

## **Heathrow Strategic Planning Group Response to Heathrow Airports Limited Airport Expansion Consultation - September 2019**

### **Introduction - Structure and purpose of this document**

This document forms the response from Heathrow Strategic Planning Group (HSPG) to Heathrow Airport Limited's (HAL) latest Airport Expansion Consultation (AEC). This consultation ran from June 18 until 13<sup>th</sup> September 2019. Where relevant, the HSPG response references previous HSPG documents produced to help shape HAL's airport expansion proposals, such as the Masterplan Principles document (Oct 2018), HSPG Outcomes Statement (2018), HSPG Landscape Strategy (2018), HSPG Position Papers on Environment (2018), Transport (2018), Low Emission Strategy (2018) and Public Health (2019), and previous responses by HSPG to Masterplan iterations. Where relevant, it also refers to key policy and strategy documents, such as the Government's Airports National Policy Statement (ANPS) and the Aviation Strategy.

This document is formed of three main chapters.

Chapter 1 - a strategic overview, which sets out the key issues and priorities for HSPG – **p3**

Chapter 2 - a summary of the issues and priorities for each topic area (e.g. the PEIR, Surface Access Proposals etc.) – **p12**

Chapter 3 - detailed comments on the individual documents published as part of the consultation – **p41**

HSPG has not responded to all documents as some are for information or are of more local interest. The documents that are being responded to are:

1. Preferred Masterplan (and Local Neighbourhood documents where appropriate)
2. Construction proposals and Code of Construction Practice
3. Future Runway Operations and Early Growth
4. Surface Access Proposals
5. PEIR and Equality Impact Assessment
6. Proposals for Mitigation and Compensation
7. Noise Insulation Policy
8. Economic Development Framework
9. Environmentally Managed Growth
10. DCO Powers (document called 'How do we obtain approval to expand Heathrow?')

The response contains two appendices – Appendix 1 is a Joint Connectivity Statement and associated map issued by 5 HSPG members and supported by HSPG, and Appendix 2 is a specific Green and Blue Infrastructure Headline Response to AEC.

## **About HSPG**

HSPG represents many of the local authorities and other public organisations responsible for planning the land use, transport, environment, economic development and sustainable development of the sub-region surrounding Heathrow Airport.

HSPG neither supports nor opposes Heathrow Expansion. Rather it works proactively to shape any proposals for expansion to maximise the benefits and minimise the impacts felt across the area. The Group works constructively with but is independent of (HAL) or any other promoters, and of Government. The individual member organisations have their own policy positions on the proposal for a third runway and proposed changes to aircraft flightpaths and operations.

This response has been agreed and signed off by the HSPG members at the Leaders Board on 5th September 2019. The HSPG members are: Buckinghamshire County Council, Buckinghamshire Thames Valley Local Enterprise Partnership, Colne Valley Park Community Interest Company (responsible for the Colne Valley Regional Park), Enterprise M3 Local Enterprise Partnership, Elmbridge Borough Council, London Borough of Ealing, London Borough of Hounslow, Royal Borough of Windsor and Maidenhead, Runnymede Borough Council, Slough Borough Council, South Bucks District Council, Spelthorne Borough Council, Surrey County Council and Thames Valley Berkshire Local Enterprise Partnership.

## **Qualifying comments**

These comments are made on a strictly 'without prejudice basis' to any position HSPG and individual member organisations may take in future, particularly as further detail is made available post this consultation. The organisations reserve the right to withdraw or change any comment made here without prejudice to their position. It should also be noted that the members of HSPG have also made their own responses to the AEC which will pick up on local issues and areas of particular importance to individual organisations.

## Chapter 1 - Strategic Overview

1.01 HSPG is deeply concerned with the current consultation. HSPG has been working with HAL for several years to shape the DCO scheme, yet fundamental issues and concerns remain and there has been a lack of action to address our previously made concerns.

1.02 HSPG's strategic response to the AEC can be summarised into the following key points. Further detail is provided in the paragraphs beneath.

1. Across the board there is not the level of detail required for HSPG members to be able to adequately assess either the impacts or the appropriateness of the mitigations proposed. HSPG consider that there are very significant gaps in information, including in crucial areas such as noise and air pollution impacts and mitigation. Further engagement and consultation are vital over the coming months prior to DCO submission, HAL's programme needs to accommodate sufficient time for this.
2. The proposals lack ambition and there is much concern the opportunity to leave a once in a lifetime legacy will be lost. HSPG and HAL worked closely together in 2016 in developing a Vision and Principles document to shape airport expansion, which envisaged a scheme with a strong legacy. HSPG is concerned that HAL's approach to legacy has changed as financial considerations increasingly dictate the nature of the scheme.
3. The current consultation looks very narrowly at the airport and its immediate surroundings. The strategy must look more widely – especially in terms of surface access – on the impacts further afield. In addition to engagement on statutory local documents including Local Plans and Local Industrial Strategies, HAL must engage with HSPG on HSPG's Joint Strategic Planning Framework (JSPF) as it is developed to ensure that both airport related growth and background growth are planned for in a coordinated manner. This will help to ensure that benefits are maximised and all matters are accounted for.
4. The Preliminary Environmental Impact Report (PEIR) is based on a high-level design which lacks detail and comprehensiveness on mitigations. It would have been more valuable to have produced the PEIR at a more advanced stage of design development. As such this is a vital area for further work and to ensure an adequate level of public consultation has been undertaken prior to submission of the application.
5. There are inconsistencies between the roles and extent of the DCO area and the promoted Masterplan area. HSPG members would like to know how mitigations such as green infrastructure will be guaranteed if these are not part of the DCO boundary.
6. The green and blue infrastructure (GBI) proposals are very disappointing. They miss an opportunity to provide high quality, comprehensive, connected green and blue spaces which could improve the quality of life for residents, and there is lack of detail on future management and maintenance of GBI.
7. The surface access material does not provide any detail on how the airport's expansion will impact the local transport networks in terms of noise, congestion and air quality. Neither does it provide detail of any measures needed on the local roads to mitigate such impacts. HSPG consider this a serious omission from the current consultation that will require further consultation. HSPG consider the delivery of Western and Southern Rail to be a critical component of an expanded airport. As well as helping to deliver the no more traffic and mode share targets, the schemes will crucially ensure that the economic benefits of the airport can be unlocked and distributed equitably across the whole region. HSPG would like to see a much clearer commitment from HAL for ensuring the delivery of these schemes, including a clear funding commitment.

8. More generally HSPG would like to have seen a much more committed, ambitious, transformative and cohesive range of public transport and active travel interventions that can radically improve access to the airport, particularly from areas that are currently poorly connected. To support this, HSPG would like to see any monies raised by the ULEZ, vehicle access charge or potential work-based parking levy to be ringfenced in a democratically controlled fund that can be used to support transport investment in the region. Such a fund could be used to support a much wider active travel network, expansion of the free travel zone, subsidised bus and public transport fares, and critically the delivery of the Southern and Western Rail schemes.
9. There is no requirement in the ANPS for early growth at Heathrow and HSPG do not support this. Early growth prior to the third runway appears to rely on the use of independent parallel approaches (IPA) which bring significant and increased negative impacts to local communities. However, potentially beneficial operational changes and development could be implemented earlier than the opening of the third runway and some form of early growth might be appropriate alongside these changes, including new night-time restrictions.
10. The consultation documents address future airport operations and touch upon airspace matters and air traffic movements, and the PEIR addresses flightpaths, capacity and airspace issues reaching beyond the scope of the DCO. The indicative flightpaths and modelling of impacts in the PEIR address growth to 740,000 ATM per annum and not the 753,000 ATM currently proposed. HSPG cannot support this scale of growth with the impact untested.
11. The Committee on Climate Change is expected to produce a report in the autumn setting out its recommendations for the aviation sector in terms of the Government's target for net zero carbon by 2050. We expect Heathrow to set out how the proposals will meet these new recommendations.
12. There must be robust monitoring of HAL's compliance against its commitments, during construction and operations. This should cover wider environmental areas than those proposed, and also economic benefits. Any monitoring function must have statutory enforcement powers.

### ***Further Detail and Consultation Required***

1.03 The overriding theme is that there is still much detail missing which means HSPG members cannot form an effective and considered response to HAL's expansion proposals. The current consultation still poses many questions and there is a lack of firm mitigation proposals. Many of the documents are far from mature, refer to further work and information that "will" or may be provided in the future. HSPG wants to engage positively with HAL as these details are worked through but is very concerned that this information is not available at this statutory consultation stage. It is vital that HSPG members are involved as details evolve and further options created.

1.04 Some of the areas consulted on provide so little detail that HSPG members believe further formal consultation prior to DCO submission is vital. Further detail is provided in the individual document responses, but there is a particular lack of detail on:

- Environmental issues, particularly mitigations
- Surface access and active travel
- Construction
- The scale and specific uses of Airport Related Development proposed in the DCO and the 'residual' to be addressed in other ways
- Economic development

- Delivery and Implementation
- Future governance and monitoring

1.05 Given the amount of detail still required, HSPG urges HAL to look at its ambitious timetable for DCO submission to ensure there is time for appropriate and sufficient consultation.

### ***Expansion scheme legacy and ambition***

1.06 HSPG members are all very concerned with the lack of a compelling legacy and ambition. The technical aspects seen so far are not unified by a strong narrative and ambition that demonstrates the benefits and mitigations to local communities and businesses. Members are searching for the benefits that expansion will bring. The Airports Commissions and Airports National Policy Statement (ANPS) endorsed Heathrow Expansion alongside “a significant package of measures to address its environmental and community impacts”. The ANPS gave support to Heathrow expansion as this would offer “the greatest strategic and economic benefits.” HSPG members are keen to see these strategic and economic benefits clearly set out and committed to through conditions in the DCO.

1.07 HSPG acknowledges that expansion of the airport is, essentially, a major transport infrastructure project and as such it is more challenging to identify and promote clearly defined regeneration benefits (compared to, say, the London Olympics Games and its legacy). We do feel, however, that ambition and legacy can and should be expressed within the scheme. HSPG wants to continue to work further with HAL on the economic development strategy, for example, to ensure local communities and businesses have access to jobs and other opportunities and the skills needed for them.

1.08 HSPG appreciate the need to create a viable business case, but we consider it vital that HAL ensures the opportunity to create a world class development which brings real improvements for local communities is not lost through a process of cost engineering and corner cutting. Given the recent CAA1819 consultation, this is of immediate concern. As stated above, the ANPS was supportive of Heathrow Expansion “combined with a significant package of measures to address its environmental and community impacts”. These measures must indeed be significant and not be cut back.

1.09 As set out in the ANPS Heathrow expansion brings benefits for the entire UK, yet local communities will be impacted disproportionately in terms of negative impacts. HSPG believes the DCO offers opportunities to ring-fence income to improve the quality of life of local people. This could be improved or subsidised public transport, community facilities, skills training, enhanced or new green spaces or other priorities. HSPG is keen to work with Government, HAL and other stakeholders prior to DCO application to work up options for maximising and overseeing spend of income sources. Sources could include the proposed airport access charge, the community compensation fund, business rates growth (as highlighted in the ANPS) and s106/CIL. The AEC mentions some of this at a high level, but this should be brought together into a holistic proposal with clear governance structures, prior to DCO application.

### ***Green and Blue infrastructure***

1.10 HSPG is very disappointed by the green and blue infrastructure proposals. They miss an opportunity to provide high quality, connected green and blue spaces which could improve the quality of life for residents – both in terms of leisure and active travel. A more comprehensive approach to improving the environment and its accessibility is required. Green infrastructure proposals should off-set the loss of Green Belt and Metropolitan Open Land.

1.11 It is imperative that assurance is received on how the Green and Blue infrastructure elements of the Masterplan will be delivered given that much of the area needed for this purpose lies outside the DCO boundary. Separate third-party agreements for each land parcel outside the DCO are currently proposed, but there is no guarantee that this land can be secured to deliver the Masterplan being promoted by the airport. The current DCO only provides a guarantee that a minimum level of compensation and mitigation will be delivered. The implementation of a comprehensive Masterplan is crucial to ensuring the airport provides an enduring legacy for local communities and airport users, as acknowledged by HAL. A clear mechanism to guarantee delivery of a high-quality Masterplan needs to be provided.

1.12 HAL needs to work closely with HSPG to bring forward proposals for abundant, high quality and well-connected green and blue infrastructure, well managed and maintained, both within and outside of the eventual DCO red line boundary. Such proposals need to be developed quickly and shaped by HSPG members to ensure they feature centrally in the DCO scheme, and HAL's work needs to be highly informed by HSPG's Heathrow Area Landscape Framework (HALF).

1.13 Bucks CC, South Bucks DC, Slough BC, RB Windsor and Maidenhead and Colne Valley Regional Park have produced a Joint Connectivity Statement on improving green/active travel connections across the area to the 'western wedge' of the airport. This document sets out key connections that HAL need to fully consider in delivering the DCO scheme (the document was produced with regard to a previous iteration of HAL's Masterplan, A02, but the content remains applicable to the current AEC version of the Masterplan). This Statement and associated map is attached as Appendix 1.

1.14 HSPG members are also very disappointed that the consultation fails to reveal the significant adverse impact on the river systems and the risks associated with their ecology. The mitigation does not seem robust or extensive enough, employing unproven techniques and creating river corridors that would not replicate natural river environments. Greater information and certainty around how the rivers will be diverted, and better corridors created need to be provided by HAL and consulted on as a priority.

1.15 Flood risk mitigation requires detailed assessment and mitigation measures frequently require significant land use in specific locations to achieve sustainable drainage using gravity rather than pumped systems. It is difficult for HSPG with Lead Local Flood Authorities as members to agree with the conclusions that there will be little significant impact on flood risk especially as there is minimal detail on the final proposals or mitigation measures proposed. No details of the flood storage area capacities, attenuation area sizes and final locations, discharge locations, and final watercourse flow regimes have been provided. The hydraulic modelling is also not yet complete. Again, this makes it impossible for HSPG to conclusively agree with the outcomes of no significant effect presented in the PEIR for flood risk or drainage implications. No opportunities for reducing flood risk have been incorporated into the proposal or even evaluated to show whether they are feasible, this is contrary to NPPF paragraph 157 (c).

### ***Surface Access***

1.16 In general, HSPG is very concerned that the surface access proposals lack specific detail on how the airport's expansion will impact local transport networks – during both construction and ongoing operations. No detail is provided on the specific local impacts, and therefore there are no proposals for the provision of local mitigation measures. It is stated that this will be provided prior to the DCO in the Transport Assessment, but this document is not currently available and therefore not something that forms part of the current consultation. HSPG believe it is essential that there is a consulted strategy that considers and mitigates the impact of traffic on roads further afield than the

immediate surrounding of the airport. To address these impacts, particularly during construction, HSPG requests that HAL utilise Local Traffic Models developed by the Highway Authorities to ensure impacts including cumulative impacts are appropriately assessed.

1.17 The surface access proposals presented in the surface access strategy are highly focussed on meeting the mode share and colleague car trips ANPS targets. The main mechanism for meeting these is to limit colleague car parking and to introduce a vehicle access charge for passengers. However, the evidence to demonstrate that these measures can successfully deter car use to the extent required is generally fairly weak.

1.18 The surface access strategy shows a serious lack of ambition for meeting objectives beyond these narrow ANPS requirements. The strategy provides very little new transport infrastructure outside the Heathrow campus, and does very little to help facilitate sustainable transport within and across the sub-region. The very sparse active travel network is one example of this. This network needs to also incorporate provision for high quality recreational routes. HSPG would like to see the surface access strategy consider a wider network approach to improving transport opportunities across the region, supporting both airport related development in the region as well as the airfield itself. HSPG particularly wants to work with HAL as it develops its JSPF for the area, as this may help to highlight where there is particular need for additional public transport to support the wider campus.

1.19 HSPG consider the earliest possible delivery of the Southern and Western Rail schemes to be a critical element of a successful surface access strategy (whilst noting the concern on environmental impact). Although the surface access strategy states that it will be possible to meet the ANPS mode share and no more traffic targets of an expanded Heathrow without these schemes, this will only be possible by the introduction of very high vehicle access charges. It will also mean that areas to the south and west of the airport which currently have relatively poor public transport links will not be able to benefit from the economic opportunities an expanded airport would be able to provide. HSPG would like to see a clear financial commitment to both these rail schemes contained within the expansion DCO.

1.20 The consultation material does not provide any estimate for the amount of revenue that could be raised from the ULEZ and vehicle access charge, but with charges of potentially £20 per vehicle the amount of revenue raised could be very significant. Heathrow propose using this revenue to ensure that landing charges are maintained at existing levels, but HSPG believe that these funds should be ringfenced for funding transport mitigations and improvement, and that there should be a democratically accountable mechanism for distributing this money.

1.21 Heathrow have committed to a no more traffic pledge which states that traffic to the airport campus will be no greater than today. HSPG consider that it is imperative that the pledge is widened to cover not just traffic to the airport itself, but also traffic to related or displaced development that results from the expansion.

### ***PEIR and mitigation strategy***

1.22 The Preliminary Environmental Impact Report (PEIR) is based on a high-level design which crucially lacks detail and comprehensiveness on the mitigation package. Conclusions of the PEIR often rely on unspecified proposals (e.g. 'good design') and there is an over-reliance on 'professional judgement', perhaps due to the lack of key design information. To help mitigate this, HSPG members, particularly the relevant local planning authorities, need to see more details on design codes and/or have the process for agreeing design codes set into the DCO conditions.

1.23 There are some inconsistencies in the PEIR methodological approaches and conclusions are not always fully justified. It would have been a more valuable exercise to have produced the PEIR at a more advanced stage of design development so that the conclusions would be more meaningful. HSPG must be reassured by HAL that there will be a clear, meaningful process of consultation and engagement over the next period of scheme development to ensure the best mitigation package for local communities is delivered. We believe further information on mitigations is a vital area for further consultation. HSPG does not believe the current information in the PEIR is adequate to inform an appropriate response.

1.24 HSPG have deep concerns in relation to the divergence of the DCO area and the promoted Masterplan area. This approach leads to potentially significant effects (adverse and positive) of the overall Masterplan being unrepresentative or missed entirely in the assessment process and results in the mitigation strategy in the DCO focussing on minimum requirements rather than delivering enhancements and a lasting legacy for local communities.

1.25 There are several major projects proposed in the Heathrow area which are likely to be constructed concurrently with the expansion works, for example Western Rail. We have significant concerns that the cumulative effects of all these schemes, particularly during the construction period, will lead to unacceptable blight on local communities. The cumulative assessment in the PEIR does not assess interactions between projects in any great detail and relies on the assumption that the generic measures detailed in the code of construction practice (CoCP) will be fully effective. A more detailed cumulative assessment and more locally targeted measures in the emerging CoCP will be required.

1.26 The PEIR assumes modelling of future flight operations and indicative flight paths to a total of 740,000 ATM per year rather than the 753,000 now proposed. Flightpaths will eventually be changed through Airspace Change Processes (ACP) after the DCO examination process. There are a limited number of indicative flight path envelopes, with limited information about the assumptions on which these are modelled. There is inadequate information to support the assertion that these are representative of reasonable worst case scenarios, and concern that the limited number of paths selected misses a number of noise sensitive and densely populated areas.

1.27 HSPG expect the 'indicative' flightpaths modelled for the Environmental Statement to reflect the maximum level of ATM proposed, and robust processes to ensure that the mitigations and compensations provided through the DCO are revisited if subsequent ACPs lead to impacts that are more adverse than in the indicative modelling used for the PEIR/ES.

### ***Future Airport Operations***

1.28 The consultation documents address future runway and airport operations, growth in air traffic movements and touch upon matters for the Airspace Change Process (ACP); and the PEIR addresses flightpaths, capacity and airspace issues reaching beyond the scope of the DCO. HSPG note the content of Heathrow's Airspace Design Principles for Expansion<sup>1</sup> (passed through the CAA's Design Principle Gateway in Sept 2018), and HSPG previously made representations on the indicative flightpaths and the assessment of impacts included in the Airspace Change Process consultation

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<sup>1</sup> The Airspace Design Principles include 5 core requirements of equal weight (including the requirements of UK Airspace Policy and the ANPS) and 5 strategic principles to guide the design of Heathrow's future flightpaths through the CAA's airspace change process.

(Jan-March 2019); the HSPG positions maintains this position<sup>2</sup> which should be read across to the AEC where relevant. The interplay of the ACP and DCO processes is complex to understand and careful distinction between and integration of the two is critically important, including through the Noise Objective and Noise Envelope design processes which help bridge the processes.

1.29 The indicative flightpaths and modelling of impacts in the PEIR address airport growth to 740,000 air traffic movements (ATM) per annum and not the 753,000 ATM currently proposed in the AEC; HSPG cannot support this scale of growth with the impact untested.

1.30 HSPG is broadly supportive of a package of airfield infrastructure development and airport operational measures that could demonstrably reduce the number of people experiencing significant adverse effects of flights including night flights, and protects the amenity of areas for recreation.

1.31 HSPG supports runway operational changes to night flights that could together deliver each community closest to the airport runways the claimed least 7hours' respite between 22:00 and 07:00, however the effectiveness of this period of respite is questioned when viewed in terms of the impact of overflying aircraft over a wider geographic area, and the detailed arrangements for operating around the prohibited 'runway time' 00:00 to 05:15.

1.32 Therefore, HSPG want to see further information and demonstration of the ACP necessary to achieve a comprehensive package of managed directional preference and alternation of: a) runway mode, b) separated airspace associated with each runway mode and c) flight paths to produce 7 hours of night respite for all affected communities over a far wider geographic area. This should be assessed as deliverable with the scale of air traffic movements proposed through the future ACP.

1.33 HSPG's stated position remains that a compulsory scheduled night ban should cover the period 23.30 – 06.00 as a minimum. The PEIR notes that HSPG's preferred night ban cannot be achieved together with the achievement of the ANPS minimum of 740,000 ATM and operators' requirements for a 05.30 start to operations. However, the AEC proposals will comfortably exceed ANPS requirements with 753,000 ATM. Therefore, HSPG cannot support the proposed scale of operations without further and compelling evidence that all necessary improvements to environmental conditions and commitments are exceeded including a scheduled night ban extending to 06.00.

1.34 The Committee on Climate Change is expected to produce a report in the autumn setting out its recommendations for the aviation sector to support delivery of the Government's 2050 net zero carbon target; this may lead to changes in national Aviation Strategy and ANPS. We expect HAL to set out how the proposals will meet these new recommendations and its impact on the ability of Government to meet its carbon reduction targets.

### ***Early Growth***

1.35 There remain serious doubts of the capacity of surface access infrastructure to accommodate further passenger and freight demand at the same time as the most intensive period of demolition and construction. This is clearly acknowledged in Appendix C7 of Early Growth: "construction operations could have a significant influence on air quality relative to objective limits which, without mitigation, could be exacerbated by early ATM growth".

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<sup>2</sup> Buckinghamshire County Council maintains its position that the overall impact of airspace change should guide Heathrow's design of flightpaths and that first principle in shaping those designs should be the minimisation of the number of newly overflown communities'

1.36 Consent through the DCO of early growth using two-runway operations appears to be indivisible from the introduction of a temporary airspace change to enable temporary Independent Parallel Approaches (IPA). A key concern of the HSPG members is that early growth appears to be dependent on use of IPA at peak demand periods, using narrowly prescribed flightpaths over newly overflowed areas often during the most sensitive parts of the day and night. The PEIR shows that early growth will increase the number of people suffering day and night noise above the 2021 base case and the 2025 forecast.

1.37 The ANPS clearly expresses that there is no policy requirement for early growth at Heathrow Airport, this being provided for elsewhere. In addition, the case for early growth is not clearly demonstrated, the fiscal benefits appear exaggerated and the proposed scenarios do not appear to reflect the claimed strong market demand for additional far eastern and domestic flights. HSPG is opposed to the introduction of early growth as proposed as the negative public health impacts are too significant for members to countenance.

1.38 However, the AEC documents refer to the potential for early introduction of two-runway alternation under Easterly operations using the existing northern runway for departures. HSPG is supportive of the early introduction (using two-runways) of advantageous operational and development works associated with the third runway including: additional night restrictions, introduction of a managed directional preference and two-runway alternation under Easterly operations; displacement of runway thresholds and steeper approaches. This could bring significant early benefits to local communities. Any early growth must be conditional on early adoption of the advantageous operational ACP changes and the full DCO Requirements in relation to noise insulation; community compensation packages; and surface access requirements.

### **Mitigation and Compensation**

1.39 The consultation does not seem to clearly differentiate between mitigation and compensation. There is concern that the Community Compensation Fund will be used for 'mitigation' purposes rather than compensation – and it is proposed that the fund could be used to offset “unforeseen impacts”.

1.40 HSPG members believe the community fund (compensation) should be used to bring additional benefits to local communities, and to improve the quality of life of those most impacted by expansion and the quality of the natural environment in the wider area. It should not be used to mitigate any of the direct impacts from expansion – whether seen or unforeseen. Unforeseen impacts should be dealt with through review mechanisms set out in planning conditions. HSPG agrees that a clear governance structure needs to be in place for the compensation fund and wants to work with HAL on the details. The fund needs to have a structure which supports effective oversight, meaningful community involvement, long term planning, the allocation of spend, and monitoring of projects and outcomes.

### **Monitoring - Construction and Operations**

1.41 There must be robust monitoring of HAL's compliance against its commitments during operations and also construction. Much detail still needs to be worked through on proposals for monitoring, and HSPG does not feel the current proposals have the robustness required. It is of vital importance to HSPG members that expansion should only be allowed if impacts can be managed within acceptable limits and every effort made to reduce, mitigate and compensate for the impacts. As such, HSPG would like to engage positively with HAL over the coming months on the details for how monitoring and enforcement might work, and how HSPG members should be involved.

1.42 Monitoring should cover wider environmental areas than the four areas proposed. There should also be monitoring of the economic benefits, in line with the ANPS's argument that Heathrow provided the greater economic benefits.

1.43 Any monitoring function or body must have statutory enforcement powers. HSPG agrees monitoring should be independent from HAL, but believe this should extend to the creation of the monitoring reports and any mitigation action plans, rather than HAL being responsible for this. Any function needs to have local democratic accountability at its foundation, to ensure accountability to local communities. Governance proposals must also account for the overlap and links with the discharge of planning conditions.

1.44 The Construction Proposals and Code of Construction Practice (CoCP) documents are still high level. Both documents commit to a number of future and further strategies and plans which will be submitted with the DCO or will be subject to approval following consent. HSPG would want early engagement on these well before DCO submission, and clearly there will be a huge body of work in monitoring and enforcement which HSPG would need to work with HAL and other bodies on. HSPG is keen to engage with HAL on proposals such as the joint planning committee to ensure good strategic and local oversight of such monitoring and enforcement. In particular, the benefits of the approach of joining together Council's and other bodies planning, monitoring and enforcement powers needs to be shown to add value rather than increasing bureaucracy and taking decisions away from the local people who are directly affected.

## Chapter 2 – Summary of Issues by Topic Area

This chapter summarises the main issues identified in each topic area/AEC document, and covers the following documents, generally following HAL’s ‘document hierarchy’.

1. Preferred Masterplan (and Local Neighbourhood documents)
2. Construction proposals and Code of Construction Practice
3. Future Runway Operations and Early Growth
4. Surface Access Proposals
5. PEIR and Equality Impact Assessment
6. Proposals for Mitigation and Compensation
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### 1. Preferred Masterplan (and Local Neighbourhood documents)

2.1.01 HAL’s Preferred Masterplan sets out the physical aspects required for the expansion of Heathrow Airport. This iteration of the Masterplan is HAL’s latest Preferred Masterplan and follows on from previous consultations in 2018 which included the Assembly Options and Components Masterplan. HSPG were engaged throughout this process and have raised numerous clarification questions during all stages, some of which have been resolved within this latest iteration. The following sets out a general response to the Preferred Masterplan and refers to previous comments or queries on previous iterations that still need to be addressed.

#### Core issues for HSPG:

##### *Masterplan Development and Delivery*

2.1.02 HSPG is concerned with the relationship between the defined ‘Masterplan’ and the ‘DCO Limits Boundary’. It appears from the Masterplan that there are two distinct areas, the first being the wider (unbounded) Masterplan and the second being the area within the defined DCO Limits Boundary.

2.1.03 HSPG queries if it is the intention that everything in the Masterplan is consented and delivered by the provision of the DCO or does the Masterplan address the interface of the DCO works with the surrounding wider area and longer term works which are outside the DCO?

2.1.04 We need reassurance that the masterplan elements defined in the Preferred Masterplan (outside of the DCO Limits Boundary) will be delivered and under what mechanism. It is unclear how this will be achieved from the current documentation. HSPG have concerns that the areas outside of the DCO boundary will be left to Local Authorities to deal with and have no real connection to the wider network being developed by the HAL proposals.

2.1.05 We would expect to see a ‘Decision Tree’ process and DCO tests of ‘principal’ and ‘associated’ uses. It is currently unclear within the Masterplan document how this will happen given that the phasing in section 8 of the ‘Preferred Masterplan’ is *preliminary* and defined as ‘subject to change’. We appreciate the expansion project spans over a significant period, which strengthens our belief that we need reassurances on how all parts of the masterplan will be delivered.

### *Legacy and Exemplary Masterplan*

2.1.06 We are unable to see the evidence of the expansion being 'exemplary' and are searching for the 'legacy', contrary to some of the masterplan design principles outlined on Pg27 (para 4.5.5). Chapter 1 highlights comments on this.

### *Southern Road Tunnel*

2.1.07 HSPG support the provision of a Southern Road Tunnel with dedicated bus lanes and well-designed active travel and cycle facilities. However, HSPG are concerned that allowing general car access through the tunnel could result in some significant adverse impacts to local roads, traffic and air quality as new traffic routes to the airport are created. It may also adversely impact mode share and 'no more traffic' pledges.

2.1.08 HSPG would like to see further detail and evidence presented on the traffic impacts of the tunnel, that shows exactly how traffic flows will be expected to change. These need to include detailed proposals for any localised mitigation measures needed to alleviate the traffic impacts of the new access routes created by the tunnel. Detail is also required on how the cycle route will be separated from vehicular traffic.

### *Southern and Northern Parkways*

2.1.09 HSPG support the principle of having consolidated northern and southern parkways, although Spelthorne Borough Council object to the Southern Parkway proposal. The parkways must be sympathetically designed to minimise the environmental, air quality, noise and light impact of the building and be connected to the airport terminals by high quality, high frequency mass transit systems. It is essential that vehicle access to the parkways is limited to the motorway network. HSPG are concerned that allowing access to the Southern Parkway from other local roads would cause localised congestion and air quality impacts for which there is currently no proposed mitigation. Further detail and consultation on all these points is required. HSPG is however concerned at the scale of the proposed parkways and the impact they will have on local amenity, and the quantum of parking proposed, which is not supported by sufficient evidence.

2.1.10 HSPG would like to see the hire car and taxi forwarding areas that are proposed to the south of T4 to be also consolidated into the Southern Parkway.

### *Green Loop (Multifunctional Green link)*

2.1.11 The Green Loop around the airport is supported and welcomed in principle. We expect to see the Green Loop integrated into other networks and strategies and presented as part of a coherent and integrated Landscape and Green & Blue Infrastructure Strategy. We would want to see a much more holistic landscape-led masterplan, better realising the area's potential to offer a high-quality environment, well integrated with nearby areas for people and wildlife. This could be an extension of the Green Loop, but it needs to be better and more holistically linked with other strategies.

### *Construction and Construction Worker Accommodation*

2.1.12 The HSPG response to the Construction Proposals is contained within sections on the Construction Proposals and Code of Construction of Construction Practice (CoCP). In general, it is clear that due to the length of scheme delivery (end state 2050), construction operations will have a very significant impact, particularly up to 2030/35, on the HSPG area, and adequate mitigations and compensation need to be in place to address these impacts. The approach to managing construction activities is high level at present, and generally appears as a standard approach to managing large infrastructure projects. There are many concerns noted on the construction proposals, not least the

area of the Green Envelope between Colnbrook and the Colnbrook bypass that has been identified in the Masterplan as a construction compound which could potentially be active until 2030, this will have a negative impact upon the green network and is not supported by HSPG.

2.1.13 HSPG have pressed HAL during Consultation 1 and throughout the masterplan development engagement to provide adequate construction worker accommodation and for this to be included within the DCO. There are some proposals for accommodation in the form of provision for caravans. Whilst some provision by caravan may be considered necessary, if there is a resultant demand for accommodation on housing supply this should not be left to the market. We recognise HAL are acquiring a significant number of residential units through compulsory purchase and have indicated they will use these units to house construction workers – we do not have any guarantees from HAL on this and how it will work in practice, and if this will cater adequately for the numbers of construction workers needing housing. HSPG urge HAL to work with local authorities on how construction workers can be accommodated without impacting on local housing supply which is very much under pressure within the HSPG area. Until convinced otherwise, this remains an area of major concern to HSPG members, and we believe that as a legacy for the project, new build housing for construction workers should be considered as social and general housing post construction.

2.1.14 Some provision appears to have been made for parcels of land to be safeguarded for construction worker accommodation. The housing of construction workforce in homes purchased by HAL or in construction camps has the potential to have a significant impact on communities and demand upon public services in the area for a considerable period of time during the construction phases (up until 2050 and beyond). Para 5.65 of the Construction Proposals references a 'Construction Worker Strategy' – we are unsure what this will include and feel that HSPG have not been engaged effectively on the impacts of workers on Local Authority areas. HSPG requires further engagement prior to DCO submission regarding construction worker accommodation.

#### *Phasing*

2.1.15 The phasing is of concern for HSPG in particular for airport related development (ARD) and other key components of the masterplan. We note that the detail is not yet developed and will be developed for the submission of the DCO in 2020. Para 1.20 of the ANPS states:

*'...there is no provision in the Planning Act 2008 for the making of an 'outline' application for development consent, followed by 'reserved matters' approval. This does not mean, however, that development cannot be phased, so that particular parts are brought forward at different times, or that the details of a proposal cannot be reserved for determination later. Guidance by the Ministry of Housing, Communities and Local Government recognises that development projects advanced through the development consent order process may be phased but emphasises that every phase of the project contained in a development consent application must be considered in the application for the order and the order itself.'*

2.1.16 HSPG are concerned that the phasing outlined in Section 8 of the 'Preferred Masterplan' document does not provide the necessary detail on what will be delivered by which phase in terms of specific land uses (ARD). As for the detail on the delivery (i.e. what form the parcel of land will take), this is under-developed at this stage. HSPG expect further consultation prior to the formal submission of the DCO in 2020.

Para 1.21 of the ANPS also states:

*'...The Airports NPS covers development that is anticipated to be required by 2030 as well as other development required to support it...'*

2.1.17 The Masterplan and phasing period extends until 2050+. HSPG are unclear how this will develop and what involvement the Local Authorities will have in influencing the use and development of land if the detail is not provided within the DCO planned for submission in 2020. HSPG expect greater reference to be made to future Local Plans and the JSPF in relation to guiding later stages of expansion in particular.

#### *Airport Related Development and Forecast Land Use Demand*

2.1.18 There are areas shown on the masterplan as ARD however, it is unclear from the masterplan what type of use those areas will be or what the scale of site and floorspace proposed is. Consequently, the residual demand to be provided off-airport elsewhere in the sub-region is not clear. The JSPF will explore this in some detail (see below). A land use schedule has not been provided with the masterplan. For example, Southern and Northern Parkways have areas of proposed ARD but it is unclear exactly what the proposal is for these areas. HSPG do have concerns that 'commercial' areas have appeared at the Northern Parkway that it is assumed would contain hotels - the location is not on the public transport network and thus passengers will no doubt take the opportunity to drive and park either to stay in hotel accommodation or to directly access the airport. It is unclear what the commercial development is and how this may impact upon the road network, this is a major concern and requires further detail and justification.

2.1.19 There is concern when the ARD will be delivered and there is no detail on this in the consultation documents. HAL provided a 'Land Use' session in early 2019 as part of engagement with HSPG pre AEC which explored each area in more detail, this however did not provide any certainty or clarity – making it extremely hard for Local Authorities to plan effectively.

2.1.20 HSPG have concerns that parking associated with new hotels within the DCO limits boundary (and existing hotels retained within the DCO limits boundary) will exceed the overall quantum of parking at the airport (para 5.3.20) and it is not clear if these hotels be fully accessible by public transport (ANPS, para 5.17). Clarification is urgently sought on this issue.

2.1.21 The AEC documentation includes very limited information on forecast land use demand requirements, displacements and the proposed floorspace to be provided through the DCO. For further detail on the ASD proposed and the residual demand to be considered in the JSPF and Local Plans we have been referred to information provided at the earlier HSPG Land Use Workshop 11/4/19 and Masterplan workshop of 24/4/19.

2.1.22 The Land Use Workshops held April 2019 relied on the Lichfields Stage 2 'Future State' report looking to 740,000 ATM, 133.9mppa and 3.2m cargo tonnes by 2040. This does not correspond with the AEC proposition. There are also subsequent updates to the Future State report – for example BA Waterside has been removed from the baseline and forecasts. HSPG believe that there has been a lack of consideration of B2 and B8 land uses displaced through the scheme. Logistics space will continue to be a key issue given the shortage of land available to accommodate what is needed in the Heathrow area and more consideration will have to be given to this issue if Heathrow is to achieve its economic potential. The dispersal of freight and cargo into a wider area will also create additional transport impacts outside the airport boundary. The potential to include more of these displaced uses within the Masterplan should be considered further and consulted upon with HSPG.

2.1.23 HAL have indicated that this information is delayed and will not be available until later in 2019. This is disappointing and will have implications for the HSPG developing its JSPF post AEC.

### *Masterplan Relationship with the Joint Strategic Planning Framework (JSPF)*

2.1.24 The above ARD detail is required as soon as possible for HSPG to fully develop a comprehensive JSPF. This will aid us in addressing the 'residual growth' to be planned for the HSPG area and surrounding area. A more joined-up strategy is required between HAL's proposals for the DCO, those needed to be delivered by Local Authority Plans, and the JSPF to ensure there is an interaction between ASD highlighted in the JSPF and the Masterplan. This is also relevant to dealing with proposals on Green Belt and the impact and assessment of such for local planning authorities. It is very important for HAL to have consideration for wider strategies and proposals (for example the Oxford-Cambridge Arc).

### *Grundons (Lakeside Energy from Waste Plant)*

2.1.25 The re-provision of the energy from waste (EfW) plant is safeguarded in the preferred masterplan and this will come forward outside of this DCO process. The relocation of Grundons is being undertaken through a separate planning application. HSPG require HAL to take the lead to assess the cumulative impacts of the project outside of the DCO before the replacement of the facility is justified in the proposed location. HSPG have not seen the site selection criteria of justification criteria of why the area highlighted on the masterplan has been safeguarded.

2.1.26 A more joined up approach is required between the separate consenting regimes and the DCO(s) process to ensure consistency between the masterplan proposals and displaced uses. HSPG expect a strategy outlining how this will be dealt with.

### *Covered River Corridors*

2.1.27 The masterplan makes provision for combined river corridors with part of the corridor passing under the proposed runway. HSPG continues to have serious concerns as this strategy is unproven and there is no best practise to demonstrate how successful the concept is. Concerns remain from HSPG on how the impacts on biodiversity and the fluvial environment will be maintained. More comments are provided elsewhere in this response, particularly on sections on the PEIR, and Green and Blue Infrastructure.

### *The Railhead*

2.1.28 The existing Colnbrook branch line – 'the railhead' – is displaced by the proposed new third runway. It is proposed to realign the existing railhead at Colnbrook so that it can continue to be used for airport related logistics and replace the existing oil depot.

2.1.29 We understand and support the replacement of the railhead in the north west corner for bulk material freight (construction) purposes. However, there is a paucity of information to justify its retention at the same scale for the long term and HAL will need to work more closely with HSPG to minimise land-take and HSPG urgently need more details from HAL in order to minimise land-take and impacts on green and blue infrastructure associated with the railhead and associated development. HSPG are disappointed to not have the detail at this stage in the process of how the area around the railhead will be utilised after the construction phase is complete and whether the railhead will be retained post construction phase. If the railhead is proposed to be retained, HSPG urgently require the detail on what the principle function will be and how the area around it will be managed. HSPG are extremely disappointed in the sheer lack of ambition and detail on how this area will work in terms of the attractiveness and its effectiveness of green and blue infrastructure. The area adjacent to the railhead (to the east) is earmarked as green space, however, we find it very difficult to understand how the green space will function effectively for both active travel and recreational uses.

2.1.30 A direct access from the M4 to the construction site (adjacent to the railhead) could possibly help to mitigate any delay in the opening of the Colnbrook railhead in 2023 and avoid the significant construction traffic that would utilise the A4. This should be seriously considered by HAL and should be funded by HAL if feasible

#### *New rail access*

2.1.31 HSPG continue to support the delivery of Western Rail and Southern Rail Access as set out in the HSPG Masterplan Principles, Consultation 1 response and our response to the emerging Masterplan in December 2018. HSPG members expect HAL to take a stronger role in promoting both rail schemes and take more of an active role with the DfT to ensure linkages are provided to an expanded airport. *Please note the CVRP position is set out in our previous submission in December 2018.*

2.1.32 Expansion plans are stated to be independent of rail access schemes but compatible with, Western and Southern Rail links, both of which would be subject to their own DCOs. There appears to be a lack of commitment within the Preferred Masterplan for Southern Rail Access from HAL. HSPG are disappointed HAL have not provided their preference on a Southern Rail Access scheme.

#### *Green Belt*

2.1.33 A more comprehensive approach in the masterplan is required to include a joined-up approach to Green Belt. The Heathrow expansion involves building on around 1,300 acres of Green Belt. The very significant scale of this loss, coupled with the impact on rivers and the loss of Metropolitan Open Land (MOL) means a much more strategic and holistic approach is required. It is imperative that justification is given for each parcel of green belt/MOL that will be lost as per the NPPF paragraph 138 and the mitigation and compensation for this loss set out. NPPF paragraph 138 provides an expectation for “compensatory improvements to the environmental quality and accessibility of remaining Green Belt land” and should be a material consideration to the DCO process.

## **2. Construction Proposals and Code of Construction Practice (CoCP)**

### *Construction Proposals*

2.2.01 In general, these proposals are high level and are standard proposals expected to apply to any major construction project. Much detail still needs to be worked on and there are references to workstreams and documents that will be submitted with the DCO (e.g. Construction Worker Accommodation Strategy), however, HSPG consider that such detail should be present now and subject to this statutory consultation, as submission is not a formal consultation stage. Many of the detailed comments below in Chapter 3 in relation to each aspect of the Construction Proposals reflect this – a lack of detail, queries on when and how HSPG will be consulted, what the specific mitigation proposals will be and how they will be managed, monitored and enforced. Until many of these questions are answered HSPG has significant concerns on construction activities and measures needed to mitigate them. For example: construction traffic, construction worker management, noise, air quality, impacts on watercourses and biodiversity.

2.2.02 HSPG is looking to HAL to see what extra measures HAL would be doing through the construction phases over and above standard procedures to mitigate and benefit local communities.

2.2.03 As a general comment on construction noise, HSPG’s general position on noise including construction noise is set out in the HSPG Environment Position Paper – “NO1: In accordance with the Airports NPS, the noise management mitigation package should drive improvement adopting the

mitigation hierarchy of firstly reducing the noise generated at source; optimising the distance between the source and noise-sensitive receptors; restricting activities as appropriate between different times of day; and finally mitigating the impact at receptors including through noise insulation.”

2.2.04 Noise from construction activities need to be assessed together with on-going operational activities at the airport and include other day to day noise sources such as from road and rail. We would like the ES and the CoCP/CP to include clear assumptions on what construction activities would be considered for night-time and which would be excluded from night-time works (such as piling activities)

#### *CoCP*

2.2.05 These proposals are high level and appear to be standard proposals expected to apply to any major construction project. At a high level HAL’s approach appears to be fit for purpose, however, much detail still needs to be worked on and there are references to workstreams and documents that will be submitted with the DCO or at a later stage. The CoCP in many areas repeats the content of the Construction Proposals (CP) document also part of the AEC, and as such the detailed responses to the CoCP should be read in conjunction with the response to the CP document. In many areas, commitments are caveated through the use of wording such as “where reasonably practical.” HSPG would want to be in a position that firm commitments are made and kept for measures to manage construction impact.

2.2.06 HSPG considers it vitally important that it is fully engaged in the development of the detailed CoCP and related workstreams. The expectation in the Construction Proposals document and the PEIR is that the CoCP will set out detailed mitigation proposals, but there is a lack of detail and clarity on such mitigation proposals at present. There are some particular areas of focus for HSPG, particularly in regard to noise and vibration, biodiversity and ecology, land quality, pollution control, flooding and water environment. Of particular note to HSPG are proposals for a Joint Planning Committee to assess/determine s61 noise and vibration consent applications, a Construction Noise Liaison Group, and a Traffic Management Working Group.

2.2.07 HSPG is looking to HAL to see what extra measures HAL would be doing through the construction phases over and above standard procedures to mitigate and benefit local communities.

2.2.08 Please note the comments above in relation to the CP document and noise, which are relevant to the CoCP.

### **3. Future Runway Operations and Early Growth**

2.3.01 The AEC consultation documents address future runway and airport operations, growth in air traffic movements and touch upon matters for the Airspace Change Process (ACP); and the PEIR addresses flightpaths, capacity and airspace issues reaching beyond the scope of the DCO. HSPG note the content of Heathrow’s Airspace Design Principles for Expansion<sup>3</sup> (passed through the CAA’s Design Principle Gateway in Sept 2018), and HSPG previously made representations on the indicative flightpaths and the assessment of impacts included in the Airspace Change Process

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<sup>3</sup> The Airspace Design Principles include 5 core requirements of equal weight (including the requirements of UK Airspace Policy and the ANPS) and 5 strategic principles to guide the design of Heathrow’s future flightpaths through the CAA’s airspace change process.

consultation (Jan-March 2019); HSPG maintains this position<sup>4</sup> which should be read across to the AEC where relevant). The interplay of ACP and the DCO process is complex to understand and careful distinction between and integration of the two is critically important, including through the Noise Objective and Noise Envelope Design processes which help bridge the processes.

### *Future Runway Operations*

2.3.02 The AEC documentation sets out the preferred proposals for the operation of a three-runway airport achieved through the DCO and various associated changes (at least five) to be made through future (ACP).

2.3.03 The HSPG is broadly supportive of a package of measures that demonstrably reduce the number of people significantly impacted by the adverse effects of flights (day and night) on health and quality of life (SOAEL), and reduces Night Quota Count compared to both existing and 2013 levels.

2.3.04 In particular HSPG is supportive of operational changes and additional restrictions on night flights that together deliver each community closest to the airport runways the claimed least 7hours' respite between 22:00 and 07:00; the shortening of the late evening recovery periods, and additional early morning restrictions between 05:30-06:00 and 06:00-07:00. However, the airspace design processes should conduct further assessment; viewed another way the actual period of 'night ban' (after allowing for overruns) in relation to the impact of aircraft overflying the wider areas will be shorter, and may intrude into the minimum 00:00 to 05:15 restrictions on 'runway time'.

2.3.05 Therefore, HSPG want to see further information and demonstration of the ACP necessary to achieve a comprehensive package of managed directional preference and alternation of: a) runway mode, b) separated airspace associated with each runway mode and c) flight paths to produce 7 hours of night respite for all communities over a far wider geographic area. This should be assessed as deliverable with the scale of air traffic movements proposed through the future ACP. HSPG's stated position remains that a compulsory scheduled night ban should cover the period 23.30 – 06.00 as a minimum.

2.3.06 HSPG is broadly supportive of proposals for 'reflective' runway alternation mode allocations and 'managed' directional preference appear sensible although further testing and engagement is necessary over the 'rules' governing directional preference and timing. HSPG strongly support a binding commitment to future periodic engagement and review around runway and flightpath alternation patterns and operational arrangements. This should include investigation of the case for a more frequent mode alternation pattern to allow every community a period of (albeit shorter) daytime respite each day.

2.3.07 HSPG seek, with the further revision of the DCO proposals, a further demonstration of the ACP proposals which describe the impact of air traffic growth (as managed with the introduction of directional preference and alternation of runway mode, associated airspace and flightpaths) on communities impacted at the runway approach / departure and the wider area.

2.3.08 In addition, HSPG consider that further consideration is needed to identify the best 'world leading' measures and metrics to fully assess impacts on health and wellbeing. For example,

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<sup>4</sup> Buckinghamshire County Council maintains its position that the overall impact of airspace change should guide Heathrow's design of flightpaths and that first principle in shaping those designs should be the minimisation of the number of newly overflown communities'

introduction of a metric for single noise event peak level (L<sub>Amax</sub>) and addressing noise impact and flightpaths of airspace levels 4,000 to 7,000ft in the DCO process controls.

2.3.09 The DCO proposals will comfortably exceed the airport growth requirements of the ANPS for an additional minimum of 260,000 ATM (to total 740,000 ATM) by now reaching for a proposed 'end state' of around 753,000 ATM. The AEC documents confirm that 740,000 ATM cannot be accommodated while accommodating HSPG's preferred scheduled flight night ban between 23.30 – 06.00. Therefore, HSPG cannot support the proposed 753,000ATM scale of operations without compelling evidence that all necessary improvements to environmental conditions and commitments are exceeded.

2.3.10 Furthermore, HSPG remain concerned that the 'indicative flightpaths', hours and modes of operation used in the PEIR may emerge to be unrepresentative of those eventually adopted through subsequent airspace change processes. In any event, the PEIR only models 740,000 ATM rather than the 753,000 ATM proposed. This leads to potential inadequacy in public consultation and an inability of the DCO examination process to be assured of the adequacy of the PEIR and subsequent Environmental Statement.

#### *Early introduction of various operational improvements and two-runway alternation under Easterly Operations*

2.3.11 The AEC documents refer to the early introduction of two-runway alternation with easterly departures on the existing northern runway before the third runway opens. However, no date of introduction or explanation of the proposed mode of operation is given.

2.3.12 This early introduction of operations could also include many of the physical and operational changes associated with three-runway operations including: a fully 'reflective' alternation on two-runways under easterly operations with the introduction of a managed directional preference; displacement of runway thresholds and introduction of steeper approaches and departures; and the early introduction of the full range of night restrictions together to bring significant early benefits to many communities. If parts of the package commence in 2022 this could offer four years or more of benefits. The existing programmes for the DCO and ACP appear to include extended delay in the ACP while the DCO progresses, which pushes the introduction of the new ACP back to 2024-26 and delays the potential early implementation of potentially beneficial operational changes. This appears unambitious and misses potentially early beneficial opportunities.

2.3.13 HSPG consider the potential options for early introduction of operational change is an important matter for the DCO and noise envelope as well as the Airspace Change processes and should form a critical part of the DCO proposals. HSPG seek the exploration of scope and fuller explanation of the timing and options for introduction that are required, including mode and details of operational change, flight paths and benefits and impacts of early introduction with modelling and assessment of scenarios.

2.3.14 HSPG consider that this may offer potential benefits to be balanced with the range of impacts associated with early growth.

2.3.15 It is not clear if and how this has been addressed in the PEIR scenarios and modelling. Most certainly this has not been adequately addressed to enable adequate public consultation on the issues around Early Growth and early introduction of changes to flight operations.

#### *Early Growth*

2.3.16 Consent through the DCO of Early Growth using two-runway operations appears indivisible from several Airspace Changes, most notably the introduction of temporary Independent Parallel

Approaches (IPA) using two-runways operations. (The additional benefits to consumers and operators of improved operational reliability and resilience are noted).

2.3.17 There is no ANPS planning policy requirement for early growth at Heathrow and Government has considered the needs case for making best use of existing runways across the whole of the UK in its June 2018 policy statement. This is clear that Government considers there is a needs case for making the best use of existing runways but beyond Heathrow. Para. 1.25 states:

*“As a result of the consultation and further analysis to ensure future carbon emissions can be managed, government believes there is a case for airports making best of their existing runways across the whole of the UK. The position is different for Heathrow Airport where the government’s policy on increasing capacity is set out in the proposed Airports NPS”.*

2.3.18 Government policy in the ANPS only relates to a NW Runway at Heathrow which it sees as the preferred means of meeting growth. The ANPS does not say anything to support raising the cap on ATMs for a two-runway Heathrow.

2.3.19 The key concern of HSPG is that Early Growth appears to be dependent on use of IPA at peak periods – often sensitive parts of the day and night. On this basis HSPG remain opposed to Early Growth aspects with up to 70 additional air traffic movements per day (25,000 ATM/year) using the existing two-runways. On the face of it the claimed fiscal benefit appears exaggerated (£0.6B and 7,000 jobs benefits achieved from a 5% increase in ATM compared to the whole scheme benefit) whereas the impact could be understated (increase in number of people significantly impacted by Early Growth). Early Growth also increases the number of people suffering day and night noise at LOAEL, SOAEL and 54dB Leq 16hr levels above the 2021 base case and the 2025 forecast without Early Growth (Figure B1).

2.3.20 The asserted minimal noise impact is based on speculative scenarios only – set out on a ‘factsheet’. Figure A2 ‘Scenario 1’ puts an additional seven movements into the sensitive and busy night time period 05:30 – 7:00 and may well rely on the IPA flightpaths. From a community perspective, reducing the increase in operations during the most sensitive time periods and/or limiting these to quieter aircraft types would be preferred.

2.3.21 Furthermore, the proposed scenarios for Early Growth do not reflect the stated strong market demand for additional Far Eastern and Domestic flights and appear inconsistent (Figures A1/A2). Without clear demonstration to the contrary, HSPG is opposed to the introduction of Early Growth prior to implementation of the final airspace design (which should offer benefits to residents). The negative public health impacts as demonstrated in Figure B1 are too significant to countenance.

2.3.22 There also remain serious doubts over the capacity of surface access infrastructure to accommodate further passenger and freight demand at the same time of the most intensive period of demolition and construction. This is clearly acknowledged in Appendix C7 of Early Growth: *“It was recommended that careful consideration of cumulative impacts with expansion related construction is necessary. Whilst the Air Quality subject identified that there are no significant differentiators, construction operations could have a significant influence on air quality relative to objective limits which, without mitigation, could be exacerbated by early ATM growth. Careful consideration would also need to be given to the timing of mitigation and controls.”*

2.3.23 HSPG consider that any Early Growth proposals are insufficiently developed and detailed to be fully appraised and for public consultation processes to be completed sufficiently.

2.3.24 HSPG consider that any Early Growth must be conditional on early adoption of the full DCO three-runway requirements in relation to: airspace change (runway and flightpath alternation, displaced thresholds, steeper departures/arrivals and night time restrictions), noise insulation and community compensation packages, and surface access requirements to ensure continuous improvement in air quality of the 'no more traffic' and appropriate shift targets for passenger and staff travel compared to today's levels.

#### **4. Surface Access Proposals**

##### *Ambition of the Surface Access Strategy (SAS)*

2.4.01 It is stated in the document that the "expansion of Heathrow is a unique opportunity to change the way people travel around the airport" (para 3.1.2). HSPG would like to see the ambition of the SAS extended to help facilitate sustainable transport within and across the sub-region, not just to and from the airport. This is particularly important given that a stated aim of the airport's expansion is to help facilitate economic development, much of which will be situated in the vicinity of the airport. The impacts of the airport's expansion are far greater than just travel to and from the airport itself, yet the SAS has remarkably little to say about this.

2.4.02 The current strategy provides very little clearly committed new transport infrastructure outside the Heathrow campus. HSPG would like to see much greater ambition and commitment for the provision of an extensive active travel network, bus improvements (including Bus Rapid Transit), highway improvements and mitigations and public transport investment. Too much of the strategy is currently drafted using conditional language on what might or could potentially be delivered rather than policies or schemes that are definitely committed to being delivered.

2.4.03 Increased connectivity and improved public transport and other transport infrastructure around the airport are absolutely crucial. For example, north-south connectivity from the airport needs to be improved and developed through Bucks CC, both through public transport improvements and also important road improvement schemes such as the support for proposed Iver Relief Road. Similarly, public transport improvements need to be made to the west and south of the airport, providing quick reliable connections from Spelthorne and Slough directly into the airport.

##### *Monitoring and Enforcement*

2.4.04 The scenarios presented in the SAS can be seen to only just meet the ANPS targets meaning there is little headroom should the SAS policies not have the impact expected. For these reasons there needs to be much greater clarity on how the ANPS targets will be monitored and enforced, and what powers will be available to limit or even reduce the growth in the airport should this be necessary. In particular, more clarity is needed on the composition, powers and legal position of the Independent Scrutiny Panel.

##### *Road User Charging*

2.4.05 No evidence is provided supporting the expected response to different vehicle user charges and how this could impact traffic, mode shift and air quality targets. Given the importance of the vehicle access charge to meeting the 'no more traffic' and ANPS commitments, particularly in the assessment case scenario without Southern or Western Rail, it is essential that the effectiveness of different charges in meeting these commitments is tested and presented. It is also important to understand stakeholders' views on the consequences of adopting very high vehicle charges should this be found necessary to meet the ANPS targets (the Airports Commission suggested charges of £40).

2.4.06 The SAS does not provide any estimate for the amount of revenue that could be raised from the ULEZ and vehicle access charge. However, with a stated charge of up to £20 applied to c.35m non-transfer passengers per annum accessing the airport by car, private hire or taxi, the vehicle access charge could raise very significant levels of revenue. HAL propose that this income from the vehicle access charge should be managed in a similar manner to the airports existing revenue streams, and that amongst other uses, it is used to keep airport charges at the same level as today. HSPG strongly disagree with this point.

2.4.07 Firstly, HSPG would like to see complete transparency on the amount of revenue that is expected to be raised year on year from the vehicle access charge. Secondly and crucially, we would like to see the income from vehicle access charges held in a hypothecated fund for supporting local transport infrastructure improvements and subsidising public transport fares. A democratic mechanism involving key local partners needs to be set up to help determine the spending priorities of this fund.

2.4.08 We note that the proposed ULEZ and vehicle access charge would only be applicable to passenger vehicles accessing the terminal forecourts and car parks. Colleagues, freight and vehicle operations would be exempt, with taxis also being exempt for the ULEZ and PHVs able to receive discounts. HSPG see no logic in this position, and strongly believe the ULEZ and vehicle access charge should be payable by all vehicles accessing any part of the airport campus, no matter whether they are passenger car, PHV/taxi, colleague cars, freight or airport operations. This would provide a clear incentive to all road users to reduce vehicle usage.

#### *Definition of Colleague Forecasts*

2.4.09 It is proposed that a 'colleague' (airport employee) is defined as those people working within the airport boundary. The proposed boundary is the same as that used for the 'no more traffic' pledge and closely follows the boundary of the airfield. This therefore excludes anyone employed in airport supporting facilities or airport-related development located near the airport but outside the airport boundary. It also excludes those currently working within the boundary who might be displaced to outside the boundary by the expansion. Such a narrow definition of airport worker means that the forecast number of Heathrow colleagues subject to the ANPS and 'no more traffic' targets are lower. HSPG would like to see the definition of a colleague extended to include those working beyond the boundary of the airport if directly related to the airport, including activities displaced by the DCO.

2.4.10 HSPG would also like to see a scenario tested within the SAS that models the traffic impacts of the growth in employment outside the airport boundary that is a direct result from the airport's expansion.

#### *Accuracy of Traffic Forecasts*

2.4.11 The accuracy of the traffic model is fundamental to forecasting the expected traffic impacts of colleagues, workers, freight and construction trips resulting from an expanded airport. As well as being used to determine much of the SAS, the forecasts will also form the basis of the scope of any necessary mitigation measures. Like any forecasting model, the traffic models contain fundamental uncertainties related to the modelling approach and input assumptions. HSPG would like to see this inherent uncertainty much better recognised and tested, with sensitivity testing of key assumptions presented. Specific assumptions identified by HSPG that could have a big impact on airport related traffic forecasts and which therefore need testing are:

- The forecast proportion of transfer passengers. If the forecast number of transfer passengers was to be slightly lower, and hence the number of UK bound passengers higher, this could have a significant impact on the SAS and ANPS requirements.
- Forecast number of airport workers.
- Impact of SAS initiatives such as vehicle access charge.
- Growth in non-airport traffic in the local area, either due to catalytic impacts of the expanded airport or for other reasons.

2.4.12 We are concerned about the difficulty of clearly establishing the current number of colleague trips with one base year, as the various surveys and MAID data all measure slightly different things. Without clear evidence to the contrary, the base case for the number of colleague trips should be defined using assumptions that ensure the greatest absolute reduction in colleague car trips.

2.4.13 HSPG have separately provided comments on elements of the transport modelling that HAL have so far been able to share with HSPG. However, it is important to note that to date these documents have only provided information on the base year models. HSPG have had no sight of any detailed documentation describing the future year forecasting approach, assumptions or outputs. This does not allow us at this stage to have any understanding or confidence in the modelled outputs, which presumably provide much of the evidence base for the conclusions presented in the SAS.

#### *Mitigation of Traffic Impacts*

2.4.14 The consultation material does not provide any proposals for mitigation measures for any increases in traffic on existing local roads outside of the airport boundary, stating that this will be provided in the future as part of a later transport assessment. HSPG believe this is a serious omission from the current consultation, and that this is an important area of the scheme that is likely to require further consultation.

2.4.15 The development of necessary local mitigation measures, and the discussion of these with HSPG and its member authorities needs urgent prioritisation.

#### *Public Transport Fares*

2.4.16 Apart from some uncommitted and unsubstantiated references to reducing some advanced purchase Heathrow Express fares, there is very little commitment within the SAS to reduce public transport fares. The SAS is currently very reliant on the ULEZ and vehicle access charge in terms of meeting the ANPS requirements. Rather than relying so much on the vehicle access charge (a push policy) HSPG believe that there should be more emphasis within the SAS on measures to subsidise public transport to the airport as a way of encouraging modal shift (a pull policy). These could include (although are not limited to):

- Substantially reducing the premium of Heathrow Express fares compared to Crossrail.
- Removing the airport premium from Crossrail fares such that they have the same zone 6 fare as the Piccadilly Line.
- Ensuring Southern and Western Rail Links have no premium fare.
- Extending the free travel zone to a wider area around the airport.
- Reducing the costs of Rail Air bus/coach links.

## *Bus*

2.4.17 While it is clearly hard to be specific about the nature of bus routes that will be provided in the future by a multitude of third parties, HSPG believe that HAL should be much clearer about what level of financial support will be available to support the provision of bus services, and how this compares to the level of support provided today. This increased level of funding commitment needs to form part of the DCO conditions.

2.4.18 The SAS makes no consideration for the provision of Bus Rapid Transit (BRT). HSPG would like to see further consideration of such schemes, particularly in terms of the design of new infrastructure such as the southern perimeter road and road tunnel. The SAS needs to include such corridor studies to identify these kinds of potential solutions.

2.4.19 HSPG would like to see dedicated bus lanes provided on all new highway construction being delivered within the expansion masterplan, including the A4, A3044 and Southern Perimeter Road. We have not seen enough evidence to justify the current design capacities of these roads and the omission of bus lanes. The SAS needs to also identify where bus lanes might be most usefully provided on roads across the region outside of the campus and expansion works, that would significantly improve the quality of bus provision to the airport.

### *'No More Traffic' Pledge*

2.4.20 The 'no more traffic' pledge is based around the same boundary used to define colleagues, and it therefore excludes the traffic generated by airport related development and facilities. This might include development within the DCO red line displaced by the expansion, but which is located outside the 'no more traffic' pledge boundary. HSPG believe that the 'no more traffic' pledge needs to include access to any development displaced by the expansion. A clear example of this is any relocation of the Compass Centre or Waterside.

2.4.21 Also of vital consideration is the definition of through traffic. If monitoring equipment is located at all entries and exits to the airport's facilities (such as entry points to terminals and airport facilities rather than on through roads such as the northern perimeter roads) then there should not be any through traffic that needs disqualifying. If for some reason this is not possible, then at the very least a clear definition of through traffic needs to be established.

2.4.22 The SAS proposes that the 'no more traffic' pledge will exclude construction traffic, although no reason for this is given. HSPG think all traffic types including construction should be included in the pledge, especially as construction traffic is included in the baseline.

### *Private Hire Vehicles and Taxis*

2.4.23 HSPG support the use of an authorised vehicle area for private hire vehicles, but HSPG believe that powers to ensure all private hire operators make use of the authorised vehicle area are required within the DCO, together with a much more clearer monitoring and enforcement strategy.

### *Western Rail Access*

2.4.24 HSPG view the delivery of the Western Rail scheme as a key element of the SAS. Not only is it an important mechanism for helping an expanded airport meet its ANPS and 'no more traffic' targets, like Southern Rail, it is also important for helping distribute the benefits of the airport to

communities across the wider region. HSPG want to see a clear funding commitment from HAL included within the DCOs of both the Western Rail scheme and the airport's expansion.

#### *Southern Rail Access*

2.4.25 It is stated that Heathrow do not have any kind of preferred Southern Rail Scheme. Given that some of the proposals offer very different sorts of connectivity to the airport, we would expect HAL to be leading the way in promoting a scheme that HAL feels best suits the needs of the airport. This may not of course be the scheme that best meets the needs of the wider region, but it is very disappointing that despite the depth of data and analysis available, Heathrow are not able to offer their own view on the type of scheme Southern Rail needs to be. As per Western rail, HSPG also views Southern Rail Access as a key element of the SAS. It is important for helping distribute the benefits of the airport to communities across the wider region – without this, and Western Rail, communities to the South and West are unable to easily access airport jobs using public transport. HSPG want to see a clear funding commitment from HAL included in the DCO.

#### *Active Travel Network*

2.4.26 The proposed active travel network is very sparse and lacks ambition. There are significant communities living a short distance from the airport who will not gain any active travel routes. This represents both a failure to help reduce colleague car use, and a failure to provide long term legacy to the local community. A much more substantial and ambitious active travel network is required, one that both supports not just access to the airport but also improves wider connectivity across the region including an improved network of recreational routes.

2.4.27 The SAS provides no detail on how the active travel network will be provided or the detailed design of various elements or infrastructure. Some of the detail design that HSPG have seen for elements of the network (such as crossing the M25 or A30) would appear very substandard. All cycle routes on roads with speeds of 20mph or greater should be fully segregated and built to the highest design standards (such as TFL Healthy Streets principles, London Cycle Design Standards, Manual for Streets and Sport England Active Design). HSPG believe that detail of the active travel network and green loop is an area of the masterplan which requires both significant further work and further consultation.

2.4.28 It is yet to be determined whether the DCO will be used to provide powers for the construction of the green loop and active travel network. HSPG would want to see this included in the DCO as without powers for a complete whole network there is a risk that sections might not be delivered which risks the viability of the whole scheme.

#### *Colleague (Employee) Parking*

2.4.29 The SAS provides lots of useful sounding measures to encourage colleagues to use public transport and active travel to access the airport rather than cars. However, the only real push measure to reduce car dependency is to reduce the availability of colleague parking places. While the number of colleague parking spaces will reduce from 17,000 in 2030 for 94,800 colleagues to 12,000 in 2040 for 95,900 colleagues, this still means at least 18% and 13% of colleagues respectively will have parking permits. In practice this proportion will be higher as it takes no account of shift working that can result in one parking space being used by several colleagues. HSPG would like to see more ambition in reducing the number of colleague parking places further.

2.4.30 It is important that the southern parkway has restrictions in access off Bedfont Road. It should be hard wired into the strategic road network with no, or at the very least limited, access from the east by private car.

2.4.31 HSPG would support the development of a workplace parking levy, as long as the funds were clearly hypothecated along with the vehicle access charges for the development and ongoing support of public transport in the region.

#### *Freight*

2.4.32 Heathrow must take full responsibility for its supply chain in order to fulfil its ambitions to be a good neighbour to local communities and provide good conditions to encourage active travel. Freight should be treated like an ongoing Construction Management Plan with action to minimise the number of vehicles / consolidate loads, approve routes and manage intensive operations within or as close to the airport as possible to minimise traffic generation.

#### *Construction Traffic*

2.4.33 As described above, there is a lack of information and detail on construction traffic – movements, modelled data, etc. Clearly construction traffic will be very significant and will have a high impact on the communities in the HSPG area, and detailed assessment and mitigation is required. The CP and CoCP documents (please see detailed comments on these documents elsewhere in this response) provide some very high level information and commitments to actions and management, however, these need to be developed into detailed documents. HSPG needs to be fully engaged on these well before DCO submission, and in particular with the proposed Construction Traffic Management Plan and Construction Workers Travel Plan.

#### *Increased Train Paths*

2.4.34 HSPG support further work identified by HAL with Network Rail on investigating the potential for increased train paths to the Colnbrook Railhead, through changes to the West Drayton junction on the mainline to allow for westerly approaches. HSPG would support increased paths if it is clearly demonstrated that this removes vehicles from the road network and has minimal environmental impacts. HSPG would like to be engaged on this work going forward.

### **5. PEIR and Equality Impact Assessment**

2.5.01 It is recognised that the PEIR should provide a snapshot of the likely environmental effects of the project based on the preliminary information available at the time and that this will be developed further in the Environmental Statement. However, PINS Advice Note Seven Section 7.7 states that *“Applicants should consider carefully whether publication of the PEIR at a more advanced stage in the design process of the NSIP, where more detailed information is known about the Proposed Development and its environmental effects, would generate more detailed responses and so better inform the design of the Proposed Development and their EIA. This may provide a more effective consultation exercise.”* The PEIR is based on a high-level design which lacks detail on the mitigation package proposed. HSPG has therefore struggled to develop an informed view of the likely environmental effects of the scheme on local communities. We consider it would have been a more valuable exercise to have produced the PEIR at a more advanced stage of design development, particularly as delivery of the Masterplan in its entirety cannot currently be assured. As such, we consider this to be a vital area for further formal consultation.

2.5.02 Some conclusions on likely significant effects have also been drawn relying on mitigation proposals which are unspecified (e.g. ‘good design’) and the potential ‘worst case’ outcome has therefore not been assessed.

2.5.03 HSPG members are also concerned that there may be limited opportunity to meaningfully engage and shape the emerging design as DCO submission is approached. We would be keen to

work with HAL to ensure that there are opportunities over the next period of scheme development to engage in relation to the scheme and mitigation design.

2.5.04 With reference to the comments for Green and Blue infrastructure above, HSPG have concerns that major elements of the Masterplan (e.g. large areas of proposed Green and Blue infrastructure) are not captured in the assessment process as there is a mismatch between the DCO area and the promoted Masterplan. For example, major construction activities required to deliver Masterplan elements outside the DCO area are not currently included in the assessment and could lead to major effects on local communities.

2.5.05 Significant adverse effects have not been identified for some areas where they might have been expected given the scale of change, particularly for the community-based topics including EqIA, socio-economics and health assessments. Conversely, the Masterplan promises major benefits for local communities in relation to pedestrian and cycle links into the airport, reduction of severance, integration into the wider landscape and biodiversity/recreational benefits from the 'green loop' and greenspace provision; none of which are reflected in the assessment currently. This highlights that in some parts of the PEIR, for example in the transport users network assessment, there is a narrow focus on adherence to rigid methodologies that are not likely to represent the real effects of the scheme and may therefore not be fit for purpose.

2.5.06 The need for some professional judgement in the assessment process is recognised, however there is an overreliance on this approach with a lack of information on the factors which might inform a professional judgement, and consideration of the significant limitations of using such an approach in the context of an underdeveloped design and mitigation package.

2.5.07 There are some inconsistencies between topic chapters and the methodologies adopted; for example, moderate effects are not considered significant in some of the topic chapters which leads to a confusing approach. Each of the chapters appear to have been developed in isolation with the result that linkages and synergistic effects between topic areas are inadequately addressed, and the 'bigger picture' effects of the scheme (for example, delivery of a coherent masterplan, benefits for communities and legacy) are neglected through adoption of a narrowly focussed and disjointed assessment approach. In addition, some conclusions stated in topic chapters are not supported with any logic, evidence or explanation on how they have been reached.

2.5.08 The following sections summarise key issues related to each of the PEIR topic chapters.

#### *Air Quality*

2.5.09 We have concerns that the assessment appears to be based purely around compliance with AQOs rather than magnitude of changes in air quality. The assessment focusses entirely on whether the DCO creates or delays compliance of a 'non-compliant zone'. This is an extremely narrow interpretation of the ANPS requirement (para 5.42) to be "*compliant with legal obligations that provide for the protection of human health and the environment*". The aim should be to go beyond compliance and for HAL to commit to supporting progressive reductions in air pollutants in areas currently below the thresholds, not just avoid contributing to exceedances of maximum legal limits, given that initial results in the PEIR show widespread and long term increases in air pollution around the airport.

2.5.10 The current conclusion is that the air quality effects of the scheme are 'not significant' (Table 7.52). We consider that this conclusion is misleading, and the significance of the impacts should take into account current and the change in pollutant concentrations rather than being based purely on compliance. If the ES adopts the approach of determining significance on balance of the number properties with increases/decreases, this should not detract from the need to mitigate residual increases which may lead to an exacerbation of an existing exceedance or creation of a new one. The

interpretation of significance for the ES should not use the DMRB IAN, which is specifically for strategic roads whereas IAQM is for land development.

2.5.11 Some “worst case” assumptions for dispersion modelling, appear appropriate but lack a clear “Rochdale Envelope” definition for air quality. The sensitivity of model outputs to a range of areas of uncertainty should be tested.

2.5.12 We consider that the current Study Area for operational air quality assessment is not appropriate given that the Scoping Opinion required the model extent to be defined by the area ‘*over which significant air quality effects arising from the Proposed Development may occur*’. Effects outside the core air quality assessment area are dealt with via a tiered assessment depending on the road type. This approach is considered to be too limited with potential for exceedances in AQMA due to use of DMRB criteria on major roads even where they pass through (sub)urban areas.

2.5.13 We consider that further evidence is required in relation to assumptions made on the effectiveness of the Heathrow ULEZ, given that this will not apply to airport staff and would cover only terminal forecourts and car parks. An approach to monitoring the effectiveness of the ULEZ should be specified to inform any extension or changes to the ULEZ boundaries to ensure it is effective. The mitigation package during operation seems to rely significantly on the surface access proposals, however, there is minimal detail on these measures currently. It has therefore not been possible for HSPG to develop an informed view of the likely significant effects of the air quality scheme in the absence of critical information on the mitigation proposals to address operational air quality effects of the scheme. In relation to construction mitigation, the measures detailed in the draft CoCP are generic to any major project; bespoke and detailed measures are required to ensure local effects are identified and managed effectively.

2.5.14 The applicant should also consider the need to future proof the scheme in light of DEFRA’s 2019 Clean Air Strategy and recent announcement by the Minister for more stringent legislation on particulate matter.

#### *Carbon and climate change*

2.5.15 The ANPS requires an assessment of whether the project will impact the UK’s ability to meet carbon reduction targets. The parameters of this test are not clear in the PEIR, including what level of carbon contribution is considered ‘material’.

2.5.16 The Committee on Climate Change (CCC) is expected to produce a report in the autumn setting out its recommendations for the aviation sector consistent with delivering the Government’s recently legislated target for net zero carbon by 2050. We expect the scheme proposals to meet the recommendations in the Government’s final Aviation Strategy for 2050 (and potentially amendments to the ANPS) and for this to be a material consideration in determining whether the DCO application is acceptable in terms of its impact on the ability of Government to meet its carbon reduction targets.

2.5.17 The carbon reduction measures proposed to date are generic and unambitious and more specific measures and commitments covering all main functions and activities in the airport are required. Several HSPG member organisations have declared a climate emergency. The applicant does not currently satisfactorily explain how measures related to expansion proposals can drive at pace the changes necessary to reduce total CO<sub>2</sub> emissions and the current proposals are considered unlikely to go far enough to meet the challenge. In addition, vulnerability to future climate change should also consider local community infrastructure as well as airport infrastructure.

## Noise

2.5.18 The PEIR is not clear how the applicant interprets and proposes to address the ANPS noise requirement for *“the impact of aircraft noise is limited and, where possible, reduced compared to 2013”*. The applicant’s interpretation, goals and proposed measures to be adopted to achieve a reduction in noise compared to 2013 needs to be more clearly explained. The variety of noise metrics and data included in the assessment is complex and we would therefore welcome working with the applicant in future to agree a defined set of noise metrics so the targets and performance of the scheme can be clearly gauged.

2.5.19 The purpose of the PEIR should be to ensure that consultees are able to understand the likely environmental issues and effects of the proposed development. However, the assessment conclusions are not clear on the likely effects of the scheme and instead focus primarily on the difficulties and limitations in identifying such effects. In addition, the conclusions assume that the operational effects of the scheme can be mitigated by implementing a ‘package of measures’, but the nature of these ‘embedded measures’ are not described in any meaningful detail. The mechanisms by which these measures would be integrated into the emerging design are also not explained. Existing operational controls such as runway alternation and the voluntary ban on scheduled night flights have failed to deliver the much-needed improvement in the ambient environment for local residents; further evidence is therefore required on how embedded mitigation measures will deliver noise reduction.

2.5.20 There appears to be a reliance on proposed noise insulation to be installed in homes as the main mitigation approach (i.e. a ‘last line of defence’), rather than focussing on reduction at source and along the transmission pathway in line with international best practice. In addition, the effects of outdoor noise have also not been covered in any meaningful detail and there is no detailed assessment of likely construction noise effects which are likely to affect local communities over many years.

2.5.21 The PEIR lacks any detailed construction impact assessment so we are unable to make an informed view of the likely construction noise effects of the scheme at this stage. The applicant is currently considering 24/7 working during the construction period. We consider that there should be some restrictions on construction hours in relation to night working and certain noisy operations where there would be intolerable impacts on local communities, particularly given the very long construction period.

2.5.22 In relation to the aircraft noise envelope, the design of any noise envelope must go beyond maintaining the 2013 baseline and should reflect sensitivity testing of various noise metrics and future fleet mix due to the impacts of noise on health. The envelope should also be subject to review every 5 years and any early growth subject to binding conditions to manage noise including no additional runway landings or take offs before 06:00 to fit with HSPG’s position on night flights. We have concerns that the noise assessment is based primarily on overhead flights, which does not fully consider noise impacts adjacent to overhead flights, planes taxiing and take off/landing phases.

2.5.23 New World Health organisation criteria will be issued in the near future and will set stricter criteria on noise exposure. The applicant should be clear on how these stricter criteria will be met.

## Biodiversity

2.5.24 A key concern in relation to biodiversity is that the DCO boundary only allows for a minimum level of mitigation for the effects on ecology and habitats. We are concerned that the level of information on green infrastructure design, how it is secured, delivered, managed and monitored is not sufficient at this stage to provide confidence in the assessment. Mitigation and compensation is

currently based on calculating areas of land to offset losses within a restricted DCO boundary which is disconnected from the preferred Masterplan, rather than using a landscape scale approach which takes into account connectivity of habitats, the proximity of new habitats to existing ones and the best mix of habitats to be provided to integrate seamlessly into the wider region. There will be a permanent loss of a large area of the Colne Valley Regional Park and its primary function, and the current approach appears to deliver piecemeal compensation for this loss, in an already fragmented landscape, rather than provision of an equivalent and integrated long-term natural environmental resource.

2.5.25 The measures embedded into permanent infrastructure that define the quality of habitat to be created on the new river corridors may not be possible to implement in many locations due to bird netting requirements, new impoundments, loss of groundwater connectivity due to contaminated land, the presence of transport infrastructure and new surface water discharges. The current assessment highlights a lack of a 'landscape-led' design and failure to create attractive river corridors that function in a natural way or replicate it in an acceptable fashion.

2.5.26 There is also little detail on how biodiversity mitigation will be monitored, managed and maintained into the future and the applicant's part in adopting this responsibility. To realise a genuine step change in provision for biodiversity in and around the airport, all areas proposed for ecological mitigation, compensation and enhancement should be included within the application site boundary to give Heathrow control over long-term management and maintenance and provide greater certainty that biodiversity net gain is achievable.

2.5.27 We consider that the assessment does not adopt the precautionary principle as many of the design assumptions are "best case" rather than "worst case" given the current lack of detail on the scheme design and mitigation package. The use of the terms 'mitigation', 'compensation' and 'embedded environmental measures' are inconsistent and makes it challenging to determine what mitigation is being offered and where it will be applied.

2.5.28 We welcome the applicant's commitment to delivering biodiversity net gain on the project. However, further clarity on how the biodiversity offsetting metric will be dealt with at the next stage of assessment is needed, given that the Defra 2012 metric is now dated and in light of the current Natural England consultation on the biodiversity metric 2.0.

### *Water environment*

2.5.29 Our key concern in relation to the water environment assessment is the identification of relatively few significant impacts of the scheme despite large changes to the water environment including major river diversions. We continue to have significant reservations on the Covered River Corridor (CRC) solution under the runway which is being presented as a panacea for addressing what will be the destruction of a natural braided river system and associated habitats and recreational amenity within the Colne Valley Park. The applicant's ambition for this suboptimal solution, with no precedence anywhere in the world, to meet Water Framework Directive requirements seems unrealistic, when a derogation will almost certainly be required. The need for low and high flow channels for the Colne and Colne Brook and irrigation of planting to create the required habitat has not yet been addressed in the CRC design and will need to be developed.

2.5.30 The covered river corridor is an unproven concept, with no legal requirement for maintenance. Therefore, it should be assumed that the habitat provided in covered areas of the river will not be of a high quality nor mimic the natural environment. This remains one of the biggest uncertainties with the project. It is difficult to consider how such a proposal would sit within the

context of the WFD, given there is no known precedent. Concerns about the CRC are compounded by the unnatural and marginalised corridor being created for the diverted Colne Brook around the railhead area.

2.5.31 Heathrow airport made a commitment in 2014 to reduce flood risk in the local area. The expansion proposals seem to be the best chance in decades to deliver on this promise and yet the applicant has specifically ruled out including measures to reduce flood risk as part of the proposal. This is disappointing given the major river diversions proposed and recent destructive flooding in this part of the upper Thames catchment. We consider that the proposals should include a commitment to reduce flood risk in the local area. The Drainage Impact Assessment is a qualitative assessment rather than the quantitative one required to demonstrate that the site will be drained adequately and meet the requirements of not increasing flood risk on site or elsewhere. No opportunities for reducing flood risk have been evaluated or incorporated into the proposal which conflicts with NPPF paragraph 157 (c).

2.5.32 We consider that the assessment does not adopt the precautionary principle as there is no substantive detail on the mitigation measures proposed, but an assumption has been adopted that these unspecified measures will be fully effective. Assessments of risk which use assumptions of future and unspecified mitigation measures should apply the precautionary principle rather than assuming that these measures will result in no significant impact. A general assumption has been adopted that all flood risk impacts will be resolved using mitigation measures which will not affect location or scale of development. In our member's experience, flood risk mitigation requires detailed assessment and mitigation measures frequently require significant land use in specific locations to achieve sustainable drainage using gravity rather than pumped systems.

2.5.33 No details of the flood storage area capacities, attenuation area sizes and final locations, discharge locations, and final watercourse flow regimes have been provided. It is therefore not currently possible for us to form a view of the likely effects of the scheme. We consider that all infrastructure including water storage/treatment areas which is necessary for the operation of the airfield should be included within the DCO boundary.

2.5.34 Netting for wildlife management purposes is likely to be required but is not currently covered in the assessment. If netting is proposed this also needs to be included within the assessment and the potential impacts adequately outlined and mitigation identified. The assessment of effects on fish passage are also not covered in sufficient detail and the mitigation proposals consist only of a statement that *'any structures installed on the diverted channels will be designed to enable fish passage within the river channels'*. It is unclear whether any work has been undertaken to assess if the need for structures can be avoided and there needs to be an assessment of the likely effectiveness of fish pass design rather than an assumption that measures will be effective.

#### *Land quality*

2.5.35 We have concerns about the sterilisation of mineral sites to deliver greenspace when there may be alternatives available elsewhere. Further justification of the need for sterilising mineral sites should be provided.

2.5.36 Construction stage effects on land quality have been assessed as moderate to major beneficial. The beneficial outcomes arise from remediation of existing contaminated areas and we consider does not fully address the risk of mobilising contaminants to facilitate the remediation activities. The assessment should provide more justification at the next stage on the benefits realised through remediation versus the risks created by mobilisation of these contaminants.

2.5.37 We consider that the assessment methodology adopted for this topic is weak and does not rely on established guidance with the result that there is an overreliance on ‘professional judgement’ to determine the significance of environmental effects. If this methodology is to be adopted in the ES then the criteria on which ‘professional judgement’ is based, along with information setting out the logic and evidence for each conclusion, should be provided.

#### *Historic environment*

2.5.38 We consider that there is a lack of ambition and imagination in relation to the effects of Heathrow expansion on the historic environment. A package of standard mitigation measures is proposed which lacks a coherent place-making approach to the future of the historic fabric and character of the area which would significantly benefit local communities. A more integrated and landscape-led approach should be adopted with particular reference to sympathetic treatment of historic places and local character. We are also concerned that some land is excluded from the proposed DCO increasing the risk of harm and limiting mitigation or compensation options.

2.5.39 Various strategies to manage the effects of the scheme on the historic environment are proposed. An Archaeological Fieldwork Strategy and the CoCP will also be particularly important for archaeology and historic buildings. In the absence of these proposed strategies and a detailed CoCP which will set out the mitigation proposals, it has not been possible for us to form a view of the likely effects of the scheme at this stage. Going forward, we would welcome working with the applicant to develop an effective package of mitigation proposals through the various proposed strategies and CoCP. More information is required in relation to evaluation, to accord with the nationally-accepted process of assessment-evaluation-mitigation set out within the NPPF.

#### *Landscape and visual amenity*

2.5.40 HSPG would like to work further with HAL to bring forward proposals for more abundant, high quality and well-connected green and blue infrastructure which is well managed and maintained. We support the aspiration of the Masterplan to develop an integrated network of greenspace around the airport, including the ‘green loop’ and Slough Green Envelope to protect Colnbrook, but a more comprehensive approach is needed to realise this aspiration. In future design iterations, there should be a focus on the Stanwell and Stanwell Moor areas which will be subject to similar impacts and pressures as a result of the scheme.

2.5.41 The landscape assessment currently offers ‘good design’ as the main mitigation route. However, the principles of ‘good design’ to be adopted are unclear. The DCO red line needs to allow for all the space needed to provide all the environmental mitigation, restoration and compensatory works needed to arrive at the effects that will be reported in the ES, so that the applicant can guarantee that such works will be delivered. We do not consider that a promise of ‘good design’ is adequate as a proposed landscape and visual mitigation strategy even at preliminary design stage, when broad principles and commitments could be set out. Construction mitigation measures are also very high level and generic.

2.5.42 We have concerns that the current green belt assessment is mainly qualitative and does not assess the impact of development on particular sites or make recommendations on the case for development, or otherwise any piece of land. A more detailed assessment, including justification for all areas of green belt loss, should be provided. It is also apparent that there is some double counting of greenspace loss, particularly for mineral and waste sites that are planned to be returned to greenspace anyway as part of their separate consents.

2.5.43 The conclusions of the PEIR chapter reflects the lack of a 'landscape-led' design approach to the proposals, focusing on minimum mitigation requirements rather than delivery of a wider holistic landscape strategy. There will be a worsening of green infrastructure provision occurring in a particularly narrow part of the Green Belt and poor connectivity for walking and cycling routes in the 'masterplan' zone under the current DCO scheme. A more holistic landscape-led masterplan, which is then integrated with the landscape and visual assessment, would better realise the area's potential to offer a high-quality environment for people and wildlife.

#### *Waste*

2.5.44 We consider that the waste chapter has a narrow focus on the capacity of waste facilities to absorb waste generated rather than providing a comprehensive assessment of the effects and risks associated with waste management and measures to reduce waste generation. The applicant has indicated that the Resource Management Plan will set out how waste will be managed, however the RMP is stated to not be an assessment. There therefore needs to be a clearer explanation on how the impact and performance of the project in terms of the waste generation will be measured. We consider that there are currently insufficient measures in place to mitigate the identified potential significant adverse impacts of the DCO project. The basis on which professional judgement has been applied is also not fully justified in the PEIR text.

2.5.45 The assessment identifies a number of major adverse significant effects in relation to waste capacity. However, the additional mitigation description states that '*all relevant and implementable measures have been embedded into the design...these are considered likely to be effective and address the likely significant effects of the project*'. This conclusion seems to be unsupported if no assessment has been undertaken of the efficacy of the measures proposed and there are no current waste commitments or targets.

2.5.46 Heathrow has committed to transporting any hazardous waste arisings from the excavation of historic landfill sites for the DCO Project to licensed treatment and disposal facilities favouring rail over road *where reasonably practicable*. We would welcome working with the applicant to establish a target commitment in terms of % rail mode. There is a lack of information in the PEIR on how non-hazardous or inert material will be transported which should be provided, as this would particularly affect communities close to proposed flood storage areas.

#### *Major Accidents and Disasters*

2.5.47 The chapter concludes that there are no significant effects in relation to major accidents and disasters. Further clarity is required at later stages of assessment on how this conclusion has been reached including more detailed information on the protocols and management measures to be adopted, including emergency response measures in the event that prevention measures fail.

2.5.48 Security mitigation and protocols will not be included in the PEIR or ES; clarification is required on how local communities can be assured that measures are sufficiently robust to protect local communities.

2.5.49 We consider that Local Resilience Forums should be consulted as part of the assessment process as they will be able to identify any local issues relevant to the risk of Major Accidents and Disasters and work with the applicant to develop appropriate mitigation measures to address these local issues.

## *Health*

2.5.50 A Health Position Paper has been developed and issued to HAL by HSPG which sets out the aspirations of local communities in relation to health outcomes of the proposed scheme. There is no evidence in the PEIR as to whether these principles have been adopted in the assessment or design process to date. HSPG would welcome working with the applicant to explore how to effectively integrate the principles set out in our Health Position Paper in the scheme assessment and design to benefit local communities.

2.5.51 We welcome that the PEIR makes use of the WHO definition of health and the wider determinants of health model. However, we have concerns that the health assessment in the PEIR is generic, relies on proximity to the proposed scheme, considers only the general population, and does not specifically refer to the specific communities that will be affected i.e. those people currently living, studying and working in the area, and particularly any vulnerable groups. Currently, the assessment assumes that people in close proximity to the scheme are 'vulnerable', whereas the most influential factors that influence health and wellbeing within the affected population depend on age, gender, ethnicity, disability, income and social support. The assessment should consider these specific groups and communities to ensure that every community or vulnerable group is considered in terms of specific mitigation measures and ultimately adequate compensation if residual effects on such receptors remain significant. We also have concerns that the use of borough level data could mask the differences for those wards bordering the airport where many of the worst indicators for health and wellbeing exist.

2.5.52 The health assessment methodology deviates significantly from the overall approach adopted for the remainder of the PEIR. There is a need for clearer articulation of how health effects are assessed, in particular why moderate effects are all considered to not be significant and on what basis professional judgement has been applied. A detailed methodology for predictive modelling of health effects should also be provided.

2.5.53 It is unclear how unintended health consequences will be minimised and how beneficial health impacts will be maximised. No recommendations have been made in terms of any additional mitigation or enhancement measures to maximise beneficial health effects.

2.5.54 The Mayor of London has issued a new aspiration to meet WHO health targets. Further clarification is required in relation to whether these stricter rules will be considered in the assessment. Currently, it appears that the test is to meet national standards only.

## *Socioeconomics and employment*

2.5.55 The assessment appears to concentrate on the effects of the scheme very close to the airport, with much less detail on the wider and catalytic economic and social effects of the scheme. We would like to see detailed assessments on the wider effects of Heathrow expansion, the opportunities it would offer local communities and how these could be best captured and maximised. The development of an appropriate economic strategy will be crucial in maximising these strategic benefits for local communities.

2.5.56 We consider that the effects on the local labour market and the cost of the workforce needs to be addressed in greater detail in the assessment. This should link to HAL's EDF and relate to HSPG's work on the JSPF and a HSPG Economic Development Vision and Action Plan (EDVAP).

### *Community, Recreation and Amenity*

2.5.57 We have concerns that the significance of community effects related to the construction workforce have generally been assessed as negligible/minor negative, for example in relation to capacity in the housing market to absorb demand. The PEIR sets out that the properties in the CPO zone are equivalent to 50% of the demand for homes to be provided in Hillingdon in any given year of their Development Plan, yet this is concluded as not significant. This will make the job of LPAs more challenging in terms of housing obligations both in the buying and renting markets.

2.5.58 Broader social effects related to an influx of construction workers are not considered in detail and described as not significant in the PEIR; this seems unrealistic given the challenges which arose during Terminal 5 construction and for other similar major projects. We would therefore suggest that a detailed assessment is undertaken of the likely social effects of a long term influx of construction workers on aspects such as public services with a monitoring commitment and action plan to address any issues which may arise over the construction period.

2.5.59 The effect on recreational spaces has been assessed as positive in the longer term in the PEIR. However, the runway is taking up significant land area and the location of replacement and additional open space has not been fully identified and secured. There is also potential for good quality areas to be replaced with poor quality provision. Much of the recreational space and public rights of way, including the green loop, will sit outside the DCO boundary and the proposed network of cycle and pedestrian links in the Masterplan suitable for a world class facility are not evident in any part of the PEIR or included in the DCO application. Therefore, there is currently no basis for the conclusion that there will be benefits related to recreational resources, unless a mechanism for guaranteeing the delivery of the Masterplan and an improved Green and Blue strategy can be provided.

### *Transport Network Users*

2.5.58 We have significant concerns with the transport network users assessment as the conclusions do not seem to take into account any pedestrian or cycle benefits which might be expected as a result of the scheme Masterplan. Only adverse effects in relation to pedestrian and cyclist amenity and travel times have been identified, whereas consultees were anticipating major benefits for cyclists and pedestrians due to various measures included in the masterplan. In addition, no effects have been identified to the west and south west of airport where major severance might be expected due to major road and river realignments. The assessment is superficial focussing on a few minor road links and with most meaningful work to be done 'at a later stage' and does not therefore provide sufficient information on the likely environmental effects of the scheme.

### *Equality Impact Assessment*

2.5.59 The conclusions that groups including children, older residents, BAME and minority faith groups may experience difficulties in moving out of the area into new accommodation is understood. However, there will be significant protected characteristic groups which will remain in the area and will be more directly affected by the scheme proposals due to the specific demography of the communities most affected by the scheme. The mitigation set out to address these effects in the PEIR relies on plans and procedures which could apply to all residents and other receptor groups, and there are few details on what specific measures are proposed to address the specific needs of

each disproportionately affected group. More detail is required on how the applicant proposed to support these specific groups.

2.5.60 We consider that insufficient engagement has been undertaken with ‘hard to reach’ communities to really understand the needs of those with protected characteristics and ensure the effects of an expanded airport are fully mitigated for those falling into the relevant protected categories. The applicant should provide information on the consultation approach to be adopted to engage with these protected groups and provide the specific support they need.

## **6. Proposals for Mitigation and Compensation**

2.6.01 Overall, there needs to be a clearer definition and understanding between ‘mitigation’ and ‘compensation’. Essentially, mitigation should offset or address negative impacts of the expansion scheme in its entirety and should be tied up in the DCO as far as possible. Compensation should bring additional benefits to local communities, and improve the quality of life of those most impacted by expansion. It should not be used to mitigate any of the direct impacts from expansion – whether seen or unforeseen.

2.6.02 Due to the phased delivery of the expansion scheme and the duration of the delivery programme (up to 2050), many mitigation proposals have not yet been identified, and those that have are not worked up in detail pending further work on the Environmental Statement and other workstreams – it is crucial that as many impacts and mitigation proposals as possible are nailed down through the DCO consent (and designed in as much as possible) and that there is a mechanism devised to review and update impacts and mitigation, rather than reserving these to ‘compensation’.

2.6.03 In particular, the proposed Community Fund should not be used to deal with impacts and mitigation proposals, this should bring additional benefits to local communities, and improve the quality of life of those most impacted by expansion. As a compensation measure, HSPG’s position is that the Fund should be operational when construction starts given the impact on residents, businesses, etc. The duration of the Fund should not be time-limited; airport expansion would be long-term, with the later phase ‘end state’ being around 2050. The Fund should be in place at least until then, and should continue following that to cover impacts from those later stages, and to cover the management, maintenance and continuation of projects funded between DCO consent and end state (e.g. public realm and recreational facility projects). There could be an element of phasing to the Fund.

2.6.04 HSPG agrees that a clear governance structure needs to be in place for the CF, with a body having oversight of the overall Fund and its long term planning, the allocation of spend, and monitoring and reviewing individual projects. HAL should obviously form part of this body, however, it is considered that in essence the body should be independent and should oversee HAL’s monitoring of ‘residual effects’ of the project and spend on those impacts.

2.6.05 In general, HPSG would have expected a much fuller suite of mitigation (and compensation) measures to be identified at this statutory consultation stage. HSPG want to engage with HAL regularly well before DCO submission on identifying and securing the mitigation proposals.

## **7. Noise Insulation Policy**

2.7.01 The approach to the Noise Insulation Policy is broadly considered acceptable subject to the following comments.

2.7.02 Further clarification is required to confirm if testing or inspection on completion would include noise testing, and if so, what would the design target be? Further clarification is also required on how properties which already have noise insulation would be considered in cases where the project would generate a noise increase.

2.7.03 HSPG would like to seek technical assistance from HAL on the appropriateness of the noise metrics stated, and if these metrics are relevant for road, rail and construction noise, as well as operational airport noise. The action levels for noise insulation schemes do not appear to factor in scenarios where a location may be affected by more than one noise source – for example, aircraft noise, road and rail, or all three including construction noise, which may mean that some locations would fall within Scheme 1 for example.

2.7.04 It should be investigated whether noise contours should be updated more regularly than every 5 years and it is unclear who will have oversight of the review and assessment of the noise contours. HSPG suggest that noise contour reviews need to be independently assessed and validated.

2.7.05 For those people living in listed buildings and conservation areas, HSPG would suggest that HAL should make and pay for the applications for listed building consents, conservation area and Article 4 planning applications if needed for noise insulation schemes, rather than the onus being on owners/occupiers. An Independent Panel is suggested to consider bespoke noise insulation schemes – there is no other reference to this panel. Further information on the purpose, remit and membership of this panel is needed.

## **8. Economic Development Framework (EDF)**

2.8.01 In general, much of the content of the EDF document is supported, as it generally identifies positive principles and objectives for economic development, business development, jobs, skills, training and education. A key omission though is a focus on the need for improved transport infrastructure and the improvements this can support in terms of access to jobs, skills, education, training, apprenticeships etc.

2.8.02 A general comment that runs as a theme through the detailed comments below is that HSPG would have expected a detailed Economic Development Strategy at this statutory consultation stage, given that the DCO submission stage is not a consultation stage. HSPG would like to know when and how it will be engaged on developing the EDS well ahead of DCO submission. There needs to be a clear process set out on engagement with HSPG in developing the EDS before submission.

2.8.03 The document sets out some of the existing or developing workstreams HAL has in place for business and innovation, and jobs/skills/employment, but proposals going forward are relatively limited and lack detail. HSPG would like to work closely with HAL in developing the EDS proposals and identifying additional proposals which will increase the mutual benefits of expansion for HAL and those who live, work and conduct business in the HSPG area. In particular, there is a lack of shorter-term quick win projects that could be identified and implemented ahead of the commencement of runway construction.

2.8.04 There appears to be a lack of a detailed assessment and related actions in relation to the catalytic impact of Heathrow expansion on the wider area, including the HSPG area. The assessments and proposals within the EDF are very much Heathrow focussed. HSPG would like to see a detailed assessment on the catalytic impacts of Heathrow expansion and the opportunities it would offer and how these could be captured. This is a key element for the expansion project and its success, particularly in the economic and business development of the HSPG and wider area. Some key foci could be:

- How improved transport links can increase access to education, skills training and job opportunities.
- How business support programmes can be scaled-up to support existing and new businesses.
- How the future of sustainable and tech-led logistics can be planned and developed in the HSPG.

2.8.05 The Airports NPS states in para 5.267 that “the mechanisms for enforcing these provisions should also be demonstrated, along with the appropriateness of any identified enforcing body, which may include the Secretary of State.” The mechanisms are not set out in the EDF, HSPG would want to work closely with HAL and other parties on a body that monitors and reviews the implementation of the EDS and related workstreams; the role of such a body needs to be included to ensure HAL keeps to its commitments and enforce, if not as suggested in the ANPS, in a similar way to HAL’s Environmentally Managed Growth proposals (albeit that HSPG considers these proposals need to be developed to allow for enforcement, please see HSPG’s response to EMG). A group that considers how the fiscal benefits of expansion could be invested to unlock growth in the HSPG area would be very valuable.

2.8.06 The HAL/HSPG task and finish groups on job brokerage and SME engagement, taking place over summer/early autumn 2019 will be helpful in developing and taking forward EDF proposals and work.

2.8.07 Regarding SMEs, an additional proposal that should be considered is introducing a system of prioritising local (HSPG area or similar) companies in procurement, provided of course that such companies meet procurement requirements. Given the very significant impact of expansion on the HSPG area this would be a tangible benefit to the economies within that area.

2.8.08 Additionally, there is little in the EDF on helping and supporting SMEs and other businesses negatively impacted by expansion – HSPG would expect a detailed suite of proposals to help businesses that will need to relocate and need assistance in re-establishing, and also those businesses negatively impacted by the lengthy construction process, particularly those impacted by traffic and environmental impacts. Through the substantial redevelopment and land-use planning process, new floorspace could be provided for business start-ups and SMEs.

2.8.09 Overall, the Economic Development Strategy must link across a wide range of other strategies being developed (e.g. the Surface Access Proposals will affect the affordability and accessibility of the airport for workers from a range of incomes and locations of residence).

2.8.10 As a general comment, HSPG would like to continue to work closely with HAL on the further production of the EDS, on the production of HSPG’s EDVAP, and on the implementation of workstreams and actions that come from those documents. HAL’s EDS needs to also address Local Industrial Strategies and other economic development documents produced by HSPG members.

## **9. Environmentally Managed Growth**

2.9.01 The proposals for Environmentally Managed Growth rightly highlight that the most significant impacts for local communities will be felt through the operational effects of expansion, especially in relation to noise, air quality, surface access and carbon. It is of vital importance to HSPG members that expansion should only be allowed if these impacts, and including a wider range of impacts such as other environmental impacts, can be managed within acceptable limits and every effort made to reduce, mitigate and compensate for them.

2.9.02 Any proposals for setting, monitoring and enforcing environmental limits need careful and considered work. In general, HSPG does not believe the current proposals are robust enough, particularly in terms of how limits will be enforced. There are a number of questions and the detail still needs to be set out. Any proposals must be implemented from the commencement of scheme construction, including early works if possible.

2.9.03 As such, HSPG would like to engage further and positively with HAL over the coming months to identify the details for how monitoring and enforcement might work, and how HSPG members should be involved.

2.9.04 HSPG members have some concerns with the proposals put forward in the “Environmentally Managed Growth” document. The list below sets out the strategic response to the proposals, issues to note and a number of principles which should be the foundation for further detailed work.

- A structure and governance needs to be put in place which has local democratic accountability as the foundation, to ensure accountability to local communities.
- Any proposals must acknowledge and account for the overlap between a monitoring and enforcement function and the discharge of conditions as part of the DCO permissions. There should be a clear link between any planning committees/planning decisions and monitoring/enforcement.
- Duplication must be minimised, and roles and responsibilities between bodies, statutory or otherwise, set out clearly.
- Any monitoring body must have statutory powers to enforce actions to ensure limits are met and controls put in place if they are exceeded, and these should be provided via the DCO.
- The community compensation fund should not be used to mitigate for impacts which are a direct result from expansion, either foreseen or unforeseen. Review mechanisms through the DCO and s106 can allow for unforeseen impacts to be mitigated. The community compensation fund should be used to improve the quality of life for local residents impacted by the expansion, above and beyond the mitigations required directly from expansion.
- This type of monitoring should cover all environmental areas, not just the four set out here. A similar regime, if not the same, should also be in place for economic benefits, to ensure the balance of impacts, mitigations and benefits is seen across the entire expansion project.

## **10. DCO Powers**

2.10.01 The DCO process follows the approval by Parliament of the Airports National Policy Statement (ANPS). The ANPS provides the policy framework which allows the DCO to be assessed against. HSPG have been engaged in the consenting process for some time with HAL.

2.10.02 HSPG have undertaken discussions with HAL on the DCO process and have engaged on the timeframe prior to this formal consultation. HSPG welcomed the non-statutory consultation 1. The document provided a very brief overview of the process and explains how HAL will get consent. HSPG do have some concerns on the details which are picked up in Chapter 3 below.

### **Chapter 3 – Detailed responses to individual consultation documents**

This chapter sets out detailed comments on each topic area/AEC consultation document using the same structure as Chapter 2. Please also refer to the higher levels comments on these documents set out in Chapters 1 and 2 above.

#### **1. Preferred Masterplan (and Local Neighbourhood documents)**

##### *Para 4.7.7 – Multifunctional Green Loop and Public Open spaces*

The Green Loop around the expanded airport is still supported in principle. Connections to other local Green and Blue infrastructure need to be developed. From the masterplan it is unclear how these will connect outside of the Green Loop. Previously in December 2018 we asked for further information on how this would work – we stated that considerable work remains to ensure movement and habitat linkages to areas beyond, and to ensure high quality environments and routes are provided”.

We would expect further engagement with HSPG to finalise the detail in ‘proper and real’ connections – we expect the detail to be provided prior to the submission of the DCO.

HSPG need clarification on the maintenance and management of the Green Loop and other needed active travel/ green links – do HAL expect this to fall within Local Authority ownership? Discussions have taken place with HAL representatives regarding the maintenance and management, HSPG suggested a body (with HAL funding) should be established early to ensure a regime of high quality maintenance across the area. HSPG need urgent assurance of how this will be maintained and managed, also when will this happen, during construction or after construction?

The loss of Green Belt is not fully discussed in detail and does not set out how much will be lost. HSPG need confirmation on this.

Figure 5.2.8 – unclear from this plan if the Green loop is continuous and how it links with other GI in the area.

##### *Para 4.7.9 – Water and Green Infrastructure*

HSPG have continually asked for clarification on how the river corridor will be developed after the diversion of the rivers into one channel. We note HAL are testing options for covered river corridors and this is covered in the PEIR (Appendix 21.3), but there appears to be a lack of detail still on how this will operate.

HSPG require clarifications well before the DCO submission on how this will operate and how the biodiversity will be impacted upon. We also need clarity on the disadvantages and limitations of the covered waterways as mitigation, and where the benefits of the covered waterways can be maximised- further working groups on this matter are needed.

There appears to be more significant work required in order for HSPG to fully assess this. HSPG require further engagement on this matter with specialists to achieve the ‘best’ result for the local immediate environment.

*Figure 4.7.4 (pg 35) – Links with Other Strategies*

This section recognises the masterplan will link with other study areas and regional strategies i.e. CVRP, River Thames Scheme, All London Green Grid. HSPG support real and proper connections from Heathrow to other regional strategies and where possible can aid in the facilitation of this. Could there be a joint partnership/committee?

Have HAL considered the impacts or possible linkages with other major infrastructure projects in this area? Currently it appears a fragmented green infrastructure / green belt strategy, the communities may end up with a ‘patch-work’ of improvements rather than a joined-up approach, which may implicate links to other strategies.

Mitigation should embrace comprehensive GI design with high quality active travel routes passing through attractive, stimulating natural environments within the immediate ‘masterplan’ area. Such GI must be well integrated with GI and active travel routes beyond the masterplan area.

*Para 4.8.7 – Improved access and legibility for those accessing the airport by Non-Motorised means.*

It is currently unclear how improved access to the airport from the preferred masterplan will be linked with GI strategies both proposed and new.

*Para 4.9.26 – Hotels and Offices*

Details of hotels within the masterplan (DCO limits boundary) and why these are in the boundary and other ASD is not are required.

A crucial question for HSPG is whether parking associated with the hotels will count towards the total quantum of parking.

Chapter 5

*Figure 5.1.1 – Illustrative Preferred Masterplan*

It would be useful to have the DCO limits boundary added to the plan (red line boundary) for completeness.

*Para 5.4 – Draft DCO Limits Boundary*

Para 5.4 onwards discusses the DCO Limits Boundary, leading on from the above, we welcome this boundary as the draft boundary as it will give some certainty to LAs to make a fuller assessment of the proposals.

It is still unclear from any of the plans in section 5.3 (Figures 5.4.1, 5.4.2, 5.4.3, 5.4.4) what is included and excluded in the DCO application. We note some parts for the masterplan may come forward as a Town and Country Planning Act application or by other means – confirmation on the expansion scheme ‘development’ that is proposed to be consented provisioned outside of the DCO process i.e. what will be going through the TCPA process rather than the DCO?

We recognise that some of this is still unknown, however, this is vital to future planning to have knowledge of the proposals and link with emerging revised Local Plans and to inform the JSPF.

Concern remains over the delivery of the 'mitigation areas' which fall outside the DCO limits boundary. What mechanisms are in place to ensure HAL are committed to provide these areas?

Figure 5.4.4 shows 'other' areas which may be required for the purposes of mitigation/enhancement to water features – are HAL able to confirm if the DCO limits boundary will be altered to accommodate these or are these being provided outside of the DCO?

We seek clarifications on whether other land uses will be included in a DCO plan too i.e. Open Space?

#### *Chapter 6 – Individual Area Zones*

This section does not seek to list 'spatial' concerns with the masterplan layout, of which there are many, but raises some queries. Spatially, specific concerns are mentioned in some of HSPG's comments elsewhere, but principally they are within the comments from individual members of the HSPG.

#### *Para 6.5 – Zone D – Existing Runway Areas*

Para 6.5.3 and Figure 6.5.4 – a new starter extension on the central runway is being introduced (211m). This was previously rejected by HAL and has now reappeared. Justification and clarification is required on why this is included now. The Scheme Development Report refers to HSPG's previous AOB response rejecting starter extensions – HSPG expect clarifications on this.

#### *Para 6.6 – Zone E – Terminal 4 and Cargo Area*

Para 6.6.3 – New T4 multi-storey parking. Is this general parking as well as the stated car hire, AV and taxi feeder service parking?

Para 6.6.6 – Southern Road Tunnel – HSPG have previously stated that its members want to see the tunnel being in use for public transport use and cycle only. The cycle link is yet to be established through this area, this needs to link in from the Green Loop (para 6.6.7).

#### *Para 6.7 – Zone F – Maintenance Base and Crane Valley Area*

Para 6.7.4 – expanded parking – we assume this forms part of the total quantum of parking.

#### *Para 6.13 - Zone M – Railhead and Brands Hill Area*

p117 - shows Iver Sewage Treatment Works existing, and then blanked out plus also red hashed lines as possibly needed temporarily, but with no text on what happens with the treatment works. Confirmation is needed on this.

#### *Para 6.10 – Zone J Stanwell and Stanwell Moor Area*

HSPG reiterate the support in principle for the two consolidated parkways subject to the comments made on these in Chapter 2 above and satisfactions being made with those directly affected Local Authorities. Spelthorne Borough Council object to the Southern Parkway.

Figure 6.10.4 – Parameter Plan – there is little detail on the ASD in this area and whether this is proposed or aspirational.

- Concerns remain regarding the suggestion of commercial activities on this site – confirmation urgently required what HAL are thinking at this location? We note this will be the first of the two parkways to open, however, we remain concerned of the competing nature any commercial use may have on Staines town centre – a ‘growth centre’ for Spelthorne.
- HSPG reiterate Spelthorne’s concerns and do not support proposals for out of centre development of main town centre uses that would fail to support the promotion of or undermine the continuing vitality and viability of main town centres which are the appropriate location for such uses, including hotels. Furthermore, the use of open land and Green Belt is unlikely to be justified for such uses. HSPG would only support such commercial uses that do not hamper opportunities to promote nearby town centres and do not cause significant additional congestion / impacts.

‘Heathrow Expansion and your area: Stanwell and Stanwell Moor’ document on Pg.10 outlines some further detail on the Southern Parkway parking proposals – what is proposed as ASD? – detail is required

#### *Para 6.15 – Zone P – Harmondsworth*

Concern over the future viability of Harmondsworth remains and the impact on the ‘leftover’ residents and how the sense of community will be dealt with. Para. 6.15.6 outlines HAL’s preferred position on how to deal with the remaining residents. HSPG need more detail on how the health and sense of place will be dealt for those communities impacted upon by airport expansion.

Within the ‘Heathrow expansion and your area: Harmondsworth’ document, Pg. 6 outlines what is proposed in the village. This provides at least some high-level clarity to the residents of the village and what the impacts of loss will be. We remain concerned about the communities left behind in this area and what impact this will have on their community spirit and access to services. We support further consultation with those communities between now and the submission of the DCO.

Harmondsworth is a historic area with historic and interesting buildings that could be utilised for tourism benefits and potential for commercial benefits. We welcome the ideas presented on Pg. 10 of the ‘Heathrow expansion and your area: Harmondsworth’, these ideas should be developed in conjunction with the local community and the Local Authority to ensure compliance and acceptability.

#### *Chapter 7 – Our Proposals by Theme*

Para 7.1.3 – The proposal to land aircraft 550m further along the 3,500m runway is introduced, known as ‘Displaced Thresholds’. HAL propose this measure to help reduce the noise impacts of approaching planes by allowing planes to be at higher altitudes having a mitigating effect upon the communities beneath them. Clarification is sought on the following:

- Will this apply to all aircraft? Or only a certain type of aircraft?
- The proposed new runway is 3,500m – why is there a need to have a 3,500m if aircraft are able to land 550m further along the runway. We note the ANPS states a runway length of

3,500m however, if a runway length can be reduced, then land take can be reduced to potentially be used for the benefit of communities green space.

- Are '*Displaced Thresholds*' part of the noise mitigation measures as outlined in the PIER?

Para 7.2.4 – the Central Terminal Area (CTA) will be reconfigured to deliver improved Public transport interchange, this is welcomed by HSPG. There is reference to an 'associated commercial zone' at the CTA:

- What is the proposal for this?
- Will this be all landside (para 7.2.5) ?
- What will be within the commercial zone?
- Will the target be airport users only or an emphasis on non-airport users.

Para 7.3.6 – Southern Road Tunnel – HSPG welcome this, however this was previously supported on the basis it was to be a public transport and cycle route only. There is reference in this paragraph stating the tunnel will be accessible for buses, coaches and other vehicles. Confirmation is required for the term 'Other vehicles' .

Para 7.4.1 – Active Travel is an important part of the Airport Expansion proposals and links with the Green Infrastructure proposals very closely. There is a lack of information on how the green loop and links will connect with other strategies within the immediate area. More detail is needed on this well ahead of DCO submission so HSPG can be fully engaged.

Para 7.6.3 – ITSF cargo/cargo facilities are proposed to be reconfigured to allow more capacity and floor space. The impact on the local road network and connections to the M25 is a concern for communities situated to the south of the airport campus.

Para 7.6.7 – 7.6.10 deal with new hotels, offices and freight forwarding, there is recognition that HAL have dealt with the Local Authorities (through HSPG). In general, there appears to be a lack of detail on the land use to make a full assessment on the impacts of the location of these activities and the effect on other areas i.e. transport and environment. Figure 7.6.1 (Airport Supporting Development) shows an overview of where the various land uses are proposed – there is a little more detail in the local neighbourhood documents, which provide some generic 'ideas' on the land uses, however, there is no firm detail. HSPG need to know how consent will be gained for the detail of these sites. Will planning applications be submitted through the TCPA process or will detail be provided with the DCO submission/through the DCO consent?

Further questions required:

- Why are some hotels within the DCO limits boundary and others not?
- Land use and parking – connection between this and the total quantum of airport parking? Some clarification required on this.

### *Proposed Displacements*

Para 7.8.3 – *Displaced Key Land Uses* – some land uses will be displaced by Airport Expansion and require to be relocated. There appears to be a preference for the displaced uses to be dealt with by other consenting regimes i.e. Town and Country Planning Act. Will the DCO provide any guarantee or tie in HAL to pursue these TCPA applications? Can a requirement be added to the DCO to ensure HAL fulfil their commitments with displaced uses?

### *Chapter 8 – Indicative Phasing*

The phasing is outlined in para 8.1.3, there is no indication when elements of Airport Related Development will be delivered . Some detail is provided in the local neighbourhood documents. We require a phasing plan showing how and when the ARD will be delivered (together with the proposed consenting regime).

Para 8.1.5 states the phasing outlined in Chapter 8 is indicative and will evolve. It is important for HSPG to be further consulted on this and agree phasing in advance of the publication of HSPG’s Joint Strategic Planning Framework (JSPF).

Phasing links with HSPG’s wider question of what detail we will see with the DCO submission, it is clear the DCO will not contain all the detail required eg layout and elevational details of the ARD sites. Phasing is referenced in the ANPS para 1.20 -

*“Unlike the regime for the granting of planning permission under the Town and Country Planning Act 1990, there is no provision in the Planning Act 2008 for the making of an ‘outline’ application for development consent, followed by ‘reserved matters’ approval. This does not mean, however, that development cannot be phased, so that particular parts are brought forward at different times, or that the details of a proposal cannot be reserved for determination later. Guidance by the Ministry of Housing, Communities and Local Government recognises that development projects advanced through the development consent order process may be phased, but emphasises that every phase of the project contained in a development consent application must be considered in the application for the order and the order itself”*

## 2. Construction proposals and Code of Construction Practice (CoCP)

### Construction Proposals

The structure to the responses to this document is a summary of the content of key sections/paras followed by responses and queries.

Construction Methodology – section 4 (p27) 4.1.1 - section explains the general construction methods that have been used for assessment purposes in the PEIR – these will be considered further as progress towards the DCO application. *Have these methods been subject to a detailed assessment as part of the PEIR?*

4.1.2 – main construction phases grouped –

- Demolition of properties (c2022-24) and construction of new infrastructure (c2020 – 24)
- Airfield expansion inc earthworks (c2022 – 26)
- Campus development (c2024 – 50)

*How will the construction process be managed across such a long period and how will necessary mitigations in the longer term be secured in the interests of the amenity of adjacent residents, businesses, road users etc?*

4.1.3 – aim is to keep construction activities within the area of permanent land use as far as possible, where not possible plots of land have been identified for temporary use. Construction Support Sites (CSSs) will be located along main roads and as close as possible to the main construction areas. Following AEC1, the footprint and number of CCSs has been reduced.

*This seems like a sensible approach. Is the reduction in CCSs feasible to ensure that those remaining cover most of the construction activities, and are the reductions in footprint significant enough to alleviate previous concerns?*

4.2.2 – this states that ground investigations, environmental and archaeological surveys are already underway to inform the EIA, design development and delivery strategies, and further surveys may be needed following DCO grant.

*These investigations and surveys need to have been carried out in the main by now to inform the content of the PEIR and the content of the expansion scheme, any later would mean that they would not be informing the scheme or the final EIA until submission or post DCO grant which is considered too late in the process. Such information is necessary now.*

4.2.7 and 4.2.8 – some uses that are proposed to be relocated may be subject to separate planning applications pre or in parallel to the DCO for certain elements, eg Harmondsworth Primary School, Heathrow Special Needs Centre, Harmondsworth Community Hall. Early preparation works for construction of the Immigration Removal Centre (IRC), may seek planning consent for this.

*How will these planning application be linked/wrapped up in the DCO, how will necessary mitigation be pinned down and monitored as part of the wider DCO process?*

4.2.13 – some infrastructure works will need early relocation – eg Scottish and Southern Electric overhead powers lines and HV substation in Poyle, Spout Lane Lagoon to Mayfield Farm. *What legal/statutory processes would these follow, what mitigations/management measures will be put in place and how will they be secured?*

4.2.14 to 4.2.17 – general principle that current major roads (eg A4, A3044, A3113, M25) will remain open until new ones are complete. The western roundabout at J14 of the M25 would be extended, and there would be phased extensive modifications to J14a. *What would the impacts of junction changes be during the construction period, have the changes been modelled, what mitigation/management measures would be in place?*

4.2.19 - the same principle applies to river diversions, the existing river corridors will remain open until the new ones are established. *What does 'established' mean? – how does water flow get tested? If not tested and flow is not correct and is problematic, what mitigation would be in place?*

4.2.20 - it is proposed that new river channels will be constructed whilst all flow remains in the existing channel. The phased movement of rivers, including moving fish from old channels to new, will be sensitive to spawning seasons. Fish will be placed upstream and downstream of the construction site, so that their habitats will not be disturbed. *What fish species currently exist, how will they be relocated without harming individual fish and overall populations, what measures would be in place in case things go wrong?*

Earthworks, page 31,

4.3.2 – 4 Borrow Pits – Northern Strip (south of Harmondsworth), Taxiway Islands (south of Harmondsworth), East of Saxon Lake (north of Harmondsworth), Colne Brook at Poynings. *How will material from the Poynings borrow pit be transported across the M4 to the construction site?*

4.3.10 – Materials Management Plan will be developed setting out how materials will be managed during construction. *When will this be developed and when will HSPG members be able to review it well ahead of DCO submission?*

4.3.14 - As part of the EIA there will be a land contamination risk assessment, which will set out an acceptance criteria for the re-use of material. *When will this be available and when will HSPG members be able to review it well ahead of DCO submission?*

4.3.16 - Where material cannot be re-used and where it is not hazardous, proposed to be in new landfill in the Northern Strip and Taxiway Island borrow pits (once all sand, gravel and London clay has been excavated). Old Slade Lake is also proposed to be a landfill site. Some temporary storage of material may be required while awaiting landfill, this will be in impermeable, bunded contained areas with odour suppressants where necessary. *How will the landfills be designed to prevent future contamination? What environmental permits are required? How will the commitments made to temporary storage be pinned down?*

4.3.18 - A Site Waste Management Plan is proposed in accordance with the COCP. *When will HSPG members be engaged on this Plan and get to input/shape it well ahead of DCO submission?*

4.3.19 - Airfield Construction – on land subject to landfilling. Settlement is flagged as an issue, ie downward movement of the ground. 3 potential options;

- Excavate the landfills and replace with clean backfill
- Pile through the base of the landfills, minimising excavation
- Undertake ground improvement works, which don't involve piling through the base of the landfills, and which also minimise excavation

Which of these solutions is adopted in different parts of the site will depend on the proposed use, the depth and nature of the landfill and the underlying geology. The final solution chosen for each area will be dependent on the outcome of the current ground investigations and on-going discussion with stakeholders. More detail on these options is in the SDR, Ch 14.

*What are the pros and cons for the different options, which one is the most effective in ensuring the minimisation of extraction and dealing with landfill material and in ensuring that land is not further contaminated?*

4.3.25 – the use of concrete is proposed to be minimised, however, significant quantities will be needed. Concrete will be delivered by train as much as practicable. Batching plants and pre-casting areas will be established on site to minimise the transport of ready mix concrete by road. The main batching plant will be by the Colnbrook branch line. Other batching plants may be placed on the CSSs if localised concrete supply is needed. *How will these measures be ensured to ensure batching and pre-casting are done on site?*

Dewatering and infilling of waterbodies – the earthworks platform would extend over Colnebrook West and Orlitts lakes to the west of the M25 that will require dewatering and infilling. *What is the process for dewatering, where will water be diverted, how will this process be managed?*

4.3.28 – a 'range of measures' will be adopted during the construction phase to control potential risks to the water environment and local communities arising from earthworks. The draft COCP and PEIR outline preliminary thinking on some of the key measures required to manage impacts on the water environment – these will be developed further with relevant stakeholders as construction proposals mature further.

*The level of information in the COCP and PEIR is not detailed. In general, it would be expected to have detailed work to review and comment on well before the completion of the COCP, the EIA and submission of the DCO.*

#### Construction and Logistics Management

5.1.5 – overall approach – avoid road use – as such, use of CSSs, rail freight, use of Logistics Hubs and CSSs for Just-In-Time Delivery, and delivery management systems, designated access routes and HGV parking on some CSSs.

The choice of location for construction and related activities is to ensure they are as far as possible from residents, and where not possible, that appropriate buffer zones and other measures set out in the draft COCP are in place to minimise impacts. *Where will the defined buffer zones be, what*

*measures are proposed in each location in detail, when will HSPG members have site specific details? There is limited detail in the COCP. General further comments on construction and logistics management as follows.*

*HSPG's general position on noise including construction noise is set out in the HSPG Environment Position Paper – "NO1: In accordance with the Airports NPS, the noise management mitigation package should drive improvement adopting the mitigation hierarchy of firstly reducing the noise generated at source; optimising the distance between the source and noise-sensitive receptors; restricting activities as appropriate between different times of day; and finally mitigating the impact at receptors including through noise insulation."*

*Noise from construction activities need to be assessed together with on-going operational activities at the airport and include other day to day noise sources such as from road and rail*

*There is no mention in the PEIR that reduction of construction source levels has been considered, it goes directly to barriers or noise insulation. We would like the ES and the CoCP/CP to include clear assumptions on what construction activities would be considered for night-time and which would be excluded from night-time works (such as piling activities). Also, specifics on proposed quieter plant and methodologies (i.e. bored, vibratory or Giken piling).*

*New and altered roads, and increased freight movements should also include vibration and ground borne noise to be assessed for potential impacts Railway noise needs to be identified as a relevant noise source and data provided and assessment made to indicate impacts and necessary mitigation.*

*All elements of construction activities need to be identified in order to assess the impacts and mitigation requirements, including tunnelling and bridge works, which would include piling and tunnelling plant.*

*5.2.2 – CSSs – to be used for workforce and HGV parking. How many additional trips would be generated on the road network, has the impact of such additional traffic been modelled and if so would there be significant impacts and what would they be and how will they be mitigated?*

*5.2.3 – the detailed design of the CSSs will ensure that there are suitable set-backs and buffers to sensitive land uses. When will HSPG members see the design of the CSSs and the measures to be in place to minimise impact, and how will these be pinned down?*

*5.2.4 – CSS phasing –*

- Early works – none needed. Where will construction activities take place, how will these be managed and impacts mitigated?*
- DCO to runway opening – all completed and in use (decommissioning of CS2 from 2025)*
- Runway opening to 115mppa – decommissioning of CS1, CS2, CS18*
- 115 to 130mppa – decommissioning of CS11 and 12*
- 130mppa to end state – phased decommissioning of all remaining.*

*5.3 - Management of construction traffic – Preliminary Outline Construction Traffic Management Plan (CTMP), and Preliminary Construction Workforce Travel Plan (CWTP), both appended to*

COCP. Both 'part of our strategy to mitigate the effects of construction traffic'. *HSPG needs full engagement in further development of these documents which are very high level at present.*

5.3.7 – CWTP - aim to achieve a public transport mode share of at least 60% for construction workers travelling to/from the site over the construction period and to exceed this where possible. Dedicated bus services to work locations from CTA, Hatton Cross and T5. Expect to supplement existing bus routes with project specific services, if needed. *How will the public transport mode share be monitored and pinned down? What is the expected public transport mode share during the major construction period up to 2026, given the provision for car parking for construction workers?*

5.3.8 – it is likely that a proportion of the workforce will reside to the north, south and west where public transport connectivity to the airport is less developed – those workers may then need to drive, although bespoke shuttle bus services could be supplied from key locations if there is sufficient demand to supplement existing public transport. Similarly, it also anticipated that people working night and evening shifts may need to drive due to reduce public transport at night.

*How many workers are predicted to come from the north, south and west (and specific areas) in each construction phase, particularly the major phase, and have HAL identified the public transport connectivity deficiencies and opportunities to improve connectivity? How many evening and night shift workers would there be in each phase and where do they live? HSPG would like to see every effort made to produce detailed assessments and to ensure that the majority of workers from these locations and during night and evening shifts travel to and from the airport/construction sites by public transport, rather than HAL relying on a statement that public transport is poor and as such workers will have no alternative to drive.*

5.3.9 – a minimum of construction workforce parking facilities will be provided, which will be controlled by Heathrow and located near the major access routes to the airport. Project bus services will then transport workers to their site offices or workplaces. Parking spaces will be allocated on a needs basis. *Same comments as for 5.2.2 above.*

5.3.10 – car share scheme for construction workers will be in place, spaces will be allocated to car sharers. Facilities will be in place for walkers/cyclists. *When will this detail be shared with HSPG members, how will management measures be pinned down?*

5.3.12 – railhead – this will be located at the Colnbrook branch of the Great Western Main Line (GWML). To increase the number of train paths, capacity enhancement options are being considered to the line at West Drayton to allow access to the Colnbrook branch to/from the west. However, it is likely that the railhead will operate 24 hours a day to use available train paths during night time hours. *Please see comments on this above in Ch 2. Such a proposal is supported by HSPG if it is demonstrated that this takes significant numbers of vehicles off the road network, and has minimal environmental impacts.? HSPG would like to be engaged on this work going forward.*

5.3.15 – construction freight – managed by adherence to dedicated routes and specific arrival slots. Use of delivery management systems (pre-booked delivery slots, managing the flow of vehicles). *How will this adherence be pinned down, managed and monitored?*

5.3.16 – emissions standards set out for different types of vehicle, consistent with para 5.40 of ANPS. Reference to Ch 13 of the draft COCP. *How will future, cleaner engine emission standards be factored in? How will standards be managed and monitored?*

5.4.1 – access to the site will be either directly through or via the CSSs on to temporary roads.

5.4.3 – utilising the trunk road network and main roads on the local road network (A3044, A4, A3113 indicated on graphic). For other local roads, eg town and village centres, access for construction traffic will be restricted but may at times be necessary, eg to deliver locally sourced goods.

*How will such traffic on local roads be managed and mitigated? Could the use of trunk road network be avoided by having bespoke construction access from the M4 for some CSSs – could partner up with Highways England on Smart Motorway's implementation and plans for construction access? HAL should know the source of local materials and should be able to plan routes that minimise impacts.*

5.4.4 – generally access on residential roads will be prohibited. Where access on lower classification roads and in residential areas is necessary, Heathrow/its main contractors will implement measures to mitigate and manage negative effects. *What measures will be used, how will traffic be managed to try to ensure such roads are not used, how will the management/mitigation process be pinned down?*

5.4.6 – at the start of construction the main circulation routes will be the A4 for east west movement and A3044 for north south. *Has modelling of impacts been undertaken, if so what would the impacts be and what mitigation measures are proposed?*

5.4.9 – after runway opening, construction traffic is estimated to significantly reduce, access to construction sites will be via upgraded public highway network including the new A4 and A3044. *With on-going construction activities, has construction traffic been modelled and impacts assessed on new highway network?*

5.5.1 – construction network – would contain haul roads, internal construction roads, service roads. These will cross physical restrictions including public roads and watercourses. *Has the impact of the temporary bridges been assessed on watercourse environments as part of PEIR/EIA?*

5.6 - Management of construction workforce – workforce projected to reach a peak of approx. 14,000 in 2024-25, and will drop on runway completion, to vary between 2,000 and 5,000 from runway opening to end state. Post runway opening it is envisaged that the workforce will largely be confined to the construction areas of the new terminal/satellites or within new airport supporting facilities and related developments largely with the airport curtilage. *How will workforce be managed post 2026 given construction will last to 'end state' and the workforce would still be considerable in number?*

5.6.3 – the majority of the workforce is anticipated to be drawn from the existing construction labour market residing within a commutable distance of Heathrow, therefore temporary living accommodation will not be needed. The airport's London location has a well developed housing market and public transport links, so the requirement for construction accommodation facilities is less than for more remote infrastructure projects. Due to possible demand for caravan infrastructure Heathrow intends to provide and manage hardstanding areas in some of the

CSSs. HAL may also use accommodation that comes into its ownership. Reference to a Worker Accommodation Strategy, a draft of which will be provided with the DCO application.

*HSPG has raised many concerns over the approach to construction worker accommodation, this is a key area of concern for HSPG members. In the briefing sessions on this topic on the Preferred Masterplan in April/May, there was significant detail presented on where HAL believe the workforce would come from (mainly east London), what is considered a commutable distance, what proportion would reside at home and would not need overnight accommodation, what proportion would travel from longer distances and would require such accommodation, what facilities would be available for this ('Heathrow sponsored accommodation, properties acquired through the expansion process). There was an acceptance there will be a proportion of those needing accommodation that HAL can not provide for, so there will be a demand within surrounding local authorities. As expressed previously by HSPG, most if not all authorities around the airport have very significant pressure on temporary accommodation and it is not likely that there is an appropriate supply to meet demand from workers.*

*As such, HSPG would expect a detailed assessment to be consulted on as part of AEC to support HAL's approach, both on the demand for accommodation and supply, and a strategy for engaging with local authorities to ensure that there will not be an adverse impact on high demand temporary accommodation. It is noted that there is reference to a Construction Worker Accommodation Strategy that will be submitted with the DCO application, however, HSPG consider this is far too late in the process and should be subject to consultation now – DCO submission is not a consultation stage.*

5.6.6 – Worker Code of Conduct will be implemented, including workers using caravan accommodation, car parking, local community and recreation facilities. There will be welfare and occupational health facilities on site. This is consistent 'active workforce management' (para 5.40 of ANPS). *How will this Code be implemented, enforced and managed?*

5.7 – Worksite Security – due extent of the project it will not be possible, at least initially, to create a fenced perimeter. HAL/main contractors will ensure there are adequate security facilities – including fencing, barriers, ditches/bunds or hoarding. These will be designed to landscape character, visual amenity, biodiversity in each location, while taking account of security and public safety. Other standard security measures are listed. *How and when will HSPG members be consulted on the detailed physical proposals for security to ensure that they address landscape character, visual amenity and biodiversity?*

5.8 – Temporary utilities infrastructure – high level proposals for managing surface water run-off to avoid any increase in flood risk downstream and to protect water quality (such as dedicated temporary construction site surface water drainage systems, attenuation and treatment facilities), and to deal with groundwater pumped from excavation. The drainage system would be divided into different drainage zones depending on topography and work phases. A new sewage collection network would be installed for the construction workforce. *Cross-check with the PEIR. These proposals would be considered standard and necessary, how and when will HSPG be provided with the detail of the drainage system to review and input into its design, implementation and management. How will the system be managed, implemented and enforced?*

5.8.3 - Electrical power and water would be by dedicated supply from the existing and water networks, with a new temporary distribution network serving the whole construction site. *Cross check with PEIR. Has a detailed assessment been undertaken on power and water needs and liaison with relevant utilities companies taken place?*

5.9 – Temporary buildings and structures – are required as part of construction process. Given the length of phases of construction, in particular the main phase, these buildings and structures will be in place for a significant amount of time. *For those visible from the public realm, will HSPG be consulted on the height, form and design of buildings and structures, and if so when?*

5.10 – Logistics Hubs – four to be announced in early 2020, two to be ready in 2022 by the start of main construction, the other two shortly after the start. *See HSPG’s comments on Logistics Hubs in response to HAL’s AEC Economic Development Framework.*

5.11 – Working hours – in general, these will vary by area, activity and receptors, but mostly 24/7 inc Bank Holidays, mainly so new runway is operational asap. Shift and finish times to be staggered to reduce pressure on public transport, roads and construction site infrastructure. Mitigation measure proposals to be considered, including bunds or buffer zones, particularly for noise and light, and sensitive environment receptors. HAL will consider where 24/7 working is not acceptable. Reference to the COCP set out working hours on a locational basis. May be the need for some short notice working.

*The COCP has little detail on locational working hours. These proposals are heavily reliant on the strategy for transporting workers in and out of the site, and the accommodation needs for works, and the Worker Code of Conduct, all of which given other queries and comments on the Construction Proposals HSPG still has significant concerns over.*

Chapter 6 – more specific detail given on construction activities in 3 areas, near Harmondsworth and Sipson, Poyle and Cranbrook, and Stanwell and Stanwell Moor.

More detail provided for these 3 areas, including construction infrastructure (eg temporary bridges) and mitigation proposals. Screening is proposed for each area around CCSs and related sites, but it appears that noise barriers are proposed for Harmondsworth and Sipson only.

*The proposals are relatively high level still and HSPG would expect more detail on construction activities and mitigation/management proposals in these areas. HSPG would expect a high standard of mitigation to sensitive areas, including noise barriers, significant buffer zones and landscaped screening. HSPG would also suggest that CSS8 in Cranford should be targeted for specific high standard mitigation and management.*

### Code of Construction Practice

#### Overview and Summary -

In general, these proposals are high level and appear to be standard proposals expected to apply to a major construction project. At a high level HAL’s approach appears to be fit for purpose, however, much detail still needs to be worked on and there are references to workstreams and documents that will be submitted with the DCO or at a later stage. The COCP in many areas repeats the content

of the Construction Proposals (CP) document also subject to AEC, and as such the detailed responses to the COCP should be read in conjunction with the response to the CP document. In many areas, commitments are caveated through the use of wording such as “where reasonably practical.” HSPG would want to be in a position that firm commitments are made and kept for measures to manage construction impact.

HSPG considers it vitally important that it is fully engaged in the development of the detailed COCP and related workstreams. The expectation in the Construction Proposals document and the PEIR is that the COCP will set out detailed mitigation proposals, but there is a lack of detail and clarity on such mitigation proposals at present. There are some particular areas of focus for HSPG, particularly in regard to noise and vibration, biodiversity and ecology, land quality, pollution control, flooding and water environment. Of particular note to HSPG members are proposals for a Joint Planning Committee to assess/determine s61 noise and vibration consent applications, a Construction Noise Liaison Group, and a Traffic Management Working Group.

HSPG is looking to HAL to see what extra HAL would be doing through the construction phases over and above standard procedures to mitigate and benefit local communities.

Detailed review and responses to the document -

Chapter 2 – Implementation -

2.4.1 - how will compliance with the COCP be pinned down in the DCO, managed and monitored?

2.4.3 - the term "appropriate action" requires some explaining. This can be done by references the guidelines used in determining the “appropriate action” applied in the event of noncompliance.

2.5.3 - who determines compliance? And how do you eliminate bias?

2.6.1 – how will monitoring be reported publicly and to HSPG/HSPG members and how will issues be tackled/resolved?

2.7.1 – there is a need to be more specific with regards to what constitutes "sufficient experience on construction-related works".

2.7.3 - will a standardized training program be made for all contractors? Or will a framework be issued on what is expected within a training program?

2.8.1 – when/how will Heathrow’s intention to adopt the principles of the Considerate Constructors Scheme be pinned down?

2.9.1 - will there be provision for independent periodic unscheduled independent checks

2.11.1 – how will the proposals for interface management be pinned down, managed and monitored?

2.12.1 to 2.12.6 – HSPG supports the proposals for changes in construction methodologies and mitigation measures.

Chapter 3 – Community and Stakeholder engagement -

3.2.1 – when will HSPG be engaged on the community engagement plan?

3.4.3 - for a higher level of transparency and openness are Heathrow willing to periodically provide data on number of complaints/ questions asked by the public and number of responses provided along with time range of response To ensure improvements could be tracked along the timeline of the project.

Chapter 4 – General Requirements -

4.1 –The Construction Proposals (CP) document states that the COCP will set out locational working hours. However, the COCP does not.

4.2 –Point 10 – how will use of public rights of way be pinned down in the DCO and managed/implemented post DCO consent?

4.3 – Site Lighting – what procedure would be in place for residents etc to express concerns and for resolution on those concerns on site lighting?

4.4 – Worksite Security – no detail provided on how landscape character, visual amenity and biodiversity will be addressed, this should be provided.

4.14 – when will HSPG be engaged on the Pollution Incident Control Plan?

4.6.5 – HSPG is pleased to see the commitment to use tree surgery such as crown reduction and pollarding over felling wherever possible, however we would like to also see a commitment to using ground protection measures (such as cellweb) and adapted construction practices (as well as innovative design) to further mitigate the risks to retained trees.

4.6.6 - consideration should be given to involving the Ecological Clerk of Works in these discussions so that the most ecological valuable timber/brush can be retained for log piles/hibernacula and dead wood habitat (as referred to in paragraph 6.2.3, bullet 6) and in the specification.

Chapter 5 - Air Quality and Odour -

5.1 –the main contractors' EMS - management plans to document the approach to managing construction related dust and odour – will these be publicly available, will HSPG members be engaged on these if necessary?

5.2 - Heavy Goods Vehicles (HGVs) will be required to comply with Euro VI emission standards. Petrol Light Duty Vehicles (LDVs) will be required to comply with Euro 4 emission standards and Diesel LDVs will be required to comply with Euro 6 emission standards – *are these standards acceptable?*

5.6.2 - “Selection of designated routes to consider areas of poor air quality”. How will areas of poor air quality be identified? Will the CTMP seek to avoid routing construction traffic through such areas? Can it be determined that designated routes will not adversely affect receptors on construction traffic routes?

5.10.2 – Dust and Particulate monitoring –will HSPG members be engaged on the dust risk assessments for construction sites? How will activities be monitored and enforced?

5.10.3 - "Monitoring will commence in advance of construction in order to establish a baseline against which changes can be considered." The duration of baseline monitoring should be committed to, a minimum of 3 months is recommended. Monitoring strategies should be developed and agreed in consultation with HSPG/relevant local authorities.

5.10.6 and 5.10.7 - "For automatic PM10 measurement, this trigger level will be 250 µg/m<sup>3</sup> in accordance with the Mayor's Supplementary Planning Guidance". IAQM Monitoring Guidance 2018 (CCP 5.1.1.5 b) recommends a Site Action Level for PM10 of 190 µg/m<sup>3</sup> over a one-hour period. This guidance is more recent than The Mayor's SPG and should be considered. If the trigger level is breached, include action to stop work.

5.10.8 - Monitoring of pollutants around construction traffic routes –this is a key process which needs to be addressed and discussed with HSPG imminently, the location of existing air monitoring equipment (and locations for additional equipment ahead of any works) is important in comparing baseline to future performance.

5.10.10 – Reporting – standard approach to be expected. Proposal is that Heathrow/ the main contractors will prepare quarterly reports of dust and air quality monitoring data – will these reports be made publicly available?

5.10.10 - given the construction phase is the most critical in terms of legal compliance with AQ EU LVs, quarterly reporting should include data on AQ mitigation measures, and linked in to the review and scrutiny process for EMG. E.g. quarterly reporting data could include:

- extent to which low emission plant and machinery are used
- proportion of materials travelling by rail
- HGV mileage (off and on-site) and routing
- breakdown of fleet as regards use of EVs
- extent of freight consolidation
- hours of use of diesel or petrol operated generators
- plus AQ monitoring data from local sites and site specific - to report / flag trends

CEMP/OMP monitoring, mitigation and reporting to be agreed with local authorities and reviewed on a regular basis to ensure it continues to be appropriate.

Adopt more challenging requirements for NRMM than in the London SPG as per HS2, which applied across the whole of the route including outside of London. As some of the works associated with HAL are outside London, HAL should add a commitment for GLA NRMM standards to apply everywhere, and to adopt best practice/highest standards (Stage IV/V) in most sensitive areas.

Table 4: NRM Engine Emission Stage Requirements (of net power between 37kW and 560kW)

Area	London SPG Stage Requirements		HS2 Requirements	
	From 2015	From 2020	From 2017	From 2020
Central Activity Zone (includes Euston)	IIIB	IV	IV	Best practice (Stage V is expected in 2020)
Rest of Greater London	IIIA	IIIB	IIIB (or IIIA with approved Diesel Particulate Filter)	IV
Rest of country	Not applicable	Not applicable	IIIB (or IIIA with approved Diesel Particulate Filter)	IV

## Chapter 6 - Biodiversity -

6.1.2 Heathrow/ the main contractors will manage impacts from construction on ecological resources, including the following:

- Designated sites including European sites designated for nature conservation, Sites of Special Scientific Interest (SSSIs), Local Nature Reserves and local wildlife sites (i.e. non-statutory sites designated for nature conservation)
- Legally protected and conservation notable species
- Other habitats and features of ecological importance (including ancient woodlands, linear/ecological corridors and surface and groundwater bodies).

Do these have to be formal areas of 'ecological value'? ie non identified/categorised areas may also have ecological value?

6.1.3 Within the DCO Project boundary, Heathrow/ the main contractors will aim to minimise habitat loss and where reasonably practicable protect and enhance biodiversity. Why not also outside the project boundary – there will be areas that will suffer from impact on biodiversity outside the project boundary but impacted by the project?

6.1.5 The main contractors will need to account for the other requirements in the draft CoCP. Heathrow/ the main contractors will be required to undertake pre-construction surveys - as per HSPG's response to the CP document, such surveys need to have been carried out by now to inform the PEIR and scheme proposals, pre-construction and post DCO decision is too late.

6.2 Ecological management measures and biodiversity management measures - how will these measures be developed and implemented, how will HSPG be engaged?

6.3 - Conservation of legally protected and notable species – how will HSPG members be engaged in developing method statements and implementing these?

6.3.1 – HSPG is pleased to see commitment to producing a breeding bird species management plan and note that this will be shared with Natural England. We would request that we are able to comment on the development of this strategy also and would expect that this plan does not commit to using netting of trees and hedgerows as a way of mitigating the risk of breeding birds during the construction phase. We would also expect to see further details on how disturbance impacts on

breeding birds listed on Schedule 1 of the Wildlife and Countryside Act will be avoided or mitigated during construction. And how disturbance will be managed for important bird assemblages associated with statutory designated sites of ecological interest (including SSSIs), non-statutory sites of ecological interest (e.g. Sites of Importance for Nature Conservation) and other areas of notable habitat (including ancient woodland) during construction.

HSPG is pleased to see commitment to producing a reptile method statement and reptile species management plan and we note that this will be shared with Natural England. We would request that we are able to comment on the development of this strategy and we would expect to see within this plan details on how local reptile populations will be provided for in the long term.

6.5.1 - in relation to the monitoring and survey works to be undertaken prior to construction we would expect these to be designed to collect sufficient baseline data which can be used to help assess the long-term success of proposed mitigation and compensation of the Scheme.

6.5.2 - this should specifically commit to the Ecological Clerk of Works carrying out suitable monitoring throughout construction activities, as we see this as an important part of their role.

Chapter 7 – Carbon and Greenhouse gases – short chapter, repeating much of CP document, containing standard measures -

7.1 - Site construction works - aim to reduce carbon emissions arising on-site during construction through careful selection of plant and construction activity approaches - related mitigation measures. How will these measures be pinned down through the DCO and managed and monitored? Will the carbon emissions inventory be made public and shared with HSPG members to allow monitoring of performance?

Chapter 8 – Historic Environment -

General provisions – will these broad management measures for the historic environment be undertaken with Historic England and HSPG members as relevant, eg preparation of a schedule of historic environment investigation, surveys and protective arrangements to be implemented prior to and during construction works.

8.3 Written Scheme of Investigation - it is acknowledged that this will undertaken with engagement with local authorities, Historic England and the Greater London Archaeology Advisory Service (GLAAS).

8.4 Historic Environment Management Strategy - will HSPG members and HE be engaged on this prior to DCO submission? It is important engagement occurs well before DCO submission in order to shape this.

Chapter 9 – Land Quality -

9.1 - General provisions – Mitigation of potential impacts - measures will be implemented by the main contractors to assess and control potential risks to human health and controlled waters. What regulatory/statutory provisions would oversee these measures, will HSPG members be engaged on these?

9.3 – a Materials Management Plan (MMP) is proposed – this will be developed in consultation with relevant stakeholders. Will this be developed with HSPG members prior to DCO submission, and what provisions would be in place for management and monitoring?

9.6 – soil resources, focus on agricultural soil - Is the reasonable satisfaction of the landowner enough? What environment regulation/controls are in place to manage this?

This section should reference any additional measures which may be required as part of the control of invasive and non-native species strategy, specifically managing the risk of spreading seed and/or plant fragments of non-native invasive weed species.

Bullet 7 - whilst we agree that in certain circumstances using seed for grass cover on medium or long-term excavated material and soil stockpiles is needed, we would request details on what approaches will be used where soil is to be used for habitat creation/landscaping where this would be counter-productive to the ecological/landscaping aims i.e. species-rich grassland.

Bullet 9 - further details are required on how weed control will be implemented on soil stockpiles to be used for habitat creation/landscaping where chemical weed treatment would be counterproductive to the ecological aims i.e. species rich grassland.

9.7 – Monitoring – section states that where necessary ground and surface water, and gas and vapour, monitoring strategies will be prepared and implemented. Who will independently validate, assess and monitor these strategies, will HSPG members have a role?

#### Chapter 10 – Landscape and Visual Amenity -

General provisions – 10.1 – Construction-related impacts on landscape and visual amenity will be controlled the proposed measures listed – will HSPG members be engaged on those measures and if so when and how? – eg protection of existing elements of the landscape that are to be retained, design and management of temporary construction components in response to landscape character and visual amenity

10.2.3 - we would expect to see habitat creation for ecological mitigation/compensation to be implemented as early as reasonably practicable also.

#### Chapter 11 – Noise and Vibration -

11.1 - General provisions - Best practicable means (BPM) will be used by Heathrow/ the main contractors to minimise noise (including vibration) emanating from the worksites in order to protect people and other noise sensitive receptors from the adverse effects of noise. How would construction noise and on-going Heathrow operational noise impact local residents etc, and how with this be assessed, monitored and mitigated? How would noise impacts be assessed in combination with airport operational noise, road and rail noise and other noise sources?

11.1.5 states that the recommendations of BS 5228-1:2009+A1:2014 – Code of practice for noise and vibration control on construction and open sites – Noise, and BS 52282:2009+A1:2014 – Code of practice for noise and vibration control on construction and open sites – Vibration, will be implemented, together with the specific requirements outlined within this draft CoCP. How do these standards relate to BPM above? Are they additional standards?

11.2 – Noise and Vibration Management – Heathrow will be proposing, at DCO application stage, a framework for the management, mitigation and monitoring of construction noise and vibration which uses best practice from major infrastructure projects, applied to the circumstances of the Heathrow Expansion Project. This framework will be implemented through the CoCP and through provisions in the DCO itself which will amend the Control of Pollution Act (1974) to create a suitable regime. What is the mechanism to amend the Act and how would that relate to the DCO? Is it necessary to amend the Act? – is there provision in it focussed only on Heathrow airport? How and when will HSPG members be engaged on the framework well ahead of DCO submission?

11.2.4 – the framework contains a proposal for a Joint Planning Committee (JPC) of all affected local authorities and would have the role of discharging a number of the DCO's requirements as well as determining applications for section 61 consents within a set of parameters specified in the DCO. It then sets out some ways in this could operate.

Whilst HSPG supports in principle a potential body to deal with strategic cross boundary matters resulting from the DCO consent (eg discharge of conditions, S61 consents, S106 clauses etc), the nature and detail needs to be considered by HSPG members and worked on collaboratively with HAL and other key stakeholders. Any body should also link into any Environmentally Managed Growth body (please see HSPG's comments on this AEC document), which needs to be considered as part of the collaborative discussion.

A Construction Noise Liaison Group is also proposed as part of the framework. How would this work in relation to existing noise liaison groups? This appears as an engagement group but what role could it play in properly holding HAL and its contractors to account to ensure noise is minimised? HSPG would like to work closely with HAL on this concept and how it relates to other noise liaison groups.

11.3 – Noise Insulation Policy – please see HSPG comments on this AEC document. In essence, are these thresholds appropriate? Do they factor in day to day airport operational noise?

11.4 and 11.5 – Protection of building occupants from vibration disturbance – states that Heathrow/ the main contractors will employ BPM to protect the occupants and users of buildings from vibration disturbance. Are these trigger levels appropriate? – HSPG may need technical assistance in this area.

This section goes on to state that Listed or other heritage buildings of historical importance which are difficult to repair may require special consideration on a case-by-case basis. Any such buildings that are situated within 50 metres of any construction-related activities which may cause vibration will be identified by the main contractors. Is 50m an appropriate threshold – where does this threshold come from, is this based on HE advice?

## Chapter 12 – Resource Efficiency -

12.1 – General Provisions states that Heathrow aims to deliver a DCO Project that is resource efficient and supports a circular economy. 12.2.1. states that resource efficiency measures are also set out in the Resources Management Plan (RMP), including measures for sustainable resource management and waste management. The main contractors will be required to adhere to the RMP. Where is the RMP, doesn't seem to appear amongst the AEC documents? If not present, how will HSPG members be engaged and when?

12.4.5 - Site Waste Management Plan for Heathrow/main contractors, to be in line with the Resource Management Plan. The section then sets out factors that will be incorporated in the SWMP. When and how will HSPG members be engaged on the SWMP?

#### Chapter 13 – Traffic and Transport -

13.1 – General Provisions – a Construction Movement Strategy will set out key measures, requirements and principles to be adopted, including the CWTP and CTMP, plus also commits to a Traffic Management Working Group (TMWG), which will be established with key stakeholders, to be consulted on the planning and submissions of highway consents. When will this Group be set up, what would be the membership, what role would it have (in particular what powers could it have to address issues and poor practice?)

13.3 sets out 21 bullets for the proposed content of CTMPs. Point 15 states that measures to reduce construction traffic impacts or impacts associated with over-parking on residential streets by construction workers. Proposals should be in place to ensure there is little or no 'over parking'.

A key principle for HSPG should be that parking in relation to construction on residential streets should not be an issue in the first place – HAL need to manage the construction workforce and deliveries etc so that there is little or no parking pressure on residential streets, mainly through ensuring public transport access and active travel are the key ways of getting to the site, and any parking required is in the entirety of the CSSs. Regardless, what are these exact measures, how will parking pressure now and in future be assessed, how will 'over-parking' be assessed, when will HSPG be engaged on these exact measures, how will measures be monitored and enforced?

13.4 sets out high level details on the content of the CWTP. It commits to the appointment of Travel Plan Co-ordinators who will be responsible for co-ordinating the implementation and monitoring of the CTWP (and main contractor CTWP).

HSPG has concerns that there will be a number of CWTPs given the probable large number of main contractors – how will these be effectively co-ordinated? When will the Travel Plan Co-ordinators be appointed, how many and for what duration?

13.5.6 states that Traffic Safety Officers will be appointed and sets out proposed responsibilities – when will these Officers be appointed, how many and for what duration?

#### Chapter 14 – Water Environment -

14.1.3 states that a Water Environment Plan will be developed and will detail the measures that will be put in place during construction. The Water Environment Plan is the working title for the document(s) which will contain consideration of construction drainage, flood mitigation and river diversions. When and how will HSPG members be engaged on this Plan well before DCO submission?

14.2 states that a Pollution Incident Control Plan will be prepared and implemented by the main contractors – when and how will HSPG members be engaged on this Plan well before DCO submission?

Notwithstanding the above, generally the approach in this document to the water environment looks sound and HSPG is in agreement with the overall methodology. However, we would like to see more details with regards to both the groundwater and surface water assessments for flood mitigation and how HAL have assessed these risks prior to construction starting.

Para 14.9.7 states that Flood Management Plans will be developed. Again, when will these be developed and when will HSPG/HSPG members/flood authorities be engaged on these well before DCO submission?

### 3. Future Runway Operations and Early Growth

*(To assist clarity specific HSPG responses are numbered a) to ff) below)*

#### *Future Runway Operations document*

The executive summary shows that the preferred proposals for the operation of a three-runway airport achieved through the DCO and various associated (at least five) changes made through the Airspace Change processes. These are to achieve the Airports NPS minimum expansion growth figures on the NW runway and the requirements of the Aviation Policy Framework to ensure works together with the operational changes and technological advances, improve the effects of aircraft on local communities. The related changes include the mechanism of Noise Envelope design to establish the 'rules' for the use of the runways, utilising: the introduction of 'reflective' three-runway alternation and directional preference; displaced runway thresholds and new airside infrastructure; flightpath alternation and Noise Envelope directed flightpath design / amended Noise Objective; further restrictions and management of night flights; and other advances in procedures and technology including PBN, eTBS, slightly steeper approaches and other operating procedures.

- a) The HSPG is broadly supportive of a package of measures that demonstrably reduce the number of people significantly impacted by the adverse effects of flights (day and night) on health and quality of life (SOAEL), and reduces Night Quota Count compared to both existing and 2013 levels.
- b) In particular HSPG is supportive of operational changes and additional restrictions on night flights that together deliver each community closest to the airport runways the claimed least 7hours' respite between 22:00 and 07:00; including the cessation of scheduled flights between 23:00 – 05:30 (runway time); shortening of the late evening recovery periods, and additional early morning restrictions between 05:30-06:00 and 06:00-07:00.

However, further assessment is required, as viewed another way the actual period of 'night ban' (after allowing for overruns) in relation to the impact of departing and arriving aircraft overflying the wider areas (below 4000ft) will be shorter than the minimum 00:00 to 05:15 restrictions on 'runway time':

- c) HSPG seek further demonstration of the impact of aircraft on communities impacted at the runway approach / departure and wider area flightpaths (below 4000ft). The scope for combining runway, flight envelope and individual flightpath alternation (and directional preference) should be reviewed to provide all communities with 7hours of night time respite.
- d) HSPG is broadly supportive of proposals for 'reflective' runway alternation mode allocations (Figure 3.2 and para 3.6.2) and 'managed' directional preference appear sensible although further testing and engagement is necessary over the 'rules' governing directional preference and timing.
- e) The HSPG strongly support a binding commitment to future periodic engagement and review around runway and flightpath alternation patterns and operational arrangements. This should include investigation of the case for more frequent alternations to allow every community a period of (albeit shorter) daytime respite each day.

- f) In addition, HSPG consider that further consideration is needed to identify the best ‘world leading’ measures and metrics to fully assess impact on health and wellbeing. For example, introduction of a metric for single noise event peak level, and addressing noise impact and flightpaths of airspace levels 4,000 to 7,000ft in the DCO process.

The ANPS “covers development that is anticipated to be required by 2030 as well as other development required to support it. It will remain in place until it is withdrawn, amended or replaced” (para 1.21). The AEC proposals reach to comfortably exceed the minimum requirements of the ANPS for an additional 260,000ATM (total 740,000ATM) to reach a proposed ‘End state’ of 753,000ATM by around 2050.

- g) The HSPG cannot support this scale of operation and reach beyond 2030 (‘life’ of the ANPS) without compelling evidence that all necessary improvements to environmental conditions and commitments are exceeded and the overall objectives of Aviation Policy Framework are continuously achieved to deliver the following:
- overall objective on noise is to limit and where possible reduce the number of people in the UK significantly affected by aircraft noise
  - reduce aviation emissions to one-quarter of 2000 levels by 2050 and to halve perceived aviation noise. (APF Summary para 17)

The document notes (2.1.1-6) “- Substantial benefits for UK” growing capacity in SE; Section 3.2 explanations of how expansion of slots will be managed, allocated through Airports Co-ordination Ltd and spread over peak and non-peak periods to ensure resilience and reliably assured through expansion. 3.3 – explains the enhancement of operational efficiency, with three principle measures:

- IPA approaches using PBN.
- eTBS Phase 2 Pairwise to reduce interval time of compatible aircraft (allowing for wake vortex of different class aircraft).
- AMAN and DMAN (and RECAT reclassification of Wake Vortex) to optimise the sequence of aircraft movement.
- Infrastructure improvements.

3.4 - Future Operations sets out three types of alternation: Airspace, Flight Paths and Runway.

3.5 - The Options for Runway Alternation are outlined, with Fig 3.2 Runway Mode Allocations – the development of proposal is laid out in the SDM.

- h) The runway alternation modes appear sensible.
- i) HSPG has no view on the merits of a 14.00 or 15.00 mode change, however see c) above.

#### Section 4 Night flights

Explanation of Runway compared to scheduled time at the terminal gate – the difference (taxiway time increases – 10mins day and 15mins at night for arrivals, 20mins for departures day and night.

- j) It is noted that as well as the number of ATM increasing by some 60%, the ground running time for each increases by 50%. How is this reflected in localised noise and air pollution?
- k) It is questioned whether the difference in aircraft types is reflected adequately in NQP and QC figures?

Evaluation process outlined at p35 Fig 4.7 onward. Existing fines process set out.

5.3 Directional Preferences - Discretionary and DfT Issued exceptions to the night time ban are explained.

6.2 and Fig 6.1 – Preferred Operational Framework considering early morning operations.

Discussion around the choice of later starts to flights with two-runway compared to making an earlier start with one-runway only. HAL’s preferred proposal for a runway start time of 05.15 arrival and 5.30 scheduled time at the terminal, operating with one runway until 06.00, and restricting no QC4 aircraft before 7.00.

- l) The HSPG seek that there are no additional aircraft movements than the existing number before 06.00 as part of restricting night flights to reduce or not exceed current levels

e.g. QC of types are noted in a HAL 2018 doc:

Departures							Charging Category (Cum Margin)	Arrivals					
QC								QC					
8	4	2	1	0.5	0.25	0.125	0.125	0.25	0.5	1	2	4	
		A340 A380		A350 B787		Dash 8	Ch14L (>25)	B787 Dash 8	A350 A380	A340			
				A320 A319			Ch 14B (20-25)	A319 A320					
		A330		B757			Ch 14H (17-20)	B757 B737	A330				
B747- 200	B747- 400	B767 B777	A321 B767	A321 E90	E90		Ch 4B (15-17)	E90 A321	B767 B777	B777 B767	B747- 400	B747- 200	
			B737 B757	B737			Ch 4H (10-15)		B737 B757				
		B767	A321 B737	B737			Ch 3 (0-10)		A321	B737 B767			



- m) HSPG question whether the QC could or has been adapted to address aircraft using steeper approaches and departures

6.4.11- states that “Crucially, our work has shown that achieving the 740,000 ATMs a year required by the Airports NPS is not currently deliverable with a night ban timed from 23:30 to 06:00. This is evidenced in *Document 5 of the Updated SDR*.

- m) Critical admission that 740,000ATM cannot be accommodated with HSPG night ban – the position is presumably worse for 753,000 ATM. On this basis the HSPG cannot support 753,000ATM
- n) HSPG consider that fines collected for flight deviation must be directed to affected communities and should be kept entirely separate to Compensation Fund

### *Early Growth document*

2.1.7 – This justification for early growth at LHR from the ANPS (para 3.74) appears misplaced. It is noted that:

2.2 Economic benefits of Early Growth – extrapolated from Govt forecasts as % of whole – direct benefits – 25,000pax to £0.6B and further annual benefit £0.9B, 7,100 to 12,000 additional jobs, 5,200 ‘directly employed at the airport (PEIR Chapter 18 Table 18.45)

- o) Simple extrapolation appears crude, and the benefit of the 5% increase in ATM achieved compared to the total AEC growth figures, the employment figures attributed to early growth appear inflated.

2.2.2 Other benefits presented and section 2.2.3 is revealing:

“In particular, the period from the grant of DCO in 2021 through to the opening of the runway in c.2026 involves the heaviest capital investment in expansion with no incremental air traffic movements above the current 480,000, unless early ATM growth can commence in 2022 to help mitigate the associated increase in the aeronautical charge. In the absence of early ATM growth, consumers would be likely to bear the cost of higher aeronautical charges passed on by airlines. Conversely, the phased implementation of early ATM growth from 2022 would generate additional passengers, and this benefit would translate directly into helping to deliver Heathrow’s challenge to deliver expansion at close to current charges. Early ATM growth is an important component in delivering our obligation to ensure that expansion is cost efficient and sustainable, minimising costs to airlines, passengers and freight owners.”

- n) It is difficult for HSPG to comment on veracity of the above – however, early growth appears to be driven by spreading costs for HAL, loading onto the local community in terms of negative impact, with the only benefits to consumers and operators

2.2.4 – Important qualification / condition of early growth – documents acknowledges references in the ANPS to early growth: at paragraph 4.13 of the Airports NPS explains:

*“The effects of any changes in operations, including the number of air traffic movements during the construction and operational phases must be properly assessed and appropriate mitigation secured for any significant effects.”*

4.2 Testing and scenario development – principles applied to planning are stated to include that no new arrivals assumed before 06.00 (see HSPG response at I) above), however, this is then breached to allow for arrivals from 5.30!? – which equates to runway time of 05.15 and earlier overflying local communities in the approach.

- o) HSPG support the principle that no arrivals before 06.00 – but question and challenge the modelling to include 05.30 schedule arrival ‘as precaution’ which means and 5.15 runway time! This is not acceptable to HSPG

4.3.5 - In relation to the principal environmental effects of early ATM growth, it is important to recognise the following outcomes from evaluation:

- **Noise:** whilst noise levels increase (compared with no early ATM growth) with additional movements, for all scenarios our early stage evaluation suggests that total noise impact from the airport operating with early ATM growth is relatively small and consistent with the policy requirements of the Airports NPS, for example, for aircraft noise effects to be better than the 2013 baseline. The change in noise exposure as a result of an additional 25,000 movements is expected to be a negligible change i.e. less than 0.2 decibels and therefore not significant; Appendix B see PEIR)
- **Air Quality:** the provisional analysis shows that the impact of up to 25,000 additional ATMs is relatively limited in terms of its impact on annual mean NO<sub>2</sub> concentrations at receptors. The maximum increase at any location is expected to be 0.5 µG/m<sup>3</sup>; a level of change which is consistent with the Airports NPS policy and which would be regarded as “slight adverse” and classified as “not significant” in an Environmental Statement.<sup>17</sup>
- **Surface Access:** early modelling outputs indicate that the increased passenger numbers associated with early ATM growth from 2022 can be accommodated by the available capacity on the transport network around Heathrow, prior to the delivery of Heathrow’s passenger public transport mode share and colleague car trip targets in the Airports NPS. The higher levels of early ATM growth may require Heathrow to implement elements of its expansion surface access proposals

p) The sense of the above is not clear – it is questioned whether HAL committing to early achievement of mode targets?)

Appendix C2 – notes that the “best rated early ATM growth scenario was therefore Scenario 1 (example schedule “A”) as this proposes the lowest increase in ATM growth compared to all other options whilst also proposing the latest start time (05:30). It was suggested that the early deployment of some of the interventions proposed within the *Surface Access Proposals* would likely be needed to mitigate any adverse effects.”

5.3.2 - Noted that: “given that early ATM growth may lead to additional flights in the 06:00 to 07:00 period (classified as within the night period), we confirm that our preferred proposal for consultation and further assessment is that the early morning ban (05:30 scheduled time) should apply from the outset of early ATM growth.”

5.3.3- noted that: The enhanced Noise Insulation Scheme, which has been announced as part of our expansion proposals would be in place prior to early ATM growth.

5.3.4 – noted that: “We are also developing a detailed Surface Access Proposal to ensure that a three runway Heathrow meets the transport requirements of the Airports NPS. The Strategy will apply once expansion is consented and will therefore also include the early ATM growth phase. The elements of the Strategy will be implemented proportionately to mitigate impacts as they arise. For example, our proposals for emissions charging for vehicles to access the airport may be implemented before

the first date of operation of early ATM growth.”

- q) HSPG consider that any Early Growth must be conditional on early adoption of as many of possible of the beneficial three-runway requirements in relation to: to airspace change (runway and flightpath alternation, displaced thresholds and night time restrictions), noise insulation and community compensation packages, and surface access requirements of the ‘no more passenger road traffic’ and appropriate shift targets for passenger and staff travel.

Appendix A Figures A1 and A2 – presented and appear inconsistent:

- r) The HSPG note that Appendix A Figures A1 and A2 appear inconsistent with one another and do not appear to reflect the stated demand for growth in services to Far East destinations (typified by night time / early AM arrivals).

Appendix C4 - identifies that the preferred scenarios for early growth from a community perspective (A, B C with lower rates and less early morning flights) are not those favoured by the Aeronautical revenue (Business Case - G, H, I and J) where D performed best for Airline strategy with 04.30 runway time arrivals (earlier overhead on the approaches).

- s) HSPG notes that Appendix B – B1 states that Early growth coincides with IPA, new Compton SID, Easterly alternation (use of 09L), steeper approaches; however, not all these aspects appear to be a clearly put forward in the proposals? What is the proposal? .
- t) The HSPG challenge why not include the future Night time restrictions in the modelling too – it is stated previously that are being progressed?

B1 and Figures B1 and B2 – note that these state:“Early ATM growth could occur at different levels from 2022 and at points where there could be airspace and operation changes. However, given that the airspace changes are outside of the DCO Project, the ‘point when the airport’s noise impact is forecast to be highest’ (the assessment required by the Airports NPS (paragraph 5.52) will fall when early ATM growth has reached its highest level (i.e. 2025).”

Figure B 1 Noise Exposure Results

Daytime	2013	2021	2025	
		Base Case	Without Early ATM growth	With Early ATM growth
> LOAEL 51 dB L <sub>Aeq, 16hr</sub>	1,206,300	1,051,150	1,051,100	1,091,400
> 54 dB L <sub>Aeq, 16hr</sub>	616,100	495,350	478,550	510,250
> SOAEL 83 dB L <sub>Aeq, 16hr</sub>	67,100	43,826	51,150 <sup>18</sup>	54,450 <sup>18</sup>
Night time	2013	2021	2025	
		Base Case	Without Early ATM growth	With Early ATM growth
> LOAEL 45 dB L <sub>Aeq, 8hr</sub>	998,300	732,700	664,900	666,900
> SOAEL 55 dB L <sub>Aeq, 8hr</sub>	103,500	53,400	54,000 <sup>18</sup>	54,300 <sup>18</sup>

Figure B 2 2025 Noise contours

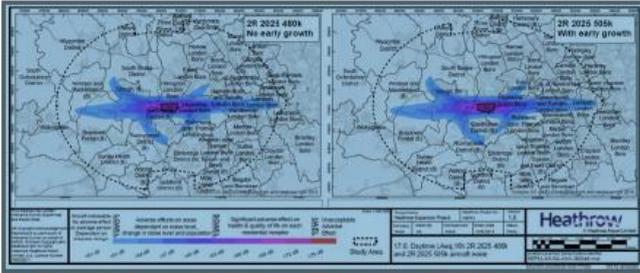


Figure B1 shows that with early ATM growth (0.2 dB increase in noise), approximately 40,000 more people would be exposed to noise above the daytime LOAEL (in the context of 1,050,000 people exposed above LOAEL without early ATM growth) and around 3,300 people exposed to levels above the daytime SOAEL (in the context of 479,000 people exposed above SOAEL without early ATM growth). Where the new exposure above SOAEL occurs, mitigation and compensation (noise insulation) measures will avoid significant adverse effects on health and quality of life. Noise compensation measures for the DCO Project are set out in the draft DCO Project Noise Insulation Policy.

- v) HSPG request that the detail of the modelling for timing of introduction of airspace changes (new Compton, IPA and 09L Easterly operational flightpaths) with and early ATM growth should be made clear and consistent. It is understood that at this time there is considerable uncertainty and likelihood of inconsistency across the streams of work and assumptions behind the noise exposure results above in Fig B1, PEIR and ASC. e.g. does the 2025 scenario include two-runway alternation on Easterly operations?
- u) The PEIR only looks at 2025 (full exploitation of 25,000ATM) and not intermediate dates and impacts, this may be problematic? What does this assume about two-runway Easterly alternation for example?
- w) HSPG consider focus only 2025 for full Early Growth' at B1 N b2 this could lead to an understatement of the negative impacts from 2022 through to 2025 as the additional tranches of 5000 ATM brought on. stream. This could significant impacts on some communities – particularly where facilitated by the introduction of IPA with schedule times 5.30 -07.00 (earlier runway and overhead times for arrivals)

In relation to air quality impacts of early growth (aircraft and surface access) B5 states that: impact of less than 25,000 ATMs assumed in 2022, 2023 and 2024 will be proportionately less than  $0.5\mu\text{g}/\text{m}^3$  (i.e. the contribution from 5,000 ATMs would be expected to be less than  $0.1\mu\text{g}/\text{m}^3$ , which would be defined as negligible in air quality terms).

- y) HSPG are concern that this is not the right way to look at impacts, the National Air Quality Standard seeks continuous improvement of air quality and HSPG consider that Early Growth (coinciding with surface access and construction pollutions) will run counter to this.

Appendix C7 - The conclusion at Appendix C7 acknowledges this, noting:

“It was recommended that careful consideration of cumulative impacts with expansion related construction is necessary. Whilst the Air Quality subject identified that there are no significant differentiators, construction operations could have a significant influence on air quality relative to objective limits which, without mitigation, could be exacerbated by early ATM growth. Careful consideration would also need to be given to the timing of mitigation and controls.”

- z) HSPG remain concerned that the ‘indicative flightpaths’, hours and modes of operation used in the PEIR may emerge to be unrepresentative of those eventually adopted through subsequent airspace change processes. This leads to potential inadequacy in public consultation and an inability of the DCO examination process to be assured of the adequacy of the PEIR and subsequent Environmental Statement.

*Exec Summary Page 5 Early Growth document - HAL states that:*

Asserted that: Early ATM growth will bring substantial economic and consumer benefits in the national and local interest as well as enhanced connectivity for Heathrow and the UK. The Airports

National Policy Statement (Airports NPS) confirms that:

*“The needs case has shown the importance of developing capacity more quickly.”<sup>1</sup>*

(Airports NPS paragraph 3.74)

Assessment also shows that early ATM growth can be introduced whilst complying with the environmental policy requirements set out in the Airports NPS. Accordingly, we intend to include proposals for early ATM growth in our DCO application, so that we can realise some of the benefits of expansion before the third runway opens

- aa) ANPS Para 1.6 clear that that growth is to be provided at other airports. Further the PEIR shows negative impacts for Early growth compared to baseline and no clear evidence that the road to achieving ANPS targets can be achieved with Early Growth in ATM. All the improvement in operations and infrastructure appear to only be released with the third runway.

Reference to early implementation of ban on early morning arrivals appears to be only part other than mitigations that introduced early with the Early Growth

- bb) Introduction at an early point of the ban on very early arrivals would appear to be a substantial missed opportunity for HAL to offer the local community a ‘quick win’ – see Chapter 2 comments

1.1.2 – noted that: Brexit Boost We explained that early ATM growth would bring forward the benefits of expansion but also bring forward the necessary mitigation; including the proposed introduction of a later start for scheduled early morning flights as well as our expansion proposals for noise insulation.

*Early introduction of operational improvements and two-runway alternation under Easterly Operations*

The AEC documents refer to the early introduction of two-runway alternation with Easterly departures on the existing northern runway before the third runway opens. However, no date of introduction or explanation of the proposed mode of operation is given. This early introduction of operations could also include many of the physical and operational changes associated with three-runway operations including a fully 'reflective' alternation on two-runways under Easterly operations, introduction of a managed directional preference, displacement of runway thresholds/steeper approaches, and the early introduction of the full range of night restrictions to together bring significant early benefits to many communities. This might commence at 2022 offering four years or more of benefits?

- cc) The HSPG consider that the options for early introduction of operational change is an important matter for the DCO and Noise Envelop as well as the Airspace Change processes and should form a critical part of the DCO proposals. Fuller explanation of the timing and options for introduction are required, including mode and details of operational change, flight paths and benefits and impacts of early introduction with modelling and assessment of scenarios.
- dd) The HSPG consider that this may offer potential benefits to be balanced with the range of impacts associated with early growth.
- ee) HSPG note that it is not clear if and how this has been addressed in the PEIR scenarios and modelling and most certainly this has not be adequately addressed in enable adequate public consultation on the issues around Early Growth and early introduction of changes to flight operations.
- ff) HSPG consider that the asserted minimal noise impact of Early Growth is based on speculative scenarios only – set out on a 'factsheet'. Figure A2 'Scenario I' puts an additional seven movements into the sensitive and busy night time period 05:30 – 7:00, and may well rely on the IPA flightpaths. From a community perspective, reducing the increase in operations during the most sensitive time periods and/or limiting these to quieter aircraft types would be preferred.



Figure A1: DCO and ACP Timelines



Against this background, this appendix explains briefly the approach to be taken in the DCO application and explains how this can be aligned with and complementary to the ACP.

*The assessment approach to be taken in the DCO application*

While the two processes are separate, there are some links between the two. The DCO process requires an assessment of the “likely significant effects” of flight paths which come from the airspace change process. Because this is needed before the airspace change process has completed it will necessarily be based on an ‘indicative’ design, which is an estimate of what the future airspace may be, given the stage of design at the time of the DCO application. The DCO process will complete ahead of the airspace change and while the DCO will not determine the detail of the airspace design, it will set out some of the conditions that the airspace design must meet.

The Airports NPS is clear that “development consent should not be granted unless the Secretary of State is satisfied that the proposals meet the following aims for the effective management and control of noise, within the context of Government policy on sustainable development:

- avoid significant adverse impacts on health and quality of life from noise;
- mitigate and minimise adverse impacts on health and quality of life from noise; and
- where possible, contribute to improvements to health and quality of life.”

The Airports NPS provides guidance and policy on how the applicant’s assessment should be undertaken to address various matters but the first important issue to address is: what assumptions should be made as part of that assessment in relation to airspace?

The Airports NPS recognises that “precise flight designs can only be defined at a later stage after detailed airspace design has taken place” and requires that “the applicant’s assessment of aircraft noise should be undertaken in accordance with the developing indicative airspace design. This may involve the use of appropriate design parameters and scenarios based on indicative flight paths.”

**A2 goes on:**

ff) Appendix A2 Fig A1 of Future Operations compares timelines for DCO and ACP. (More detail in the PEIR) but there is no clear reason for delaying ACP public consultations until 2022 – see left hand above

#### **4. Surface Access Proposals**

##### *Detailed Comments on Surface Access Proposals*

Para 1.1.1 and 2.6.23 - Colleague Definition: The definition of a colleague only includes people working within the airport boundary. This would therefore appear to exclude anyone employed in airport supporting facilities or airport related development, which is located near the airport but outside the airport boundary - even if such employment is critical to the functioning of the airport. It would also seem to exclude people who may be currently working within the airport boundary (and who are therefore currently defined as a colleague), but who under the expanded airport will be relocated to a new worksite site outside the airport boundary and therefore excluded from the colleague definition.

HSPG would therefore like to see the definition of colleague extended to include anyone working at any organisations or sites that are currently located within the DCO boundary, but which will in future be displaced to outside the DCO boundary as a result of the airport expansion. This may include employees at sites such the relocated IRC, BA Waterside, Compass Centre etc. as well as other displaced airport supporting facilities.

Further to this, HSPG would also like to see the definition of colleague extended to include anyone working in employment directly related to the operation of the airport even, particularly key airport supporting facilities, within a certain distance of the airport. The proposed definition would exclude such workers if they are outside the airport boundary, even if their jobs are critical to the successful operation of the airport.

Para 2.3.25 - Traffic Modelling: The modelling is stated to show that much of the traffic around the airport is non airport related, and that the impact of the expanded airport on local roads is therefore minimal. More evidence for this needs to be presented, including both modelled and survey outputs across a number of sources, including TfL's WELHAM model.

More generally there needs to be much better recognition of the inherent uncertainty within any modelled forecasts that needs to be better quantified and explained. Although further information on the modelling is provided in the PTIR there is still a lack of detail within the consultation material that explains the approach and key assumptions behind the future traffic forecasts, and explains why the chosen approach and assumptions are considered robust and conservative.

In particular, the modelling does not include any stress testing of key assumptions that show the conclusions are robust to different assumptions on things like non-airport traffic growth, proportion of airport users interchanging (and thus not leaving the airport), vehicle access charges, and behavioural responses etc.

Graphic 2.8 - Traffic Impacts: The diagram shows that the quantum of traffic on major roads around the airport is relatively significant. Given the lack of capacity on these roads for additional traffic any increase in airport related traffic is likely to have significant local impacts. The consultation does not present any detail on these impacts or what mitigation might be required stating that this will be part of the future transport assessment. HSPG consider this to be a serious omission, and that further consultation in this area is likely to be required once any detailed mitigation proposals are identified.

Para 2.3.27 – Parking: The colleague parking numbers exclude Waterside and other tenanted sites not exclusively used by colleagues (noting the comments above on the definition of colleague). HSPG think that these kinds of spaces should be included within the analysis, even if it is presented as a separate row within the tables.

Para 2.3.28 – Parking: It is unclear what third party parking is included in table 2.4. Is this picked up in the row off-site other? If so, does this include parking provided at hotels?

Para 2.3.40 – AVA: More information should be provided on the success of the current authorised vehicle area, such as who currently uses it and who doesn't. For instance, do Addison Lee and other private hire operators and apps 'geocache' in the same way as Uber, and do they currently use the AVA? HSPG believe that appropriate powers to make all private hire operators to make use of the AVA, together with a monitoring and enforcement strategy to ensure that operators are using the AVA is required. Further detail on this area is required.

Para 2.3.43 – Walking: While it is recognised that the total number of airport passengers wanting to walk to the main airport campus is very limited, there are much greater opportunities to encourage staff to walk to areas of employment, particularly those on the edge of the airport. The provision of better walking links and facilities to the airport could therefore help facilitate more walking trips, either for employees who live very locally or for those making part of a trip chain using other modes to transport hubs. HSPG believe the SAS needs to do more to identify potential opportunities to facilitate greater levels of walking, including particularly where better facilities or links could be provided in the masterplan.

Paras 2.3.50, 2.6.26 and table 2.13 - Baseline Trips: HSPG find it concerning that it is so difficult to establish a robust base year, and that the various surveys and MAID data all seem inconsistent. Without clear evidence to the contrary the base case should be defined using the most conservative assumptions that ensure the greatest absolute reduction in colleague car trips. It is unclear if this approach is being followed.

Graphic 2.15 - Baseline Trips: It is identified that 31% of passengers from Scotland travel to the airport by taxi. This statistic does not seem credible.

Graphic 2.18 - Baseline Trips: Further information required on the definition of the "other" trip category.

Graphic 2.20 - Baseline Trips: The map showing the location of freight activity is highly indicative. HSPG would like to have further information on this, including the specific locations where key freight activities are to be provided. This is therefore an area that will require further consultation.

Para 2.4.42 - Independent Scrutiny Panel: While HSPG broadly support the proposed "toolbox" approach, we note its success will rely on an accurate measurement of outcome. HSPG therefore support an independent scrutiny panel being responsible for monitoring and enforcing the SAS. However, it is vital that this panel is given appropriate powers for the enforcement of the SAS. It is essential that further consultation is undertaken on the composition and powers of the scrutiny panel.

Paras 2.4.47 and 2.4.53, and Graphic 2.24 - Meeting ANPS requirements: The SAS shows that the airport can only achieve compliance with ANPS targets with either the all pull scenario, or the likely pull and medium push scenarios. We note that both of these scenarios require Western Rail.

This implies that there is little headroom for the strategy to deliver the required mode shift outcomes, should the modelling prove inaccurate, or the required pull strategies not be fully delivered – in particular Western Rail. Presumably, in these circumstances the push policies (ie vehicle charging) would have to be much higher, although this isn't explicitly stated.

The SAS therefore needs to present much more sensitivity testing and risk analysis around these scenarios and the underlying assumptions. More evidence is required that the proposed SAS policies would actually lead to the stated behaviour change and hence mode share outputs. For instance evidence from any stated or revealed preference surveys needs to be presented.

Additionally, further detail is required as to whether a surface access strategy of likely pull and medium push is supported by stakeholders such as the CAA and airlines, and whether they would support a push strategy using much high levels of vehicle access charge and reduction in colleague parking should this prove to be necessary. The SAS needs to have greater transparency on the maximum level of vehicle charge that would be considered before other measures are identified (such as limiting air passenger growth).

Para 2.4.58 - Local Road Impacts: It is stated that consideration has been given to supporting the mitigation of issues resulting on the local transport network. However, no detail on these issues or how they have mitigated has been provided. As commented under graphic 2.8, HSPG feel this is key omission that requires further detail and consultation.

Para 2.4.61 - Land Use: It is stated that moving employment sites to areas of high transport accessibility will help them achieve mode shift targets. HSPG agree that this is a sensible policy. However more detail on how and where this can be facilitated, and the impact this can have on mode shift targets is needed. To help develop the evidence for such a policy it would be useful to know how many employees currently work in areas of low public transport accessibility, and how this is expected to change in the future.

Para 2.4.64 - Southern Parkway: It is important that the southern parkway has restrictions in access off Bedfont Road. It should be hard wired into strategic road network with limited access from the east by private car.

Para 2.4.65 - Southern Parkway: It is essential that both the Northern and Southern Parkways have high capacity high frequency rail based transit into the terminal areas. The masterplan does not provide any details on the type of transit links that will be provided to the parkways. This is a serious omission and prevents HSPG being able to come to a firm view on the merits or otherwise of the parkway proposals.

Paras 2.4.68 and 2.4.71- Bus Provision: HSPG are ambivalent as to whether a new road tunnel or repurposed cargo tunnel are used to provide access to the CTA from the South. However, it is vital that any solution prioritises the provision of high quality dedicated bus lanes within the tunnel and connecting roads. Without further information on the impacts of a Southern Road Tunnel, HSPG are

unable to come to a firm view as to whether the tunnel should be open to all road users or just public transport operators.

HSPG believe that a southern road tunnel provides an opportunity to significantly improve public transport access to areas south of the airport. The SAS does not provide enough detail on how such opportunities will be identified, developed and funded. One way of providing a step change in public transport access to the south of the airport would be to develop a BRT system (as a minimum to bronze standard) from the CTA to the A30, with extensions provided through partnership working to Feltham. HSPG would like to see all masterplan infrastructure, including the Southern Road Tunnel developed in such a way to allow the delivery of BRT, and the SAS to make much greater consideration of these opportunities.

HSPG welcome attempts to restrict rat running through the southern road tunnel but more detail on how this will be achieved is required.

Para 2.4.70 - Active Travel: HSPG support the proposal for a dedicated cycle and walking facility on southern road tunnel, although this needs to be fully segregated from vehicle traffic, with appropriate levels of ventilation and lighting etc. HSPG would like to see similar cycle and walking facilities provided in the Northern Road Tunnel too.

Paras 2.4.73, 2.4.74 and 2.4.75 - A4, A3044 and Southern Perimeter Road Designs: More evidence is required to understand the traffic forecasts that have resulted in the A4 and A3044 road design being mostly single carriageway, and the Southern Perimeter Road being a dual 3 lane carriageway. More detail is required on the specific bus prioritisation measures that are being proposed with these new roads which the SAS only states at a high level. HSPG would like to see a dedicated bus lane or BRT provided along the whole length of the re-provisioned A4 and A3044 and southern perimeter road, and the SAS therefore needs to provide at the very least clear justification for why this option is discounted.

Para 2.4.78 – Freight: HSPG welcome the principle of a Vehicle Forwarding Facility within the masterplan and the improvement to efficiency of freight movements this will provide. However, without further information HSPG remain concerned about impact of significant net increase in HGV movements resulting from the airport's expansion, both to and from the vehicle forwarding facility as well as then on to the airport itself. Further information is required on how these freight movements have been modelled, what roads and routes they are expected to travel on, and the details of any necessary mitigation needed to minimise the impact of this additional HGV traffic.

Paras 2.4.82 and 3.2.3 – Passenger forecasts: The SAS states that the current proportion of passengers using Heathrow to interchange between aircraft is c.27%. Table 2.7 suggests a transfer rate of up to 32% after expansion, although little evidence to support this is presented. This assumption could have a critical impact on traffic and mode share projections, which much higher levels of surface access traffic if the transfer rate becomes for any reason lower. For instance, it would seem that if the transfer rates remain at 27% this will put an extra 5 million passengers onto the network (2030) and 8m in 2040.

The SAS does not present any sensitivity testing that might have been undertaken on this crucial assumption in respect to its impact on surface access and the ability to meet the ANPS targets. More

information is needed on what would happen if the transfer rate were to remain the same (or lower than today) – in particular how additional initiatives identified within the SAS “toolbox” would be used to keep within the ANPS targets.

Para 2.4.84 and table 2.8 - Colleague forecasts: Further detail is required on the methodology used to calculate the colleague forecasts, which form a critical assumption within the SAS. It is noted that the increase in colleagues is assumed to be less than the proportionate increase in passengers. This may be reasonable, but the consequence of a different colleague forecast on ANPS targets and no more traffic pledge needs to be better tested.

As per comments on colleague definition made on para 1.1.1, more detail on whether the forecasts (eg in table 2.8) include a relocated BA waterside and Compass Centre.

Para 2.4.85 - Colleague forecasts: The Heathrow colleague forecasts do not include any jobs indirectly resulting from the wider economic growth provided by the airport’s expansion. This seems a serious oversight and may mean that the traffic and air quality impacts of the airport’s impact are only picking up first order effects, and are therefore understated. At the very least this point needs to be acknowledged.

HSPG suggest that a scenario that includes all the traffic impacts of airport expansion including jobs created off the main campus as a direct result of airport’s growth needs to be undertaken as a sensitivity test. Furthermore HSPG would like to see Heathrow take responsibility for the much wider transport strategy needed to support these additional jobs, many of which are vital the direct operation of the airport (for instance freight warehousing, hotels or aircraft servicing industries).

Para 2.6.7 and Table 3.30 - Vehicle Access Charge: The stated access charge is described as a modelling assumption, but presumably this is the charge that the model has used in order to meet the ANPS requirements. The size of the access charge (noting it is in 2017 prices) is very high. Even before the addition of any parking charges, it is likely to be a lot higher than at any other airport

Much more detail on the actual proposed levels of vehicle access charge that move away from a modelling assumption is needed. HSPG believe this is an areas likely to require further consultation. on. Further detail and evidence on the forecast impacts on mode share that different levels of access charge would provide is needed. Further information is needed as how to the access charge will be determined, and who will have the powers to change it?

As stated elsewhere in this response, HSPG would like to see any income from the access charge hypothecated to a democratically accountable body for local investment and mitigation.

Table 2.9 and para 2.6.18 - PT fares: The consultation material needs to be more specific on how public transport fares are forecast to change. The assumptions are stated as growing in line with guidance and reduced HEx fare, but this needs further detail and explanation.

HSPG’s view is that lowering fares on HEx and Crossrail, such that Crossrail is the equivalent of any other zone 6 fare, should be prioritised as a policy before the introduction of a vehicle access charge. Further information on exactly how fares might be reduced is required (see also comments on paras 3.1.10 and 3.2.6 and Graphic 3.3).

Table 2.9 – Taxi: The proportion of empty taxi/PHV return trips is stated as reducing from 70% to 60%. HSPG do not view this as particularly ambitious. Further information is required on the constraints limiting a more ambitious level of backfill and what potential policies might encourage a higher level of backfill.

Table 2.9 – Colleague: Further information on how the category ‘Colleagues will work remotely where possible’ been modelled is required.

Para 2.6.10 - Definition of Public Transport: It is stated that the definition of public transport might be reviewed. Further information is required on what “new forms of transport” are anticipated within this period that might require such a change – are there any examples?

Table 2.11 - PT mode share targets: It seems remarkable that the Heathrow Express mode share is predicted to grow so much given that Crossrail will be significantly cheaper and provide a much wider range of destinations for only a slightly increased journey time. More evidence is required to explain the drivers of this increase in HEx mode share given the competition from Crossrail. Is it purely down to the journey time difference (which must therefore implicitly outweigh the incentive of higher fares), or are there other factors, such as marketing or frequency, and could any of these initiatives be applied elsewhere?

Similarly, it would be helpful to have further explanation on what is driving the increase in Piccadilly Line mode share, given that Crossrail will offer faster journey times to much of London.

More generally, evidence needs to be provided that there is available capacity (particularly at peak times) on the PT routes to take the big increase in PT demand to/from the airport. There is no discussion on the impact of crowding on mode share or the capacity of the public transport network. HSPG understand that the models used to assess the SAS do not take account of public transport crowding which could mean that the PT mode share are overstated.

Table 2.11 - Taxi mode share targets: It would be helpful to understand what is driving the decrease in taxi/PHV mode share? Is this driven purely by the vehicle access charge?

Para 2.6.16 - Mode Share targets: It is stated that by 2040 the PT mode share for accessing the airport from London will be 70%. It would be useful to understand the current mode share for London for comparison.

Para 2.6.17 - Mode Share targets: The proportion of passengers from London using road modes to access the airport is higher in the expected case than in the assessment case, even though this case contains Southern Rail. This is presumably a result of the lower vehicle access charge, but further explanation would help understand this further.

Para 2.6.34 - Colleague car trips: This states that the colleague car trip reduction targets can be achieved under both cases. This is good news, but it would be helpful to understand further the sensitivity of this result. What are the key policies driving this change, and how can the policies be extended should the colleague ANPS target look like they won’t be met? In particular, it is important to understand how the number of colleague park spaces impacts the ability to meet the ANPS targets.

Para 2.6.41 - No more traffic: HSPG do not agree that construction vehicles should be excluded from the no more traffic pledge. Not only is it hard to define exactly what constitutes a construction vehicle, but construction traffic for existing airport works (such as T2) will be also be included within the 2019 base year data. More to the point there does not seem any reason in principle to exclude construction traffic given a construction period of at least 20 years, with further asset renewal work on a continuing basis beyond.

Para 2.6.43 - No more traffic: It is clearly right to exclude through traffic from the pledge, but HSPG are unclear why with the appropriate positioning of the monitoring equipment, any through traffic will be captured. If the traffic monitoring equipment is located at every entrance to the airport campus, then no through traffic should be captured, as anyone at those crossing those points is by definition entering the airport and thus airport traffic (presumably the vehicle access charge will deter through journeys through the CTA).

If for unstated technical reasons it is not possible to measure traffic at entries and exits to the airport as described above, then it is crucial to define exactly how through traffic will be measured. Although not stated, presumably it will be based on a time spent inside the cordon. This assumption is critical in accurately establishing airport related traffic. If it is too long, then this will incorrectly allocate airport related traffic as through traffic - for example taxis or cars dropping off passengers or colleagues. Further detail and consultation on this important assumption is needed.

Para 2.6.46 - No more traffic baseline data: It is unclear how the modelled data and the ANPR data available in January 19 will be combined or used to determine a baseline. It would be helpful to compare the modelled data as shown in Graphic 2.35 with the ANPR data. More generally, the construction of the baseline data needs to be described in more detail.

The modelled data is itself based off an older baseline so presumably requires some uplift to 2019. The modelled data focussed on a September weekday and therefore needs annualising although these assumptions are not stated. It is also important to recognise that a September weekday is unlikely to represent the busiest days for the airport, and that there will be other days -such as bank holidays – when airport related traffic and could be higher and its impact consequentially greater. More detail on all these points is required.

Para 2.6.52 – Freight: Important to understand whether the freight vehicle forecasts represent the number of freight movements into the airport, or the number of vehicles to the freight vehicle forwarding facility?

Para 2.6.56 - Road traffic forecasts: It is stated that the proportion of road traffic coming into the airport from outside of London increases significantly. This does not seem to square with the analysis in 2.6.17.

Para 3.1.2 - SAS objectives: It is stated that the “Expansion of Heathrow is a unique opportunity to change the way people travel around the airport”. This could usefully be extended make the assertion that Heathrow want to facilitate sustainable transport within and across the sub-region, not just to and from the airport. As discussed in sections 1 and 2, HSPG would like to see greater ambition from the SAS on these points.

Para 3.1.8 - SAS objectives: HSPG support these stated objectives for the SAS. However, HSPG would like to see as an additional objective provide a commitment to support local authorities surrounding the airport to provide complementary infrastructure to support a wider shift to sustainable travel across the region as well as to and from the airport, that will be caused by the catalytic impacts of the airports expansion.

Such a policy would help support the airport's requirements to reduce the negative impact of trips generated by its operation, even those that are not to and from the main airport campus. These off-airport trips extracted from the highway through such partnership working could even be credited, if necessary, towards the airport's mode shift targets.

Paras 3.1.10 and 3.2.6 and Graphic 3.3 – public transport fares: Although there is mention in other parts of the document to lowering some pre-booked HEx fares, the SAS proposals in graphic 3.3 make no reference to supporting lower PT fares been available within the “toolbox” of initiatives that can be flexibly used to help meet NPS commitments.

HSPG would like to see greater commitment using public transport fare reductions as a clear policy lever within the “toolbox” for increasing public transport mode share. Furthermore, HSPG would like to see this policy take a much more central role in meeting the ANPS requirements, acting as a complement to the ULEZ and vehicle access charges. Options within this policy could be to subsidise bus fares, extend the free travel zone, and reduce HEx and Crossrail fares to the equivalent zonal fare. At the very least the SAS needs to explain why these kinds of initiatives are not being considered.

Para 3.2.10 - Private public transport: Private public transport (eg hotel shuttles for example) do not form part of the public transport proposals. It is unclear whether these are instead included the private hire statistics.

There could be a case for restricting such services to ensure a virtuous circle of demand (and therefore pressure on supply) onto universal services. The SAS should include any analysis or thinking that has been undertaken on this.

Table 3.4 – Typo: The table looks to be mislabelled.

Graphic 3.11 - Coach demand: It is unclear whether the indicated flows include non-airport passengers using Heathrow coach station as a coach interchange hub.

Paras 3.2.37 and 3.2.128 - Hatton Cross: It is stated that Hatton Cross will be used as a gateway to the airport, and that the station will be improved. However, no detail is provided on the kinds of improvement that are thought to be necessary or how these will be funded and delivered. Further detail and consultation on these sorts of proposals are required, which HSPG would like to see form part of the DCO.

Paras 3.2.42 and 3.2.154 - Southern Rail: Para 3.2.42 states that “Heathrow has always been at the forefront in investing and promoting expansions to the rail network at the airport. We have continued to work closely with government and Network Rail to support the case for delivering the Western and Southern Rail Links.”

Despite this we note that Heathrow are not offering a view on preferred southern rail scheme despite the different types of scheme having very different kinds of connectivity to the airport.

As set out in sections 1 and 2, HSPG would like HAL to take a much more active role in promoting southern rail, including being clearer on the kind of scheme HAL believe would best serve the interests of the airport.

Paras 3.2.43, 3.2.61 and 3.3.89 - Free Travel Zone: No mention is made in para 3.2.43 of any potential to extend the free travel zone, and 3.2.61 does not provide any further detail. As stated in the comments to paras 3.1.10 and 3.2.6 and Graphic 3.3, the extension of the free travel zone needs to be included as a clear policy measure that is available to Heathrow to help meet the ANPS. HSPG are of the view that extending the free travel zone can both help deliver the ANPS targets as well as help those local communities most impacted by the airport's expansion. At the very least the SAS needs to acknowledge the potential of the free travel zone and discussion of any advantages and disadvantages that it might bring.

It is stated that there has previously been a consultation on changes to the free travel zone. Further information on the consultation and its conclusions is required.

HSPG would like to see the SAS provide much greater clarity on how much it currently spends on supporting bus services (Free travel zone/SRA etc), and how much it intends to spend in the future. This will allow stakeholders to understand much more clearly what level of commitment Heathrow is intending to provide to the SAS, and how this will change as the airport expands.

Para 3.2.59 and 3.2.60 - HEx fares: Most of these HEx fare changes seem to be about discounting pre-booked tickets at off peak times in order to maximise revenue. There needs to be a clear policy to substantially lower the average HEx fare, such that it is the same as Crossrail. As the moment the high fares deter a lot of would be users, resulting in HEx providing a lower mode shift impact than it might otherwise.

The proposed fares policy needs to be spelt out more clearly. It is stated that the HEx fare will be broadly similar to today's Elizabeth Line (presumably this mean Heathrow Connect) fare. But what is more important to understand is how the future HEx fare in 2030 and 2040 will compare to the future Crossrail fare, and how both of these will compare to the Piccadilly Line fare. Or put another way does this assumption mean that the HEx fare is assumed to have a premium over the Crossrail fare which in turn is assumed to have a premium over the Piccadilly Line. It is unclear whether the stated fares policy for HEx form part of the assessment and expected cases. Further information is required on all these points.

As discussed in other sections (Paras 3.1.10 and 3.2.6 and Graphic 3.3), the SAS does not do enough to discuss this policy option, despite it being a policy lever entirely within Heathrow's control.

Para 3.2.65 - PT support: HSPG believe that critical omission from the SAS is to state how much is currently being spent by HAL on public transport support and investment, and how much is being expected to spent in the future. This will allow the public transport commitments made for an expanded airport to be much better understood in the context of current funding.

Graphic 3.17 and para 3.2.74 - Integrated Ticketing: Even more mode shift might be possible by offering not just Hex fares as integrated tickets, but also Crossrail, Piccadilly and Railair bus fares. At the very least consumers need to be aware of the choice. It is stated that booking fares this way will be cheaper than doing it separately, however no explanation as to why this is the case or why it might be desirable is given.

More information is required on the incentives that there might be for third party providers (e.g. airlines) to offer these kinds of integrated ticketing schemes. Further detail is required on what would happen if the third party providers do not participate. HSPG would like to see necessary powers for enforcing this sought as part of the DCO monitoring and enforcement strategy.

Para 3.2.81 – ULEZ: It is unclear why coaches and buses should be exempt from an emissions charge stated aim of the ULEZ charge is to improve air quality. Further discussion on the impacts of including different vehicle types in the charge is required.

Para 3.2.98 - Bus Service Provision: It is stated that the X26 is a success and should be repeated on other corridors. HSPG believe that such express services should still stop in the areas around the airport (in the case of the X26 in Hounslow) to serve local population, otherwise it is possible that express services extract demand from more local stopping services and stopping services are then likely to suffer service reductions. Local residents should also be able to benefit from quick (express) bus travel to surrounding areas (in this case Richmond, Kingston etc).

Para 3.2.102 - Bus Service Provision: HSPG welcome the suggested bus service improvements. But the consultation provides no detail or commitment as to how these enhancements are going to be funded and delivered. If these proposals been modelled in the assessment case, but aren't yet committed then there needs to be clear articulation of what will happen if for whatever reason the anticipated level of bus services is not provided?

HSPG strongly believe that Heathrow need to provide much more clarity on the level of funding that they expect to provide to support these bus enhancements, and that such commitments should form a key part of the DCO. While HSPG understand that the exact levels of funding for different routes and services cannot be specified in detail given the long term planning horizon of the 2030s and beyond, there should still be a clear financial commitment to supporting bus routes in general, which the exact decisions as to how this fund might get spent consulted upon at a later date

Para 3.2.104 - Rail schemes: It is unclear what is meant by “we will do more than simply wait for these [committed] improvements to happen” and “we will maximise the benefit of these committed improvements”. Further detail is required on the actual actions HAL are proposing to undertake?

Para 3.2.105 - Rail Schemes: A small point of detail, but this para reads like connectivity to Heathrow via Hayes and Harlington is a new thing, when it is already provided by Heathrow Connect/TfL Rail. The point to note is that Crossrail will provide higher frequency connections from Hayes and Harlington and direct access to all terminals.

Para 3.2.115 – Crossrail: Despite acknowledging that lack of capacity is a driver of dissatisfaction, no mention is made of the levels of crowding passengers might experience on Crossrail or HEX trains given the large increases in airport traffic. As noted in comments to Table 2.11 we note crowding is not included in the assessment models.

Table 3.10 - Piccadilly Line: This table is inconsistent with table 2.11. Table 2.11 shows the Piccadilly mode share increasing, whereas table 3.10 shows the Piccadilly Line mode share is decreasing.

Further detail is required as to how crowding on the Piccadilly Line will compare to present, and how much of that will be due to Heathrow passengers?

Graphic 3.20 - PT mode share: This shows that improving route access from Greater London is likely to lead to significantly more mode shift than from outside of London. It also shows the importance of fare price. This would indicate that the SAS should therefore provide more focus on these areas.

Paras 3.2.150 and 3.2.160 - Western and Southern Rail: No mention is made of the fare for Western or Southern Rail. What is assumed within the modelling, and have different fare levels been tested? HSPG view any kind of premium fare on Western or Southern Rail highly undesirable.

Para 3.2.158 - Southern Rail: It seems unlikely that the stated SRAtH service pattern can work within existing rail capacity around Richmond so some services would therefore need to go via Brentford and Hounslow. Further information on what assumptions have been modelled is required.

Para 3.2.165 - Southern Rail: We would like to see HAL take a more active role in developing and promoting southern rail than simply waiting to receive next steps from DfT. This requires HAL make a clear funding commitment to the scheme.

Para 3.2.167 - Coach Enhancements: It is not made clear how HAL will incentivise operators to deliver any of these enhanced services. More detail is required as to what actions will be undertaken, and how can these will be committed within a DCO.

Para 3.2.169 – RailAir: Greater use of RailAir would be obtainable with cheaper fares as well as higher frequencies. HSPG would like to see the subsidy of such links provided as part of the surface access strategy.

We note that no mention is made of RailAir link from Feltham. Is this a deliberate omission?

Graphic 3.23 - Coach Enhancements: This shows potential new or enhanced coach routes but doesn't confirm now these will be funded and delivered. Do these form part of the expected or assessment cases?

As with bus enhancements the SAS needs to provide a greater financial commitment to funding such coach enhancements, with the current level of coach funding presented alongside future funding.

Table 3.13 and para 3.2.173 – Coach: Despite all the proposed coach enhancements mode share barely increases in the assessment case and reduces in the expected case. This would indicate that the coach enhancements could and should be more ambitious.

Para 3.2.174, Graphic 3.25 and Table 3.23 - Bus enhancements: HSPG are of the strong view that bus services need to be provided to the south east of the airport, with a new service serving Kingston, Hampton, Hanworth and Bedfont to access the southern road tunnel and CTA. An east west bus route through the airport could be attractive, if there is bus priority within the airport to a reasonable level.

It would be useful to discuss through running to improve general orbital transport, this would reduce stand requirements at Heathrow too. This is alluded to in 3.2.185 in respect to use of the Southern Road Tunnel.

As mentioned in other comments, HSPG believe the Free fare zone should be extended, to include Clockhouse, Hatton Road, Causeway (j/w Staines Road) and Henleys roundabout. In all cases the Free fare zone should be clearly advertised on stops. HSPG would also like to see discussion of BRT as well as traditional bus routes.

Para 3.2.174 - Bus enhancements: The level of financial support that Heathrow currently provides for the provision local bus routes, and the level of support to be provided in the future needs to be stated. This increased level of funding then needs to form part of the DCO.

Para 3.2.180 - Bus facilities: Real time service information should be included on all bus stops with routes to Heathrow, not just in the terminal areas.

Para 3.2.188 - Bus Priority: As stated in earlier comments (paras 2.4.73, 2.4.74 and 2.4.75) HSPG have a strong preference for bus lanes to be provided on all new road links to the airport, including Southern Road Tunnel, SPR, A4, A3044.

Para 3.2.199 - Bus facilities: All bus stops served by a Heathrow bound service should be made accessible.

Graphic 3.29 - HS2: A small point of detail, but it would appear from the green and yellow areas on the map of the South East that HS2 is providing journey time improvements to areas in the South East that are not on the HS2 network (eg areas to the north of Reading or, St Albans, and Guildford. It would be helpful to understand what is providing this improvement.

Graphic 3.31 - Southern Rail: It would be useful to see these maps for different alignments and service patterns. For instance it would be useful to know the proportion of people that benefit from SRAtH on the Bedfont alignment vs the Staines alignment.

Para 3.3.2 - Colleague numbers: The number of daily commuters is established from HEM-CM rather than from surveys. Presumably the HEM-CM is calibrated to the survey data, but it is not clear why commuting numbers cannot just be established directly from the survey.

Para 3.3.6 – Cycling: It is stated that there are currently 1,800 cycle trips per day out of 19,000 colleagues who live within 5km of the airport. This is a cycle take up rate of c.10%.

It would be useful to understand how this compare to other major employment sites, and how this take up rate will change in response to the active travel network and other measures.

Para 3.3.37 and Graphic 3.42 - Cycle Network: HSPG view are very disappointed by the relatively sparse nature of the cycle network which we think lacks the necessary ambition to significantly improve cycle provision in the area. HSPG consider that the masterplan needs to provide additional routes that better link all the areas with high densities of colleagues as shown in red on the map.

As a minimum, this would include routes between;

- T4 and Ashford via Clockhouse
- Feltham and Sunbury Common.
- Southall via Heston.
- Iver Crossrail station via a new link across the M4

Para 3.3.59 - Land Use: There is a proposal to relocate employees from areas of poor public transport accessibility, but no detail is provided how this can be achieved for what could be a hugely impactful policy.

Para 3.3.60 - Colleague parking: More detail is required on the London Plan car parking standards for any relocated sites (presumably in airport boundary). The SAS needs to reflect these standards, particularly if they are zero given that this is in an opportunity area.

Para 3.3.62 - Cycle routes: While we welcome that segregated cycle facilities are to be provided on roads with a speed limit of 40mph or higher, HSPG consider it essential that these are provided on roads with a speed limit of 30mph or higher.

Standards for cycle lane provision can vary widely, and it is therefore important that the detail of any proposed cycle facilities are consulted upon with clear quality standards provided.

Graphic 3.50 - Cycle routes: This shows the cycle network (green loop + hub and spoke). As noted previously (comments on Para 3.3.37) the proposed cycle network needs to be far more extensive.

It would be helpful to add the greenways network around Crane/Hanworth to this. The map shows cycle facilities through the northern tunnel, although the details of this need to be confirmed.

Graphic 3.51 - Walking routes: Further information required on what a 'core walking zone' means in practice.

Para 3.3.69 - Colleague parking: The provision of 17,000 spaces in 2030 for 94,800 colleagues and 12,000 spaces in 2040 for 95,900 colleagues means at least 18% and 13% of colleagues will have parking permits. In practice this proportion will be higher as it takes no account of shift working that can result one parking space being used by several colleagues.

The number of parking spaces, particularly in 2030, still seems very high. We would like to see further justification for this number and a commitment to reduce the number of colleague parking spaces to less than 10% of the workforce.

Para 3.4.5 - Free parking zone: The strategy to reduce parking on local authority roads must include commitments to a CPZ (controlled parking zone) to cover all adjacent wards. This needs to include cost of implementation, cost of permits and cost of enforcement (as with Twickenham).

Para 3.4.33 - Park and Ride: The document states that locating park and ride further from the airport is the best solution to addressing demand for travel to the airport. But it then goes on to describe all the disadvantages of park and ride. It is rather unclear therefore whether the SAS is advocating park or ride as a solution or not (noting that the southern and western parkways are effectively providing a park and ride). Further detail on these points is required.

Para 3.4.52 - Southern Parkway: T5 parking would initially be relocated to T4 prior to the opening of the Southern Parkway. More clarity is required on how passengers would travel from T4 to T5 in such circumstances, together with the resulting traffic and air quality implications.

Para 3.4.60 - Workplace parking levy: HSPG would support the use of a Workplace Parking Levy and agree that this should be sought through the DCO. However, it is crucial that the monies raised from such a scheme are kept within a clearly identified hypothecated fund that is available for funding public transport improvements in the region.

Para 3.5.2 – Vehicle access charge: No explanation is provided as to why colleagues are exempt from user charging. There does not seem any reason in principle why colleagues should be exempt, especially as there is a proposal to charge in other ways through the workplace charging levy.

Without evidence to the contrary, HSPG believe that colleagues should be subject to the same user charges as passengers.

Table 3.32 and paras 3.5.26, 3.5.31, 3.5.33 and 3.5.35 – ULEZ: It is unclear why it is proposed that PHVs and taxis that register with Heathrow will receive a ULEZ discount. What behaviours will this incentivise, and what are the impacts on air quality.

It is stated that the ULEZ would only be applicable to vehicles accessing the terminal forecourts and car parks. More clarity is required as to whether this fee will be payable at all car parks or just short stay?

HSPG think the ULEZ should be payable by all vehicles (including PHV, taxi and freight) accessing all parts of the airport, including the colleague car parks and freight terminals. Essentially the ULEZ should be extended to the NMT zone and cover all vehicle types.

Para 3.5.36 – ULEZ: Without any evidence presented to the contrary, HSPG believe that all colleague trips made by car to the airport should also be subject to the ULEZ charge. This would help encouraging colleagues to use clean vehicles or switch to alternative modes.

Para 3.5.39 - Vehicle Access Charge: While it is right that there needs to be some flexibility in the VAC scheme to be able to respond to circumstances, there needs to be better definition of the parameters in which it would operate. Further detail and consultation on the operation of the ULEZ charge are required.

Para 3.5.41 - Vehicle Access Charge: It is not clear on the mechanism by which backfilled taxis would get a discount on the vehicle access charge, but in principal HSPG would support such an approach.

Table 3.34 - Vehicle Access Charge: Further information is required providing a price base for the expected access charge, and setting out how is it expected to change over time as the airport expands.

Para 3.5.47 and table 3.35 - Vehicle Access Charge: As previously stated, HSPG do not think colleagues, LGVs or HGVs should be exempt from the vehicle access charge.

Paras 3.5.53 and 3.5.54 - Vehicle Access Charge: There needs to be greater transparency on the amount of revenue expected to be raised by ULEZ and vehicle access charges, which a back of an

envelope calculation suggests could be very significant. Current (2017) mode share by private car/taxi is 62% on 56.9m non-transfer passengers per annum (again 2017). At £20, a drop off and pick up charge on those numbers would mean income for HAL of £700m per year. While the charge will reduce the mode share, this analysis is based on 2017 2R patronage. With future expansion the number of passengers paying a charge could be even higher despite the incentive it provides to switch to other modes.

HSPG do not agree that income from the vehicle access charge should be managed in a similar manner to the airports existing revenue streams, and that the revenue should be used to make airport fees lower. Instead the vehicle access charge should be held in a hypothecated fund to support transport infrastructure improvements to the airport.

A democratic mechanism needs to be set up to help determine the spending priorities of this fund should be established, with the funds used to specifically support and develop sustainable transport policies in the region, including the delivery of Southern and Western Rail, and subsidised fares. HSPG are strongly of the view that monies raised by ULEZ or vehicle access charges should not form part of HAL's regulated income alongside landing charges etc.

Para 3.5.56 - Vehicle Access Charge: There is acknowledgment that there will be impacts of the vehicle outside the airport from people trying to avoid the charge, but the SAS offers no solutions or mitigations to this issue. More engagement and consultation on this topic is required.

Para 3.6.40 – PHV: HSPG support making a registration system for PHV mandatory, and would ideally like to see such powers be included within the DCO.

Para 3.6.43 - Taxi and PHV: HSPG support a proposal to match empty taxis and PHVs with Heathrow employees to get home.

Para 3.6.49 - Taxi and PHV: HSPG support increasing taxi occupancy, but the consultation does not provide any real strategy or commitments as to how this will be achieved.

Para 3.7.24 – Freight: It is stated that ensuring operators adopt TfL's Construction Logistics and Cyclist Safety (CLOCS) and Fleet Operator Registration Scheme (FORS) is under consideration. Adoption of these standards should be mandatory for any operator working in Heathrow.

Para 3.7.25 – Freight: It is stated that the emissions and vehicle access charge will not be applicable to freight vehicles, although the reasons for this are not clear. HSPG think that all vehicles, including LGV, HGV, PHV and taxi should be subject to the emissions and access charges.

Para 3.7.31 – Freight: It is stated that HAL will consider mandating use of the 'cargo cloud'. This seems an obvious requirement, however it is not clear how this will be monitored and enforced. There is a danger people register for using cargo cloud but not actually use it.

Para 3.7.31 – Freight: Further detail required on how queuing for the FCFFs be managed.

Para 3.7.40 – Freight: It is not clear why the safeguarded location of the physical consolidation centre in a different place to the proposed VCFF. Can it be in the same place?

It would be very useful to get independent views from the logistics industry on whether these proposals for freight consolidation are likely to be embraced.

Para 3.7.41 – Freight: HSPG welcome the range of DCO powers are being sought to drive efficiency in freight.

Para 3.8.34 - Intelligent Mobility: While a bag drop service can make public transport options more attractive, it also risks bringing additional vehicles to the airport, one carrying a passenger's bags and one carrying the passenger. Discussion of this point and how it can be limited is required.

Para 3.8.46 - Intelligent Mobility: The detail behind some of the IM proposals need further discussion. For instance, what are the specific intelligent mobility proposals that would be sought through DCO?

Para 4.3.29 - Displaced development: There is acknowledgement that displaced development activities will have an impact, but no discussion of either this or any proposed mitigations. This topic needs much more substantive proposals, discussion and consultation.

Para 4.3.33 and Graphic 4.7 - No more traffic: As noted previously, it there needs to be greater thought about how through traffic is defined in the no more traffic definition, as this could have a crucial bearing on its measurement.

Para 4.3.35 - No more traffic: It is stated that modifying the approach of no more traffic to include areas beyond the boundary would be difficult to define and impossible to measure, although the reasons for this are not stated. If a site was deemed to be an airport related activity, and there was a wish to capture traffic to that site, then it would seem relatively simple to include monitoring of traffic at the entries and exits of that site.

Paras 4.3.39 and 4.3.40 - No more traffic: It is not clear why construction vehicles should be excluded from the no more traffic pledge, particularly given existing construction activities are included in the baseline traffic levels.

HSPG would like to see all vehicle trips including construction vehicles included within the no more traffic pledge.

Para 4.3.41 - No more traffic: For simplicity all vehicle types, including bus and coach, should be included in the no more traffic pledge.

Para 4.3.43 - No more traffic: As per previous comments, the ANPR cameras should be located at entries and exits to the airport so that by definition they capture traffic to the airport such that cannot be through traffic.

Para 4.4.2 - Enforcement Strategy: This refers to there being third party enforcement of the Environmentally Managed Growth. Is this third party the Independent Scrutiny Panel, and is this a legal entity? More detail is needed on the make up and powers of this panel.

Graphic 4.8 - Enforcement Strategy: The timelines associated with undertaking these actions in respect to reporting targets, and developing and delivering mitigation action plans needs to be more clearly stated.

Para 4.4.3 - Enforcement Strategy: Further detail is needed on what the airport will do if there is a breach in its obligations, with much more clarity needed on what the implications may be if targets are missed, and the potential scope of the mitigation action plans.

HSPG would like it to be able to rescind slots if actions are not being undertaken quick enough or having the expected outcomes.

*Detailed Comments on Indicative Delivery Plan*

Graphic 2.1 and 2.2 - Delivery Initiatives: A full list of the 47 initiatives need to be provided (noting it is provided later in the document). This chart is only useful if one can understand the nature of the initiatives, otherwise there is no sense of whether the 47 initiatives have any sense of comparability in scale and ambition.

Graphic 2.3 - Southern Rail: This shows two years to agree objectives for SRAtH, and four years for a business plan. This may be a realistic assessment of the programme, but it does not imply any sense of urgency to see this vital project delivered.

Graphic 2.3 - Green Loop: We note that the Green Loop is missing from this table. Is this because it cannot be delivered by 2025, and if so why not? HSPG consider delivery of the green loop alongside the opening of the third runway to be essential.

Table 2.1 – Funding: It would be helpful to have some numbers against these funding sources. What sum has the Sustainable Transport Levy previously provided for example, and how is this expected to change in the future?

As previously noted, HSPG think the revenue from ULEZ and HVAC should be fully ringfenced for local transport initiatives. There needs to be much a more detailed discussion of the pros and cons of such an approach, including any evidence from the CAA that states this revenue could not be ringfenced in a future control period.

Para 3.2 R2 - HeX fares: As already noted, there needs to be a greater commitment to reduce the HeX fare premium across all fares, that goes beyond just a revenue maximising dynamic pricing strategy for certain off peak ticket types. This commitment needs to be quantified with reference to current fares.

Para 3.2 R6 – Typo: Refers to West Coast Main Line rather than Great Western.

Para 3.2 R7 - Southern Rail: This describes Southern Rail as providing “a new rail link from T5 to the southwest rail network near Staines”. Given that some Southern Rail schemes do not serve Staines, is this therefore describing Heathrow’s preferred scheme for Southern Rail, or is it purely exemplary? Further clarity on Heathrow’s preferred Southern Rail scheme is required.

Para 4.1.1 – Bus: No reference is made to engaging with HSPG. The roles of HSPG and HATF needs to be made clearer in this context.

Para 4.2 – Bus: No reference is made to expanding the free travel zone which HSPG believe would help support colleague travel and offer something back to the local community.

Para 5.2 C2 – Coach: No reference is made for subsidising fares for the rail air bus links. HSPG believe such a policy would help increase the public transport mode share to the airport.

Para 8.2 - Active Travel: More consultation is required on the detail of these proposals. HSPG are concerned about both the limited scope of the proposals, and the quality of some of the proposed infrastructure.

Para 10.2 p2 - Colleague Parking: As previously commented HSPG would like to see a much sharper reduction in colleague parking

Para 12.2 E1 - Electric Vehicles: No numbers are provided on the number of charging points.

Annex 7.3.2 - Active Travel: This describes refurbishing the cycle provision across J14. The existing provision is wholly unfit for purpose, and HSPG would like to see a new crossing of the motorway for active travel and the green loop provisioned as part of the masterplan.

## 5. PEIR and Equality Impact Assessment

### *Waste*

General - The waste chapter has a narrow focus on the capacity of waste facilities to absorb waste generated. The Resource Management Plan sets out how waste will be managed, however the RMP is stated to not be an assessment – how is the impact/performance of the project in terms of the waste generated to be measured?

General - Have the potential long-term environmental effects of waste deposited in landfill or the environmental effects of transporting waste a longer distance, or depositing more waste in proximity to sensitive receptors (odour, groundwater etc) been considered?

20.2.6 - the assessment methodology is based on other large-scale infrastructure projects, why is this considered an appropriate method for Heathrow? Types and quantities of waste generated will be very different to major rail projects.

Table 20.3 Comment 207 – ‘Heathrow are providing support to Lakeside’s owners to achieve their aspiration to relocate the Lakeside plan’ –Does this not suggest that Lakeside want to move, whereas they are forced to relocate due to the Heathrow project? HSPG consider that the relocation of Lakeside should form part of the DCO.

Table 20.3 Comment 207 - ‘the counter factual argument...’ – not clear what this paragraph is saying. Loss of the plant is unacceptable to Slough and the surrounding authorities due to loss of employment and the fact Local Authorities will have to bear the burden of the waste generated, whether or not there is sufficient ‘capacity’. It is appropriate to test the loss of Lakeside as a worst case, but the realistic case should also be assessed – i.e. replacement of Lakeside and the short-term effects of moving the facility.

Table 20.3 Comment 211 – PINS recommended engagement with the highways authorities to agree the 30-minute rule, however the assessment has determined that doing this ‘would elicit little benefit’ and states that HSPG have agreed with this approach. HSPG has agreed in general with the geographic areas to be considered in the scope of the assessment, but consider that empirical evidence of the 30 minute rule should be explained rather than just stating it is a ‘rule of thumb’.

Table 20.3 Comment 213 – states that methodology is adequate as it has been subject to ‘rigors of Parliamentary scrutiny’ despite being adopted before introduction of the EIA Regulations 2017 which introduced new requirements. The requirements of the new directive as it relates to waste, and how this has been taken into account in the assessment, should be explained.

Table 20.3 Comment 213 – use of threshold criteria suggested by Bucks CC. The rationale for rejecting the established threshold criteria for waste movements is not clear and how has it been determined that they are ‘too low’? The criteria adopted (e.g. new facility = major, extension = moderate etc.) appears to be based on the demands of the Heathrow project and not based on any established standard. In particular, the description of a conclusion that the existing waste infrastructure can cope with the loss of Lakeside as ‘minor and negligible’ ignores the potential significant effects that the loss of overall capacity will have on the ability of Local Authorities to meet local waste management requirements and the burden this will place on the authorities as a direct

result of Heathrow expansion. For example, if there is 25% capacity in the region and Heathrow expansion takes up 24% of this capacity, the existing infrastructure can cope but this would be described as a 'minor' effect in the EIA process and places the burden of addressing a potential shortfall on Local Authorities.

20.3.6 – Pleased to see that study area was amended based on HSPG feedback.

20.3.8 – Excluding Stanwell is not fully evidenced at present. How has the potential effectiveness of managing CDE waste been assessed and how can we be assured that it will address any loss of capacity at Stanwell?

20.4 – Scope of wastes to be included in assessment and spatial scope accepted, with proviso that 30 minute rule should be evidenced more fully to ensure confidence that all potential effects on local communities will be captured.

Table 20.10 – sets out a list of proposed embedded good practice measures – however, these are general and there are no firm commitments or targets against any of these measures. What is the proposed mechanism for ensuring that these measures are enforced and what level of mitigation will be targeted to ensure that these measures actually have an effect on waste quantities produced by Heathrow expansion?

20.7.2 – states that methodology based on professional judgement. Earlier section implies that the methodology is based solely on past project examples. What level of professional judgement has been applied and how does this differ to the past projects referenced?

20.7.7 – Significance criteria has been subject to 'public scrutiny' – what is this statement claiming? What did the public (or more importantly accredited experts) say about it?

20.7.11 – how have the effects of waste reduction strategies and waste reuse/recycling efforts been quantified? The measures set out in section 20.5 do not provide any quantification or commitments/targets.

Table 20.13 – as comments above, what is the evidence basis for the thresholds adopted? – these seem to be based on the needs of Heathrow expansion rather than any basis in evidence/examples. For example, what is the basis of deciding that less than 2 million tonnes of additional construction waste is not significant when the impact would need additional small scale waste treatment (i.e. mitigation to address the impact)?

20.13 – The assessment identifies a number of major adverse significant effects in relation to waste capacity. However, the additional mitigation states that 'all relevant and implementable measures have been embedded into the design...these are considered likely to be effective and address the likely significant effects of the project'. What is the basis of this conclusion at this stage if no assessment has been undertaken of the efficacy of the measures proposed and there are no commitments/targets? By what means will impacts be reduced from 'major' to 'minor' adverse and will commitments/targets be included in the ES?

## *Land Quality*

General – continuing concerns about planned sterilising of mineral sites to deliver greenspace when there may be suitable alternatives available elsewhere. Some areas potentially required for delivery of greenspace are not included in the DCO boundary and therefore may not be included in the Zol/study area. How are the effects of sterilising greenspace sites (not located within the DCO boundary) to be identified and assessed?

Table 14.3, Scoping comments – generally satisfied that suggestions for improvement made at scoping stage have been integrated into the PEIR assessment. Comment 111 – EIA impact assessment and mitigation sections should be sectioned by Local Authority area so it is clear on the effects of the proposal on the responsibilities of each Local Authority in relation to land quality.

14.4.13 – It is not clear what is meant by ‘the likely significant effects of the DCO project are being considered with regard to broad definition of environmental change’. Does this mean that the assessment only considers a simple ‘before and after’ scenario?

Tables 14.4 – 14.7 - Satisfied with scope of receptors considered and potential effects scoped in for further assessment

Tables 14.9 and 14.10 – It is recognised that the mitigation measures set out are preliminary but pleased to see that most of the measures set out at this stage include specific details and commitments, which are lacking in some other topic assessments. Additional targets should be specified at ES stage, for example for reuse of excavated material.

14.7.7 & 14.7.8 & 14.7.11– States that evaluation of significance of loss/damage of BMV land, soils and geodiversity sites is based on professional judgement. On what criteria has professional judgment been applied? – i.e. is it based on rarity of the resource in the local area, ability of agricultural activities to survive into the future, ability of the resource to recover etc.? There are a number of ways that impacts could be objectively determined reducing the reliance on professional judgment.

14.10.52, 14.10.53, 14.10.54, 14.10.56 – Major beneficial effect during Phase 1 construction identified for shallow groundwater quality, River Terrace Deposit and new river alignments due to lining of the landfill, treating abstracted water, remediation and reduction of SPR linkages. How have the risks of mobilising contaminants been offset against these potential benefits? Improvements by operational stage might be expected, but difficult to understand how a benefit might arise during the construction period when materials and contaminants are being mobilised significantly, when currently they are stable in situ (notwithstanding the gradual leaching etc of some of the landfills). Effects during operation are assessed as negligible/minor. The logic of determining the benefits are realised at construction stage rather than operational stage needs to be explained.

General - The Phase 2 and Phase 3 impact assessment lacks any detail at this stage, as design not developed sufficiently. At what point will preliminary information be available to review, as there may be insufficient time to influence the design if not available until submission of the DCO application?

Table 14.23, cumulative effects – several significant cumulative effects identified but in section 14.13 it is stated that no additional environmental measures are required. What is the proposed approach to mitigating the significant cumulative effects identified?

#### *Water Environment*

General – The methodology fails to consider the need for low and high flow channels for the Colne and Colne Brook and the associated planting to create the required habitat. (Annex 21.3A section 3.1.1). Will this be included in future design information? For example, the plants to be planted in the CRC have no current way of being watered.

General - Have fluvial and ground water assessments been modelled and assessed together?

General - Is the proposal to provide a fully lined channel or adopt designs which allow groundwater interactions, as there seems to be contradictory information in relation to this?

General - Will hydromorphology effects consider whether pollution risk is increased in view of contaminated land risks?

General - What are the risks for human water supply abstraction, as there is little information on this potential effect, which in view of additional airport or other growth poses a potentially significant cumulative risk?

General - The PEIR indicates that the Poyning's and Thorney Park sites are respectively preferred for the Colne and Colne Brook flood capacity. This is not supported or proposed as a preferred option in the consultation material (modelling workshop) - can the discrepancy be explained?

General - Additional technical engagement over the summer on flood and water matters is proposed including modelling and the Water Framework Directive. It is likely that a definitive position will not be able to be reached until after the 13 September consultation deadline. How will this be managed?

General - The Poyning's Flood storage area should be designed to accommodate multifunctional use including for biodiversity and informal countryside recreation; creation of a better route for the Colne Valley Trail away from the M25/M4 and with a more direct link from the M25 underpass to the Old Slade Bridge underpass and potential new M4 crossing further west; and re-naturalise the Colne Brook breaking it out from the artificial engineered channel adjacent to the motorway including opportunities for meanders and better connectivity between the river and the flood plain.

General - Clarification is required on whether fluvial and ground water assessments are being modelled and assessed together.

General - Clarification is required on which groundwater flood mapping dataset was used for the assessment of groundwater flooding

General – flood storage areas - The PEIR information on watercourses does not provide a clear picture on the requirement for flood storage in terms of volumes required based on flood modelling or number of sites required. The Flood Storage Areas lack any detail or option selection; there are just eight sites listed without any details around feasibility, capacity or multiple uses and benefits. Until all this information is presented it is not possible to form an opinion on these options. A full

options appraisal is required for us to be able to fully evaluate this (Construction and Masterplan documents)

Drainage Impact Assessment (Appendix 21.5) - there are some high level requirements and decisions that are contradictory to Lead Local Flood Authority policies and guidance and national planning guidance and policy. Runoff rates will be the same as existing – whereas LLFAs would require a minimum of greenfield rates not brownfield. There is a preference to manage surface water with attenuation basins and ponds and a need to comply with non-statutory technical guidance from Defra especially for the “Peak flow control” assessment. There is a requirement to prove that infiltration is not possible as set out in PPG Flood Risk and Coastal Change 080 Drainage Hierarchy. Testing will need to prove that this is not possible before other options are permitted. Generally, with regards to drainage and SUDS we would expect HAL to be using grey water recycling methods such as active rainwater harvesting to reduce the potable water supply required for the development. Permeable paving and hard surfaces should also be incorporated into the plans wherever possible to reduce the runoff rates very close to source.

Appendix 21.7 River Colne Modelling - Section 1.1.2, Point 2 - The “with development” model includes an indicative representation of the DCO. Does this include changes to the infrastructure and any changes to runoff or impact on surface water routes from roads, buildings. If so, when in the process is this going to be assessed?

Appendix 21.7 - Section 4.2 Model Extent and Figure 21.7A.1 - There are a number of watercourses which have not been modelled but there is a concern over how they have been accounted for in the model. Can we have an explanation of how these watercourses and their catchment areas have been accounted for in the model. These watercourses are:

- Rusholt Brook (main river) which flows into River Colne to the west of Uxbridge and to the north of the Alder Bourne OS ref 504709 183885
- Ordinary watercourses flowing into the Colne Brook to the west of the M25 at locations OS ref 504169 182556 and 504152 181687
- Ordinary watercourse flowing south west from the west of the M25 towards and into Horton Brook at locations 503004 178313 and 502912 178026 both north and south of the M4

Appendix 21.7 - Section 4.2.5 - Can the OS grid reference of “the short reach of the Grand Union Canal included in the model” be provided so we are clear where this is located?

Appendix 21.7 - Sections 4.3.6 – 4.3.8, Roughness Values - There is extensive discussion in this section on roughness, but no values given. Are the values being used those identified in Table 21.7.7 and if so, can this table be referenced in these sections? If it is not these values being used can the values be identified in these sections?

Appendix 21.7 - Table 21.7.11 Comparison of Lower Colne baseline modelled 1% AEP flood extents with EA flood zone 3.

There are an extensive number of locations where the baseline and EA models do not agree and an explanation of the differences is required for the following reaches:

## River Colne

- Reach 2 and 3 - the explanation for increased water levels are “as a result of new hydrology”. This is quite a vague explanation and could cover numerous issues. Does this mean that the inflow hydrograph shape has changed and what is the reasoning for that? We would suggest more clarity in the explanation.
- Reach 2 and 3 - the water levels being increased over EA flood zones may be consistent with observed Feb 2014 flood levels, but the model would need to be calibrated – see general comment below
- Reach 4 – the reason for the difference seems a strange explanation and leaves lots of questions. If a large area of flood plain is “missing” from the baseline model due to a watercourse not being modelled, is that not a cause for concern. We would suggest that this is followed up further if there are large discrepancies in different models.
- Reach 4 – the other reason for the discrepancy in flood areas in addition to the Alder Bourne not being modelled could also be the lack of modelling or inclusion of the Rusholt Brook (north of Alder Bourne) which is main river and may be unaccounted for.

## Poyle Channel

- Reach 1: Is the baseline model extent and lack of flooding at the Argonaut Business park where I believe there was flooding in February 2014.

General - There are discrepancies between the flood model and the EA Flood zones and the Update maps for Surface Water. Which version is correct? In order to get a confirmed baseline model is there not a need to do calibration and verification exercise as well as some sensitivity testing on the hydrology, channel roughness and some of the assumptions made? There is extensive data and information in the recent past for a number of flood events which are mentioned in section 3.4.3 and it is clear that some hydrological verification has been done for the 2003 and 2014 events and indicates strong calibration results. In addition, there is plenty of photographic and anecdotal information within Section 19 Flood Investigation report both from Slough CC in Colnbrook and Buckinghamshire CC in New Denham. In addition to hydrological calibration/verification is there going to be a similar exercise done on the flood levels from the 2003 and 2014 event alongside a sensitivity analysis to confirm the baseline situation

## *Biodiversity*

General – the purpose of the PEIR is to provide preliminary information to consultees to assist them in forming a view of the scheme. The most important information needed to form a view is the mitigation and compensation measures proposed to address the effects of the scheme. There is currently no certainty around the quantum, location or mechanisms for delivering sufficient and high-quality green and blue infrastructure for biodiversity purposes. If this information is only to be provided at DCO submission, how will HSPG’s views on the mitigation be captured?

Table 8.3 – Consideration of habitat connectivity not included in PEIR, but will be included in the ES as the scheme design is not sufficiently developed. We have concern around lack of detail on the

mechanisms for identifying and securing land, the location of these areas and absence of a feasibility study on whether a suitable quantum of land is available in the vicinity of the airport to deliver full compensation.

Table 8.3 – No information on monitoring is provided in the PEIR but will be included in the ES. A draft strategy or measures on monitoring proposals might be expected at PEIR stage as not entirely dependent on precise locations of compensation areas.

Table 8.3 – Species not included in biodiversity offsetting metric – further clarification needed on how the effect on individual species will be taken into account in provision of compensation areas – i.e. will the effect on key species be compensated in a balanced way?

8.3.16 – no information on HSPG’s views on the biodiversity assessment to date which has been provided for NE and EA – should be included so all stakeholders are aware of HSPG’s current position in relation to biodiversity and how HAL has addressed these views in their assessment approach.

8.4.5 – Survey effort appears extensive, thorough and HSPG is satisfied that surveys will identify all potential ecological receptors which could be affected by the proposals. Further survey effort is proposed.

Table 8.12 - Red listed and legally protected species are considered of local importance if ‘based on their extent, population size, quality etc. are determined to be at a lesser level of importance than the geographic contexts above’. How is this determined?

Table 8.13 – ZOIs/study areas and temporal scopes set out considered to be appropriate to capture potential effects.

Table 8.15 sets out ‘embedded mitigation’ which includes the green infrastructure strategy. However, with no detail on the location or mechanisms for delivery of compensation and enhancement areas, it does not seem appropriate to include this as ‘embedded mitigation’ at this stage as it is not yet embedded in the design or clear if it can be delivered, and so the ‘worst case’ scenario may not actually be assessed.

Table 8.17 – states that effective monitoring is assumed in the assessment – but Table 8.3. states that information on monitoring is not provided in the PEIR – so how can the assessment be confident that monitoring will be effective if no information on how this will work is available?

Section 8.8.9-8.8.10 – impacts considered significant if favourable conservation status is compromised or lost – what about habitats and species which are not favourable or degraded? It is not clear what ‘compromised’ means if professional judgement is being used – all habitats and species will be compromised to some extent.

8.9.4, second sentence – can the meaning of this be explained? How has precautionary approach been applied if green infrastructure proposals are only indicative – should the worst case be no provision of green infrastructure?

8.9.5- 8.9.9 – precautionary/worst case not adopted here – the best case assumptions seem to have been adopted.

8.9.12, third sentence – on what basis/evidence is the information ‘more than adequate’ given that it is stated that likely significant effects are ‘broadly defined’, surveys are incomplete and there are no firm proposals for location or mechanisms to deliver green infrastructure/ecological compensation areas?

General - Impact assessment sections; assessment of significance where the decision is based on provision of green and blue infrastructure – although the results are preliminary, there seems to be insufficient evidence at present to support a conclusion of whether an impact is significant or not significant if the precautionary approach is adopted. The quantum, location or quality of compensation/green infrastructure areas is not yet defined, so how can a conclusion be reached in the absence of any information on the parameters of the mitigation? An example might be for great crested newt; how can a conclusion of ‘not significant’ be reached if there is no detail on mitigation to be provided?

General - Throughout the impact assessment sections, nearly every section states that ‘mitigation is still to be defined’ and ‘further survey is required’. A principle of something happening does not provide a robust basis for conclusions or provide sufficient information for consultees to form a view of the project.

8.13.1 – HSPG pleased to see the commitment to a net gain for biodiversity. New habitat creation should also consider quality as well as quantity. It would be useful to have a short explanation of biodiversity unit value in the main text.

Appendix 8.2, Scoping Tables – justification has been provided for scoping out habitats which are considered of ‘negligible’ value. This includes semi-improved grassland, marshy grassland and common ‘locally important’ habitats. It is considered that the justification for scoping out local habitats is still not evidenced and have been screened out by stating they are ‘common’ and ‘locally important’ which doesn’t fully explain why they should be scoped out. The comment made by PINS at scoping stage has therefore not been adequately addressed. The combined areas of these types of habitats may be more important collectively and valued by the local community than larger areas of higher quality habitat. How is this to be addressed in the assessment, and these habitats to be compensated, if they have been scoped out?

#### *Historic Environment*

Table 13.3 – We are pleased to see that all PINS and HSPG scoping comments have been considered and addressed in the PEIR

13.3.10 – Although HSPG have been briefed on a regular basis on progress, the package of mitigation measures has been developed primarily between HAL and Historic England. HSPG and local authority consultees were not invited to develop the mitigation package directly with HAL. Is there any future intention to involve HSPG members in development of the historic environment mitigation package?

Section 13.4 – Study area, temporal scope and receptors included are considered to be appropriate.

Table 13.13 – What is the basis of determining that low value/medium magnitude and medium value/low magnitude are not significant? Is there precedence for this, or established guidance which supports this system?

General - Impact assessment sections – some conclusions have been drawn without evidence or justification – for example in several areas it is stated that ‘there are no direct or indirect effects on conservation area character’; other examples might be ‘there is likely to be no change to Historic Landscape Character’ or ‘there are unlikely to be changes to the concentric ditches’, but there is no thought process set out as to how these conclusions are reached. Is it due to distance, mitigation, no source or pathway?

General - The conclusions reached in terms of the significance of the likely effects of the scheme appear to be reasonable given the unavoidable direct and indirect effects the proposals will have on the historic environment.

Table 13.14 – This provides a clear summary and the ‘opportunities and additional measures’ information is a useful tool to indicate which mitigation measures are being explored and where effects cannot be mitigated, backed up by the information provided in section 13.13.

General - the various strategies proposed i.e. Heritage Design Strategy, Heritage Management Strategy etc. are not provided in draft in the PEIR. How developed are these documents and have they informed the current assessment? At what point will these be available for comment as they should be available to HSPG for consultation well in advance of DCO submission.

#### *Landscape and Visual Amenity*

General - Many of the photos convey little of their relationship with the Scheme. Will captions that outline the visibility of the existing airfield and its roads etc in the view and/or the likely visibility of the Scheme, be included in the ES?

General - Have wider viewpoints been considered in the assessment even if outside HSPG area? For example, the airfield is clearly visible from Epsom Downs. Additional viewpoints have been suggested by HSPG as part of a recent Work Request.

General - Will duplicate winter views be provided in the ES winter after all the leaves have fallen? If only one photograph is to be provided, it must be the winter view.

General - The DCO red line needs to allow for all the space needed to provide all the environmental mitigation, restoration and compensatory works needed to arrive at the effects that will be reported in the ES, so that the applicant can guarantee that such works will be delivered. It is not adequate to rely on a promise of ‘good design’ as proposed landscape and visual mitigation. Planting is highly constrained close to major airfields and other works may be needed to provide visual screening. How is this to be addressed in the ES?

General - 15 years after opening has been defined as the key operational assessment year. Is this fit for purpose for a project with such a long implementation phase?

Table 15.3, comment 108 (and section 15.13) - states that no further mitigation over and above embedded mitigation is proposed, and all relevant measures are assessed in the chapter. If most greenspace areas proposed are excluded from the DCO red line boundary how will adequate landscape screening be provided in the ‘embedded mitigation’? The embedded mitigation proposed

just states 'good design ' with no detail, so how is it possible to claim that all relevant measures are assessed in the chapter and no further mitigation is required?

General - The assessment year assessed includes the design year of 2065. Is this a meaningful design year for landscape assessment given that most of the mitigation will have been implemented in the early years and matured 15 years thereafter. The landscape may have changed irrevocably by 2065 in ways that are difficult to predict.

Table 15.6 - as per comment above, reliance on 'good design' as part of the operational mitigation package with no detail of what this would include. How can a conclusion of no significant effects be reached at this stage if there is no information on the main mitigation to be relied upon?

Construction mitigation measures are also high level and generic.

General - Assessment sensitivity, magnitude and significance criteria seem to be appropriate and consistent with similar large-scale projects.

Tables 15.19 and 15.21 - assessment outcomes detailed in these tables could be included in an appendix and a summary included at ES stage to highlight the key outcomes. The PEIR chapter is not easy to navigate and interpret by consultees as it is mainly a succession of long tables.

15.12.3 cumulative effects - what does this paragraph mean? Is it saying that minor and above impacts are considered in the CEA?

Table 15.24, Cumulative effects assessment - how meaningful and valuable is a cumulative assessment for the design year of 2065 when there is no reasonable way of knowing what other development may be constructed/in construction 50 years in the future?

### *Lighting*

APPENDIX 5.2 - 1.5.7 - Noted that lighting proposals not defined at this stage, so the appendix sets out only the scope of the assessment which appears to be appropriate.

APPENDIX 5.2 - 1.5.9 - List of receptors should be agreed with HSPG members once lighting proposals are known.

APPENDIX 5.2 - 1.5.37 - This section appears to scope out consideration of cumulative lighting effects. How will the potential combined effects of lighting schemes for Heathrow-related and other projects be considered?

APPENDIX 5.2 - Table 1.21 - Most of the lighting installation measures listed are only to be considered. Will commitments/targets be included by ES stage?

### *Major Accidents and Disasters*

Table 16.3, comment 117 - Security mitigation and protocols will not be included in the PEIR or ES – how will HSPG members be able to judge effects in relation to security factors at the airport if information is not disclosed?

General - Local Resilience Forums are responsible for managing the response to major accidents and disaster in local areas - have they been consulted to date?

Table 16.9 - good practice environmental measures proposed are mainly a list of broad aspirations and processes to be developed in future, rather than specific and committed measures. At what point will information on the embedded measures to be adopted be available?

Section 16.7 - Methodology is considered to be appropriate to identify potential MA&D effects.

Section 16.10, Assessment - some of the conclusions are based on the implementation of health and safety regulation and the draft CoCP. Currently, the draft CoCP is a fairly high-level document with little specific information on protocols and management measures. How confidently can a conclusion be drawn on the significance of an effect at this stage if the CoCP measures are not particularly detailed currently?

Table 16.4 - could be included in an appendix with a summary of the key outcomes provided in the text. It is difficult for consultees to navigate and understand long tables.

Section 16.12 - the cumulative assessment methodology appears robust. However, there is a reliance on management measures set out in CoCP which currently lacks specific detail on protocols and management measures.

### *Community*

Table 11.3/ comment 63 - PINS requests states that mitigation for significant negative impacts on the existing green infrastructure network and public access and other public rights of way should be set out in the ES and secured in the DCO. However, most of the areas proposed for green and blue infrastructure are not included in the DCO boundary and therefore not fully assessed in the PEIR - how is HAL proposing to meet this PINS requirement?

Section 11.3.7 - This section on HSPG consultation doesn't set out HSPG views or position on the community topic - how have HAL responded to HSPG's previous responses to the community topic?

Section 11.3.10 - How do HAL propose to ensure that the scheme meets the needs of Hillingdon residents in the event Hillingdon do not provide any feedback on the scheme?

Section 11.5 - Embedded environmental measures - measures are still generic (i.e. measures still to be developed) with no detail in relation to greenspace provision, and areas required are not included in the DCO boundary. Therefore, how is it possible to conclude no significant effects at this stage?

Section 11.5.8 - Pleased to see that quality and accessibility are specified as factors to include in re-provision of public open space - what will be the mechanism for ensuring that greenspace delivery takes these elements into account and monitors/maintains ongoing quality and accessibility issues?

Section 11.5.9 - States that access for communities to greenspace will be maintained 'as reasonably practicable to do so' - why can't a commitment be made without the 'reasonably practicable' words - are there some areas where access will not be maintained?

Table 11.10 - It is stated in this table that most of the effects cannot be assessed sufficiently at this stage due to lack of project information. How can HSPG respond to the PEIR findings if basic information is missing and most aspects are still not able to be assessed? Will further opportunity prior to submission of the DCO be provided so consultation can be meaningful?

Section 11.7.18 - Some reliance on professional judgement is granted, however this paragraph suggests that professional judgement is based, at least to some extent, on embedded environmental measures. It is admitted that these measures lack detail at the moment, so how can professional judgement be properly applied if this information is lacking?

Section 11.7.19 - What specific comments from HPSG have had 'regard' in the assessment and how have they influenced the methodology?

Section 11.7.23 - Why are moderate effects not by default considered significant? This is standard in EIA practice. On the basis of what criteria does the 'assessor's opinion' judge this?

Section 11.8.9 - Implies that information on embedded mitigation will not be available until DCO submission which is too late for meaningful consultation with HSPG and other consultees. How do HAL propose to deal with this problem?

Section 11.9.113 - States that 121 routes were not publicly accessible or had no recreational function. How many of these routes are public rights of way? Even if not accessible, these routes should be covered in the assessment as could be brought back into use. How was a decision of 'no recreational function' determined?

Section 11.9.139 - This section focusses on Hillingdon. How have other LPA areas been considered?

Section 11.10.58 - Properties lost represent around 50% of market demand in any year. How can this reasonably be considered a 'low' magnitude of effect and therefore minor negative (not significant) effect? This section admits that the boroughs only have capacity to absorb change 'to some extent' and in 11.10.63 again implies that the loss of housing stock will place a burden on LPAs. The 50% change is large and will make meeting housing demand particularly challenging in the local areas. The effect will be amplified by greater purchasing power to residents in the CPZ with the 125% market offer. In addition, if the WPO is not yet developed, how can this conclusion be reached at this stage if a worst case is adopted?

Section 11.10.98 - spare capacity in private rented sector is stated to be around 23,000 to 26,000 bedspaces. What is the nature of this capacity and why are properties empty? - do we know if some of these properties are long term empty, HMOs, where are properties located and would they affect local communities evenly? It is likely that communities closest to the airport would be disproportionately affected - how has this been considered in the assessment? Even if the effect on the housing market is 3-4%, this will make the job of LPAs more challenging - what responsibility in the form of committed measures will HAL take for the effects on the private rented sector market during construction?

Table 11.25 - 11.34 - describing moderate negative effects as 'not significant' conflicts with established EIA practice and the rest of the EIA topics in the PEIR; particularly in light of the lack of detail on the design mitigation measures to be implemented. How is the applicant defending this approach?

Section 11.10.249 - Effects of the construction workforce are stated as 'assumed to be minimal'. More workers in the private rented sector will have some measurable effect on demand for council services (waste, schools etc). How have these minimal effects been analysed and quantified to safety

conclude that they are 'minimal'? Currently the conclusion of minor negative to negligible effects is unsupported by any meaningful analysis.

Section 11.10.275 - Reprovision of open space - no information currently on the location of most of the reprovided areas, some of which are outside the DCO boundary. How can conclusions be reached at this stage and consultation be meaningful if reprovision cannot be guaranteed and the new locations are not known?

Section 11.10.288 - states that HAL will seek to minimise severance or loss of connectivity as far as practicable. This implies that some severance is expected. How can conclusions be reached at this stage if the extent of potential severance on local communities is not known currently? Major positive effects have been identified for many public rights of way during Phase 1 due to the green loop. However, much of the green loop is outside of the DCO, so what assurance is there that this can be delivered in its entirety and how has a worst case been adopted?

### *Socio-Economics and Employment*

General - How have economic assumptions and principles in the JEBIS been adopted in the assessment?

18.4.37 - States that not all assessment areas can be assessed at the current time. Has the assessment of a reasonable worst case been considered? At what point will information become available to enable meaningful consultation prior to DCO submission, as many of the conclusion sections state that it is not possible to conclude anything currently?

18.7.9 - states that there is no UK legislation or government guidance that specifies the methodology to be used, but methodologies are not usually provided by legislation or government. Has the methodology drawn on industry guidance or other best practice examples?

Section 18.10.32 - Concludes that displacement of business would be minor negative/negligible (not significant). However, preceding text implies there is insufficient information to come to a conclusion at the moment. How has this conclusion been reached in the absence of the necessary data?

Section 18.10.104 – Identifies a moderate positive effect as significant. If moderate positive effects are significant, why not moderate negative effects in the Community chapter?

Section 18.10.126 - What are the reasons for identifying a major positive effect, what are the thresholds used?

### *Equalities Impact Assessment*

General - How will Heathrow ensure that local communities faced with bearing the brunt of the impacts will ultimately see the economic benefits from the expansion?

General - This is a long-term project which will affect people for years. How will Heathrow ensure that impacts and mitigations are continuously reviewed to ensure that they are effective over the course of the project?

General - How will Heathrow ensure that mitigating actions are specifically tailored to different groups to improve their impacts? There needs to be further engagement/consultation on detail prior to the DCO/EA being submitted.

General - How will Heathrow ensure that groups understand the impacts and what options are open to affected residents to mitigate?

General - How will local people be able to raise concerns about the efficacy of mitigating actions over the course of the project?

General - Concern about when consultation will be done and if outcomes will be too late for HSPG to review meaningfully before DCO is submitted.

General - The conclusions that groups including children, older residents, BAME and minority faith groups may experience difficulties in moving out of the area into new accommodation is supported, however there needs to be acknowledged that these groups are more affected directly by airport construction in the first place due to the specific demography of the communities most affected by the scheme. As well as the capacity of these groups to adapt to change, how is this more direct disproportionate effect to be assessed and mitigated?

General - The mitigation set out to address these effects relies on plans and procedures which could apply to all residents and other receptor groups, and there are few details on what specific measures are proposed to address the particular needs of each disproportionately affected group, i.e what specifically will HAL do to support older people or BAME groups that acknowledges the singular needs of these groups?

### *Noise and Vibration*

Assessment methodology for the PEIR:

Methodology for identifying significant effects. We note that it is only between LOAEL and SOAEL that population is considered when determining LSE. Above SOAEL single receptors are sufficient to cause LSE. We agree with this methodology.

Preliminary assessment of significance | geographical reporting:

General - It is noted that the Tables in section 17.11 indicates more significant effects than the earlier sections, such as Table 17.26 and 17.27.

Table 17.9 - likely significant effects: New and altered roads, and increased freight movements should also include vibration and ground borne noise to be assessed for potential impacts. Railway noise is identified as a relevant noise source, but no results are presented for this, and therefore significance of effects are not identified, but it is identified as being low risk and will be assessed in the ES.

17.5.8 - Construction noise assumptions: There does not seem to be a construction activity for tunnelling and bridge works, which would include piling and tunnelling plant.

General - Aircraft noise assumptions: What guarantees do we have that the quieter aircrafts will be utilised in the future as per the used Quota Count?

General - Methodology for identifying significant effects: Noise levels from combined noise sources should be quantitatively assessed, at least for operational combined sources (road, rail, aircraft and stationary) and construction combined sources. Part of the assessment compares the project against noise impacts from 2013, noting reductions in numbers of properties exposed. This ignores that noise levels have reduced from 2013 and the comparison with 2013 has the potential to hide increases in noise which would occur with the project.

General - Assessment of residential receptors: The proposed sleep disturbance criterion is confusing. Aircraft L<sub>Amax</sub> criterion (with estimates of potential number of events similar to rail criterion) for LOAEL, SOAEL and UAEL should be added and assessed. The difficulty as we understand it is not to set a criterion, it is for HAL to predict the L<sub>Amax</sub> level when different flight paths may be used (which is the same as trains on different tracks). We have concerns about considering noise insulation as an embedded mitigation (what about outdoor amenity?) and noise benefits are identified as a result which is down only to provision of insulation. It should be noted that all the LOAELs, SOAELs and UAELs are external criteria and even though the last line of defence is noise insulation, receptors exceeding the external criterion should be reported as having a residual impacted even if the noise insulation may mitigate internal noise levels.

Table 17.22 - Noise control measures: All proposed noise insulation control measures should have the wording avoid (or prevent) adverse effects on health and quality of life at night (sleep disturbance) and daytime (annoyance) indoors. The daytime (annoyance) is not totally avoided and it is important that external daytime impacts that are not controlled are also appropriately reported.

General - We would like the ES and the draft CoCP to include clear assumptions on what construction activities would be considered for night-time and which would be excluded from night-time works (such as piling activities). Also, specifics on proposed quieter plant and methodologies (i.e. bored, vibratory or Giken piling). There is no mention in the PEIR that reduction of construction source levels has been considered, it goes directly to barriers or noise insulation.

17.10.48 - states "The 63dB LAeq,16h daytime contour and 55dB LAeq,8h contour shown on these Figures represent the levels above which government policy notes that adverse noise effects may start to be observed at residential receptors (Significant Observed Adverse Effect Level - SOAEL). This may start to be observed when exceeding the LOAEL. When exceeding the SOAEL there is a significant observed adverse effect.

17.10.48 - noise insulation mitigates and manage significant adverse effects as far as reasonably practicable, but they do not avoid all significant adverse effects there are still daytime significant adverse effects at outdoor living areas.

Figures 17.12 to 17.27 show that there are test cases resulting in very high change in noise (i.e. >9 dB) in the northern parts (e.g. Slough, South Bucks District, Hillingdon, Ealing, Hammersmith and Fulham, Lambeth, Southwark).

Tables 17.28 and Table 17.29 specifies in the footnote that newly above SOAEL will receive noise insulation. There should also be a footnote about further actions for the newly above LOAEL, in

cases where some may be exposed to very high change in noise (i.e. >9 dB) and therefore exposed to a likely significant effects (even down to a low population size). Table 17.13 states that these should be offered Voluntary Noise Insulation for aircraft noise if in the upper half of the LOAEL range.

General - The assumption is that all significant adverse policy effects can be avoided by provision of insulation and compensation, which presumes that 100% of people will take up the offer made. Is there a risk of residual significant effects should people not take up the offer?

General - Where properties have previously been insulated and the project predicts a further noise increase, should the assessment consider the additional impact on these receptors as needing further insulation/mitigation, or would these additional increases be another residual effect?

### *Health*

General - Vulnerable groups: Is it correct to consider people in close proximity to the location of changes as a result of the project as a 'vulnerable group' given that they do not fit into the usual definition of 'vulnerable group' and may distort the results of the assessments? Should they be considered as part of the general population category? From an equality's perspective, factors that influence health and wellbeing within the affected population vary by age, gender, ethnicity, disability, income and social support. It is then the case that within the general population affected some individuals are more vulnerable due to the factors identified. Proximity to change is not one such factor.

General - Spatial scope: Although there are different study areas depending on the determinant of health considered and that the assessment is an amalgam of these study areas, core study area for the human health assessment should be defined from the outset. 500 metres should be the minimum distance in terms of identification of receptors.

General - Assessment methodology framework. It is not explained why the human health assessment methodology has deviated from the generic project-wide approach to the assessment methodology set out in Chapter 5: Approach to the EIA regarding prediction of impacts, considering specifically the magnitude of effects and the sensitivity of receptors as set out in Chapter 2. Prediction and applied as in Graph 5.4 3. Evaluation in Chapter 5. Instead, the assessment utilises different terminology in Step 1 and in Step 2 Framing Judgement of Significance brings into the assessment considerations which are questionable in terms of the value they add - consultation responses and policy context. These are considerations which should inform the development of the framework, but they are not key to the framework (as they maybe subjective and reflective of stances at a particular point in time or by a particular organisation). However, they appear to have been used to justify certain scores. Scientific evidence, baseline conditions and standards and controls are the three key considerations here. In Step 3 the categorisation of the significance of effects on human health appears to lose sight of the receptors and their sensitivity to change and Table 3.13 amalgamates a number of considerations together for categorising the effects and a statement is made that 'based on the categorisation of the health effects using the categories in Table 12.13, those health effects rated as 'major' (positive or negative) have been rated as 'significant' for the purposes of compliance with EIA Regulations. This statement represents a deviation from the normal approach is EIA as set out in Graph 5.4.3 in Chapter 5 where 'moderate'

(positive or negative effects) are also significant. In terms of significance of assessment results this approach this downplays the significance of many of the effects identified. Can a fuller justification for the methodology framework adopted be provided?"

Chapter 12 Vol 3 Appendix 12.5 - Health supporting analysis sets out the detailed assessments that have been undertaken and then reported in the chapter 12 vol 1. The way the methodology has been applied does not follow a best practice EIA approach. By using symbol 'tick' against every consideration that describes the effect (Table 2.15 for example) and the categorisation of effects (Table 2.20 for example), the presentation is confusing and doesn't clearly cover positive and negative aspects of the assessments. Then in terms of rating of effects (Table 2.21 for example) no proper explanation is presented as to why for each type of human health effect particular scores have been arrived at. Can a clearer approach be adopted with a full justification for the health effect scores?

General - The assessments are generic and do not specifically refer to the real receptors that are going to be affected i.e. those people currently living, studying and working in the area, and in particular any of the vulnerable groups. The assessment should consider these groups to ensure that every individual is catered for in terms of specific mitigation measures and ultimately adequate compensation if residual effects on such receptors remain significant. Many of these receptors are already identified in Chapter 11 Community but not transferred over into the human health assessment.

General - From the assessments undertaken it is unclear how unintended health consequences will be minimised and how beneficial health impacts maximised. No recommendations have been made in terms of any additional mitigation or enhancement measures to maximise beneficial effects. The weaknesses in the application of the methodology means that opportunities to deliver mitigation and enhancement measures have been missed and the areas to target have not been identified.

General - The assessment downplays the significance of many of the effects identified across the range of receptors identified, no additional measures are identified by the assessment and it is unclear as to which specific receptors are actually being affected. Can a commitment to providing this detail be provided for ES stage?

General - The role of community access to well designed, integrated open space/ natural areas, as part of a wider network to promote active lifestyles and good mental health needs is underplayed in the PEIR and needs to be more prominent. Clearer and more comprehensive mitigation is needed for the "significant negative effect" of expansion relating to changes in access to open spaces and healthy lifestyles. Mitigation should embrace comprehensive GI design with high quality active travel routes passing through attractive, stimulating natural environments within the immediate 'masterplan' area. Such GI well integrated with GI and active travel routes beyond the masterplan area.

General - The surface access commentary in the health assessment focuses on 'colleague' trips to the airport/ for work and needs to be wider, embracing recreation routes and all ARD.

### *Carbon and Greenhouse Gases*

Sections 9.4.33 and 9.9.3 - Note that the term 'mitigation' is not generally used in the PEIR and 'environmental measures' used instead. What is the rationale for using a non-standard term as it may serve to downplay the presence of impacts to be mitigated?

Sections 9.6.3 - Notes that reporting is largely aligned to the GHG protocol - in what respect is reporting not aligned to the GHG protocol and do HAL intend to align in full with the protocol going forward?

Table 9.9 - What reasonable assumptions have been adopted in the absence of detailed design information?

Section 9.9.4 - States that the DCO project without mitigation scenario includes environmental measures that are part of the Masterplan. Does this include green and blue infrastructure? If so, many of the areas allocated for this purpose are not within the DCO boundaries and there is therefore no guarantee they can be delivered. The assessment may therefore underestimate the greenhouse gas emissions in the worst-case scenario. A real worst case would only include measures which are guaranteed within the DCO application.

Table 9.11 - the table lists some embedded measures which have no substantive detail or quantification (e.g. is infrastructure for charging of electric vehicles at one location or ten locations?) In addition, some measures are aspirations rather than commitments (i.e. where possible, wherever practicable etc.), and should not therefore form the basis of a worst-case assessment.

General - Carbon mitigation measures proposed seem to be standard measures that might be expected for any new development. Does HAL have a proposed carbon reduction target figure to work towards, and what specific and cutting-edge measures will the airport include to ensure that the development performs at a 'world class' level, particularly that Heathrow will be a major emitter in the years ahead?

Section 9.14.4 - The ANPS requires an assessment of whether project will impact UK's ability to meet carbon reduction targets. How has the definition of material change been defined and what are the parameters adopted? What is the justification for excluding international air transport (the biggest source of emissions by far)? It is recognised that aviation is excluded from UK carbon budgets but the question the ANPS poses is whether the DCO development would impact on the UK's ability to meet its carbon reduction targets (i.e. zero net by 2050) and not just carbon budgets, which surely it will? The domestic aviation assessment seems redundant when its contribution is negligible compared to the contribution of international flights.

### *Climate Change*

General - currently the assessment focusses purely on Heathrow infrastructure, how will HAL influence the development of related airport infrastructure outside the DCO to ensure resilience to future climate change (e.g. green and blue infrastructure, ARD, community facilities, Lakeside etc).

Section 10.4.9 - 2050 has been adopted as the worst-case year for construction. Can more explanation be provided? 2050 may be the year with the greatest climate effects, but earlier years

might be more intensive in terms of construction, or include particularly vulnerable construction activities?

Section 10.4.10 - Can there be more explanation of the 100-year timeline? Why is this most relevant in terms of the DCO project? Why not test 2050 when the proposals are in full operation?

Table 10.20 - Includes some measures which do not currently have any substantive detail or are aspirations rather than commitments. Will this detail be considered and applied at ES stage? Further consultation or engagement is required prior to the DCO/EA on these measures - when might this happen prior to DCO submission?

Section 10.11.1 - the statement that all possible environmental measures have been included does not necessarily mean that an impact is not significant. Also, how confident is HAL that all possible measures have been identified as claimed?

#### *Transport Network Users*

General - Only adverse effects in relation to pedestrian and cyclist amenity and travel times have been identified which will need mitigating. The local communities were promised various extensive measures to improve pedestrian and cyclist amenity, road user improvements, and improved access to the airport. Positive effects for pedestrians, cyclists and road users might therefore be expected to be identified in the assessment. How have the proposed pedestrian, cycle and local road improvements been considered in the assessment, as they appear to have been overlooked? Are these measures still included in the design, is it concluded that these measures will be ineffective, or have they been simply ignored? Section 19.13 suggest that no further measures are being considered.

General - No significant severance effects are identified to the west and south west of airport where the most significant severance could be expected due to all the road and river realignments. This does not seem like a credible conclusion - can the thought process and evidence/justification be set out more clearly so it can be understood how this conclusion has been reached?

General - the methodology and baseline information set out in the chapter seem to be appropriate. However, further clarification on the logic of how the methodology has then been applied is required as the conclusions reached are counterintuitive, and the effects identified are for fairly trivial localised areas to the north of the airport, focussing on absolute changes in traffic levels and missing the big picture changes that should be the focus of the assessment. What about the major benefits promised for road users, pedestrians, cyclists and public transport users? The assessment is not considered fit for purpose and a rethink on the overall approach to this chapter is perhaps required.

Section 19.3.6 - This section does not describe the content of the feedback HSPG has given and how this may have influenced the scheme assessment - has any previous HSPG feedback influenced the assessment?

Tables 19.7 and 19.8 - Most of the measures included in the table lack substantive detail, are aspirations rather than commitments and some are qualified by 'where reasonably practicable' etc. Will specific detail on these measures be included in the ES so that a real worst case is assessed?

Currently mitigations, which may or may not be delivered, do not provide a robust basis for determining the significance of impacts.

Section 19.6.5 - What surveys are proposed?

Section 19.10.11 - Concludes that there be no severance at all due to early construction works. This does not seem credible given the scale of the works proposed in the built-up surroundings of Heathrow, with likely traffic diversions in place. Where are the workings on how this conclusion was reached and can further justification be provided? Similar issue for paragraph 19.10.18.

Section 19.10.15 - The construction period is over a number of years and this paragraph states that changes would increase pedestrian and cyclists fear thereby causing loss of amenity. The argument that the changes are temporary and would only be for short periods at any one time does not support a conclusion that there would be no effects as the construction period is over a very long period and over a wide geographical area.

#### *Air Quality and Odour*

General - the following sentences are repeated throughout all but one of the "Heathrow Expansion in your area" documents: *"There will be increases in pollutant levels associated with expanding the airport, but these are not considered to be significant. Levels of all pollutants will be within the levels set by the Government to protect health."* Such oversimplification of air quality effects into non-technical language is misleading. It gives a false impression that there are no exceedances of AQS objectives (AQOs), contrary to data presented in the PEIR which predicts that 2022 concentrations of nitrogen dioxide will exceed AQOs in the following locations:

- Brands Hill
- West Drayton
- Harlington
- Hayes
- Heston
- Iver and Richings Park

In contrast, the "Heathrow Expansion in your area", document for Longford & Bath Road provides no information on likely air quality impacts in this area. It is acknowledged that many existing receptors in this location will be acquired to enable construction, but air quality impacts on facilities to be relocated should be considered.

General - Current presentation of air quality impacts in local community reports does not reflect current and future air quality conditions described in the PEIR. This could be improved with inclusion of maps to show the impacts on air quality in affected areas, highlighting hotspot locations in current and future scenarios.

General - The proposals indicate HAL will introduce minimum emission standards to contracts between Heathrow and bus and coach operators where applicable. A Euro VI minimum standard should be adopted. (It is noted that HGV emissions will be controlled by the London LEZ.) We are supportive of HAL proposals to improve bus timetabling (paragraph 3.2.63) to reduce vehicle

emissions / car usage. We are also supportive of HAL Policies on EV's including intention to monitor and collect data on EV charging usage to optimise provision (Section 12.2).

3.4.16 - Notes EV charging as currently applies - level of provision going forwards is not yet defined. Can HAL be more specific and quantify their commitment rather than an intention to increase EV charging provision year on year (paragraph 3.4.17) E.g. could use the ratio of passenger EV charging points to the number of passengers (from information presented in Table 3.29, Heathrow is in the lower half of EV provision per passenger)?

General - What assumptions have been made about the proportion of EVs in the current/future fleets for air quality modelling purposes. Are any changes assumed with the proposed interventions? Information can be obtained from the ANPR monitoring and review of EV charging uptake as regards use of the infrastructure.

General - The HULEZ doesn't include measures for taxis (hackney carriages), relying on TfL licensing of London Taxis (no new diesel taxis licensed - must be zero emissions capable, max 15-year age limit with scrappage scheme from Jan 18). This means that all taxis will be Euro 6 by 2033. This is very late, compared with requirements for PHVs.

General - ANPR used for monitoring trip numbers and staff travel plans, could also be used to present data on fleet split – vehicle types, and Euro Standards. Fleet split could be reviewed on a regular basis to record the number of taxis remaining Euro V and below and compare against assumptions in the air quality modelling. The terms of the HULEZ could then be reviewed.

General - Road user charging revenue should be used for broader local benefits outside of Heathrow to mitigate impacts felt in AQMAs and areas where exposure has increased.

General – The Heathrow Vehicle Access Charge (VAC) should be reviewed every 2-3 years rather than every five years to assess potential to adopt new technology to enhance compliance and influence behaviour.

General, baseline information - Local authority monitoring data (both CMS and diffusion tube data) for 2018 should be considered in the assessment.

General - Method: Scope of assessment:

- Some “worst case” assumptions mentioned throughout text for dispersion modelling lack a clear “Rochdale Envelope” (DCO concept) definition for air quality
- Agree with approach of assessing first year of each operational phase in terms of background concentrations.
- The ES should demonstrate that this corresponds with maximum traffic flow in same year
- Agree with pollutants included in road traffic modelling.
- Basis for exclusion of SO<sub>2</sub> is in line with normal practice due to low fuel sulphur content and low ambient background concentrations
- Exclusion of ozone assessment out suitably justified, it is not typically assessed for individual developments and dealt with at national policy level.

- ES should provide more recent research to demonstrate that previous assumptions (PSDH, Ricardo) cited in Table 7.6 hold true and that ozone concentrations not of concern (ref. DEFRA UK-Air)
- As a general principle, HAL policy to limit NO<sub>x</sub> and VOC emissions should link to potential for ozone formation
- Secondary PM scoping out appears to have been suitably justified and not a matter for HSPG as no impacts within 50 km –dealt with through national policy to limit emissions e.g. EU ceiling directive
- ES could provide more recent research to demonstrate Laxen (2010) still holds true
- As a general principle, HAL policy to limit NO<sub>x</sub> and SO<sub>2</sub> emissions could link to secondary PM
- Definition of sensitive receptors is reasonable, focusing on residential, schools and hospital for human health and inclusion of commercial for dust/odour
- Agree it is reasonable to exclude workers as receptors, who fall under HSE remit.

#### General - Assessment years

- The assessment years are defined as 2022, 2027, 2030, 2035 and 2050 and are reasonable and in line with construction and operational phases. The year 2027 is the first full calendar year with the North West Runway operational.
- A qualitative approach for 2050 is reasonable given the uncertainty in future emission estimates
- The most important years for compliance with air quality legal obligations are 2022 and 2027, when the activities are largely construction.
- The ES should clarify assumptions for construction phasing i.e. is it assumed to be constant throughout the period, or are some years more intensive than others? A conservative approach should be taken in line with PINS guidance. Apply similar level of detailed modelling for construction as for operation in all areas.

#### General - Study area

- Brands Hill now included within AQO and screening approach for areas outside the AQO core area
- Concerns that receptors in AQMA outside AQO core area have not been explicitly modelled and therefore there is a risk of exceedance/worsening existing exceedances have not been accurately determined. The ES should adopt a coherent and consistent approach for all potentially affected areas not just those within the historically defined AQO core area.

#### General - Construction dust

- Use of IAQM (2014) guidance is appropriate
- Definition of sensitive receptors is appropriate
- ES should provide further justification of dust magnitude definition (currently, Table 7.22 simply indicates “large” which could be an overestimate)

- ES should clearly define the individual work areas and community areas and demonstrate that this approach does not miss cross boundary / in-combination effects (e.g. unclear if any compounds would be in remote locations).

#### General - Construction vehicles

- Use of detailed modelling is appropriate, given expected magnitude of change.
- ES should apply same significance criteria given length of construction period
- ES should use worst case approach combining earliest year with highest traffic change
- Limitations noted above apply in relation to the study area definition by PCM links only.

#### General - Operational air quality

- Agree that ES should use latest DEFRA EFT at ES stage (which is now version 9). The dispersion modelling uses Outer London Emission Factors and a speed of 20kph for LDVs and HDVs. The ES should explain if this a conservative assumption as a wider range of factors may be appropriate given the extent of the study area. Where appropriate, demonstrate through a sensitivity analysis.
- 2017 noted as worst case year for baseline; this is acceptable at PEIR stage but should be reviewed once 2018 monitoring data are available.
- Scoping opinion requires consideration of non-combustion PM sources as well as direct emissions from vehicle exhausts. The PEIR will use DEFRA EFT for non-combustion sources.
- Brake and tyre wear from on-site vehicles - i.e. aircraft [ICAO emissions databank includes calculation of brake and tyre wear for aircraft - based on maximum take-off weight - Appendix 3.3.32]
- Sensitivity test using CURED emission factors is appropriate.
- Recommend that ES also includes a sensitivity test keeping baseline concentrations at current levels, if trend analysis suggests no significant decreasing trend. (See also notes below commenting on speed and fleet assumptions.)
- Model verification approach using DEFRA TG(16) is appropriate, and has been completed in two stages using a combination of CMS and diffusion tubes (including LA data)
- NO<sub>2</sub> - RMSE in excess of 10% of AQO (>4) (Appendix 9.2.7 and Table 9.3) - not ideal but close enough to 10% to be acceptable.
- Outlier Heston automatic monitor in Hounslow. Made an argument to keep it (would reduce RMSE to <10%) => apply higher primary adjustment factor and predict higher total concentrations. But the results are then compared with DTs with the conclusion that it is performing well on average, and if anything slightly over predicting (worst case).
- Over prediction of NO<sub>x</sub> around motorway is not unexpected. Recommend that at ES stage further splitting of verification factors into urban vs free flowing roads and check that there is no geographical difference e.g. east vs west.
- PM<sub>10</sub> is noted to be underpredicting, site specific reasons identified for each site: local sources (i) dusty roads; (ii) agriculture therefore not appropriate to adjust model outputs [Appendix 9.3.4].
- PM<sub>2.5</sub> – agree there is good alignment without need for adjustment

- The principal of starting a tiered assessment for local air quality, using screening modelling to determine areas with potentially significant effects outside the 'AQO core assessment area', using IAQM criteria for urban roads and DMRB criteria for the strategic road network, is agreed.
- There are concerns with the tiering of the subsequent steps and under representation of impacts outside the core area (see below).
- Interpretation of magnitude of effects using IAQM criteria is agreed and appropriate
- Use of DMRB IAN for significance is not agreed (see below).

#### General – Rail emissions

- The ES states in Table 7.3 that rail emissions have been considered in line with DEFRA guidance TG(16). This is agreed in principle although assessment is limited to heavily trafficked diesel lines.
- Given the sensitivity of the area, and potential for high NO<sub>x</sub> emissions particularly from idling diesel locomotives, sensitivity testing would be welcome to check that the guidance is appropriate.
- The ES should clearly state the source of emission rate used for rail emissions and the assumptions used in determining the fleet composition.

#### General - Odour

- Use of IAQM (2018) guidance is appropriate
- Definition of sensitive receptors is appropriate
- ES should provide further justification on how odour potential has been derived for the variety of sources noted in Table 7.3 item 8.
- Community area definition is unclear
- Qualitative approach to potential for cumulative impacts is appropriate

#### General - aircraft emissions

- The ES should include sensitivity tests to demonstrate that the assumptions applied (para 7.8.4) are robust and reasonably conservative.

General – study area - The Airport NPS para 5.43 states: “Air quality considerations are likely to be particularly relevant where the proposed scheme:

- Is within or adjacent to Air Quality Management Areas, roads identified as being above limit values, or nature conservation sites (including Natura 2000 sites and Sites of Special Scientific Interest);
- Would have effects sufficient to bring about the need for new Air Quality Management Areas or change the size of an existing Air Quality Management Area, or bring about changes

to exceedances of the limit values, or have the potential to have an impact on nature conservation sites; and

- After taking into account mitigation, would lead to a significant air quality impact in relation to Environmental Impact Assessment and / or to a deterioration in air quality in a zone or agglomeration.

The Scoping Opinion stated *“The Inspectorate considers that The Applicant should not apply an arbitrary limit to the assessment area based on previous studies, since the Proposed Development is more extensive and covers a wider geographic area than set out in those studies. The Inspectorate considers that the model extent should be defined by the area over which significant air quality effects arising from the Proposed Development may occur. This should be clearly defined within the ES.”*

- There is a Core AQO Assessment Area with tiered, simplified assessment beyond it which may mean under-reporting or inconsistent reporting of impacts.
- The Core AQO Assessment Area remains as a 12km x 11km grid, which is not centred on the proposed red line boundary for the DCO (Figure 7.1 Volume 2 PEIR Ch7).
- Effects outside this area are dealt with via a tiered assessment using DMRB / IAQM screening criteria depending on the road type (strategic vs urban).
- The definition is deemed to be too limited outside the AQO core area and there are concerns over the consistency of approach and potential for exceedances in AQMA due to use of DMRB criteria on major roads even where they pass through (sub)urban areas.
- There are multiple AQMAs in the surrounding area. IAQM screening criteria specific for roads within or adjacent to AQMAs (i.e. change of LDV flows of 100 AADT, change of HDV / Bus flows of 25 AADT, change of 5m or more in road alignment) should be extended to strategic roads where they pass through urban areas.
- Study area for operational air quality is therefore not considered appropriate to capture all the potential effects of the Scheme

General – Method - The PEIR states *“where changes in traffic flows have the potential to lead to non-negligible changes in air quality, dispersion modelling of discrete PCM road links will be undertaken to assess the likely impact on EU limit value compliance”*.

- By focussing only on PCM links, this may miss critical areas of relevance to local authorities. The M25 is not included in the PCM model, for instance.
- Detailed modelling of receptors using the actual road alignment on links outside AQO core area would be preferable where there are AQMAs on SRN, as use of DMRB traffic screening criterion could be masking the potential for significant impacts. The fine model grid should then be extended outside the Core AQO Assessment Area to ensure consistency and parity of assessment approach to the whole study area.
- The final detailed model for the ES for the NSIP should include all major roads with receptors close to it/its junctions where they are within AQMA.

- Prevailing wind at LHR is not always south westerly (e.g. para 7.10.163); Met office data records show in 2017 it was west south westerly, so the generic dispersion modelling may slightly underestimate effects.
- ES to demonstrate why the worst case for a street canyon is parallel rather than at any other angle relative to the prevailing wind. E.g. a perpendicular wind would create recirculation of pollution trapped within the canyon rather than channelling along it.

General – Method - the national NO<sub>2</sub> compliance assessment (based on national PCM modelling and AURN measurements) allows for determining NO<sub>2</sub> concentrations on a nationwide scale. However, it is not able to reflect local NO<sub>2</sub> concentrations for each individual town or city as accurately as detailed, local scale models. A more comprehensive approach is required to determining areas at risk of non-compliance, using the latest PCM model and applying uncertainty to it to define the detailed assessment area.

General – Method -The assessment areas according to EFT definitions include parts of “Inner London” and “England (not London)”, outside of Core AQO area e.g. on A4/A40 and Slough and Egham, where Outer London factors may not be appropriate as they may receive greater or lesser benefit from London ULEZ and other policy measures. The modelling for the ES should select the most appropriate emission rates and fleets for each area.

General – Method - Average modelled speeds have been applied, whereas a diurnal speed profile would be preferred for the most accurate modelling rather than one average 24h speed. The ES should clarify how congestion and queueing traffic has been dealt with, setting out clearly the basis for professional judgement e.g. DEFRA TG(16).

Figure 7.7 (Volume 2 PEIR Ch7) depicts contours of predicted NO<sub>2</sub> concentrations in the core AQO assessment area with the DCO project in place. There is no associated figure for the ‘without DCO’ case. The ES should show the extent of the change and identify the areas where the change is greatest.

General – Method - Presentation of the dispersion modelling results is confusing (Tables 7.26 onwards). The first three columns (Baseline, Future without DCO and Future with DCO) show the maximum concentration anywhere in the area - not necessarily at the same receptor. The magnitude of change must show absolute values for the same receptor, to be able to determine overall significance.

General – Method - The PCM output has recognised limitations and not appropriate for assessing total concentrations to determine compliance of a scheme at a local level. It could underestimate total concentrations if basing on older ANPS findings.

General – Method - There is currently no assessment of decommissioning impacts; these should be considered.

General – Method -Uncertainty and model assumptions. The PEIR has not adequately demonstrated that certain assumptions are a reasonable worst case; given the geographical and temporal scale of the project, coupled with the level of uncertainty inherent in the air quality modelling itself, the

composition and emissions performance of the road transport fleet, and the reliance on incentivised modal shift through public transport initiatives, this is a key limitation.

General – Method -The CURED results are noted to be generally higher than the EFT; for a worst-case assessment, it is suggested that the ES presents the CURED figures upfront if they are considered to be valid.

General – Method -The future baseline appears to reduce NO<sub>2</sub> by ~12 µg/m<sup>3</sup> in some areas between 2017 and 2022. It is not clear whether this is a realistic level of change given the statement in paragraph 7.9.10. The ES assessment should include statistical analysis of trends in recent monitoring data and include a sensitivity test with future backgrounds if not a significant decreasing trend.

General - Method - The assessment should include sensitivity analyses to test the impacts of failing to meet surface access targets for modal shift and trip reduction.

- How is uncertainty built into assumptions on trip rates and modal shift? What are the bounds of uncertainty?
- What monitoring and feedback mechanisms will be in place? Noting that the key period for air quality compliance is largely during the construction phase (2022-2027).
- Assessment uses DEFRA EFT Fleet Split – the ES should ensure this is representative for the full Heathrow study area. It is likely some roads have a higher proportion of taxis. Location specific data from ANPR may assist in this.
- Need to clarify assumed impacts of intervention measures on fleet composition (Vehicle Access Charge and Heathrow Ultra Low Emission Zone, but also incentivising Public Transport)?

General – Method - Compliance with National Emission Ceilings Directive

- The PEIR states the ES will calculate total emissions of SO<sub>2</sub>, NO<sub>x</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> for sources within the Core AQO Assessment Area. As stated in the PEIR, however, the key emission sources are airport related surface transport which most likely originates some distance from the Core Assessment Area.
- The ES assessment should include an ‘emissions footprint’ of the airport, taking into account the length of the journeys generated.

General – Method - Compliance with Air Quality Objectives. The PEIR reports that there will be substantial and moderate adverse effects in 2022 during the construction phase (at a time when emission factors and fleet splits are more reliable than in future years). These include areas of existing AQMAs or areas where future baseline concentrations are >40 µg/m<sup>3</sup> (in 2022). Multiple properties exist at single receptor locations, due to built-up nature of the area. The property counts and the argumentation is only based on a one year snapshot, not the full duration of the construction period, which the assessment year of 2022 represents.

General – Method - Use of the AddressBase data to support arguments can be misleading.

- The approach underestimates total count of receptors as it does not include recent, new development that has become operational since data published in 2018-19 – and not including planned development e.g. at Brands Hill, Southall Waterside.
- Receptors have not been placed at the façade of buildings but in the centre. This approach can lead to a significant difference in concentrations for kerbside properties. The ES should place receptors at the property façade closest to the main/most affected road or, preferably, refer to this element of the assessment as a more generic consideration of overall exposure.
- Number of receptors: It is considered misleading to cite the total number of receptors in negligible locations (145,000) to show that on balance the development would not have a significant effect, when different approaches have been applied in different areas. There are over 100 receptors with moderate to substantial adverse effects, many of which are in areas which currently exceed the air quality objectives.
- In Table 7.44 the count of 'substantial adverse' is 1 in 2022, but the table for Brands Hill (Table 7.42) shows 2 – this is without including new housing developments at Brands Hill

General – Method - The assessment should include consideration of the relative increases in exposure to PM2.5.

General - Method - The interpretation of significance for the ES should not use the DMRB IAN, which is specifically for strategic roads whereas IAQM is for land development. The PINS comment with regard to applying the DMRB criteria was to identify the ARN, not significance. The DMRB does not consider changes where the total concentration is below 40 µg/m<sup>3</sup> and is not considered appropriate in this circumstance.

- Paragraph 7.10.136 states that IAN 174/13 is not generally considered to apply to a construction phase as it is temporary and therefore doesn't affect the long-term ability to meet the AQO or limit value. The nature and scale of the construction phase is substantially different to HE projects for which the IAN was designed, in that the construction phase will span several years over which compliance with EU LVs is required by law. Therefore, it does affect the ability to meet the AQO or Limit Value. The IAQM guidance should be used to interpret significance of construction impacts.
- Table 7.46 presents magnitude of change by year in locations >40 µg/m<sup>3</sup> or <40 µg/m<sup>3</sup>. It doesn't appear to include the modelled increase in Brands Hill (up to 3.0 µg/m<sup>3</sup>). It uses DMRB criteria to define small (0.4 µg/m<sup>3</sup>) rather than IAQM in which case it would be 79 address points above 40 µg/m<sup>3</sup> (a point which is overlooked below). The assessment should identify more clearly for the reader where these locations are.

Table 7.47 reports on overall evaluation of NO<sub>2</sub> significance with reference to EIA Directive questions:

- Is there a large change in environmental conditions? The assessment reports that the changes are only small where AQO exceeded, however a medium change (3.0 µg/m<sup>3</sup>) was modelled at Brands Hill. There are also large changes at other locations where the AQO is

not exceeded and these are currently not considered due to the application of the DMRB IAN.

- Will it continue for a long time? The assessment states no, impacts are only in 2022. This is not correct, as 2022 is a representative assessment year for the duration of the construction phase. No information is presented for intervening years 2023, 2024, 2025 or 2026.
- How many people will be affected? The assessment states only 33 of the Address Points are predicted to experience small change where AQO exceeded already in 2022. This is not correct - it only looks at the core area and uses DMRB screening criteria to define 'small' (would be at least 79 if IAQM guidance were applied). See above re. medium change modelled at Brands Hill.
- Impacts on designated sites? Reported as N/A as the assessment hasn't yet considered these.

General – Method - Before drawing a conclusion of “not significant”, more complete information is required on the extent and duration of change and uncertainty in several of the model assumptions/compliance assessment. If the ES takes the approach of determining significance on balance of number properties with increase/decrease, this should not detract from the need to mitigate residual increases which may lead to an exacerbation of an existing exceedance or creation of a new one.

General – Method - Compliance with EU LVs (PCM)

- The DCO boundary is surrounded by AQMAs. There are multiple road links within the surrounding area and Greater London Zone, which currently exceed the EU Limit Values and for which compliance is predicted to occur between 2022 and 2029. Delaying compliance on any of these road links would be in breach of the terms of the ANPS, which does not consider a zone as a whole).
- The ES assessment should include sensitivity analyses to show the impacts on results of future background assumptions, and future projections for fleet composition / vehicle emissions should they prove to be optimistic – i.e. assuming little/no improvement in emission factors over the short term.

General - Method - The base position which supported development of the ANPS was set out in a DfT paper, identifying PCM Link 70181 (on the A40) as the most constrained in the London Zone, with compliance originally predicted by 2026. DfT (2017) estimates that Heathrow Expansion would increase NO<sub>2</sub> by 0.3 µg/m<sup>3</sup> on this link in 2026 and 2027. The latest PCM projections now estimate that the same link will comply with the NO<sub>2</sub> EU LV two years later, in 2028, with a concentration of 40.2 µg/m<sup>3</sup> (rounded down to 40 µg/m<sup>3</sup>).

- An additional 0.3 µg/m<sup>3</sup> on this link as a result on expansion at Heathrow could give a total concentration of 41 µg/m<sup>3</sup> (rounded) which would delay compliance.

General – Method -The methodology used within the PEIR to assess compliance with the EU Limit Value is less detailed than to the process that Local Authorities have been required to follow, in undertaking feasibility studies following publication of the UK NO<sub>2</sub> Plan.

- PCM links have been modelled only within the core AQO assessment area, and only at midpoints rather than along length of the route. Concentrations can change markedly along the length of road links, and on different sides of the road, depending on their relative location compared with prevailing winds and this could underestimate results.
- The assessment relies on the PCM model, intended for national level modelling, using national level fleet splits and traffic data. Local authorities have had to reassess the baseline, using detailed modelling, based on locally derived ANPR data, and considering all road links.
- Impacts beyond the core assessment area are assessed qualitatively only - using demand forecast information from the surface access modelling.
- No uncertainty / sensitivity analysis appears to have been undertaken.
- Local studies under the UK NO<sub>2</sub> Plan have shown that roadside concentrations can vary by up to 4 µg/m<sup>3</sup> depending on local fleet split and emission factors. In relation to the National NO<sub>2</sub> Plan, the High Court stated that the Secretary of State must: (i) aim to achieve compliance by the soonest date possible; (ii) choose a route to that objective which reduces exposure as quickly as possible; and (iii) take steps which mean meeting the limit values is not just possible, but likely.
- The assessment focusses entirely on whether the DCO creates or delays compliance of a 'non-compliant zone'. This is an extremely narrow interpretation of the ANPS requirement (para 5.42) to be "compliant with legal obligations that provide for the protection of human health and the environment". Indeed, paragraph 5.43 references: "(i) consideration of AQMAs, roads identified as above limit values, nature conservation sites; (ii) effects that may bring about need for new AQMAs or change the size of an existing AQMA or bring about changes to exceedances of limit values, or have potential to have an impact on nature conservation sites; and (iii) significant effects in relation to EIA, and or to a deterioration in air quality in a zone or agglomeration."
- Under the EU Directive, Member States are required to meet limit values in all outdoor areas (excluding certain workplaces). However, they are not required to report air quality in all of these areas due to different sampling and reporting requirements. Member States must split their areas in to zones and agglomerations, based on population density, and report on compliance (or non-compliance) for each zone / agglomeration.
- The approach taken in the PEIR effectively assesses whether the DCO proposals would affect the way in which the UK reports compliance, not whether it complies with the Directive itself. Following the High Court decision, the Secretary of State is required to comply with the threefold obligation stated above (as soon as possible, reducing exposure as quickly as possible, and that meeting the limit values is not just possible but likely).
- The results of the assessment predict that the effects of Heathrow Expansion will result in non-compliance in 2022 on PCM link 36309, which would otherwise have complied with the EU Limit Value. This is in breach of the threefold obligation, and therefore the ANPS requirement of not affecting legal compliance (para 5.42) is not met.

#### General - Mitigation measures

- The ES should be clear about the assumptions that have been made in the assessment regarding the effectiveness of measures intended to change (i) the number of vehicle trips and (ii) the fleet composition (affects both the VAC and HULEZ, but also EV incentivisation and staff travel plans)
- HULEZ - Measure is not assessed in the PEIR. Should provide further information on how it will be considered in the ES, e.g. assumptions about levels of compliance, ringfencing of funds, what/whether monitoring and control systems will be in place to ensure it is delivering the compliance assumed [Ref. EMG - Monitoring Reports and Independent Scrutiny Panel]
- Terms "broadly mirror" London ULEZ – the ES should be clear on how it is different to the London ULEZ. Evidence should be provided that the LEZ will not displace air quality effects out from the airport and into surrounding communities
- Further information should be provided on the extent to which funds will be ringfenced, and the type of monitoring and control systems in place to ensure that the level of trip reduction assumed is realised [Ref. EMG - Monitoring Reports and Independent Scrutiny Panel]

#### General - Mitigation Measure - Onsite Emissions Runways

- Further information should be provided on the assumptions that have been made regarding the extent of use for the following measures: Are these potential additional benefits, or have they been built into the assumptions? What are the future estimates?
- Design of taxiway to minimise time aircraft occupies runway
- Fixed electrical ground power to minimise need to use auxiliary power units (APU) whilst on stand
- Pre-conditioned air for new aircraft stands "where there is a clear business case and environmental benefit, given the intended occupancy of the stand"
- Tariff structure including landing charges
- General point – HSPG is not clear if adequate attention has been given to the 50% increase in time anticipated for each ATM to move on the ground between terminal gate and runway – average increased from 10min to 15min. Pollution and noise increase for each ATM – with number of ATMs increasing by some 60%

General - Mitigation Measure - Onsite Emissions EV infrastructure. Various measures are included. The ES should clarify and justify the assumed proportion of EV in fleet mix over time

General - Mitigation Measure - Onsite Emissions Rail. The Railhead will be used for delivery of bulk materials and for construction. It is not clear if these rail movements were included in modelling assumptions - diesel locomotive emissions will result in high NO<sub>x</sub> concentrations close to the track"

#### General - Mitigation Measure - Onsite Emissions Construction emissions

- Further information should be provided on the assumptions made regarding construction fleet mix and confirm whether any EVs been assumed.

- "Consideration will be given to the use of low emission plant and machinery, including the use of EVs where reasonably practicable"" not accepted as weak wording with no firm commitment
- NRMM only mentioned once in embedded measures section 7.5. That would mean Stage IIIB would apply from 2020 but potentially not Stage IV; note, Stage V applies to new engines from 2019. The commitment as it stands is in line with Greater London SPG but not best industry practice (see below).

#### General - significance of adverse and beneficial effects

- Construction / operational activities (Table 7.52) – there is not enough information provided at this stage to be able to conclude no significant effects given key concerns about assessment area.
- NO<sub>2</sub> – substantial adverse impacts reported in 2022 only. This does not highlight the potential for substantial adverse effects throughout the construction period (as 2022 is the only year modelled). Moderate adverse effects are noted for other years. The approach of using AddressBase receptor counts within AQO only will have underestimated the number of receptors where effects apply as outside the core area, only discrete points have been modelled.
- PM<sub>2.5</sub> - assessment reports no exceedances of PM AQOs but there is no information on exposure reduction, for which there is an objective in the national AQ strategy.
- PCM compliance – the focus of the air quality assessment in terms of the justification of compliance looks only at compliance of “zones”, which is the means of reporting under the EU Directive, not compliance with the actual terms of the Directive, as highlighted by the High Court Judgement. Further limitations of this aspect of the assessment were discussed above.
- The approach is not considered to be in line with the ANPS which states air quality is “particularly important” if a scheme “would have effects sufficient to bring about the need for new Air Quality Management Areas or change the size of an existing Air Quality Management Area, or bring about changes to exceedances of the limit values”. This statement does not limit the assessment to reporting zones and agglomerations.
- Paragraph 7.7.32 appears to be at odds with 7.7.35 – unclear how IAQM guidance and DMRB guidance on significance interact, particularly with regard to the definition of what is a negligible change? A more precautionary approach would be welcome, which does not entirely disregard changes < 40 µg/m<sup>3</sup>

The model should be subject to sensitivity testing covering a range of areas of uncertainty including:

- Construction phasing to demonstrate reasonable worst case in 2022
- Screening criteria applied to determine road network outside core AQO
- Suitability of emission factors, speeds, orientation and other model inputs/assumptions
- Effectiveness of mitigation

The final CEMP and OMP content should be agreed in consultation with HSPG.

- Baseline and post opening air quality and traffic monitoring would be welcome to verify legitimacy of future year estimates
- HAL to extend their NRMM commitment for construction emissions and follow industry leading example set by HS2

The applicant should consider the need to future proof the development in light of DEFRA's 2019 Clean Air Strategy and recent announcement by Minister for more stringent legislation on particulate matter.

- An emissions damage cost approach would be appropriate and could be linked to emission estimates required to demonstrate compliance with the NECD. It should consider the full length of trips made by road, beyond the "core" assessment area which does not include all affected areas.
- Use of air quality neutral / emissions damage cost approaches (Policy 7.14 within the London Plan and Slough's draft Low Emission Strategy), should be used for both the construction and operation phases (particularly in light of the wide area that may be affected and thus population exposed, in particular to PM2.5).
- Attributing a monetary cost to the residual emissions damage could then support additional mitigation across the surrounding area.

General - Local air quality compliance

- Given the temporal and geographical scale of the DCO proposal, and the clear direction within the ANPS, the ES assessment should include quantitative modelling of the impact on links exceeding the EU Limit Value in 2022 across the traffic modelled area. This should include quantified assessment of the impacts on the A40.
- Within the PCM model there are a wide range of links that exceed the EU Limit Value in 2022 and become compliant in different years between 2022 and 2028. The ES assessment should ideally present impacts for the key compliance period 2022-2027 inclusive. A temporal assessment of the impacts is key to understanding whether changes, even slight changes, could delay the compliance dates of separate road links. the impacts on delaying compliance. (Note – construction phasing should also be considered, identifying whether activity will be constant or more intensive in different areas throughout the period.) In summary,
  - i. Extend compliance assessment to all areas where DMRB/IAQM thresholds are breached (not just the Core AQO Assessment Area and Central London, and not just PCM links);
  - ii. Estimate concentrations along the full length of PCM links, including at junctions and links outside the core AQO.
  - iii. Review screening criteria to check all links exceeding in 2021 (not 2022, to give some bounds of uncertainty and make sure all that will exceed or be close to exceeding in 2022 are considered);

- iv. Assessment for all years 2022 to 2027 inclusive - critical to see if the compliance year / likelihood is impacted;
- v. Final approach for the ES should be agreed with local authorities to ensure that all areas of concern for compliance, and not just those based on PCM model within the Core area, are considered. This would bring the approach in line with LA requirements set by DEFRA when assessing CAZ, to meet UK's legal obligations on air quality.

#### General - Mitigation

CEMP/OMP monitoring, mitigation and reporting to be agreed with local authorities and reviewed on a regular basis to ensure it continues to be appropriate. The applicant should adopt more challenging requirements for NRMM than in the London SPG as per HS2, which applied across the whole of the route including outside of London. As some of the works associated with HAL are outside London, a commitment for GLA NRMM standards to apply everywhere should be adopted along with best practice/highest standards (Stage IV/V) in the most sensitive areas.

#### General - Odour mitigation

Mitigation for odour should include the following measures:

- A minimum commitment in CEMP should be for regular sniff testing at boundary
- Good practice 100m buffer between residential properties and stockpiled material
- VOC measurements using Tenax tubes– 4 week baseline and 4 weeks at start of works then review need to continue in case odours detected
- Excavate smallest area practicable at a time to reduce surface area for evaporation
- Plan works with reference to meteorological conditions, with most potentially odorous material excavated during favourable wind directions/wet weather to aid suppression.
- Complaints procedure to be in place, regular community liaison, odour diaries
- Careful use of perfumed odour sprays, trial with community involved, limit water consumption

## 6. Proposals for Mitigation and Compensation

Page 8 – 3rd para – negative impacts need to be fully addressed regardless of the economic benefits of the project.

P9 – HPSG would have expected a much fuller suite of mitigation (and compensation) measures to be identified at this statutory consultation stage. HSPG want to engage with HAL regularly well before DCO submission on identifying and securing the mitigation proposals.

P9 – the first para states that HAL’s mitigation and compensation proposals may change slightly after testing (ie examination of the DCO). HSPG consider that the proposals (and number of proposals/requirements) may change significantly after examination given the lack of detail on mitigation proposals thus far and the extent of work that it is quite clear will take place well beyond the DCO examination.

P10 and 11 – set out a summary of mitigation proposals by topic. Many if not all of these examples are not essentially mitigation proposals, they are key elements of the expansion project, and in part required by the ANPS. For example, relocation of community facilities that would be lost, measures to improve access by public transport, delivery of a Covered River Corridor, and measures to reduce carbon emissions and climate change impacts must surely be considered as key elements of the scheme. Detailed mitigation (and compensation) proposals should then follow as an assessment of the impacts of those and all scheme elements.

There is also little mitigation detail to date on some of these proposals, for example the Code of Construction Practice is relatively high level and contains a number of general, standard measures and procedures rather than detailed mitigation proposals.

P12 – the response to the Community Fund proposals is expanded on further below, however, the document states here that Community Fund could include “addressing residual effects and unanticipated local impacts which we cannot anticipate when we submit our application.” As stated above, it is considered imperative that impacts are identified as much as possible now (indeed much more detail on impacts and mitigation proposals was expected during statutory consultation) with appropriate mitigation proposals, rather than at DCO submission stage (or beyond).

P13 – states that spending on the Community Fund could start during the construction period, or from when the new runway opens. HSPG considers that it is imperative that the Fund is operational from DCO consent, to cover early works and the start (and then duration of) the construction period. The construction period is likely to be one of the most impactful elements of the scheme, particularly the major period between 2020 and 2035, and as such the community funding needs to be available after DCO consent.

P14 to 17 – proposed Property Policies are summarised. These are subject to more detailed AEC documents. These policies focus on the acquisition of properties in the CPZ, WPOZ and Draft DCO limits area. It would be helpful to consultees to know that there are other sources of compensation available with regard to blight and loss of value, which are referenced in the ANPS.

P20 – Noise Insulation – are these the correct noise metrics? Cross reference to the PEIR. Are these relevant for road, rail and construction noise too, and operational noise too (eg planes leaving terminal buildings, on taxiways etc)?

P21 – Action levels for noise insulation schemes – this doesn't appear to factor in scenarios where a location may be affected by one than one noise source – ie possibly aircraft noise and road and rail, or all three including construction noise, which may mean that some locations would fall within Scheme 1 for example.

P23 – noise contours – should these be updated more regularly than every 5 years? Who will have oversight of the review and assessment of the noise contours? HSPG suggest that noise contour reviews need to be independently assessed and validated/approved.

P26 – for those people living in listed buildings and conservation areas, HSPG would suggest that HAL should make the applications for listed building consents and conservation area consents if needed for noise insulation schemes, rather than the onus being on owners/occupiers. An Independent Panel is suggested to consider bespoke noise insulation schemes – there is no other reference to this Panel. What is the purpose and remit of this Panel, and who would it consist of?

P28 – Community Fund - 3rd para – please refer to the Overview and Summary comments above. The CF should not be used for mitigation – mitigation should be wrapped up in the DCO.

P31 – the CF should relate mostly to environmental mitigation. Reference for use for Heathrow Academy job initiatives, skills and apprenticeships is not considered appropriate, these should be part of other commitments by HAL as part of the expansion scheme (and in part are a requirement of the ANPS), and that the reference that the CF may be appropriate to support the enhancement of any services which are required as a result of the airport growing is not considered appropriate – additional services required due to the airport expansion project should be mitigated as part of the DCO consent with relevant review mechanisms.

P32 – extent of area for the Community Fund – this should be set based on a detailed assessment of all impacts and identification of all necessary mitigation having been carried out, followed by a resultant assessment of community fund requirements over and above mitigation and subject to detailed consultation.

P35 – ideas for the Community Fund – again, these reference mitigation which should be wrapped up as part of the DCO (eg the suggestion for investment in transport, such as adding public transport routes to enhance connections across the area or dealing with unforeseen impacts such as higher traffic volumes).

P36 – HSPG agrees that the size of the Fund should not be decided as yet, until the full impact of the project is known.

P36 – the duration of the Fund should not be time-limited. Airport expansion is long-term, with later phase 'end state' being around 2050. The Fund should be in place at least until then, and to continue following that to cover impacts from those later stages, and to cover the management, maintenance and continuation of projects funded between DCO consent and end state (eg public realm and recreational facility projects). There could be an element of phasing to the Fund.

P38 – HSPG agrees that a clear governance structure needs to be in place for the CF, with a body having oversight of the overall Fund and its long term planning, the allocation of spend, and monitoring and reviewing individual projects. HAL should obviously form part of this body, however, it is considered that in essence the body should be independent and should oversee HAL's monitoring of 'residual effects' of the project and spend on those impacts.

P40 – although match funding may be acceptable in some instances, in the main it is considered that the CF should be mainly funded by HAL (and passenger levy and airline charges) rather than sources of funding from others (such as public funding) given the Fund is there to address the impacts of airport expansion.

## 7. Noise Insulation Policy

Further clarification is required to confirm if testing or inspection on completion would include noise testing, and if so, what the design target would be. Further clarification is also required on how properties which already have noise insulation would be considered in cases where the project would generate a noise increase. The policy states: “The schemes will not be provided to properties that currently meet or exceed the benefit of the eligible package to avoid disruption without benefit, or even degradation, of existing properties.” This suggests that no action would be taken and result in unmitigated residual impacts.

P20 – Noise Insulation – are these noise metrics appropriate? Are these relevant for road, rail and construction noise too, and operational noise too (eg planes leaving terminal buildings, on taxiways etc)?

P21 – Action levels for noise insulation schemes – this doesn’t appear to factor in scenarios where a location may be affected by one than one noise source – ie possibly aircraft noise and road and rail, or all three including construction noise, which may mean that some locations would fall within Scheme 1 for example.

P23 – noise contours – should these be updated more regularly than every 5 years? Who will have oversight of the review and assessment of the noise contours? HSPG suggest that noise contour reviews need to be independently assessed and validated/approved.

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## 8. Economic Development Framework

### Executive Summary

Para 2 – reference to the ANPS and economic benefits, HSPG support the benefits that airport expansion will hopefully bring and want to work with HAL and others to maximise these. However, HSPG economic benefits, no matter how widespread and comprehensive, should not be weighted favourably if all other aspects of the scheme, eg environmental, surface access, are not addressed appropriately. This will be HSPG’s position to the Examining Authority at DCO examination.

Para 2 – to note that the ANPS references HAL’s commitment to apprenticeships at para 5.263 as “the Government notes that, with expansion, Heathrow Airport has publicly committed to ensuring 10,000 apprenticeships *before 2030.....*”

Page 7 – What is a) HAL’s offer and b) HAL’s ‘ask’ to support the mutually-beneficial relationship with those businesses clustered around the airport?

Page 7 – How will adverse economic effects be identified (prior to DCO and throughout development), and how will HAL work to mitigate them?

Page 8 – What is the improvement and expansion plan for Heathrow Employment and Skills Academy, and how will it be integrated or collaborate with local further education (FE) and training programmes?

Page 8 / 9 – As the Business Summit programme expands in scale and geography, how will HAL implement programme evaluation to improve outcomes, not just engagement?

Page 9 – What is HAL’s ‘ask’ of central and local government to ensure that the benefits of FDI, trade and tourism can be captured at the local and regional level?

Final para – HSPG would have expected a full EDS to be consulted on at this stage, not solely a Framework with objectives and principles, given that DCO submission is not a consultation stage. HSPG queries when it will be engaged on the final EDS – HSPG is very keen to work with HAL on this to ensure it is as comprehensive as possible.

### Introduction

Para 2.1.1 – comment as above in relation to ANPS reference to HAL’s commitment on apprenticeships.

Para 2.2.2 – under ‘Preliminary Assessment’ – this states that an assessment of socio-economic and employment issues has been undertaken in the PEIR. A full assessment will be completed for the Environmental Assessment which will inform the final Economic Development Strategy. HSPG would have expected a full assessment to be complete for consultation and review at this stage, given DCO submission is not a consultation stage. HSPG queries when this full assessment will be complete and when it will be engaged in that assessment, well before DCO submission – HSPG is very keen to work with HAL on this assessment and the final EDS to ensure it is as comprehensive as possible.

Para 2.2.3 – bullet 5 – displacements and multipliers – these figures should be made public. publicly. It would be helpful to know which factors HAL used for calculating displacement and multipliers and whether they are in line with particular benchmarks.

Para 2.2.5 -- would benefit from clarity regarding how those businesses/sectors which will be disadvantaged in construction years and in the long term will be identified. A monitoring and evaluation framework may be required.

Para 2.3.2 under 'Implications for the Economic Development Framework – high level early assessment on apprenticeships. ANPS requires more detail. When and how will HSPG be engaged.

Para 2.3.4 –what conversations and considerations have taken place regarding usage of increased local tax revenues, and when will HSPG be engaged in this conversation?

### Chapter 3 – Economic Context

Para 3.1.5 – have HAL engaged with Oxford Economics to factor in HAL's projected increase in jobs with airport expansion, ie does Oxford Economics' projection for employment factor in Heathrow expansion? Also, is any further detail available regarding the types of jobs expected to grow (sector, occupation, skills level, etc)?

### Chapter 4 – Education, Employment and Skills.

Para 4.1.3 -- Has HAL given any further consideration to what the impacts of new technologies and ways of working will be in construction (e.g., modular construction and BIM).

Para 4.1.4 – same comment as above for para 2 of the Executive Summary.

Para 4.2 – When will specific plans for the Heathrow Skills Taskforce be available that translate the high-level recommendations from the Skills Taskforce report into specific actions with identified owners and metrics for assessing performance?

### Para 4.3 – Leadership

Paras 4.3.1 to 4.3.3 - the People Leadership Forum (PLF) has been recently created. It would be helpful to describe how the PLF is working in practice and what results are being seen. HSPG would like to engage with HAL going forward on understanding the operation and results of the PLF.

Para 4.3.5 – under 'Strategic Skills Forum – Construction (SSFC) – similar comment as above for the PLF, HSPG would like to engage with HAL going forward on understanding the operation and results of the SSFC.

Para 4.3.6 – under 'Skills Implementation Steering Group (SISG) – HSPG welcomes the creation of the SISG and looks forward to meaningful engagement going forward.

### Para 4.4 – 'Employment and Skills Academy –

Paras 4.4.1 to 4.4.5, under 'Heathrow Employment and Skills Academy, HSPG recognises the good work to date by HAL through the Academy on employment and skills development including apprenticeships. Has there been any evaluation of the programme to suggest what is working well

and not? It would be good to know prior to expansion so HSPG can collaborate more with local services. For example, there may be underperformance for placing people from deprived communities that could be improved upon.

Para 4.4.6 under 'Employment and Skills Proposals', and 'Enhanced recruitment and job brokerage', HSPG supports expanding the current activities of the Academy, and the need to work more collaboratively with key stakeholders. HSPG would like to work closely with HAL on expanding these activities, particularly in matching up labour and skills supply with demand created by airport expansion.

Para 4.4.9 under 'Address Barriers for Disadvantaged Groups' – HSPG supports HAL's intention to develop a community-based programme of support to tackle barriers and those targeted with the tools to gain access to services such as the job brokerage. How will HAL build off existing local government programmes which have knowledge of local communities and links to other social services?

Para 4.4.13 under 'Upskilling the Workforce', HSPG supports the identification of transferrable skills across airport operations.

Paras 4.4.14 to 4.4.16, under 'Develop the Skills Infrastructure', HSPG supports the establishment of a skills partnership between HAL and a number of colleges and universities. HSPG would like to understand how this operates and its results/successes, and the opportunity to engage with this.

Para 4.5 – Apprenticeships – as above comment under para 2 of the Executive Summary, regarding the ANPS reference to HAL's commitment on apprenticeships.

HSPG would expect more detail at this statutory consultation stage on how HAL will deliver the apprenticeships it has committed to and against the content of the ANPS, rather than a commitment to produce an Apprenticeships Plan that will form part of the EDS submitted for DCO consent, given that submission is not a consultation stage. HSPG would like to understand when and how it will be engaged on the Plan well before DCO submission.

The ANPS under para 5.265 states that "Heathrow Airport should put in place arrangements for the delivery of the 5,000 new apprenticeships which it has publicly stated would be created. Heathrow Airport should set out the timetable for delivering the apprenticeships, provide information on the areas and skills to be covered by these apprenticeships, the breakdown between opportunities to be created within the core airport and those being offered by companies within its supply chain and other airport-related businesses, and the qualification level and standards which they will need to achieve. Heathrow Airport should also set out how it will publicly report progress against the target."

In general, we value HAL's focus on enabling more vulnerable people to access sustainable and rewarding employment and would suggest that the Apprenticeship Plan defines what percentage of the 10,000 apprenticeships will be allocated to train and support vulnerable young people and adults in pre-apprenticeship schemes and directly in apprenticeships. Also, how will HAL continue to support these individuals into sustainable employment either as part of its own workforce or with local employers?

We recommend opening up a dialogue with other parties about skills including local authority education sectors (not just those within the Heathrow core study area) and with the wider construction/infrastructure sector such as the Strategic Skills Forum for Construction to:

- identify opportunities to expand and grow leading-edge education and training provision for construction at all levels/programmes, within HSPG and wider institutions and providers (beyond the current skills partnership group) and in collaboration with existing programmes;
- to universally make the construction sector a highly attractive career proposition for young people and adults, including those from diverse backgrounds, and providing clear pathways to career progression; and to
- understand the impact of population growth (both transient and permanent workers) on local authority areas (not just the core study area) and its resources. This needs to be done in collaboration and within the context of the wider needs of other major future infrastructure/built environment projects in the South East.

Para 4.5.5 – the Strategy should recognise whether there has been challenges filling and levels of apprentices within any of the programmes and develop strategies for providing a better match between demand from employers and supply of labour willing and equipped to fill them.

Para 4.5.6 – under ‘Proposals’ – HSPG supports the 6 proposals set out under this para and would like to work closely with HAL to help implement these training and apprenticeship proposals.

Para 4.5.7 – as per the above comment under para 4.5, HSPG would like to work closely with HAL on the Apprenticeships Plan well ahead of DCO submission, and to input and understand the workforce profile being developed.

Paras 4.6.3 and 4.6.4 under ‘Education’ – HSPG would like to understand the effects and results of the existing Primary and Secondary School Challenges, and the annual Jobs, Apprenticeships and Careers Information Fair, and if these are to continue going forward to input into these to add value if possible.

HSPG would like to see more detail and a timeline for how Heathrow will promote the careers available at the airport more generally as part of our school education programmes. We are particularly looking for clarification on how this work is to be funded as part of school education programmes.

Paras 4.6.5 to 4.6.11 – ‘World of Work’ – HSPG is supportive of this programme which HAL is developing and would appreciate working closely with HAL in its further development.

HSPG would like to see detail on how Heathrow will implement work experience opportunities guarantee work placements for young people, with fast track opportunities on to apprenticeships for those who wish to take that route.

HSPG would like more detail on how Heathrow intends to work with HSPG members and their job brokerage services to support local people accessing opportunities.

Chapter 5 – Business and Innovation –

Para 5.1.8-10 – Again, it would be beneficial to understand whether any evaluation has taken place which provides feedback regarding the effectiveness of the programme so it can be continuously improved as it expands.

‘What Works Centre’s’ has some particular advice on procurement -

<https://whatworksgrowth.org/resources/local-procurement-1/>

Para 5.1.12, under ‘SME engagement’ and ‘Proposed Activities’, HSPG supports the development of a supplier engagement strategy, and would urge that such a strategy prioritises SMEs within the HSPG area, given the impact of expansion on the area and that SMEs here provide added value given their understanding of the services and the quality that HAL and other large companies require.

Para 5.1.13 – Table 2 – SME challenges and potential measures – HSPG supports the identification of challenges and measures and would like to work with HAL closely going forward on further on developing and implementing the SME strategy. HSPG looks forward to work further with HAL on the Task and Finish Group on this topic to develop proposals on the SME ‘offer’. An additional proposal that should be considered is introducing a system of prioritising local (HSPG area or similar) companies in procurement, provided of course that such companies meet procurement requirements. Given the very significant impact on expansion on the HSPG area this would be a tangible benefit to the economies within that area.

HAL need to commit to enhanced engagement with, and opportunity creation for, the lower-tier supply chain to Heathrow of SMEs through practical means including, but not limited to, a dedicated supplier portal for HAL tier one and tier two opportunities. Mitigation measures against the impacts on SMEs during construction and in general (eg being displaced) need to be identified and developed.

HAL must recognise the importance of new and sustainable businesses through the creation of affordable workspaces in the HSPG area with capacity to support MSMEs (Micro SMEs) through incubator and accelerator initiatives. A sector approach to business support will be vital, and HAL must ensure that targeted support is made available to businesses in, for example, the Transport & Logistics, Hospitality & Tourism, Low Carbon, Green & Sustainability industries

Para 5.2 – Logistics Hubs – it would be good to understand more, through an analysis of the distributional impact on the Hubs, and how this would affect opportunities in the HSPG area.

Para 5.3 – Innovation – HSPG is supportive of HAL developing its innovation programme and HSPG would appreciate working closely with HAL on this. It is supportive of the Centre of Excellence for Sustainability which is in operation, and the proposal for developing a Sustainable Airport Research Centre proposed through the Innovation for Sustainable Airports Report (ISA), a partnership led by Brunel University. HSPG would like to be engaged in developing the Research Centre project, particularly as this could be a mechanism for wider economic development and creation of high-level jobs. HSPG also recommends that HAL help take forward a number of other recommendations in the ISA report.

Para 5.4 under ‘Inward Investment’ – there appears to be a lack of a detailed assessment and related actions in relation to catalytic impact of Heathrow expansion on the wider area, including the HSPG area. The assessments and proposals within the EDF are very much directly Heathrow focussed.

HSPG would like to see a detailed assessment on the catalytic impact of Heathrow expansion and the opportunities it would offer and how these could be captured. This is a key element for the expansion project and its success, particularly in the economic and business development of the HSPG and wider area.

Para 5.6.3 – under ‘Managing adverse impacts on businesses’, HSPG is concerned on the effects of the project on existing businesses that would be negatively impacted. This para states that the EDS will set out how HAL will seek to minimise the effects on displaced businesses. HSPG would have expected such information at this stage of statutory consultation given DCO submission is not a formal consultation stage and would like to know how and when it will be engaged on this well before DCO submission.

HSPG would expect a detailed suite of proposals to help businesses that will need to relocate and need assistance in re-establishing, and also those businesses negatively impacted by the lengthy construction process, particularly those impacted by traffic and environmental impacts. Through the substantial redevelopment and land-use planning process, new floorspace could be provided for business start-ups and SMEs.

#### Chapter 6 – Governance and Delivery

Paras 6.1.1 to 6.1.9 - in general, HSPG would like to engage closely with HAL on developing the EDS and related workstreams and their delivery and monitoring (notwithstanding earlier comments that a detailed EDS should be subject to AEC now), and simple structures for partnership working and governance across a number of fields.

The Airports NPS states at para 5.267 that “the mechanisms for enforcing these provisions should also be demonstrated, along with the appropriateness of any identified enforcing body, which may include the Secretary of State.” The mechanisms are not set out in the EDF, HSPG would want to work closely with HAL and other parties on a body that monitors and reviews the implementation of the EDS and related workstreams; the role of such a body needs to include to ensure HAL keeps to its commitments and enforce if not as suggested in the ANPS, in a similar way to HAL’s Environmentally Managed Growth proposals (albeit that HSPG considers these proposals need to be developed to allow for enforcement, please see HSPG’s response to EMG).

## 9. Environmentally Managed Growth

### Executive Summary

We agree that any monitoring function should have statutory powers of enforcement provided via the DCO.

### Chapter 1 – introduction

Para 1.1.16 - there is reference to envelopes being set which will not be exceeded in “the long term”. Any monitoring and enforcement regime should have clear interim targets set and monitored, and enforcement actions taken early if required.

Para 1.1.16 - if envelopes are to be set, it would be good to also have interim caps on the growth in passenger numbers set, to ensure that environmental targets are on track before further growth is allowed.

### Chapter 2 – Managing Airport Growth

Para 2.17 – the reference to s106 clauses makes it clear that as the detail is worked through the linkage between the discharge of planning conditions and the role of Local Planning Authorities needs to be aligned and made clear. HSPG is keen to engage on these proposals.

Para 2.2.3 – although the principle of encouraging further environmental improvements seems sound, HSPG would suggest that a combination of interim ATM caps or “checkpoints” alongside environmental envelopes would provide more security for local communities.

### Chapter 3 – environmental limits

As a principle, we would encourage HAL to do the maximum possible to mitigate and reduce environmental limits, rather than setting envelopes based on the minimum set out in policy.

Para 3.15 – see point above on the link between LPAs and planning conditions at para 2.17

Para 3.6.4 – we do not believe the community compensation fund should be used to mitigate local impacts which are as a direct result from expansion. Instead it should be used for additional compensation to improve the quality of life for local residents to compensation for the cumulative impacts through both the 30 year construction period and the increased operations. Any unforeseen impacts should be dealt with through s106 and other planning conditions.

Para 3.6.5 – This is a precise example of what should not be paid for via the community compensation fund. There should be review mechanisms built into the DCO permission and via s106 which ensures that the development and HAL pay for any additional public transport if the modelling is proved to be wrong. This is not a use of the community compensation fund.

### Chapter 4 – monitoring growth and operation

Para 4.1.1 - HSPG would like to work positively and jointly with HAL to work up the details of monitoring in their forthcoming “environmentally managed growth – our monitoring” document

Para 4.1.2 – monitoring information should be available real time (or as close to as possible), and we agree this should be published on HAL’s website. A formal annual report is useful, but interim reports (potentially 6 monthly or quarterly) should also be produced which highlight any risks, exceedances and the direction of travel to meeting limits.

Para 4.1.3 – the monitoring report should have detailed local data, and monitoring reports should highlight where limits are exceeded, or in in line to be exceeded for any local areas. Monitoring and enforcement should ensure that impacts are not “averaged out”. If limits are exceeded in a local area, mitigations and controls should be put in place, even if limits are being met or reduced elsewhere so the “total” limits are met.

Section 4.2 - It is right that any monitoring function should be entirely independent from HAL. In addition, the costs of any function to new or existing bodies should be borne by HAL on an ongoing basis.

Section 4.2 - Interim controls and caps should be put in place to ensure growth does not happen before there is clarity on the environmental impacts. Further detail is needed on how the trajectory and annual (or otherwise) targets will be set which HAL will be measured against.

Para 4.2.1 – All of the bodies listed have a role and interest in monitoring and enforcement. It is vital, however, that any proposals reduce duplication and set out clear roles and responsibilities for each

Para 4.2.2 – Detail is required to be worked for how any monitoring function or body will make decisions, who has the casting vote and how any conflicts between members will be dealt with.

Para 4.2.3 “Direct discussions are being held with each of these bodies to agree their role within the ISP”. Current and future discussions should be transparent to ensure that there is confidence in the independence of the ISP

Para 4.2.4 – The role of Local Authorities is vital to any monitoring function or body. Local democratic accountability should be a key foundation of any proposals.

Para 4.2.5 “The role of the ISP would be to oversee and facilitate the sustainable growth of the airport, in line with the Airports NPS and the DCO, subject to the clear terms of this framework”. The role of the ISP as “facilitators” seems to conflict with their independent scrutiny role. The ISP role should not include any responsibility to encourage or facilitate growth, only to independently judge the merits of EMG

Graphic 4.1 – As set out above, the unforeseen mitigation strategy should link to s106 and/or DCO conditions, and should not be a use for the community compensation fund.

Graphic 4.1 – The timings for producing mitigation strategies should be tight, and monitored on a very regular basis,

Para 4.3 – see above for comments on frequency and type of monitoring.

Para 4.3.3 - we would agree that in the event of dispute that issues should be referred to the Secretary of State. However we do not agree that this right of appeal should be delegated to the

CAA or others. Given the number of different stakeholders' views which will need to be taken into account, it does not seem appropriate to delegate this to any body which may have a more limited scope.

Para 4.35 - Any monitoring function should have statutory powers for enforcement, which are provided via the DCO. It should not just be a condition of the DCO enforced on HAL to comply with a framework. Powers should also be given to any enforcement function through the DCO.

## Chapter 5 – wider environmental management and monitoring

In order to reduce duplication, we believe any monitoring function should cover all environmental targets and commitments. A similar, if not the same, function, should also cover the commitments made on economic growth and benefits, such as jobs and apprenticeships.

## Appendix A – proposed environmental limits -

### Noise

HSPG are supportive of the principle of committing to a series of noise limits which will ensure they can be monitored long term. We are also supportive of the provision for an Independent Scrutiny Panel [ISP] (subject to HSPG comments on the Environmentally Managed Growth document) and the deployment of technology to monitor surface access.

Further clarification is required for [3.5.1] to understand how HAL is “working with industry, commercial partners and academics to innovate, invest and incentivise to make our contribution” in relation to noise limits.

[3.5.1] “This Framework will be one way we achieve this and ensure that the airport and airlines are incentivised to reduce emissions and invest in new technology”. Further clarification will be required on the proposals for incentivisation to reduce noise emissions.

Further clarification is required on how the benefits of technological improvements will be shared in accordance with the Noise Envelope.

The ISP should work with Heathrow to agree a suitable monitoring response in the case of breach of noise limits.

### Air Quality

The only limits proposed to be included for Air Quality relate to whether the DCO creates, or delays compliance of a 'non-compliant zone'. This is an extremely narrow interpretation of the ANPS requirement (para 5.42) to be “compliant with legal obligations that provide for the protection of human health and the environment”. Paragraph 5.43 references: “(i) consideration of AQMAs, roads identified as above limit values, nature conservation sites; (ii) effects that may bring about need for new AQMAs or change the size of an existing AQMA or bring about changes to exceedances of limit values, or have potential to have an impact on nature conservation sites; and (iii) significant effects in relation to EIA, and or to a deterioration in air quality in a zone or agglomeration.”

Under the EU Directive, Member States are required to meet limit values in all outdoor areas (excluding certain workplaces). However, they are not required to report air quality in all these areas due to different sampling and reporting requirements. Member States must split their areas into zones and agglomerations, based on population density, and report on compliance (or non-compliance) for each zone / agglomeration. The approach taken in the PEIR effectively assesses whether the DCO proposals would affect the way in which the UK reports compliance, not whether it complies with the Directive itself. Following the High Court decision, the Secretary of State is required to comply with the threefold obligation stated above (as soon as possible, reducing exposure as quickly as possible, and that meeting the limit values is not just possible but likely).

The DCO boundary is surrounded by AQMAs. There are multiple road links within the surrounding area and Greater London Zone, which currently exceed the EU Limit Values and for which compliance is predicted to occur between 2022 and 2029. Delaying compliance on any of these road links would be in breach of the terms of the ANPS, which does not consider a zone as a whole.

Proactive steps should be taken to reduce the air quality impacts of its operations in all affected areas, including those that do not currently exceed AQS objectives. The aim should go beyond compliance and extend to not-worsening and then improving air quality in the neighbourhood affected by emissions from its operations. A process should be defined for setting the 'amber' breach of limits for air quality. Triggers need to be broader than zonal compliance or non-compliance, with reference to the indicator data suggested below. HAL should identify which parties will make these decisions, and at which stages. Stakeholders (including HSPG) should be part of the decision-making process.

Further clarification is required on the measures proposed for monitoring of construction phase impacts – particularly given that the construction phase presents the greatest risk to legal compliance with EU Limit Value for NO<sub>2</sub>. E.g. this could include monitoring of levels of construction traffic and fleet mix, proportion of materials delivered by rail.

Further clarification is required on the scrutiny/monitoring systems proposed to ensure that predictions made for the construction phase are within the bounds of uncertainty. What is the recourse if they are not? Is construction capped or controlled in the same way that operational growth caps would be applied? Documentation with control measures, e.g. pertaining to vehicle fleet composition, construction traffic routes etc, are live documents, and must remain under continual review with implementation of improvement measures to achieve AQ compliance in construction.

The ISP and HSPG should be consulted prior to developing appropriate response policy/guidelines.

The key stakeholders of the ISP should work with Heathrow to agree a suitable monitoring response in the case of breach of air quality limits.

Further information is required on the data that will be included in the monitoring report for air quality (some detail listed for surface access targets in Appendix A). This should include checking that measured traffic flows and fleet splits reflect the assumptions input to the air quality model, establishing indicators (taking account of bounds of uncertainty of the analysis itself) that will measure whether the modelled results will broadly be achieved; e.g. examine total flow, vehicle split

and euro standard assumptions for comparison with measured data from ANPR to compare with modelled scenario results and quantify the disparity with real world emissions and percentage increase/decrease over predictions.

Use of ANPR cameras (already established for SAPs) should provide data on total numbers, vehicle types, fuel types and Euro standards - for both public and colleague vehicles.

HGVs and Black Cabs are not included in the HULEZ - data on Euro standards should be collected to ensure external incentives are limiting the number of pre Euro VI/6 vehicles entering. This should then be used to check that HULEZ and VAC are working according to their assumed impacts on total numbers and fleet splits.

A feedback loop process should be included - e.g. to modify the level of the access charges if necessary. A commitment to a stated review period (e.g. annual) for implementation of improvements identified through the feedback loop should be incorporated.

The ULEZ excludes colleagues, freight and construction traffic. HSPG think that these should be included to help manage air quality.

#### Appendix B – ULIMS

See above for comments on the principle that the community compensation fund should not be used for unforeseen impacts. Any monitoring function should have a role to oversee and identify unforeseen impacts. It should also be able to enforce controls. However, this should be in conjunction with review mechanisms in the DCO and s106. Again, this calls for the detail of any monitoring function to clearly set out the overlap and joint work required with LPAs.

#### Appendix C – draft constitution

There is much detail to be worked out here, and HSPG would like to engage in detail with HAL to ensure a constitution is worked through and consulted on effectively prior to DCO application. We agree this should be funded by HAL.

## **10. DCO Powers (document called ‘How do we obtain approval to expand Heathrow?’)**

DCO process is welcomed and HSPG have been engaged in Part 1 of the process ‘Pre-application’. HSPG have undertaken discussions and consultation with HAL on the masterplan development together with the PEIR.

The Scheme Development Report (SDR) outlines in Chapter 2.2 (para 2.2.2) how the masterplan process has been developed. Whilst we agree with most of the what is outlined in the summary of the process, we do not necessarily agree or endorse the way the iterations of the masterplan have developed and how evaluation criteria have been applied (that in essence can be applied subjectively) and are seeking further clarifications from HAL on some of their reasonings for discounting certain options before HSPG are able to make a formal statement on the final masterplan.

HSPG need to understand what the red line boundary is and what this incorporates, a comprehensive list of what is included within the DCO and what is excluded from the DCO, it's unclear at present how this will work and how they will interact.

The DCO process and the Masterplan is also at odds, the masterplan appears to be much wider than what will be included in the DCO boundary. How will HAL be held account to deliver what is in the masterplan (areas outside of the DCO limits Boundary)?

More information needed on rationale for prioritisation of uses for inclusion in the DCO. Some decisions on what a ‘principal’ is or ‘associated’ use is appear inconsistent and appear arbitrary. e.g. 100% of hotels not entirely reliant on airport use have been included in the DCO, major ASF offices are without. Some reprovision, is included some not.

HSPG urgently need clarification on what aspects will form part of the DCO and what other aspects will be part of the TCPA.

A joined-up strategy between JSPF and the DCO is needed to ensure there is an interaction between ASD within the JSPF and the masterplan. Further consultation is required on the masterplan between now and submission. HSPG expect further opportunity to influence the masterplan prior to submission in 2020. We are encouraged by the text in para 2.2.2 (point 4) ‘The Preferred Masterplan will be refined in light of on-going environmental assessment to refine and define appropriate mitigation for the likely significant effects of the Masterplan on communities and the environment. This stage will conclude with the submission of the Development Consent Order (DCO) application in 2020’.

Clarification is needed on what will be contained within the draft DCO document. HSPG need to be engaged on this draft well before submission so that it has the opportunity to input as much as possible. We would expect to see what HAL intend to include within their DCO and what specific areas will need to be consented under a different planning regime i.e. TCPA.

HSPG would seek a wider DCO limits boundary to include the wider ‘Masterplan’ area, this would allow those areas required for mitigation to be delivered under DCO powers. Further engagement is required between HAL/HSPG so HSPG can understand this.

We are advised the DCO will be 'hybrid' resulting in some parts of the masterplan being 'detailed' and other parts of the application being 'outline' with the detail being added at a later date. We need to see what parts constitute 'the detail' and which parts the DCO are approving the 'principle'. We seek clarification on this as a matter of urgency.

Airspace Change Proposals and DCO process – HAL make clear the processes are separate. We need clarifications and reassurance that once flight paths are agreed as part of this process, that the DCO 'assumptions', in particular environmental considerations, will not be affected. If there appears to be a difference, is there a mechanism within the DCO to make amendments i.e. as part of a requirement, or submission of an amendment to the original DCO? HSPG would require this and for adequate consultation to occur.

Requirements – we would like further discussion and consultation with Heathrow on the 'responsible body'. HSPG are developing ideas and options which the Group would welcome early discussion on.