

# MAYOR OF LONDON

## Aviation 2050: Draft Strategy

*Consultation Response from the Mayor of London and Transport for London  
June 2019*

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### 1. Introduction

- 1.1 This submission is provided in response to the Government consultation on its draft Aviation Strategy to 2050 and is a joint response from the Mayor of London and Transport for London.
- 1.2 Aviation presents us with significant environmental challenges. In light of the climate emergency declared by Parliament, there has to be clear commitment to reduce the emissions associated with aviation, in line with the advice of the Committee on Climate Change (CCC). Studies show that people are becoming more sensitive to noise and, as such, every effort must be made to reduce aviation noise exposure, which is also having demonstrable effects on public health. Aviation also has an important part to play in helping our cities reduce their toxic air pollution, underpinned by sustainable airport surface access.
- 1.3 Aviation also plays an essential role in the economic and social well-being of our city and our country. Every year, it delivers millions of visitors to London, facilitating tourism, trade and inward investment. It enables talented people from all over the world to come and live, work and study in London and helps Londoners broaden their horizons and keep in touch with friends and family wherever they may be. Aviation plays a key role in transporting freight that supports manufacturing and allows UK business to participate in global commerce.
- 1.4 An effective aviation strategy needs to ensure that the economic growth benefits from future aviation are not realised at the expense of the environment and that there is a credible plan to reduce the existing environmental damage of aviation without delay, while supporting economic growth and prosperity.
- 1.5 The overarching concern with this draft aviation strategy is that it falls woefully short in striking such a balance. The strategy relegates addressing the environmental impacts of aviation to a by-product of promoting aviation growth. The tangible steps which could address the challenge are largely absent.
- 1.6 The Government's decision to take forward Heathrow expansion and do so without a credible, effective plan for addressing its impacts is symptomatic of an approach which does not give serious weight to the environmental responsibility of the

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Government or the aviation industry. This error will be compounded if this strategy likewise fails to address this. Such a one-sided approach serves the interests neither of business, nor local communities, nor, ultimately, the aviation sector itself.

## 2. Climate change

- 2.1 Given the climate crisis we are facing and the need to meet legally binding UK carbon budgets, it is vital that all sectors play their role and set out a credible plan to decarbonise.
- 2.2 Airport expansion will not only have an impact on national carbon targets, it will be an important factor in determining whether London's carbon targets can be achieved. The Mayor has set a target for London to be a zero carbon city by 2050. Last November he published his 1.5C Compatible Climate Action Plan setting out how London can reach this target. London's carbon budgets have been set without an allowance for an increase in aviation emissions. They are based on ambitious policies for building retrofit and the de-carbonisation of heat and road transport. Other than on new developments and transport, the Mayor has limited powers to reduce emissions and is heavily reliant on national government policy and action to achieve the carbon budgets.
- 2.3 London's emissions have peaked and are currently 25% lower than 1990 levels (34MtCO<sub>2</sub> in 2015 compared with 45MtCO<sub>2</sub> in 1990) and will need to fall to around 5MtCO<sub>2</sub> by 2050. The proposed expansion at Heathrow alone could add potentially in the order of 0.4MtCO<sub>2</sub> to London's carbon budget and is therefore not insignificant (equivalent to 90,000 cars).
- 2.4 Whilst the draft strategy acknowledges the need for emissions from the aviation sector to remain at 2005 levels, it fails to set out a credible plan for how the necessary emissions reductions will be achieved within the necessary timescale – or even if at all.
- 2.5 We welcome that the draft strategy accepts the previous recommendation by the CCC that carbon emissions from UK departing flights should be at or below 2005 levels in 2050. However, we would also like to see confirmation from the Government that this planning assumption is likely to have to be reduced further, in order to meet our commitments under the Paris Agreement. As such, the strategy will need to set out firm proposals to reduce demand for aviation, and provide support for lower carbon alternatives to flying, such as rail. It will also need to set out what could be done to support new technologies, aircraft designs, airspace management and airline operations and use of sustainable fuels.
- 2.6 The draft strategy states that Government will review the forthcoming

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recommendations of the CCC on carbon targets but given the central importance of this advice to the strategy, the draft should have been developed following the advice not prior to it.

- 2.7 Following the publication of the draft strategy, the CCC has since issued its report on the need for the UK to change its target under the Climate Change Act and get to net zero by 2050. In it the CCC stresses that unlike shipping, carbon emissions from international aviation continue to rise. The report notes the lack of any zero-carbon aircraft technology on the horizon even out to 2050.
- 2.8 The CCC report sets out how aviation emissions could be reduced further under a Further Ambition scenario developed for all sectors, in order for the UK to get to net zero by 2050. Meeting this will require new UK policies to reduce demand for air travel and even greater investment in low carbon R&D in the UK and internationally. The report confirms that the CCC is due to write to the Government over the next year on the role aviation needs to play if the Government adopts the net zero by 2050 target. The Strategy will therefore need to be substantially reviewed in light of the CCC recommendations. The Mayor calls on the Government to swiftly adopt the zero carbon target to align with scientific advice and the target already adopted by London, and strengthen its mitigation policy across all areas including aviation to achieve the reductions required.
- 2.9 Whilst the UK Government's engagement in the International Civil Aviation Organization (ICAO) on emissions is welcome, we urge it to be robust in helping it rapidly deliver genuine emissions reductions, by pushing for a 2050 target that is consistent with the strongest ambition of the Paris Agreement and moving away from the over-reliance on offsetting.
- 2.10 A comprehensive plan, with quantified and credible contributions from different technology solutions will be needed to demonstrate that the Government is on target to meet the 2050 planning assumption or a tighter target if the net zero target is adopted. It is these details that will signal to the market where investment is needed. In particular, this plan needs to be credible in terms of the amount of sustainable biofuels that will be available to aviation, i.e. not exceeding 10% by 2050, as advised by the CCC.

## **3. Noise and airspace**

- 3.1 The impact of aviation noise exposure on local communities is considerable, both in terms of health and quality of life, and recognition of this in the draft strategy is welcome. Moreover, as is acknowledged, the CAA's 2014 Survey of Noise Attitudes (SONA) found that people are becoming more sensitive to aircraft noise. If the Government is to credibly address these impacts, then it must adopt the 2018

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environmental noise guidelines published by the World Health Organization (WHO), which is underpinned by robust evidence.

- 3.2 We should be under no illusion that Heathrow expansion casts a shadow over any efforts to reduce the noise exposure of UK aviation. The Government's own analysis found that 2.2 million people will be exposed to a significant increase in aircraft noise as a result of a third runway – and this will likely dwarf any improvements that might be achieved nationally.
- 3.3 It is unacceptable that the Government has failed to heed the call by the Mayor and others for an independent aviation noise regulator with effective monitoring and enforcement powers. The Independent Commission on Civil Aviation Noise (ICCAN) put forward instead falls well short of this, as an off-shoot of the CAA with an advisory role only and which is temporary in nature. It is questionable whether an off-shoot of this type can be truly independent.
- 3.4 Night flights remain particularly distressing for local communities and the strategy must be clear that night restrictions are sacrosanct. The night flights regime needs to be made more robust – not less, as has been the case with Heathrow expansion, which would result in a significant increase in flights operating in the official Government-defined night period (11pm-7am) – potentially up to 140 per cent more night flights compared to today.
- 3.5 The advent of airspace modernisation, underpinned by new technologies, is set to transform UK airspace. However, Government must be clear that this is not a silver bullet for noise – rather it necessitates a series of difficult trade-offs to be made. The draft strategy gives the example of steeper departures but fails to mention that this can only be achieved at the expense of increased fuel burn – resulting in higher costs and greater emissions. Performance-based navigation enables more precise flight routings, freeing up capacity – but this can be used to allow more flights, improve reliability and/or reduce noise impacts. The latter can, in turn, be implemented through concentrating flights on a small number of people or dispersing the impacts on multiple flight routings over a larger number of people. The answer is not to place the burden of navigating these operational principles with local communities. As is being seen with the Heathrow expansion airspace change process, the result is a long-drawn out affair with multiple consultations of questionable value which give residents no meaningful indication of the actual noise impacts until the end of the process, a number of years away. The strategy should be helping guide these trade-offs and ensuring the benefits of new technology are fairly shared with local communities, with a view to significantly reducing noise exposure, both indoors and in public spaces and wildlife habitats outside.
- 3.6 The strategy needs to go much, much further if it is to demonstrate it can deliver real

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reductions in noise for the hundreds of thousands of local residents exposed to aircraft noise on a daily basis.

## **4. Air quality**

- 4.1 Tackling toxic air pollution is a fundamental priority for London and a legal priority for the Government, and airports must play their part. The measures proposed in the draft strategy on air quality are positive but limited. In particular, further work on monitoring ultrafine particles is long overdue – though this then needs to be followed up with efforts to reduce their concentrations. However, the strategy needs to go much further in setting out how Government will push the industry to significantly reduce air pollution from airborne aircraft and airside operations.
- 4.2 Moreover, central to addressing the air quality impacts of aviation remains airport surface access. The strategy needs to be clear that driving a shift to sustainable modes has to be at the core of addressing air pollution. An airport’s responsibility for sustainability does not stop at the airport boundary.
- 4.3 Indeed, the finding in the Airport National Policy Statement that Heathrow Expansion has a high risk of impacting on air quality compliance across a wide area, including in central London, serves to highlight the tensions between airport expansion and the wider approach to reducing air pollution, which is why it is so imperative that this issue is addressed. Improvements in air pollution procured by substantial public investment of time and resources should not be appropriated to enable airport expansion.

## **5. Surface access**

- 5.1 The draft strategy is a missed opportunity to recognise and act on the critical role for airport surface access. Improved surface access has the potential to increase the catchments of airports, enhancing their viability and giving passengers greater choice. Moreover, in a congested aviation system such as London’s, improving access to the airports allows for better use to be made of the existing capacity available.
- 5.2 It is imperative that airport surface access is placed on a more sustainable footing. Increasing passenger and freight highway trips to airports is unsustainable, in terms of air pollution, carbon efficiency and road capacity – with electric vehicles not even a partial answer. Government needs to do more to explain how it will ensure that airports meet their obligation to deliver sustainable surface access for both passengers and staff.
- 5.3 This is more than likely to require significant new rail and/or bus infrastructure and the strategy needs to be much clearer as to how such schemes will be taken forward

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and funding secured. However, this is also likely to require significant measures to discourage car and taxi use, in the form of increased parking and forecourt charges and, where necessary, road access charging. Mechanisms should be put in place to ensure that revenues raised are then ploughed back into to help fund public transport infrastructure and operation and are not simply an additional income stream for private owners.

- 5.4 It should also be made absolutely clear that accommodating increases in airport passengers, staff and freight using surface access networks cannot be at the expense of current and forecast non-airport traffic. The capacity benefits of already existing schemes, designed to address non-airport economic and housing growth, must not be diverted.
- 5.5 In the London context, there are major schemes which could deliver invaluable benefits to airport and non-airport users alike. The Piccadilly line upgrade could support incremental growth at Heathrow, but it will require the funding gap to be plugged if its full potential benefit is to be realised. The Brighton Mainline upgrade remains a key priority for the South East and one that would also enhance Gatwick's access. Stansted is handicapped by its weaker surface access offering – and if it is to make better use of its existing runway, four-tracking of the West Anglia Mainline is essential, followed by Crossrail 2.
- 5.6 The strategy should also do more to set out the softer measures which can ensure a smoother journey experience and so help encourage sustainable travel, notably through better information and ticketing. Passing mention is made of the role of airports in developing ticketing solutions. But Government must take the lead in securing smart ticketing on the routes serving airports. In particular, contactless ticketing should be rolled out to the rail links serving the three remaining London airports where it is currently not available – namely Stansted, Luton and Southend. This can and should be implemented without delay, and in any case before the Euro 2020 Football Championship when London is expecting a significant increase in visitors.
- 5.7 Airport Transport Forums (ATFs) and surface access strategies have a useful supplementary role to play. But if Government is serious about securing the significant shift to sustainable modes that is necessary, the aviation strategy needs to set out a robust plan which can deliver a transformation in airport surface access.

## 6. **Brexit**

- 6.1 Brexit continues to loom large over the economy and presents particular challenges for the aviation sector.

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- 6.2 It is a positive step that agreements have been put in the place with the European Union and others to ensure that flights can proceed in the event of Brexit. However, we should be in no doubt that these stop-gap arrangements entail restrictions for UK aviation. For while they might allow existing services to continue, they generally would not enable new routes and frequencies – which would likely require negotiation of substantial new bilateral aviation treaties.
- 6.3 It remains the case that the best way to minimise the impact of Brexit on UK air connectivity is to seek continued participation in the European Common Aviation Area (ECAA). This in turn is likely to require that the UK minimise divergence from EU regulations relevant to the aviation market. In practice, this means maintaining the existing approach to slot allocation, public service obligations (PSOs) as well as state aid and wider competition policy.
- 6.4 However, if the Government persists with rewriting the regulations with regard to matters such as slot allocation and PSOs – as the draft strategy is proposing – this could leave UK aviation at a significant disadvantage by preventing UK participation in the ECAA.
- 6.5 Confirmation of continued UK co-operation with the European Aviation Safety Agency (EASA) post-Brexit is welcome. Nevertheless, this is a second best option compared to retaining our membership of EASA – which would be possible in some Brexit scenarios – and which would limit our loss of influence in this globally respected body.
- 6.6 While some of the worries about the immediate impacts of Brexit on aviation have eased, there remain concerns that the approach being pursued will result in an inferior framework for aviation in the UK going forward – to the detriment of our connectivity.
- 6.7 It should go without saying that, in any Brexit scenario, there must be no attempt to dilute the environmental regulations that currently apply to the UK, including those which have a bearing on aviation, and that these should be enshrined in UK law as per the EU Withdrawal Act.

## **7. General aviation**

- 7.1 The general aviation (GA) sector may constitute a small fraction of UK aviation but it nonetheless can make a useful contribution to the economy. As such, the focus on the GA sector in the draft strategy is sensible, particularly given the challenges the sector faces.
- 7.2 Like the rest of the industry, the GA sector will need to play its part in reducing its environmental impacts. The expected growth in commercial aviation is creating

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pressure on the slots available for GA at busy commercial airports – notably those serving London – and this is unlikely to ease. The development of new airborne technologies is also blurring the traditional boundaries of the GA sector and the policy and regulatory framework will need to have sufficient flexibility to adapt to this.

- 7.3 We are, however, greatly concerned by any suggestion that the night flight regimes at London airports might be relaxed to support increased GA movements. The existing night flights regimes are in place for a reason; those exposed to aircraft noise value any respite from aircraft noise at night and we need to be looking to make further reductions in night flights.
- 7.4 Similarly, we would oppose any moves to relax the restrictions on aerial advertising, particularly over urban areas. The number of aircraft overflying London is already a significant issue. It cannot be justified to increase flights solely for the purposes of advertising when alternative channels exist which do not raise any concerns with regard to noise or emissions.
- 7.5 We remain deeply concerned about the number of helicopters overflying London and the significant disturbance caused as a result. The regulatory regime governing helicopters is woefully out of date and desperately needs reforming to address environmental, public health and safety concerns and reflect the substantial spatial development that London has experienced since the regime was introduced decades ago. Some thought will also need to be given to how a new framework might handle future convergence with drone technologies.

## **8. Freight**

- 8.1 Air freight is a key part of ensuring UK and London is open for business, enabling exports and supporting just-in-time manufacturing. However, unlike the GA sector, the attention to freight in the draft strategy is woefully lacking – yet it faces similar challenges. Dedicated freighter flights are being squeezed out by scheduled passenger flights at busy airports. The sector also has a responsibility to address its environmental impacts.
- 8.2 More work is needed to understand development of the air freight sector and, in particular, the future mix of bellyhold freight (on passenger aircraft) and dedicated freighter flights. If growth in dedicated freighter flights is envisaged, this will become increasingly difficult to accommodate in the constrained London airports system and alternatives would need to be explored.
- 8.3 The particular challenges associated with Brexit for the air freight sector need to be addressed and must be a key factor shaping the policy approach to Brexit.

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- 8.4 There needs to be a greater focus on the steps which the air freight sector can take to reduce its environmental impacts – including how to deliver more sustainable surface access. This should be in tandem with developing high speed rail freight as alternative to some air freight trips.
- 8.5 Separately, detailed consideration needs to be given to freight in the context of new technologies, notably drone deliveries, and what the appropriate framework might need to be.

## 9. New technology

- 9.1 The emergence of new technologies has the potential to improve the efficiency and competitiveness of UK aviation, while also reducing the environmental impacts.
- 9.2 It is essential that the benefits of new technologies are fairly shared with local communities. For example, new flightpath technologies such as performance-based navigation (PBN) should not be used solely to deliver more flights – but should also unlock lower noise impacts for residents.
- 9.3 We urge Government to take concrete steps to unlock the potential social and environmental benefits of new technologies and ensure a framework which incentivises their development.
- 9.4 At the same time, in taking forward airport development proposals, we would caution reliance on anticipated but unproven technologies to deliver environmental mitigation. While recognising the potential upside as environmental technologies develop, any planning must be done on the basis of the mitigation measures which have a high degree of certainty.
- 9.5 Development of new aviation technologies have the potential to reinforce the position of London and the UK as leaders in innovation. Nevertheless, the strategy is right to recognise the risk to this posed by the science, technology, engineering and mathematics (STEM) skills shortage as well as the industry's diversity challenge. It is essential that Government tackles this – and does so starting from an early stage in the education system.

## 10. Drones

- 10.1 Recognition of drones as part of a future aviation strategy is welcome. However, what is required is a holistic approach and the strategy lacks this. We need a policy landscape able to support the potential public benefit application of drones, alongside accommodating and enabling development of the economic opportunities that drones present. The policy framework must also be equipped to address the actual and perceived impacts of drones and provide the reassurance that the public

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needs. Public safety and security and ethical and privacy concerns should be central considerations in any new regulatory regime.

- 10.2 This will need a cross-sectoral approach with multiple stakeholders working together and one appropriate for different parts of the UK – for example, the context in rural and urban areas will be markedly different. As part of this, the use of low altitude urban airspace and how it is regulated needs to be explored in detail.
- 10.3 The potential for significant increased use of low altitude urban airspace by drones and new forms of passenger aircraft will require an entirely new approach and framework for how this airspace is managed and regulated. This will create heavy burdens on existing regulators and service providers and will need a greater range of stakeholders to be brought into the approach – in particular, local authorities, transport authorities and infrastructure providers. There is a strong case to be made for devolution of decisions over management, regulation and approach to this airspace that enables cities to define how their own airspace is used – and even more so as new types of aircraft focused on urban travel emerge.
- 10.4 The future regulation of low altitude airspace should be should be approached in such a way as to make it easier and more likely for public benefit applications to emerge, be trialled and deployed at scale. How this can happen needs to be investigated through extensive engagement with stakeholders and the technology developers to ensure that the net impact of the new technologies is positive for cities.
- 10.5 These developments must go hand-in-hand with a focus on actively avoiding the environmental impacts, notably noise – so that the benefits of new technology are shared with local communities rather than banked by the industry, for example to enable more routes.
- 10.6 If there are opportunities for drone technologies and systems to be put to publicly beneficial uses, we cannot rely on these being pursued by the industry without the right incentives, and this is particularly likely in the early stage of a nascent industry. In working with industry and academia, Government needs to consider carefully how incentives can be used to support this dimension.
- 10.7 How infrastructure is developed and deployed will also impact the types of uses that drones are put to and whether publicly beneficial or commercial uses are prioritised. For example, landing infrastructure and Unmanned Traffic Management (UTM) systems and protocols could be developed to bias and prioritise publicly beneficial or ‘public service’ uses such as use by the emergency services and medical delivery. Such an approach needs to be integrated into thinking from the start.
- 10.8 The ground-based infrastructure requirements for urban air mobility will stretch

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beyond airports and include all parts of the city where there may be demand for more distributed aviation. These requirements therefore need to be balanced carefully against significant other competing demands, including through the planning system, to ensure the land-use implications are managed appropriately and contribute to the sustainable development of our cities.

- 10.9 The acknowledgement of drones in this strategy is welcome but there needs to be much more thought given to the detail of this policy at this critical period in the development of the technology and its application. If this is not addressed now, it will be much more difficult to correct further down the line and the opportunity to shape the drone landscape will have been missed.

## **11. Passenger experience**

- 11.1 The emphasis that the draft strategy places on the passenger experience is welcome and ensuring smooth, hassle-free journeys through the airport. Everyone, without exception, is entitled to a good quality experience of air travel and we support efforts to make air travel more accessible for disabled passengers and those with reduced mobility, as well as those with hidden disabilities. The CAA's rating of airports on their care of disabled travellers has been positive in shining a spotlight on this issue. We support the CAA being given powers of enforcement to ensure airports meet their obligations to disabled travellers.
- 11.2 Many of the consumer rights that thousands of UK air passengers have come to rely on are rooted in EU legislation and these have been successful in curbing some of the worst industry practices. But rather than seeking to jettison the European regime as the draft strategy implies, even in a Brexit scenario we should be seeking to maintain alignment with these European rules. As well as facilitating our continued membership of the ECAA and the benefits that brings, it provides simplicity for passengers, offering continuity with today's arrangements and commonality with the rest of Europe. That does not prevent us building on the European rules and looking at what we can do to further improve consumer access to redress as well as providing additional protection, for example in the case of airline failure.
- 11.3 It is right that we hold airports and airlines accountable for the service they provide to passengers – but that must equally apply to Government. For many people's experience of UK airports, the weak link in the chain is passport control. Improvements that have been made to improve the efficiency of the process are welcome, including the recent announcement that citizens of seven non-European states can use the e-gates and that landing cards would be discontinued for all.
- 11.4 However, the wait times – both for a desk officer or e-gate – are too often too long, in part the result of an approach to staffing which is not generally aligned to demand

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(i.e. schedules of incoming flights) nor developed in co-operation with the airport. This is compounded by unsatisfactory targets for wait times of 25 minutes for EEA citizens and 45 minutes for non-EEA citizens. When we are trying to show that Britain is open for business, it is unacceptable that a passenger waiting for 44 minutes can be counted by the Border Force as having met its target.

- 11.5 There needs to be a simple but radical shift in approach if we are to get passport control right – and this is particularly critical in the event of Brexit. The Border Force needs to be working hand-in-hand with airports to ensure appropriate resourcing across the traffic day, coupled with wait-time targets that are not an embarrassment. There is no reason why the UK border cannot be safe and secure and at the same time provide a good service to the hundreds of thousands of passengers who pass through every day.