

CHILTERN COUNTRYSIDE GROUP

'Preserving the peace of the Chilterns'



www.chilterncountrysidegroup.org

SUBMISSION FROM CHILTERN COUNTRYSIDE GROUP

**This document is submitted on behalf of the Chiltern Countryside Group
to the Airports Commission Consultation on
Increasing the UK's Long-term Aviation Capacity**

Written and researched by the Steering Group February 2015

The Chiltern Countryside Group supporters are people who value the special character of the Chilterns and its Area of Outstanding Natural Beauty and seek for this to be preserved for the benefit of all.

The Steering Group comprises aviation & noise consultants, commercial pilots
& professionals in finance, technology, media, healthcare & education.

Introduction:

The Chiltern Countryside Group (CCG) welcomes this opportunity to contribute to the Airport Commission's Consultation on 'Improving the UK's Long-term Aviation Capacity' and specifically on the three options given in that Consultation.

We give below our comments which we would ask the Airports Commission (AC) to take into account in their review of these options and in any further reviews and consultations by the Commission, particularly where these are linked to consideration and implementation of the UK's night flying regulations and regime.

The Group believes that whilst aviation remains firmly part of people's lives in the 21st century, the world's population holds collective responsibility for reducing their need to travel and that when we do so, we should aim to choose the most environmentally-sustainable transport mode available. With this qualification, therefore, we respond to the Commission's review.

The CCG's mission statement is '*Preserving the peace of the Chilterns*'. However the operation, impact and benefits of aviation is not restricted to this area of SE England; indeed, the Commission's original brief which: '*examines the need for additional UK airport capacity and recommends to government how this can be met in the short, medium and long term*' is thus, specifically consulting on a national approach to aviation. We, therefore, respond to this document from a broader perspective which has been informed by our experience of aviation in the Chilterns.

Throughout this paper, the CCG recognises night time hours as those identified by the European Commission (2300-0700).

Since its foundation in 2008, the CCG has made submissions to Government, to the Parliamentary Transport Select Committee, the Department for Transport, the Civil Aviation Authority and the National Air Traffic Service's different aviation Inquiries and Consultations. The Group has also made submissions to the Noise Action Plans (NAPs) Consultations conducted by Heathrow Airport and London Luton Airport (LLA).

All the Group's submissions are posted in full on the CCG website:
<http://www.chilterncountrysidegroup.org>

Q1: What conclusions, if any, do you draw in respect of the three short-listed options?
The options are described in Section 3.

The CCG does not find any of the 3 options currently under review acceptable solutions to a perceived need to increase aviation capacity in the UK, either in the short or long term.

Some of our reasons for this response are given below:

- **Case not proven:** The CCG does not find the case proven for a need to increase aviation capacity in the UK. The Group finds such statement of need predominantly generated by the aviation industry.
- **A national transport strategy:** The Group perceives that pressure has been applied publicly by many organisations with vested interests in the complex questions currently under review by the Airports Commission. We do not accept that sufficient consideration or importance has been given, either by the Commission, or by Government itself, to the wider issues of a national transport strategy to encompass connectivity throughout the UK and thus, internationally. **We believe any of the 3 options in this consultation will fail to provide the sustainable and environmentally protective operations which the Government should be seeking.**
- **Specific research needed:** The aim of the DfT to increase links to emerging economies should be carefully considered against the employment needs and potential of the UK workforce, the more cost & time-effective use of electronic technology to do business and for individual communication and the environmental sustainability of increased aviation. **The CCG view this as a complex area where properly conducted research is needed to inform decisions. This has yet to happen.**
- **Site of a 'hub' airport:** The CCG does not accept that any 'hub' airport in the UK needs necessarily to be in the SE. If passengers are transferring between flights, this can be at any airport in the UK. Indeed there is a strong argument that the UK's prime 'hub' airport should not be in the SE, where airspace and other transport networks are most congested, thus where delays are more likely to occur with the inevitable consequence of passengers missing their onward connecting flights.
- **Connectivity:** The Department for Transport's (DfT) Draft Aviation Policy Framework (October 2012) stated: '*London is an exceptionally well served city*' [for connectivity]. Therefore, the prime focus for the Airports Commission should not be on 3 options, all of which are in the SE/London, but on those areas of the UK where there is possibly potential demand currently unsatisfied, except by travelling to one of London's 5 airports. Connectivity should be encouraged for all our nation and its commercial interests, rather than continued focus on the over-heated SE.
- **Sustainable improvement:** It is widely known that the Government recognise the UK is one of the best connected countries in the world. What is now needed is sustainable improvement to more efficient use of airspace and operational procedures, particularly in the crowded South-East, initiatives to make the UK's airports better for all, which does not necessarily equal bigger, or more - and use of latest technology to support such efficiencies.
- **All 3 options will exacerbate the already crowded airspace of the SE.**

- **All 3 options will exacerbate already unacceptable existing aural and air pollution, will require destruction of settlements and other significant buildings or commercial premises and will adversely affect the quality of life for those residents and communities overflown by operations.**
- **Environmental impact at Heathrow:** Two of these options relate to Heathrow, which is surrounded by residential & commercial conurbations, where air quality is already below acceptable levels and where stacking and overflights adversely impact heavily on these areas together with rural landscapes of tranquility including the Chilterns Area of Outstanding Natural Beauty (AONB) some 30 miles distant.
- **Environmental impact at Gatwick:** The third option at Gatwick also has adverse impact on scenic and tranquil landscapes, significant local conurbations and communities and is inconveniently located for access by the majority of UK residents.
- **Aviation Pollution:** The CCG finds there is considerable lack of attention and remedies to the enormously disadvantageous impact aviation places upon overflown communities. Aural and visual pollution from overflights and stacking remains a daily disruption for communities many miles beyond the airport perimeter and noise contour maps.
- **A key problem for the Chilterns and its AONB:** In the Chilterns and its AONB, for example, aircraft can be clearly seen and heard as they circle around the 'Bovingdon stack' waiting to land at Heathrow. We remain unconvinced that either of the two Heathrow options considered will improve or eliminate this situation. Indeed, we believe they will exacerbate it.

Heathrow:

- **Surface access:** The Heathrow options present challenges to surface access. All travellers using the M25 know that right now, let alone in the future, the area around Heathrow is slow, subject to delays and congestion and easily reduced to standstill when accidents or roadworks happen.
- **Link with High Speed 2:** Whilst the consultation refers regularly to access to/from Heathrow being enhanced by High Speed 2 (HS2) rail links to a possible interchange at Old Oak Common, this cannot be relied upon, as since early 2013 the HS2 spur to Heathrow has been 'put on hold' and is not part of the current Hybrid Bill process for this project. In today's fragile economic and political climate, there is no guarantee that HS2 will be built at all, let alone the Heathrow spur be commissioned. It is irresponsible and unwise to base key decisions for aviation expansion upon such a precarious and political premise.
- **Current pollution at Heathrow:** The October 2012 Draft Aviation Policy Framework demonstrates the current hugely pollutive impact of Heathrow's present operations and that further (Fig 4.5) they account for: *'approximately 70% of people in the UK exposed to average noise from airports above 55 decibels. More than 1 in 4 people exposed to this level of noise around European airports lives near Heathrow..... Heathrow's noise impact easily exceeds the combined impact of all the other hub airports in Western Europe, despite each having approximately similar numbers of movements.'*

- These are truly appalling statistics, although not very surprising to those of us who are overflowed by Heathrow operations. Clearly this is strong evidence against further growth, both at Heathrow and in the SE, until robust and statutory measures are in place to immediately contain, and urgently, significantly reduce noise impact on those communities.
- **Is the solution to move operations elsewhere?** If operations are simply moved away from Heathrow to elsewhere, without any such measures of containment and reduction, the noise problem is simply moved with them. This is unacceptable.

Q2: Do you have any suggestions for how the short-listed options could be improved, ie their benefits enhanced or negative impacts mitigated?

Yes.

- **Are the options environmentally sustainable?** Making better or different use of UK's current runway capacity should be environmentally sustainable and must not be at the expense of overflowed communities or locally significant and/or nationally protected landscapes, such as AONBs and National Parks.
- **The CCG does not find any of these 3 options fulfil these obligations.** Indeed they will almost inevitably bring greater intrusion and adverse impact over those very areas of the UK which as a nation, we should seek to protect and preserve for future generations.
- **International agreement:** Work on international agreements to address climate change and emissions from aircraft should be a high priority.
- **Is sufficient weight given to local environmental impacts?** Greater weight needs to be given to local environmental impacts from aviation. This needs to be translated into robust targeted action by both the aviation industry and Government. **Economic growth generated by aviation does not necessarily need to be detrimental to local environments or overall climate. Greater efficiency and operational policies are key parts.**
- **Reduction of impact is a must.** Improved operational procedures and new technology should contribute to better use of existing capacity, but equally of importance, should make a positive contribution to reduction of local environmental impacts, particularly over densely populated areas and those which are sensitive, such as AONBs and National Parks.
- Government has previously accepted that impact on overflowed communities by regional airports can be significant. **The Chilterns and its AONB are overflowed by the operations of 2 London airports (Heathrow and Luton) and by Northolt. This fact is ignored.** It is imperative that noise reduction measures are consistent for all airports and operations which overfly communities and protected landscapes. This is particularly important for night time operations.
- **Pollution by night flights:** The DfT 2013 Consultation on Night Flying Regulations stated Government desired '*promotion of airport capacity in harmony with the environment.....*...*limiting or reducing the number of people significantly affected by aircraft noise*' – a statement which the CCG welcomed. However, **we would raise serious questions on whether these objectives are, and with any of these options, would be met.** It may well be that quieter aircraft are being used at night but that is a meaningless objective unless it actually reduces the number and level of impact on overflowed communities. The aircraft can be quieter but if it still disturbs residents, then it still has an adverse effect which should be recognised.
- The aviation industry and the DfT should not be complacent that objectives have been met whilst thousands of residents are being significantly and regularly woken at night, and particularly in the early hours of the next day. Any expansion will add further challenge to meeting, even in part, these objectives.

- **Aircraft Noise Management Advisory Committee:** The majority of night flights are arrivals, particularly at Heathrow, the CCG therefore strongly recommends that **arrivals** as well as departures are part of the DfT's Aircraft Noise Management Advisory Committee (ANMAC)'s work.
- **Heathrow's night time 'curfew':** Whilst the current voluntary night time curfew at Heathrow is relatively successful, the CCG believes it would give greater security to residents if this became mandatory with operational limits on movement to be at most what they are now, with the curfew maintaining at least the present schedule.
- **Night quotas:** Night quota movements should be reduced and the respite period should be from at least 23.00 hours to 6.00 am in line with other European and international airports, such as Sydney.
- **Scheduling of night flights:** Scheduling of night flights is an important area with potential benefits in noise/disturbance reduction if correlated to robust research studies on sleep disturbance. **The CCG urges the DfT or other relevant authorised body to carry out more work in this area.**
- There should be a ban on all but the quietest aircraft in the key shoulder periods at all UK airports, not just those which are designated.
- **The value of noise contour maps?** The CCG does not find the use of noise contour maps a meaningful method of assessing noise impact. To realise a more accurate picture of real disturbance, these must be combined with other factors, such as records of complaints which may well be outside the noise maps, track keeping, aircraft height, number of overflights etc.
- **Other European hub airports do better:** The CCG questions why Heathrow is so sorely lacking in reducing noise impact compared to other Western European hub airports. It would appear that not only are these airports challenging Heathrow in its role as a leading world class hub airport, but are also better at managing environmental issues. **Heathrow can, and should, do better.**
- We make a strong recommendation that the relevant bodies at Heathrow consult with their colleagues at these other airports to find out how they do it – and then implement these findings at Heathrow. If funding for this is required, it should be sought from both the polluter, ie the aviation industry, and from the regulator, ie the Government.

Suggested changes to operational procedures to reduce environmental pollution:

- a) For most people the greatest environmental impact of aviation is noise from aircraft departing and arriving at airports particularly within approximately 20 miles of an airport. Some alleviation can be achieved by the use of 'optimum' routes in and out of airports called 'noise preferential routes'; these can help but do not solve the problem because the noise is merely moved laterally elsewhere.
- b) Significant improvements in the noise environment can however, be gained by adjusting the vertical profiles of departing and arriving aircraft. The perceived noise at ground level reduces markedly as aircraft altitude (height above mean sea level) increases so that in most circumstances aircraft flying above about seven thousand feet are barely heard at ground level. The sooner departing aircraft can reach this altitude and the

longer arriving aircraft can maintain at or above this altitude then the better is the noise environment at ground level. How can this be achieved?

- c) It is common practice for commercial aircraft to use less than full engine power for take-off and to employ a technique called a 'reduced power take-off' so that, depending on ambient conditions, only sufficient power is applied to achieve a required, safe climb gradient. This is a safe and perfectly legal procedure and there are commercial advantages for operators in the use of less than full power but it does mean that aircraft do not achieve the best rate of climb of which they are capable.
- d) A compromise power setting, at say, somewhere between the 'reduced power' setting and full power would enable aircraft to achieve a steeper initial climb gradient than at present. Reaching seven thousand feet sooner would significantly reduce the noise footprint. Such procedures, if adopted, would not be popular with the airlines because they would incur higher operating costs as a result, but they could be very beneficial in relation to noise footprints. They would almost certainly need to be mandated by the aviation regulatory authorities.
- e) Steep and continuous aircraft climb profiles are sometimes currently impeded by the local air traffic control (ATC) environment when for instance, crossing tracks or holding patterns require departing aircraft to stop their climb early to achieve safe separation with other traffic. A review of the ATC procedures and airspace organisation at specific locations where such conflicts currently exist could greatly improve the noise footprint by allowing aircraft to climb quickly without hindrance.
- f) A good example of this situation has been highlighted by CCG in a previous consultation (TCN 2008) in relation to aircraft departing westwards from London Luton Airport and routing over the Chiltern Hills and below the Bovingdon (BNN) holding stack.
- g) The minimum altitude in the BNN holding pattern is seven thousand feet. Northbound departures from Heathrow (LHR) and Northolt also route underneath the BNN hold but because ATC require a minimum vertical separation of one thousand feet between conflicting aircraft their climb is restricted to six thousand feet altitude. In practice heavy, trans-Atlantic departures from LHR, which may also have used reduced power for take-off, can often only climb to five thousand feet by the time they reach BNN. Westerly departures from Luton are thus required to stay even lower at four thousand feet until they are some twenty miles from the airport and have crossed the Chiltern Hills which rise to nearly one thousand feet altitude.
- h) The siting of the BNN Hold is a key issue for all Heathrow & LLA operations.
- i) For arriving aircraft, the optimum type of final approach is a constant descent approach (CDA) from about four to five thousand feet and approximately 10 to 15 miles out from the runway; this results in low engine power settings, reduced fuel consumption and reduced noise. Although it is the flight crew who actually fly such approaches they can only be achieved with the active involvement of ATC controllers who vector aircraft from the airway system towards the airport and decide on its vertical profile.
- j) However, in the modern ATC organisation such 'area' controllers are usually located at a remote central control centre rather than at or near a particular airport and thus may have little knowledge of local topography and noise sensitive areas. Moreover, when

there is little ATC activity, controllers often give arriving aircraft early descent and direct routings to the final approach point because this can save time and fuel.

- k) While this may suit airline operators the downside of these procedures is that populated areas can be subjected to higher than normal noise levels by overflying aircraft. Some visual indication on their radar scopes of the location of centres of population near particular airports would enable controllers to prevent this happening by vectoring aircraft away from them prior to final approach and descent. If implemented such procedures could significantly reduce the noise footprint in the vicinity of airports, particularly at night.

Q3: Do you have any comments on how the Commission carried out its appraisal?

Yes.

- **Sufficient breadth?** The CCG finds the Commission insufficiently broad in its appraisal of impacts from either of the 2 Heathrow options on communities and sensitive landscapes such as the Chilterns AONB.
- **Impact on the Chilterns AONB?:** To the best of its knowledge, **the Group finds there has been no recognition by the AC of the adverse impact of Heathrow's operations upon the Chilterns and its AONB, nor the restrictions placed by Heathrow upon London Luton's operations and thus, that airport's ability to reduce environmental pollution upon the same area.**
- **Stakeholders:** We question whether the AC has identified the local authorities of the Chilterns and its community groups as relevant stakeholders in this Consultation. Has there been community or elected representative engagement by the AC? If, as we believe there has not, why not?
- **The Chilterns Conservation Board:** Further, the Chilterns AONB has a Conservation Board (the Chilterns Conservation Board) which was established to uphold the statutory obligations of Government as described in the Countryside and Rights of Way Act 2000 (s85). Has the AC had any dialogue, communications or met with the Board and/or its officers? We believe not, which is a significant omission.
- Our responses to Q 1 and 2 apply.

Q4: In your view, are there any relevant factors that have not been fully addressed by the Commission to date?

Yes.

- Please refer to our responses to Q 1,2,3.

Q5: Do you have any comments on how the Commission has carried out its appraisal of specific topics (as defined by the Commission's 16 appraisal modules), including methodology and results?

Yes.

- Please refer to our responses to Q 1,2,3.

Q6: Do you have any comments on the Commission's sustainability assessments, including methodology and results?

Yes.

- Please refer to our responses to Q 1,2,3.

Q7: Do you have any comments on the Commission's business cases, including methodology and results?

Yes.

- Please refer to our responses to Q 1,2,3.
- **Effect on health and well being:** The CCG does not accept that the AC has taken fully into account the detrimental effect which any of these options would have on the quality and well-being of life for overflown communities. It is widely scientifically accepted that sleep deprivation and continuous disruption adversely impacts on physical, emotional, mental and societal aspects of life for the person affected. This places a cost upon medical and social services, upon ability to work or study at optimum levels, upon relationships and community well being. **Have these additional costs been taken into account alongside the possible benefits of airport expansion? Would it not be more truthful to say that the communities surrounding an airport together with those overflown at low level at further distances bear the cost 24/7 whilst travellers reap the benefits for a few hours?**
- **Employment benefits?:** The CCG accepts that airport expansion may well bring greater employment opportunities but this would be true for other areas of expansion too, which may well have less adverse environmental impact. **Government should be seeking to facilitate more employment throughout the UK, in particular in those areas where there is greater need than in the SE. Such developments should not be at the expense of other communities or to the detriment of sensitive national or locally significant landscapes. This objective is clearly not achievable with any of the 3 options in the Consultation.**

Q8: Do you have any other comments?

Yes.

- **Timing of the Consultation: The CCG finds the timing of this Consultation and the schedule for publication of its findings and final report of September 2015 unacceptable.**
- In May 2015, the UK will hold a General Election. The electorate will wish, and indeed, we believe has the right, to be fully informed of key matters, such as development of significant infrastructure, for example, airport expansion or new railway. As the AC will not report publicly until after the Election, the electorate will be unable to take the AC's findings and the political parties' responses to these, into account when considering their vote. Political parties are unlikely to mandate on the subject of the AC's remit, as the Commission's findings will not be concluded.
- Additionally, should a different Government be elected into office, the AC may find its work irrelevant.
- **This is completely unsatisfactory and not the best use of taxpayers' money, nor in the best interests of the people of the UK.**

Chiltern Countryside Group.
February 2015.