Heathrow
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LB Ealing	Heathrow response
	LB Ealing's objection to the application does not acknowledge that the application responds to and is required by Government policy. Or that it is required in order to bring equity to the distribution of noise around Heathrow. It is understandable that the Council would wish to preserve the status quo in which LB Ealing experiences less overflying on easterly operations, at the expense of other communities – but any assessment should recognise the policy background and the balance which the application is seeking to strike. The objection also does not recognise that these matters have been the subject of previous proposals which were considered by the Secretary of State and approved because of the "*overriding public benefit*" that they will provide. At that time, the mitigation offered to Ealing residents was significantly less. A balanced assessment should acknowledge these matters.
Welcome the opportunity to work with Heathrow …transparent roadmap	Heathrow is committed to working closely with its local authorities and fully engaged in the joint working facilitated by CISHA for the Easterly Alternation project. In regards, to future projects at Heathrow there will be a programme of engagement with all key stakeholders, which the London Borough of Ealing will be part of. Heathrow will share further information when they are able to. For example, Heathrow has committed to working collaboratively with Local Authorities to share and exchange information as set out in their Noise Action

	Plan to aid land use planning and noise mitigation.
Revised contours have a sharp node NW of the airport – this fundamentally means that 30% of total departures will affect the vast majority of Ealing residents in Southhall, Hanwell, ….Greenford	It is a misconception that all easterly departures (30%[1] of the total 480,000 (that's movements, not just departures)) will affect the likes of Southall, Hanwell, Ealing, Acton, Perivale and Greenford. Not all easterly departures are routed north over Ealing. BPK and ULTIB departures are Heathrow's only northbound SIDs (affecting those areas), which during 2023 and 2024 accounted for only 30% of easterly departures (2023 - 15%/15% and 2024 – 15%/15%). To put that into context: - The total permissible movements at Heathrow annually are 480,000; half of these are departures – ie 240,000; - For c.30% of the time, Heathrow operates on easterlies – ie 72,000 departures; - c.30% of these would route north over Ealing – ie 21,600; - But only for 50% of the time over newly affected area, due to alternation – ie 10,800 movements (so, using the 2023/24 split, that's 4.5% of total departures). - This also means that residents being overflown today would benefit from a reduction of c.10,800 movements due to alternation. To put this into perspective, communities affected by westerly operations are affected by departures 35% of the time and, unlike Ealing communities, many of those communities are also affected by arrivals.

[1] Easterly operations occur up to a maximum of 30% of the time in any one year, but often occur much less frequently, c.10% of the time, depending on climatic conditions.

The largest exposure during nighttime will adversely affect residential developments, care homes and hospitals – particularly by affecting residents' ability to fall asleep and an increased risk of awakening, leading to sleep deprivation. With at least 16 departures during the night. The vast majority of newly overflown residents shall be regularly exposed to aircraft noise at night due to late departures and activity starting at 04.30.	The main change during the night-time period (23:00 to 07:00) due to easterly alternation which would affect Ealing is a change in scheduled operations, which commence at 06:00. Activity commencing at 04:30 relates to arrivals, which do not overfly Ealing. There are 16 departures scheduled during the night-time period in the 06:00 to 07:00 hour of which around 30% use the northbound routes over Ealing. Therefore, around five departures will overfly Ealing during easterly operations in the 'night-time' period. Even this number is not all new to Ealing, with easterly alternation, scheduled departures will be split equally between Heathrow's northern and southern runways and their corresponding departure routes. The northbound departure routes from both the southern and northern runways both currently overfly parts of Ealing. These routes are presented in **Figure 7.29** of the Environmental Statement along with the Ealing borough boundary. The northbound routes are denoted 'ULTIB' and 'BPK'. Easterly alternation will result in half of these departures utilising the northern runway departure routes with a corresponding reduction in departures on the southern runway departure routes. As such, some parts of Ealing will observe an increase of around 3 aircraft departures in the 06:00 – 07:00 hour with some parts of Ealing observing a corresponding reduction. Whilst early morning arrivals are scheduled, departures can occur after 23:00 due to late running. The noise assessment has considered a worst-case scenario whereby, based on trends observed at the Airport,

	eleven aircraft scheduled to arrive or land before 23:00 have been modelled in the night-time period. Of these aircraft, 9 are departures and all typically operate southbound routes and therefore do not affect Ealing. Night-time noise effects on sleep, including awakenings, are assessed based on average noise conditions. This means that such assessments must consider the amount of time the Airport is operating in both an easterly and westerly direction and how it uses its runways. Easterly operations occur for around 24% of the time during the night-time period. Therefore, Easterly alternation would on average result in a change of less than one departure on either the northern or southern runway northbound routes during early morning departures. Government policy requires night-time aircraft noise to be considered where noise exposure is above the Lowest Observed Adverse Effect Level (LOAEL). This is based on average conditions. The night-time LOAEL with and without easterly alteration is shown in **Figure 7.28** of the Environmental Statement. Neither contour is forecast to extend into the Ealing borough boundary. Government policy also allows changes in night-time aircraft noise to be presented using the 'N60' metric. This metric represents the number of aircraft events above 60 dB L_{ASmax} on average at night. These metrics, referred to as 'Number Above', are used to help describe and show changes in the number of maximum noise level events above a certain maximum noise level. Guidance issued by the Civil Aviation Authority states that the N60 should be presented for five events or more. Due to

	the use of the northbound routes and the east-west modal split at Heathrow, the night-time N60 contours as presented in **Figure 7.5.7-WoD** and **Figure 7.5.7-WD** do not extend into Ealing under departure routes. **Section 4** of **Appendix 7.5** of the Environmental Statement provides an indicative assessment of changes in objective awakenings. **Figure 7.35** of the Environmental Statement shows that Ealing falls beyond the outer most contour presented (5 N60 events) and that within this contour the expected change in awakenings would be less than one per night on average.
Noise contours are misleading – maximum sound pressure levels and the number of events during the night are more relevant.	Aircraft noise is subject to Government policy and assessment guidance which prescribes the use of average equivalent exposure level contours i.e. $L_{Aeq,16hr}$ and $L_{Aeq,8hr}$ for day and night-time periods respectively. These metrics have been adopted based on the findings of studies demonstrating these metrics best corelate exposure to aircraft noise with annoyance and sleep disturbance. These metrics and associated Government policy thresholds form the 'primary' basis of assessing the effects of changes in aircraft noise. However, as described above, Government has also adopted the use of 'Number Above' metrics to help articulate impacts and describe changes that may occur due to a change in runway or airspace operations. For night-time operations, the N60 metric is presented in the Environmental Statement with the N65 metric (the number of aircraft events above 65 dB L_{ASmax} on average during the day) is also provided. The N65 metric is particularly useful in describing impacts. This metric is presented

	for both average conditions (in line with Government policy) and to articulate the change that would be observed due to Easterly Alternation during a busy easterly day. This information is provided in **Figure 7.18** and **Figure 7.21** of the Environmental Statement, respectively. These figures show that during the daytime some parts of Ealing would experience an increase in N65 events with other parts of the Borough experiencing a decrease. These changes are a consequence of the Airport alternating its runways at 15:00 which seeks to equitably distribute air traffic between the northern and southern departure routes to provide noise respite. The position at night is described above.
Assessment should use a 1-hour day and a 15-minute night for the assessment in line with Ealing's SPG10.	As outlined above, Government policy in relation to aircraft noise assessment is based on effects in a 16-hour daytime period from 07:00 to 23:00, and an 8-hour nighttime period from 23:00 to 07:00. There is no policy or evidential basis for the assessment of aircraft noise against a 1-hour daytime or 15-minute night-time metric. We note that Ealing's SPG10 was written prior to the adoption of the Noise Policy Statement for England (2010), the Aviation Policy Framework (2013), and the Air Navigation Guidance (2017) which are the key policy documents in relation to the assessment of aircraft noise. None of those documents use or reference 1-hour or 15-minute contours.
Heathrow should adopt the Agent of Change principle.	LB Ealing may have misunderstood the Agent of Change principle. As set out in the London Plan, at Policy D13, the responsibility for protecting against noise nuisance from an established source lies on the noise sensitive development nearby, which must be constructed to a sufficient standard. The purpose of the principle is to

	protect important economic activity. As D13 explains: "*Development should be designed to ensure that established noise and other nuisance-generating uses remain viable and can continue or grow without unreasonable restrictions being placed on them*." The Agent of Change principle protects, rather than undermines Heathrow's ability to comply with government policy by using established flight paths to achieve easterly alternation. The policy to support and bring forward Easterly Alternation is not new, and LB Ealing will have been aware of it, and should have planned accordingly.
The EIA does not clarify what increase in sound level the listed areas in Ealing will experience from the proposed development.	This is not correct. The Environmental Statement is accompanied by a series of figures which articulate the changes associated with easterly alternation using a range of noise metrics. These are presented throughout **Volume IV Appendix 7.5**. These figures are presented with the London Borough of Ealing boundary shown. • **Figure 7.5.4** presents the expected change in summer average daytime $L_{Aeq,16hr}$ in line with policy • **Figure 7.5.5** presents the exposed change in summer average night-time $L_{Aeq,8hr}$ in line with policy These figures present the primary policy metrics for assessing the effects of the Proposed Development. • **Figure 7.5.25** presents the change in $L_{Aeq,16hr}$ noise level during a busy easterly day for information purposes • **Figure 7.5.26** presents the change in $L_{Aeq,8hr}$ noise level during a busy easterly night for information purposes

	• **Figure 7.5.29-1** presents the change in N65 during a busy easterly day for information purposes • **Figure 7.5.29-2** presents the change in N60 during a busy easterly night for information purposes These figures help describe changes in aircraft noise levels and events during easterly operations because of Easterly Alteration. • **Figure 7.5.36** presents $L_{Aeq,8hr\ (alternation\ period)}$ noise levels during an 8-hour period of easterly runway operations departing from the northern runway and landing on the southern runway for information purposes i.e. as would occur for 8-hour with easterly alternation • **Figure 7.5.37** presents $L_{Aeq,8hr\ (alternation\ period)}$ noise levels during an 8-hour period of easterly runway operations departing from the southern runway and landing on the northern runway for information purposes These figures show the levels of aircraft noise during an 8-hour runway alternation period describing the levels of noise during specific runway operations. **Appendix 7.8** of the Environmental Statement provides more detailed assessment areas described as 'Community Focused Areas'. This appendix and its associated figures present a localised assessment of changes due to easterly alternation using metrics discussed within Chapter 7 of the Environmental Statement. The following communities within Ealing are represented in the Community Focus Area analysis, as follows: • Acton – Focus Area E5 • Acton Green – Focus Area E9

	• Dormer's Wells – Focus Area E4 • Ealing – Focus Area E5 • Greenford – Focus Area E1 • Hanwell – Focus Area E4 • North Acton – Focus Area E2 • Northolt – Focus Area E1 • Norwood Green – Focus Area E8 • Perivale – Focus Area E2 • South Acton – Focus Area E5 • West Acton – Focus Area E5 • West Ealing – Focus Area E4 • Southall – Focus Area E4 These figures show that locations such as Southall and Dormer's Wells would experience some increase in aircraft noise and aircraft noise events, whereas Ealing would experience a decrease. With reference to **Figure 7.5.2-WD** of the Environmental Statement which presents the summer average $L_{Aeq,16hr}$ noise metric with Easterly Alternation, this shows that the borough of Ealing would be exposed to aircraft noise at or below levels of 54 dB $L_{Aeq,16hr}$. This level of aircraft noise is considered by Government as the *"approximate onset of significant community annoyance"*. All changes due to Easterly Alternation, increases or decreases, should be considered in this context.
The impact is likely to breach the requirements of standards for internal environments and in external amenity areas, contrary to BS8233. Mitigation measures are necessary, including operational controls, a night time ban and measures to ensure an upper value of 55 dB for external areas.	British Standard BS8233:2014 'Guidance on sound insulation and noise reduction for buildings.' Chapter 1 of the BS8233:2014 standard describes it scope and associated domain of use. It states that: *"This British Standard provides guidance for the control of noise in and around buildings. It is applicable to the design of new buildings, or refurbished buildings undergoing a change of use, but* ***does not provide guidance on assessing the effects of changes in the external noise***

	***levels to occupants of an existing building**."* BS8233:2014 is not an applicable standard for assessing the impacts of a change in external noise levels on existing buildings. The standard is however applicable to the assessment of existing noise impacts on new or refurbished buildings as per SPG10 (albeit SPG10 is based on a superseded version of the BS8233 standard). Heathrow is a 'noise-designated' airport under the Civil Aviation Act 1982. This means that the Government has competence and authority for determining and introducing noise mitigation measures and noise-related operating restrictions at Heathrow Airport. Night flying restrictions are set by Government and reviewed every 5 years under this Act. These restrictions were most recently reviewed and determined in December 2024. Other measures such as runway alternation are also set down by Government in its role under the Act. The noise management and mitigation measures in place at Heathrow Airport and their origin (i.e. through the Civil Aviation Act 1982, planning controls, or voluntarily) are set out in **Volume III Appendix 7.2** of the Environmental Statement. Based upon standard thermal double glazing and non-acoustic ventilation not exceeding 4000mm^2 (equivalent area) per room, an external (free-field) to internal (reverberant) sound reduction of 26dBA can be safely assumed for normally constructed residential properties. BS 8233 advises internal noise criteria of 35 $dBL_{Aeq,16h}$ and 40$dBL_{Aeq,8h}$ for the daytime and night-time respectively. The corresponding external levels are consequently 61 $dBL_{Aeq,16h}$ and 56 $dBL_{Aeq,8h}$, below which BS8233 internal noise criteria would be readily achieved. Importantly, where external levels are higher, BS8233 criteria can still be

	achieved, but would likely require enhanced building envelope sound insulation measures, which would represent a standard well-rehearsed approach. It is important to stress that BS8233 applies only to new buildings or buildings undergoing a change of use. The standard is not a requirement or expectation by Government as part of noise insulated schemes. With reference to **Figure 7.5.2-WD** and **Figure 7.5.3-WD** of the Environmental Statement which present the summer average $L_{Aeq,16hr}$ (daytime) and $L_{Aeq,8hr}$ (night-time) noise metrics with Easterly Alternation, this shows that the borough of Ealing would be exposed to aircraft noise at or below levels of 54 dB $L_{Aeq,16hr}$ and 45 dB $L_{Aeq,8hr}$. This level of noise exposure is well below the values of 61 dB $dBL_{Aeq,16h}$ and 56 $dBL_{Aeq,8h}$ advised above. Consequently, the Proposed Development would not impose abnormal constraints upon future residential development in terms of achieving BS8233 internal noise criteria.
Cumulative effects – the ES has not taken account of cumulative effects in construction, or operation.	A construction noise assessment is provided within Chapter 7 of the Environmental Statement, **supported by further detail and figures in Volume III Appendix 7.4** and **Volume IV Appendix 7.4**. The construction noise effects identified as part of the Proposed Development are localised to Longford. There is no potential for construction noise from any other construction project within Ealing to result in a cumulative effect. The operational noise assessment has regard for all operational noise and not just the noise associated with easterly operations. The assessment has considered the combined noise impact of air and ground noise sources which is

	presented in Chapter 7, and **Volume III Appendix 7.7** however other sources of noise namely road and rail traffic will also affect receptors in Ealing. Such sources will become more influential on the overall noise climate as aircraft noise gets lower as will be the case in many parts of the Borough.
Spatial planning and housing delivery in Ealing will be affected.	For the reasons set out above, forecast aircraft noise levels within Ealing would not impact on the suitability of areas for housing delivery. We note that SPG10 adopted noise contours based on a 2016 forecast 'average worst mode on day' level. The corresponding contours are provided in Appendix 5 of SPG10. These contours show noise levels of worst-case mode levels of 57 dB $L_{Aeq,16hr}$ extending through Ealing town centre. SPG10 utilises these contours as the basis of Noise Exposure Categories (NECs) which advise how aircraft noise is to be treated within planning applications. We understand that the SPG10 contours are based on an easterly day of 09R, southern runway departures. Easterly day $L_{Aeq,16hr}$ contours with and without Easterly Alteration are available in **Figure 7.5.23-WD** and **Figure 7.5.23-WoD** of the Volume III Appendix 7.5 of the Environmental Statement, respectively **Figure 7.5.36** also provides a worst-case single mode $L_{Aeq,8hr\ (alternation\ period)}$ contour based on an 8-hour period of 09L departures, as would occur with Easterly Alternation. In all figures referenced above, the aircraft noise levels and extents of the contours provided in the Environmental Statement are at worst consistent or smaller than

	those provided in Appendix 5 of SPG10 for equivalent noise level values. We note that Appendix 3 of SPG10 states that *"It should be noted that the adopted worst mode contours relate to current conditions of operation, whereby no easterly flying takes place over the village of Cranford during the daytime period. In the event of this mode of operation changing, new worst mode one day forecast contours would be commissioned and adopted by the Borough, since new areas of the Borough would be affected by overflying."* Taking into account the noise contours provided in the Environmental Statement and the guidance provided in SPG10, Easterly Alternation is not a basis to restrict housing development. Action 6 of Heathrow's Noise Action Plan 2024 – 2028 states that Heathrow *"... will share the forecast noise contour outputs agreed upon in the MoU with local authorities and exchange information regarding their local development plans and our forecasting outputs to collaboratively reduce sleep disturbance and support land use planning."* Heathrow is happy to provide up to date forecast information to support the application of its guidance.
	Ealing's objection does not acknowledge the noise insulation offer set out in the application, which (as explained in the Planning Statement at paragraph 8.2.76), significantly exceeds the requirements of government policy, and the mitigation package which the SOS considered appropriate when easterly alternation was last considered in 2017. With respect, it is for government policy to establish noise policy and noise mitigation

	requirements. These are met and exceeded in the application.

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