

Question 9

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, Gatwick (14). CAA did not answer Q9.

b) Other: Reports submitted by AEF, NATS and Virgin Atlantic that are not question specific

Question

How quickly would Heathrow with the proposed third runway reach its stated capacity of 740 000 aircraft movements (ATMs) per year? In view of the resilience difficulties at Heathrow with 480 000 ATMs (a problem not identified at the Terminal Five Public Inquiry), how much resilience would there be with 740 000 ATMs?

Background

The question is intended to gauge how soon Heathrow with a third runway would reach its current level of congestion with two runways, in order to determine how soon the noise climate would deteriorate to the maximum extent with a third runway. The question also addresses how soon renewed congestion even with a third runway would lead to calls for: (a) more night flights in order to manage the daytime congestion in the short term; and (b) the development of a fourth runway in order to handle congestion in the longer term. A particular dimension of the question is the extent to which airlines that currently use other airports in the South East would transfer to Heathrow in the short term before the supply of new slots dries up (in part in order to avoid the current high costs of buying slots from airlines that already hold them), thereby producing under-used capacity at other airports in the South East in a dash for an over-subscribed Heathrow.

Template updated 15 Dec 14 PJW

2M, Hillingdon Council and Kensington and Chelsea Council

The HAL submission assessments have been based upon an early phase operation case, considered to be 2030 with 570k movements serving 103mpa; and mature operations considered to be 2040 with 740k movements serving 130mppa. (page 3).

It is not clear if this is the actual theoretical operating capacity of the three runway airport or whether operational resilience has been built into this figure.

The technical assessment (Technical Assessment Ref 62) carried out by the Airports Commission has indicated an opening year of 2026 with the airport reaching 80% capacity by 2030 and 100% by 2050. Again it is not clear whether operational resilience has been built into this figure.

If operational resilience is not built in, then we would see the same mistakes repeated as are faced today by an airport operating at capacity. The consequences for the local communities include encroaching into respite periods when the airport attempts to recover operationally from events such as adverse weather conditions. This must be avoided in any future scenarios and the airport movements capped to ensure that this occurs.

It would be helpful to clarify what levels of operational resilience have been built into the HAL and the Airports Commission assessments. Any associated reductions in capacity need to be featured in the economic appraisal of the option.

EANAG

It would be in Heathrow's commercial interests to fill as many available slots as possible, and so minimise any additional resilience, because of the additional staffing and other costs incurred with the additional runway. HAL would therefore make strenuous efforts to increase the number of flights to the new maximum.

Hacan

We can't find a clear answer to this question.

HAL [See Q16 for HAL revision]

After opening in 2025 we have forecast an initial growth rate of 5% pa taking us to 570,000 movements in 2030 and then 2.5% thereafter to take us to 740,000 movements by 2040. As air traffic management and ground traffic management continues to improve and become more efficient, we are confident that there would be sufficient resilience with 740,000 ATMs. [See also Q11 template for revised question & response]

Hammersmith & Fulham Council

As for some of the earlier questions, this is not an issue we can comment on with any certainty and it is up to the airport to provide comments on this issue. We look forward to seeing their comments.

Hillingdon Council

See 2M

Kensington & Chelsea Council

See 2M

LAANC and Wandsworth Council

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If operational resilience is not built in, then we would see the same issues being repeated as are being faced daily now by an airport operating at around 98% of capacity. The consequences for of failure to provide adequate operational resilience are to a great extent borne by local communities which face daily encroachment into respite periods when the airport attempts to recover operationally from events such as adverse weather conditions. This must be avoided in any future scenarios and the airport movements capped to ensure that this occurs.

We believe it would be helpful to clarify what levels of operational resilience have been built into the HAL and the Airports Commission assessments. Any associated reductions in capacity need to be featured in the economic appraisal of the option.

Richmond Heathrow Campaign

We note that HAL's noise assessments are based on forecast increases in the number of ATMs at Heathrow from the present legal limit of 480 000 per year (with Heathrow operating marginally below 480 000) to 570 000 by 2030 and to 740 000 by 2040.

570 000 ATMs represents an increase of 90 000 over five years (2025-2030), equivalent to an increase of 18 000 ATMs per year. 740 000 ATMs represents an increase of 170 000 ATMs over ten years (2030-2040), equivalent to an increase of 17 000 ATMs per year. These rates of increase are steeper than the long term trend at Heathrow and presumably reflect not just the projected increase in passenger numbers overall, but also the release of some present demand that has been suppressed due to present congestion.

Since HAL have given 740 000 as the capacity of Heathrow with three runways (assuming no increase in the number of ATMs between 2330-0600 and periods of respite 0700-2300), it must follow that HAL's noise assessment for Heathrow with three runways in 2040 shows Heathrow operating at the limits of its new capacity.

But if Heathrow is operating at full capacity with three runways by 2040, history would begin to repeat itself: the present problems of congestion and lack of resilience with two runways full would re-emerge with three runways full, with calls even before 2040 for: (a) mixed mode and more night flights for all three runways in order to manage congestion in the run up to 2040; and (b) the development of a fourth runway in order to handle increased demand after 2040. It would therefore be prudent to ask HAL to factor into its noise forecasts for 2040 the noise implications of lack of resilience.

Richmond Upon Thames Council

We have received mixed messages as to whether Heathrow will be full or only partially full by 2040. Depending on which one is correct will affect the noise levels and hence the accuracy of any modelling. Appendix J of the 'Air and Ground Noise Assessment' from HAL indicates the modelling results of noise exposure change. Although a composite contour is used, showing areas of improvement and areas of worsening, the modelling was only assessed for 2030. So we have not been presented with the contour situation which we might anticipate, with the 3 runways running full. We would anticipate that an increase in flights from 2030, to when it is full, would be likely to expand the contours shown in Appendix J. On that basis, we can expect that there are communities that may suffer worse noise than is indicated. It would therefore be helpful if HAL would model the 3 runways, when they are running at maximum capacity, rather than partially full.

The Royal Borough of Windsor and Maidenhead

RBWM fully support the assertions put forward by LBH.

Mayor of London

Airports Commission capacity unconstrained demand forecasts suggest that a 3-runway airport would effectively be full by 2030

9.1. The Airports Commission Interim Report²⁷ indicates that a 3rd runway would leave Heathrow "operating at around 80-90% of capacity by 2030". When average runway utilisation is above 70-75% averaged over the traffic day²⁸, airlines are unable to secure slots at peak times and it also undermines an airport's ability to function as an attractive, effective hub, with waves of arriving then departing flights. It also has a major impact on resilience, as an airport's ability to recover from periods of disruption is eroded.

9.2. Were a three-runway Heathrow be allowed to operate at the levels of utilisation of 99% on all three runways, then 740,000 ATMs would be reached by 2038, according to Airports Commission forecasts. This would represent an increase in 260,000 ATMs over the current cap and implies a substantial increase in aircraft sizes and a more intensive use of the runways than currently achieved. This implies a worsening of the delays at Heathrow – including more use of stacking over London – further degradation of resilience and a severe lack of slots to launch new routes and frequencies. In short, if a 3-runway Heathrow were operated in this way, it would leave the airport facing the same capacity and resilience challenges that plague it today, just a few years after opening.

Gatwick

GAL notes that Heathrow's submission suggests that with a third runway serving 740,000 ATMs Heathrow would be at capacity by 2040.

GAL has serious reservations about whether this level of throughput would ultimately be achieved and even if it could be achieved whether it would be achieved by this timeframe. GAL considers that if any government was to offer support for a third runway at Heathrow it would be likely to have to limit growth / throughput against environmental objectives (such as air quality) and resilience. This would mean that in all likelihood the economic benefits and connectivity would, at best, be deferred and in all likelihood not realised.