a day**

Places like Kew or Hounslow West under the northern runway will continue to get around 8 hours of respite but this will be off-set for many because they will be able to hear aircraft from one of the two other runways.

For places like Richmond under the southern flight path the respite period will be cut from 8 hours to just over 4.

A similar system of respite will apply when planes land from the west

The same system will also be introduced for take-offs to allow periods of respite for communities living beyond about three miles of the airport

To get more information on these changes, plus illustrations, go to page 18 of the report: [01: Air and ground noise assessment](#)

HAL

There are four operating modes for the runways which can be rotated to provide periods of respite for all communities living closest to the airport. But having three runways instead of two would obviously mean that we cannot offer runway alternation in exactly the same way as today, with a 50/50 split of landings between two runways. However we can still provide periods of respite without noise for all communities. In our publication in July we showed one way that runway alternation could work and were really clear that more consultation is needed with local communities to identify the most effective way of doing this.

We are not proposing any extra night flights before 0600. Because we would rotate the use of runways at night, based on the current pattern of night time alternation residents under existing flight-paths would have night flights at most every third week and potentially only one week in six. This means that areas such as Richmond would experience fewer night flights with a third runway than today.

Hammersmith & Fulham Council

As for Q6, we cannot provide any detailed response to this question, but others should be able to shed some light on this issue. We look forward to seeing any comments they make to the APPG on this issue. We consider runway alternation to be an important noise mitigation measure that needs to be protected.

Hillingdon Council

See 2M

Kensington & Chelsea Council

See 2M

LAANC and Wandsworth Council [text colour: black- common to both submissions, green-LAANC only, red-Wandsworth only]

The HACAN briefing paper referred to above [Q5] indicates that the current respite periods experienced by communities with the existing two runway airport would be substantially reduced. For communities under the two existing flight paths on westerly approach such as Wandsworth this could mean a reduction from the current half day (8 hours) to just over 4 hours respite. The three runway scenario as described in the HAL submission 4.5 requires the introduction of mixed mode working on both the existing southern runway and the new proposed 3rd runway to the north west. This is despite HAL's previous assertions that it did not wish to introduce mixed mode operations and the airport.

The recent Heathrow Airport submission to the Airports Commission (AMEC report) suggests that the impact of night flights is reduced by rotating the use of all three runways, with each approach used 1 night in 6 thereby providing respite for 5 nights out of 6 (para 4.3.3). However it does need to be recognised that this will then include communities who will be exposed to night noise for the first time.

We are not clear what the health impacts would be of such measures, there has been no social study to investigate community reaction to these. For example, the health impacts associated suffering sleep disturbance 1 night in 6 compared to those associated with loss of respite periods or by being newly exposed to aircraft noise are currently unknown.

Overall LAANC does We do not believe the HAL submission for a third runway meets the Aviation Policy Framework objective "to limit and where possible reduce the number of people in the UK significantly affected by aircraft noise". (para 3.12).

As a local authority which will potentially be impacted by a third runway at Heathrow, we are concerned about the current lack of detail and clarity as to what the communities will actually experience. Without this detail we fail to see how the commission can properly inform itself as to the required mitigation strategy and hence overall cost of a Heathrow 3rd runway project.

Richmond Heathrow Campaign

Runway alternation provides a half-day of relief from noise for communities to the east of Heathrow (a) to the north of the northern runway arrival path and (b) to the south of the southern runway arrival path. Communities between the flight paths do not benefit to the same extent because they are within audible distance of both flight paths. Alternation does not yet operate to the west of Heathrow.

HAL's proposal for a third runway gives a commitment to operating periods of relief from aircraft noise even with three runways in operation. But it is clear that the relief from arrivals would not be as great as at present:

- arrivals on the southern runway would take place 12 hours per day (0700-2300) rather than 8 hours per day at present.
- arrivals on the existing northern runway would take place 6 hours per day (0700-2300) rather than 8 hours per day at present.
- arrivals on the new northern runway would take place 12 hours per day (0700-2300) rather than no arrivals at present.

The distribution of relief to the east of Heathrow would be as follows (we have not assessed distribution to the west of Heathrow because alternation is not yet in operation for arrivals from the west):

- For communities to the south of the southern runway arrivals flight path, the present relief would be reduced from 8 hours to 4 hours per day.
- For communities between the southern runway and existing northern runway arrival flight paths, there would be a worsening of present exposure by 2 hours (i.e. exposure for 12 hours to the southern arrivals and 6 hours to the northern arrivals, rather than 8 hours to each runway at present).
- For communities between the existing northern runway and the proposed third runway arrival flight paths, the present 8 hour relief would be reduced because the communities would be within audible distance of arrivals on both runways (6 hours from the existing northern runway and 12 hours from the new northern runway, similar to the double exposure experienced by communities between the two existing runways).
- For communities to the north of the new northern runway arrivals, there would be an absolute gain of 4 hours, but this has to be set against the fact that these communities do not experience any noise from arrivals at present.

We have not had time to assess the scope for relief from departures, the assessment of which is more difficult because many more flight paths can and are used than for arrivals. But it should be recalled that departing aircraft continue to generate more noise than arrivals.

We consider finally HAL's proposals for the rotation of night flights. It is suggested on page 20 of HAL's noise assessment that it should be possible to alternate all arrivals before 0600 on each of the three runways, which could provide respite of between 1 night in 3 as a minimum and 5 nights in 6 as a maximum (where possible and within weather condition limitations). If achievable, this would indeed provide new respite for communities under the two existing flight paths, but at the expense of communities living under the third runway flight paths who currently are not overflowed in the day or night periods.

Richmond Upon Thames Council

Our understanding is that there could only be segregated mode on two out of the three runways at any one time. The 3rd runway would then be in mixed mode, and the two outermost runways, which can operate mixed mode, would alternate. For safety reasons, involving 'go-rounds', the central runway would not be able to operate in mixed mode. Each community would get a period of respite, but this would be on a reduced number of hours compared to the current arrangement. Whilst it is commendable that some respite would be retained by each community, that will be small comfort for the loss of some of the respite, which is so highly valued. Communities adversely affected would clearly prefer to retain their respite than to gain an extra runway.

Royal Borough of Windsor and Maidenhead

RBWM support the assertions put forward by LBH and would highlight that Heathrow's proposed new northern runway would be located at the minimal spacing accepted by international safety standards of 1035 metres north of the current one, which apart from reducing safety factors of one of the world's most congested airports to the very minimum, will concentrate noise over a narrower swathe of land than would have otherwise have been expected.

This impact would be particularly harmful for an educational community such as Windsor Castle, Eton College and other historical buildings around the Royal Borough, which would be exacerbated by the huge problem of how double glazing and sound attenuated artificial ventilation, as well as other noise mitigation

measures, could be introduced into such historical halls and other buildings.

It is also worth noting that both new runway options - either the new NW runway or the double-length existing northern runway, would add up to 54% additional flights over the Windsor area. This exacerbation of activity would create an entirely new grossly intensified set of circumstances comprising closer frequency, lower altitude (due to a shift in either of the new runways to much closer to Windsor), and hence very much noisier than today's unacceptable situation.

Mayor of London

A 3rd runway would end much of the respite that local residents rely on, with most suffering from aircraft overhead for over 13 hours a day

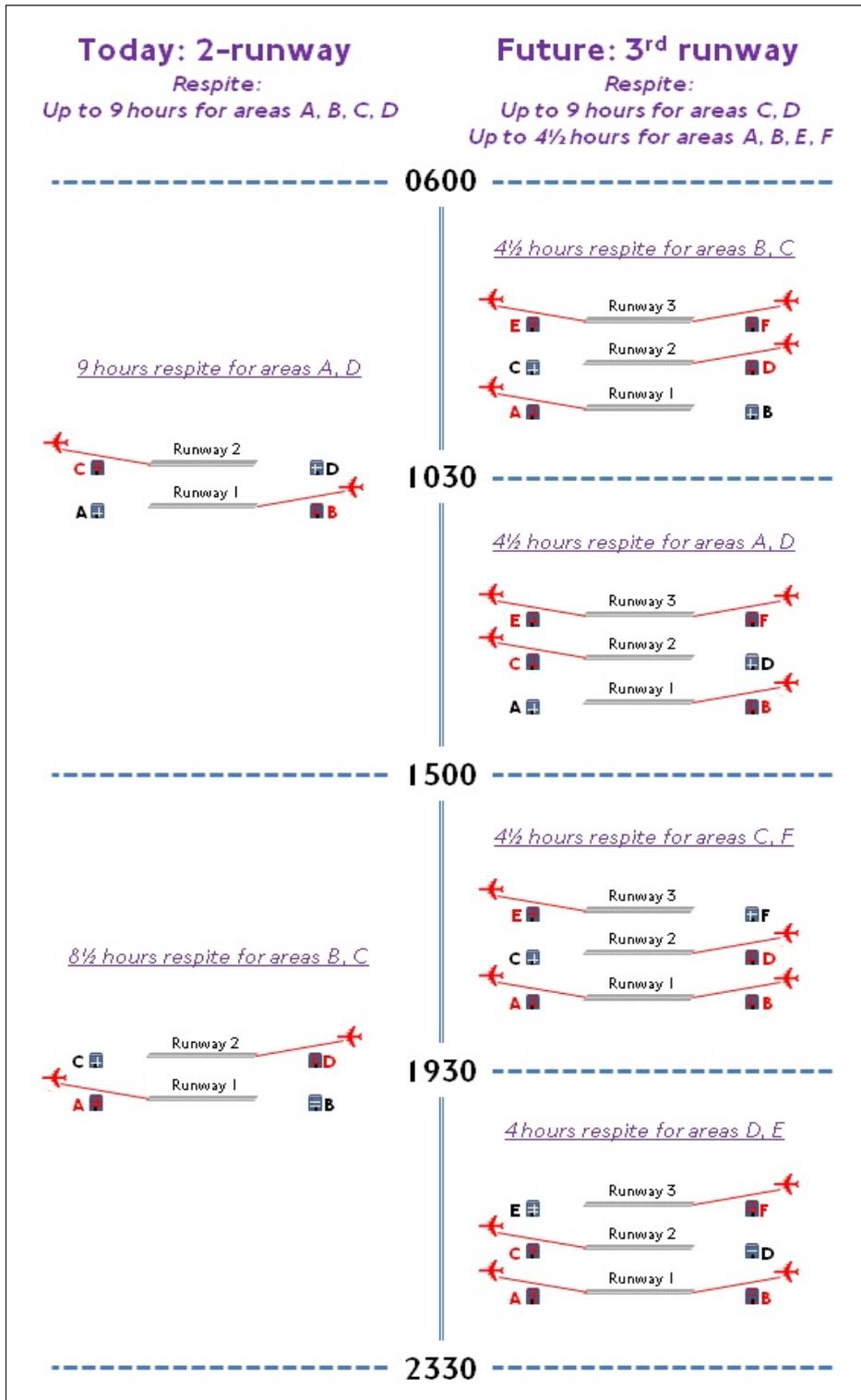
7.1. One of the few aspects of the current noise regime at Heathrow that affords local residents any relief from aircraft noise are the periods of respite that are secured by operating the airport in 'segregated alternate mode'. With one runway used for departures and the other for arrivals before being switched round at 3pm, this gives many local people half a day without aircraft directly overhead.

7.2. However, Heathrow Airport have made clear that their third runway proposals would require at least one runway to operate in mixed mode at all times – and that, for reasons of proximity, this cannot be the middle runway. For the majority of affected residents, that will mean just 4½ hours of respite a day within operating hours – half the respite offered to local communities today. For many that will mean facing over 13 hours of constant aircraft noise. The pattern of take-offs and landings proposed by Heathrow Airport are set out in the diagram below.

7.3. This arrangement means there will constantly be two streams of traffic landing (usually over London) and two streams departing at all times. It is highly likely that, given the proximity of the runways, even those nominally in a respite phase will be disturbed by one of the four streams of aircraft approaching or leaving Heathrow.

Continued:

Figure 4: Illustration of current and future respite patterns at Heathrow [Times of day are approximate]



Gatwick
 No response.

