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Date: 8th September 2021

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Dear Sir or Madam

Jet Zero Consultation – Summer 2021

Preamble

This response is made by the Heathrow Strategic Planning Group (HSPG), a constituted grouping of 'willing' local authorities and local enterprise partnerships[1] committed to jointly leading a collaborative multi-agency approach on the future planning of the functional economic area surrounding Heathrow Airport.

The Group was formed in late 2015. It is independent of, but constructively engaged with Heathrow Airport Ltd (HAL). The Group collaborates on a range of airport related matters in addition to town planning, and acts as a conduit between the members and Heathrow Airport Limited, Government, neighbouring area interests (including the West London Alliance of London Boroughs) and other key stakeholders.

Strategic level responses

First, HSPG consider that the definition of *UK aviation emissions* and scope of the Jet Zero Strategy is too narrow and is inconsistent with the Aviation Policy Framework in the way that non-aircraft emissions are tackled. Aircraft cannot fly without airports which must in turn be accessed and serviced. The full scope of emissions from the airports and their supply chain should be addressed along with the surface access to airports too. i.e. Scope 1,2,3

[1] Full Members of the HSPG (and signatories of an 'Accord') are: Elmbridge Borough Council, Enterprise M3 Local Enterprise Partnership, London Borough of Ealing, London Borough of Hounslow, Runnymede Borough Council, Slough Borough Council, Spelthorne Borough Council, Surrey County Council, Thames Valley Berkshire Local Enterprise Partnership
Other organisations have 'Observer' status and participate in some activities, including: Government, Highways England and West London Alliance (of London Boroughs), Royal Borough of Windsor and Maidenhead. The Group works closely with Heathrow and airport stakeholder groups such as Heathrow Community Engagement Board and Heathrow Area Transport Forum.

emissions and surface access need to be decarbonised too if we are truly to decarbonise UK aviation. We note that surface access to airports is not addressed in the wider Decarbonisation of Transport document either. **The focus of the Jet Zero Strategy should be broadened to fully address non-aircraft emissions.**

Second, inevitably addressing these emissions will require business plan investment at airport level funded by airport charges, and a **broadening of the primary and secondary duties of the CAA to facilitate and oversee this**.

Third, local collaborative action across the airport sub-region – as promoted by HSPG with Heathrow - will be essential, working across the functional economic area of the airport and with stakeholders that can help drive economic growth, environmental and social improvement and the decarbonisation strategies across aviation and the sub-region, including surface access transport to the airport. The recent Covid pandemic has starkly revealed the importance of these interdependences of airports and airport communities. **Government's Jet Zero Strategy should commend local collaborative action across airport communities to achieve decarbonisation with broader sustainability objectives.**

Fourth, the majority of the HSPG members (if not all) have now declared a climate emergency and would welcome that **airports impacting their areas to align their targets and action programmes with those of the communities** that they are impacting.

Responses to the consultation questions

1 Do you agree or disagree that UK domestic aviation should be net zero by 2040? How do you propose this could be implemented?

Before HSPG comment on whether UK domestic aviation should be net zero by 2040, we ask that the Government reconsider the definition and scope of targets used for UK aviation emissions proposed in the Jet Zero strategy.

<u>Scope</u>

The definition (and scope of targets) used for **UK aviation emissions**[2] specifically excludes 'non-aircraft emissions' and appears to exclude and be inconsistent with the definition of **Airport operations** defined with **Scope 1 emissions** and **Scope 2 emissions.** The approach also appears to exclude **Scope 3 emissions (**from 'airport tenants and stakeholders'). Critically, the definition appears inconsistent with the Government's own Aviation Policy Framework [3] in that it specifically excludes emissions from *surface access to airports.*

The Aviation Policy Framework (APF) addresses the management of 'aviation's environmental impacts' (para 12) and states:

> "Aviation's environmental impacts are both global (climate change) and local (primarily noise, as well as air pollution and surface access traffic congestion)".

[2] Jet Zero Consultation - Glossary of Terms page 47
[3] Aviation Policy Framework Cm8584 (2013) – notably paras 12 and 18

The APF rightly addresses a range of environmental, economic and social impacts (consistent with good sustainable development principles), and so the scope of policy to decarbonise aviation emissions should ensure all aspects of airspace management, aircraft and airport emissions *and* surface access to airports are addressed.

However, the Jet Zero strategy makes no reference of surface access to airports and nor is this referred to in the companion Transport Decarbonisation Plan document. This is a missed opportunity – designated airports are well placed to become leaders and exemplars of a decarbonisation in the surface transport system, and action at larger airports can act as an important centre for networks and activities to achieve early and significant reductions in carbon from airports and surrounding areas. Furthermore, CO2 from surface access to airports is not much less than for ground-based aviation movements which get far more attention despite surface access having a much more readily deployable range of solutions.

HSPG submit that the Government's strategy for carbon emissions from aviation should address the whole scope of aviation addressed in the Aviation Policy Framework, including surface access to the airport, and airport infrastructure and off-site supply chain, including Scope 1 emissions by the airport operator such as energy generation and airport vehicles, Scope 2 emissions of aircraft fuel production, and Scope 3 emissions by airport stakeholders[4]. It is totally inadequate to focus on the areas of direct control by airport operators and airlines alone for they are now completely interdependent with a supply chain operating both on and off the airport. Research at Heathrow[5] shows this activity to extend to locations over a 20minutes travel time from the airport.

Demand management

There is a clear focus within the draft strategy on fast tracking technological solutions for achieving decarbonisation of aviation, and a seeming aversion to demand management. This seems out of kilter with the Government's wider decarbonisation plan for transport which is clear that an element of demand management (notably to enable modal shift) is required to achieve that objective within the timeframes required by the scientific consensus. Clearly it is desirable to move towards a technological solution for facilitating aviation activity as quickly as possible, but given the evident time horizons for those solutions and the pressing need to cut carbon emissions at pace and starting immediately, the need for and issues arising around interventions to equitably manage demand cannot be ignored, and forms of demand management should be implemented as soon as practicable.

CAA regulation

We believe that significant progress on decarbonisation at Heathrow could be cost-effectively delivered at pace via changes to the regulatory system under which the airport operates, overseen by the CAA.

Heathrow Airport Limited (HAL) must submit a business plan setting out their proposed spending and investment programme to the CAA covering a five-year period. In assessing the acceptability of the business plan, the CAA is required to have regard to a number of duties, however not all of these duties are 'equal'.

[4] Verifavi – accreditation and verification provided to ICAO CORSIA – referred in footnote 47 of the Jet Zero consultation document

[5] For example, a range studies and surveys prepared to support the North West Runway DCO

The *primary duty* is often narrowly interpreted to ensure that HAL's spending and investment proposals benefit airport users – defined as passengers or cargo owners. The focus here appears to be primarily on economic benefit for those users. i.e. minimising cost of using the airport.

Avoiding adverse impact on the environment is a *secondary duty* – measures to achieve this need to be 'reasonable' and not place undue burdens on airport users and so breach the primary duty.

There is little current guidance available to the regulator to assess what is 'reasonable' in terms of mitigating environmental impact, nor any explicit reference to the need to secure the advantages of a sustainable *long-term* future of aviation (for future generations) in the context of advancing climate change, nor the need for the *airport* to decarbonise its operations and those of associated stakeholders and activities such as surface access to airports for passengers, staff and cargo.

Without such guidance we are left with a perverse situation that where proposals by HAL to decarbonise or mitigate environmental impacts can be challenged as being in breach of the primary duty, given they will almost certainly lead to additional costs on airport users.

New guidance from the Secretary of State is urgently required to provide more context and clarity for the regulator to work within. This needs to place clear expectations to deliver decarbonisation upon the CAA and the airport operator (including its supply chain) covering operational emissions from the site (Scope 1, 2 and 3) and surface transport access to the site.

In the recent Ministerial Statement to decommission ICCAN (6 September), Government acknowledged the CAA's "wider environmental remit" and have stated that the CAA "will now take on the majority of ICCAN's former functions" in relation to noise and ensure in future the provision of "independent expert advice on carbon, air-quality and noise". This is highly relevant to the CAA's duties and necessary future spending at airports such as Heathrow. It is now all the more important that this is clarified by amending the CAA's primary and secondary duties in respect to economic regulation.

2 Do you agree or disagree with the range of illustrative scenarios that we have set out as possible trajectories to net zero in 2050? Are there any alternative evidence-based scenarios we should be considering?

There is a clear focus within the draft strategy on fast tracking technological solutions for achieving decarbonisation of aviation, there is a seeming aversion to demand management. This is clear in the expressed four scenarios and 'consultation dataset' comparing 'policy off' with four future scenario all with near constant continuing growth in passengers and air traffic movements (ATM). This seems out of kilter with the Climate Change Committee's advice that 59% of emissions reductions will involve some form of societal behaviour change and the Government's decarbonisation plan for transport (and wider activity) which is clear that an element of demand management (notably to enable modal shift) is required to achieve that objective within the timeframes required by the scientific consensus.

Clearly it is desirable to move towards a technological solution for facilitating aviation activity as quickly as possible, but given the evident time horizons for those solutions and the pressing need to cut carbon emissions at pace and starting immediately, interventions to equitably manage demand management should be considered seriously and implemented as

soon as practicable. This can be accelerated by reliably informed consumer choice comparable across all modes. The Government's proposals to develop a Transport Data Strategy to support this are welcomed.

There is also a need for alternative evidence based scenarios around options for measures of demand management. Similarly, some to the alternative fuels and technological solutions require further optioning. e.g. the availability of sufficient electrical power transmission and storage or SAF's and biofuels to satisfy all competing from outside of aviation.

3 Do you agree or disagree that we should set a CO2 emissions reduction trajectory to 2050?

A trajectory and series of interim targets leading to decarbonisation by 2050 is helpful, however a greater focus on equitable demand management in the near term (when emissions/person or per/flight) remain high and therefore the most damaging should allow for that target to be brought forward and this should be considered seriously. This would reflect the environmental 'precautionary approach', and such demand management could then be relaxed helping to drive technological decarbonisation approaches as these bear fruit in the longer term.

a . Should the trajectory be set on an in-sector CO2 emissions basis (without offsets and removals) or a net CO2 emissions basis (including offsets and removals)?

To achieve completely zero emission flight by 2050 is widely recognised to be very challenging, however trajectories should be plotted both with and without offsets and removals in order to drive effective change. In-sector measures could include in-setting (within the local area of airport and supply chain transactions) and off-setting (outside of the sector and area of any influence). These will both have a vital role to play, particularly in the near term whilst technological solutions to achieve decarbonisation are progressed through feasibility and trial.

The Heathrow based strategic partnership has expressed a strong interest in the concept of sub-regional level of *in-setting* – investing in accredited projects in the sub-regional that demonstrate permanence and additionality but reduce greenhouse gas emissions (GHG) in the vicinity of the airports and therefore deliver benefits for those communities most negatively impacted by aviation operations (aircraft noise, air quality, surface access etc). The full range of such projects could be natural environment based or linked to energy efficiency, renewable energy generation or sustainable transport promotion projects within the sub-region where the airport has influence and transactions.

As noted in the answer to question 1, surface access emissions should also be included in aviation carbon accounting. To this end, could UK ETS be increased to cover surface access interventions? There are a plethora of cost effective interventions available to deliver net zero in respect to surface access there which would allow economically efficiently investment by airport operators to decarbonise and act as exemplars and leaders in their sub-regions?

b. Do you agree or disagree with the possible trajectories we set out, which have in-sector CO2 emissions of 39 Mt in 2030, and 31 Mt in 2040 and 21 Mt in 2050, or net CO2 emissions of 23-32 Mt in 2030, 12-19 Mt in 2040 and 0 Mt in 2050?

As noted above, having reviewed the assumptions for ATMs and passengers in the 'consultation dataset' we believe a more ambitious timetable for decarbonisation would be possible if an equitable approach to demand management was implemented in the near term whilst per/passenger CO2 emissions remain at highest within the proposed scenarios.

Government should confirm the methodologies used for energy and carbon reporting used and proposed in order to provide confidence that these are sound and consistent with established practice[6] and comparable with other sectors.

4 Do you agree or disagree that we should review progress every five years and adapt our strategy in response to progress?

Disagree. Given the pace that this agenda is moving, and the criticality of reducing emissions as quickly as practicable, we would propose a shorted review period for the first 15 years – every three years rather than every five. An initial three-year cycle may also make it easier to bring individual airport and airline business plans, local plans into alignment with national strategies for decarbonisation of transport.

5 Do you agree or disagree with the overall approach to improve the efficiency of our existing aviation system?

Disagree. Efficiency improvements in the airspace network can best be achieved through Airspace Modernisation Strategy (AMS) which needs to be reinvigorated after the delays introduced by the Covid pandemic. However, Jet Zero Strategy and the AMS must reaffirm commitment to ensuring other needs than decarbonisation or safety; critically the prioritization must remain for aircraft noise impact reduction in aircraft routes, operations and procedures below 4,000ft and then 7,000ft.

6 What more or differently could be done to ensure we maximise efficiency within the current aviation system?

It is critical to maintain established priorities for noise reduction (over carbon reduction) for airspace design and operations below 4000ft (and to a lesser degree 7,000ft). At Heathrow Airport this can facilitate: alternation of mode, runways and flightpaths; abatement procedures; incentives for accurate flying and quieter operations, and daily and night-time restrictions, aircraft QC and movement caps. All should be incorporated into the AMS and future airport led airspace changes processes (ACP).

As noted above, an equitable approach to demand management implemented in the near term would also assist in facilitating the most efficient use of individual flights and aircraft aviation capacity.

[6] e.g. Defra Environmental Reporting Guidelines: including streamlines energy and carbon reporting guidance March 2019 (updated)

7 Do you agree or disagree with the overall approach for the development and uptake of SAF in the UK?

We note there are a number of concerns around the sustainability credentials of SAF (both synthetic and bio-fuels) which ultimately still emits carbon when burnt. Whilst it is a promising solution in the medium term, particularly for long-haul sectors, there are concerns about adequate supply, price and competing needs and demands, and SAF can only be an interim step in achievement of zero emissions aviation.

8 What further measures are needed to support the development of a globally competitive UK SAF industry and increase SAF usage?

No comment

9 Do you agree or disagree with the overall approach for the development of zero emission flight in the UK?

As noted above, an equitable approach to demand management implemented in the near term would also assist in facilitating the most efficient use of aviation capacity and drive innovation.

We welcome consideration of including CO2 performance of aircraft in landing fee pricing strategies, however we have concerns that putting undue weight on reducing CO2 emissions from airspace management and flight paths could leads to further concentration in noise impacts for local communities. Noise has a direct and quantifiable health impact on communities and mitigation of this and provision of predictable periods of respite should remain guiding principal in developing take-off and landing pathways.

While the strategy puts emphasis on development of new aircraft types and technologies, there is a lack of regard to the necessary investment at airport level to operate new aircraft, engines and fuel types and supporting local infrastructure. This presents major opportunity for upskilling of the workforce and new types of 'green' jobs across airport sub-regions that is necessary to enable aviation and the airport supply chain to decarbonise. See response to question 10.

10 What further measures are needed to support the transition towards zero emission aviation?

<u>Classification and incentivisation to adopt lower emission aircraft</u>

Government should consider how to incentivise the aviation industry to adopt lower emission and innovative zero emission aircraft sooner rather than later. One means is for airports to incentivise the use of the lowest possible emission aircraft type and operations. The production of independent classification of aircraft pollution and operation (in terms of CO2 and other emissions) will assist this. One example of classicisation is the European Environment Agency's EMEP/EEA Air pollution emission inventory guidebook 2019.

Green skills and employment opportunities

The Jet Zero Strategy does not appear to make much reference to the green jobs and upskilling of the workforce across airport sub-regions that is necessary to enable the aviation sector to decarbonise. Many communities that neighbour airports have seen an increase in unemployment following the Covid 19 pandemic. To address this HSPG want to see green businesses/industry attracted to our areas to provide resilient future employment opportunities for our residents and address the climate emergency.

Across the West London sub region, work is progressing to develop a green skills academy that provides courses, training opportunities, apprenticeships and so forth for residents to enable them to obtain employment in the 'green' sector. We believe that there is tremendous scope for airports to have a 'green aviation skills academy' at each airport to upskill the workforce, and attract investment from industry developing a range of low carbon technologies in the local area.

What plans and (re)training opportunities do the aviation sector have in place to upskill the workforce to manufacturer, install, deliver the low carbon technological solutions for the aviation sector to utilise to enable decarbonisation to happen?

New infrastructure and airport area collaborative working

There is tremendous scope for synergy benefits through collaborative joint local actions and strategy. Coordinated infrastructure planning of airports with local areas, for example provision of new power networks infrastructure necessary for airports to fuel new aircraft, can act as a hub to local energy networks and offer economies of scale, resilience and support to wider area and industrial sector decarbonisations strategies. In particular, we would make the point that considering infrastructure needs *only* in relation to airport and aviation requirements is at best a missed opportunity, at worst it will provide a misleading and perhaps unachievable picture of requirements. All public stakeholders in the Heathrow sub-region are committed to decarbonisation to varying timetables, much of which relies on greater use of electricity. The strain on the grid in vicinity of airport is therefore not only a product of aviation demand but will be decided of a much wider set of stakeholders.

HSPG welcome the approach taken in the Tees Valley as an exemplar in cross-sectoral working to demonstrate credible pathways towards decarbonisation using different technologies. The Heathrow sub-region, with its rich and diverse eco-system of aviation and supporting industries, alongside a strong record in public-private partnership working, has much to commend it for a similar holistic approach. It will be vital to consider wider applications both within the airport campus and across airports functional economic hinterlands for these new technologies in order to improve business case and expedite viability – and ultimately delivering more decarbonisation bang for your buck.

Intensity of activity at Heathrow makes it an excellent test bed for this approach and the source of early big gains in carbon reduction, and government should look to support this (or change the regulation around the airport to free investment from HAL into this agenda).

Designated airports are properly required to produce Airport Masterplans [7] and Airport Surface Access Strategy's with local authorities, LEPs, transport bodies and stakeholders. Airport Masterplans should be reviewed every five years to ensure opportunities for

[7] Aviation Policy Framework requirements at paras 4.11 – 15 and Annex B and Airport transport forums at 4.16-24

synergies with neighbouring industries and communities are maximised. If these are coordinated with airport Noise Action Plans, surface access strategies this will help streamline local planning and engagement processes around climate action and skills (para 4.12 of the APF refers).

The HSPG consider that the maintenance of standing working arrangements between airports and LAs, LEPs and local stakeholders will maximise the scope for synergy benefits, local actions and joint strategy. HSPG commend the joint working with Heathrow Airport

Limited to Government as example. HSPG does not suggest that Heathrow and other airports should take responsibility for all such endeavour, but that they should actively collaborate with stakeholders to these ends which HSPG would willing support.

11 Do you agree or disagree with the overall approach for using carbon markets and greenhouse gas removal methods to drive down CO2 emissions?

HSPG supports the view stated in the report that "carbon pricing (is) as an essential lever for reaching net zero" (Section 3.31). Carbon taxes are vital to steer consumers and will help incentivise innovation. However, there has been a very poor application of the 'polluter pays' principle in UK policy so far which leaves us without any meaningful carbon tax. Schemes such as CORSIA play a role in carbon pricing but may not be as effective as direct levies on carbon emissions. Applying a price on carbon would clearly reduce demand for flights and help achieve the demand management objectives. But this should be applied in a way that does not penalise lower income and infrequent flyers (perhaps the working families on an annual holiday or visiting family referred to in the document's Foreword) and do apply to frequent flyers.

12 What could be done further or differently to ensure carbon markets and greenhouse gas removal methods are used most effectively?

In-setting and off-setting have a role to play, particularly in the near term whilst technological solutions to achieve decarbonisation are progressed through feasibility and trial. Heathrow and HSPG have both expressed a strong interest in the concept of sub-regional in-setting – investing in accredited projects in the sub-regional that demonstrate permanence and additionality but reduce carbon in the vicinity of the airports and therefore deliver benefits for those communities most negatively impacted by aviation operations (noise, surface access etc). Such projects could be nature based or linked to energy efficiency improvements, renewable energy generation or sustainable transport promotion.

13 Do you agree or disagree with the overall focus on influencing consumers?

Agree. Most of the adopted Climate Emergency Action Plans (produced by HSPG Members) recognise the need for, and are focused around, behavioural change and raising awareness of climate change and the impact it is having on a local and global scale. The Jet Zero strategy should do likewise and strongly support the need to influence consumers. Also see response to question 14.

14 What more can the Government do to support consumers to make informed, sustainable aviation travel choices?

We note that The Civil Aviation Authority (CAA) are planning to consult on environmental information provisions later this year, and Government intend to work with them to explore whether mandating the provision of such information to passengers at the time of booking could enable better progress in this area. This study is to be welcomed, but critically should include surface access choices as well.

We draw attention to our response to question 1, better 'reach' consumers on sustainability matters needs to be driven and supported by changes to the CAAs regulatory duties and the scope of airport charges and spending plans to address decarbonisation.

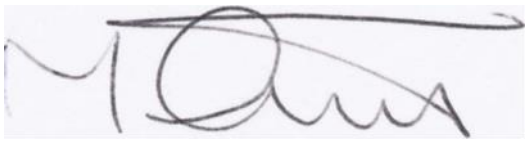
This can be accelerated by reliably informed consumer choice comparable across all modes. The Government's proposals to develop a Transport Data Strategy to support this are welcomed.

15 What could be done further or differently to ensure we tackle non-CO2 impacts from aviation?

The HSPG responses have made clear that the pursuit of CO2 reduction should be integrated with wider sustainable development objectives including tackling other impacts and non-CO2 impacts of aviation. Note responses to Q 1, 3, 5 and 10 in particular.

The HSPG would welcome the opportunity to discuss these matters further with the teams responsible.

Yours faithfully,



For Heathrow Strategic Planning Group