

TEDDINGTON ACTION GROUP AIRPORTS COMMISSION CONSULTATION RESPONSE

Q1 What conclusions, if any, do you draw in respect of the three short-listed options? In answering this question please take into account the Commission's consultation documents and any other information you consider relevant. The options are described in Section 3 of the consultation document.

Introduction

This submission has been made by the Teddington Action Group (TAG). TAG was formed in November 2014 after 7000 people signed a petition initiated by local community website Teddington Town following a consultation meeting on the easterly departure trials which had been carried out in summer and autumn 2014 (these trials were terminated early in the face of massive public opposition). We have a core team of professionals who are residents concerned about the increase in flight noise in Teddington, Twickenham and surrounding areas.

Plans for a third runway at Heathrow have already been rejected once (2010) but under pressure from powerful vested interests, the idea has returned and has to be fought again by those most affected, i.e. local communities.

The basis on which the current consultation process has been set up is a choice between three options, two relating to Heathrow and one for Gatwick. TAG does not consider this is a satisfactory basis for the public to be consulted – a choice between three unacceptable options. However we believe that the two options involving expansion of Heathrow are by far the worst, as they will impact adversely on a much greater number of people than Gatwick. The real number of people adversely affected will run into millions – not hundreds of thousands as asserted in the consultation documents, once World Health Organisation noise standards are applied.

Hub Concept

The concept of a national main Hub Airport is not universally accepted or applied. Paris has two airports – Charles de Gaulle and Orly. More significantly New York as the gateway into the USA from Europe does not have one hub airport. It has two major international airports – JFK and Newark. Both airports are served, for example, by BA and Virgin. In any event London will not have one major airport. Gatwick and Stansted will not go away, and people who wish to fly will also be able to choose Luton, City and Southampton airports.

Environmental concerns, transport and interconnectivity

Fundamentally from an environmental perspective, expansion at Heathrow is unacceptable. The Strategic Fit arguments for both proposals at Heathrow simply do not hold. Heathrow has 37% of passengers transferring immediately to other

flights and only 30% of passengers using the airport for business purposes (Heathrow's figures). Transfer passengers could go elsewhere either in England or abroad, Tourists do not have to use Heathrow – Gatwick, Stansted, Southend or Southampton would all be accessible for some of them and prevent the justification of the environmental carnage that would take place with an expansion of Heathrow. Both business and freight can consequently be adequately accommodated within the existing confines of Heathrow (there is a very strong argument that every effort should be made to minimise Heathrow's freight use due to the impact on people and the environment).

The extra housing that the Commission has identified as needed at Heathrow will not be achievable – at least unless vast swathes of the green belt are concreted over (para. 3.75 of the Consultation Document). Even taking account of the narrowly drawn economic benefits identified in the consultation documents, the indirect economic disbenefits, and the health and negative environmental impacts would significantly exceed these (paras. 3.85, 3.89 – 3.91).

It is highly unlikely that the transport system surrounding Heathrow will be able to be expanded to cope with the extra loads (M25 motorway, rail links etc)

Even taking into account the projection of a doubling of passengers to 480 million by 2050 predicted by the Economist, it is doubtful that Heathrow needs to be expanded if the load is properly shared around rather than individual self-interests of owners left to take over.

There are three main London Airports including Stansted, which is considerably under used even with its own runway. Additionally, there is Luton, which is no further away than Stansted. Luton cannot be used for long haul, as the runway is not long enough. (Although it could be lengthened without any great problem). There is also Southampton, which is an hour's train ride from London which is under used and which can take international traffic. There is therefore plenty of space to go around if it is used in a co-ordinated fashion. Flights could go from Heathrow, Stansted and Luton and Southampton without any new runway construction. There is also City Airport for short haul light aircraft

It has been suggested in some of the promotional literature of Heathrow that Gatwick is too far away from London to be an acceptable solution. All options at Heathrow and Gatwick are accessible to users. Gatwick is slightly (no more than 5 miles) further away from London city centre than Charles de Gaulle Airport is to Paris. According to the published timetables, the train journey from Gatwick to Victoria takes less time than the train journey from Charles de Gaulle to the Gare du Nord.

The Commission does not seem to have seen past the self-interests of the airport's owners.

Communities to the South and West of Heathrow

The Commission has inadequately considered the consequent effects of the extra runway or lengthening of one runway upon the communities to the south and west of the airport (it seems only to have considered those to the north)

Noise Assessment

The White Paper prepared by the Department of Transport in 2003 entitled "The Future of Air Transport" in its comment on Heathrow stated at paragraph 11.53 that:

*"11.53 We believe that development of Heathrow should be subject to a stringent limit on the area significantly affected by aircraft noise, with the objective of incentivising airlines to introduce the quietest suitable aircraft as quickly as is reasonably practicable. The limit will need to be reviewed at intervals to take account of emerging developments in aircraft noise performance. **Specifically for Heathrow, we propose that any further development could only be considered on the basis that it resulted in no net increase in the total area of the 57dBA noise contour compared with summer 2002, a contour area of 127 sq.km.***

*"11.54 The most difficult issue confronting expansion of Heathrow concerns compliance with the mandatory air quality limit values for NO₂ that will apply from 2010 (as set down in EU Directive 1999/30/EC), and in particular the annual mean limit of 40 µg/m³. The consultation document (para 16.30) said: **'...another runway at Heathrow could not be considered unless the Government could be confident that levels of all relevant pollutants could be consistently contained within EU limits.'**"*

The airport has manifestly failed to achieve this and any development would cause a huge increase. The Government felt in 2003 that Heathrow residents should not be subject to greater noise and the residents should not now be forced to be subject to greater noise. The current situation shows that there is no prospect whatsoever of meeting these requirements. There are not (nor have there been) any proper noise measurement apparatus or procedures in place and recent noise measurements from private equipment have shown that noise readings persistently breach the limit of 57dBA and even reach 200dBA on occasions.

The noise assessments contained in appendix 5 of the consultation documents (on which other appendices such as quality of life apply) are deeply flawed and do not form a reliable base for decision-making. There are a range of deficiencies including inappropriate reliance on averages, a lack of empirical measurement, an absence of scientific research into the health impacts of noise (notwithstanding the huge size of the population that will suffer detriment) and a complete failure to have regard to World Health Organisation standards.

Given a proposed increase of 57% in air traffic, it is simply not credible to suggest (as Jacobs does) that the effects on the population around Heathrow will be small or manageable. The true position is it will be 57% worse in terms of the numbers affected and the intensity of the detriment caused. In our opinion the noise report is basically an exercise in smoke and mirrors to achieve a desired result.

This is a fundamental flaw in the consultation documentation which, particularly in the light of criticism in the All Party Parliamentary Group's (APPG) report and

the failure to use applicable modern WHO standards can only be addressed credibly at this stage by fully independent research from an appropriately qualified and leading academic institution.

Quieter Planes

The CAA in 'Managing Aviation Noise' acknowledges aircraft will become quieter but is less confident than Heathrow about how quickly the quieter planes will be introduced. It could be 25 years before some of noisier planes were replaced. There is also the recorded concern mentioned under the reply to question 6 that the most modern aircraft may not be as quiet as the laboratory tests claim

Its report states: "Introducing new aircraft types is a slow and typically cyclical process that can be fraught with delays and issues, as recent experience with the introduction of both Airbus and Boeing's new models, the A380 and 787, has shown. Even when new aircraft types are available, refueling [converting the whole fleet to quieter planes] is a lengthy and expensive process for airlines, with significant resource impacts." It goes on to point out that hundreds of the aircraft types would need to be removed by 2026 if Heathrow Airport were to meet its target.

We would point out in any event it will not be possible for Heathrow, or come to that the UK government, to guarantee to the public the introduction of quieter planes, as the international airlines will decide on this, subject to commercial considerations and the enforcement of international standards. The failure by the Commission to apply WHO and EU standards in its consultation document severely undermines the assumption that planes will get quieter in the way or at the rate the noise assessments predict.

Economy

The economic benefits have been considerably overstated if considered as a national benefit. If Heathrow is allowed to expand further business activity will be drawn away from other areas, further overheating the London and south east economy at the cost of the UK regions

It is incredible that expansion at Heathrow is being seriously considered at all, given that governments across the world are finding that quality of life and economic benefits do not stack up with expanding airports in heavily populated areas.

Q2 Do you have any suggestions for how the short-listed options could be improved, i.e. their benefits enhanced or negative impacts mitigated? The options and their impacts are summarised in Section 3 of the consultation document.

The banning of Night Flights would be an improvement.

Q3 Do you have any comments on how the Commission has carried out its appraisal? The appraisal process is summarised in Section 2 of the consultation document.

Environmental and Social Effects

The Commission seems not to have spent enough time addressing the environmental and social effects. Sleep deprivation, effects of continuous noise and effects of pollutants appear to be considered as an afterthought when to a vast number of people they will be the primary consideration. It is almost impossible to understand from paragraphs 2.59 to 2.62 what factors the Commission have taken into account under Quality of Life and how these have been measured. **Without a realistic and believable assessment of the increase in noise and disturbance, the presumption must be that the damage to the area and suffering to people and communities has not been properly evaluated.**

The Commission's following stated objectives:

- *To minimise impacts on existing landscape character and heritage assets.*
- *To identify and mitigate any other significant environmental impacts.*
- *To maintain and where possible improve the quality of life for local residents and the wider population.*
- *To manage and reduce the effects of housing loss on local communities*

cannot be achieved by further burdening and overloading existing populations living alongside Heathrow. In the 90-page consultation document, minimal reference has been made to these issues.

Looking at the Table 2.2 in paragraph 2.51, even on the basis of Jacobs flawed noise assessment, the impact on sustainability of living and sleep deprivation will be very considerable around Heathrow.

As noted the Commission has relied on the methodology of airport engineering consultants Jacobs. This is fundamentally flawed and is increasingly discredited. It bases the measurements on averages and limits of noise well above those that are recognised as intrusive both by respected scientists and the WHO. **This is extremely disappointing since in the Stage 1 Consultation Document of January 2013 it was said "At the three airports at which it has the power to set noise controls -Heathrow, Gatwick and Stansted -the**

Government has historically set restrictions on the operation of aircraft at night. When it is setting restrictions, the Government's existing high-level policy objective on aircraft noise is to limit and, where possible, to reduce the number of people in the UK significantly affected by aircraft noise." [Paragraph 1.3 *Night Flying Restrictions at Heathrow, Gatwick and Stansted Stage 1 Consultation January 2013*]

The Commission has also failed to consider the proposed cap or targets for emissions and the effect on demand for air travel if VAT is levied on aviation fuel.

The Commission has not addressed the effects upon the communities to the south and west of Heathrow. These communities have been particularly sharply affected by the recent Airspace Modernisation Trials. Heathrow has received a record number of complaints and the BBC have reported upon the adverse effects. People living in these areas during the flight path trials of summer and autumn 2014, will have experienced continuous noise from 6 00 am until well after 1100 pm – more than 17 hours each day for several weeks. Often, more than 20 planes an hour passed overhead (frequently late in the night affecting sleep). Some were measured by residents as producing sound levels of 90 to 100 decibels in areas 5 miles from the airport. The year 2014 has produced a record number of complaints amounting to 94,114 details of which were produced to the Richmond Park MP in response to a Freedom of Information Request. When accounting for some discrepancies due to automated complaints by a few protesters, the number of complaints stood at 66,000 (using figures from Heathrow operational data.)

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

Yes: the Commission has not fully considered how the expanded airport could work with other airports.

Interconnectivity

This is significant if there is to be a properly integrated airport strategy, which is essential in view of the shortage of space both in the air and on the ground – England is a crowded island and more so than most other countries.

Although Heathrow is full now, it does not have to be for the reasons stated. Heathrow could take a significantly greater business usage 'tourism could be focused more on Gatwick, Stansted and other south eastern airports, whilst and freight usage could be distributed more evenly across all airports (so distribution could take closer to the major centres of population across the UK).

It seems the solution to increased demand for air traffic lies in making greater use of existing regional airports.

The Commission has failed to properly analyse the projected costs of each scheme. Already, it appears that both Gatwick and Heathrow have been very considerably under budgeted. The costs of complying with EU emissions requirements have been excluded and the economic impacts to other areas of the Country from businesses moving to the Heathrow area after expansion have not been calculated.

Climate Change

The Commission has failed to make overall assessments on the long-term environmental effects of each scheme. Since 1999, when the Intergovernmental Panel on Climate Change, IPCC, published its special report on aviation, the research has been clear. The aviation industry contributes to climate change because it burns fossil fuels. In the intervening 15 years the science has only become clearer, at the same time as emissions from aviation have increased rapidly. **Heathrow is already responsible for more CO2 emissions from international, scheduled passenger flights than any other airport globally.**

We have interviewed climate experts from the Tyndall Centre. They say that building extra aviation capacity is not justifiable until greener fuels are developed. But the use of biofuels is decades away. "We need to not provide the facilities to have further growth in the aviation sector while we don't have the technology to reduce emissions at the same time". So a moratorium on airport expansion is recommended, whilst the world figures out how to de-carbonise the aviation sector.

However the Airport's Commission has inexplicably produced its own forecast on CO2 emissions from aviation that are lower than official forecasts from the Department for Transport.

Even with this lowered forecast, the Commission's own work shows any of the new runway proposals would be inconsistent with UK climate change commitments unless unspecified action is taken by Government to cap aviation emissions, and the Commission's sustainability assessment predicts that national aviation emissions would be higher than the level consistent with the Climate Change Act any of the proposals go ahead.

Health

Although of fundamental importance to the outcome of the Commission's brief, no proper medical research has been undertaken on the effects of increasing air traffic across west London and the South East by 57%. **A recent study published in the British Medical Journal concluded that high levels of aircraft noise were associated with increased risks of stroke, coronary heart disease, and cardiovascular disease for both hospital admissions and mortality in areas near Heathrow airport in London** (*Aircraft noise and cardiovascular disease near Heathrow airport in London: small area study, BMJ 2013).

The research suggests that there will be a significant increase in costs to the NHS resulting from the deterioration in the health of the populations around Heathrow or Gatwick and this cost should be calculated and included within the financial assessments of each option.

A full and open public inquiry should be held investigating the health impacts of Heathrow – both its current operation and the proposed expansion (as called for by local MPs). In addition, given the scale and impact of the proposals, a comprehensive and independent review should be undertaken into the methodology used to assess noise impacts.

Children, Sleep Deprivation, Noise and Pollution

The Commission has used methodology that is out of date, flawed and discredited (Jacobs). Almost unbelievably no actual noise measurements were taken during the recent flight path trials. The noise contours are not accurate and do not take into account many areas that will be very severely impacted (for example the areas to the south and east of Heathrow where the 'western preference' protocol applies).

The All Party Parliamentary Group on Heathrow and the Wider Economy published its report on 18th December 2014 stating that:

Heathrow Airport, by a colossal margin is the largest noise polluter in Europe. It currently affects over 760,000 people from noise levels that cause significant annoyance. No other country in Europe allows this. The "next worst" airport in Europe affects less than one-third of Heathrow's total. Schiphol – the airport much quoted as Heathrow's hub competitor – affects sixteen times less. Heathrow is a huge problem: it is a very noisy neighbour. But does noise disturbance really matter? Unequivocally yes, it does, says the World Health Organisation (WHO). Their research shows the deleterious effect that excessive noise has on the whole population but particularly to the vulnerable, children, the elderly, those with underlying cardiovascular and mental health conditions. The WHO's key guidance documents explain the effect that a noise environment above 55 decibels has on society, increasing aggressive behaviours; increasing stress hormones, increasing blood pressure levels, reducing helping behaviours and hindering child development.

For a Government to fail to address this problem would demonstrate a Victorian disregard for the population of London.

Critically the Commission has failed to consider the effects of sleep deprivation, noise and the effects upon children. There are many children in the area and they will form a particularly high proportion of people affected at Heathrow. **No medical or psychiatric or neurological evidence has been obtained, a situation that is incredible given the huge number of people**

living in Heathrow's hinterland – the largest population in the world living in the shadow of an airport.

Studies done in West London on the impact of aircraft noise on children's cognition and health have consistently shown negative effects on reading comprehension and sustained attention, both with noise in the home environment and noise at school. As Stansfeld and colleagues concluded in their paper in the prestigious medical journal The Lancet in 2005: Schools exposed to high levels of aircraft noise are not healthy educational environments. Another study found that interrupted sleep is related to poorer neurobehavioural functioning (Sadeh et al., Child Development 2003).

Medical evidence amongst qualified doctors has already identified the following research:

1. Children's cognition and aircraft noise exposure at home--the West London Schools Study.

Matsui T1, Stansfeld S, Haines M, Head J.

Noise Health. 2004

Abstract: The association of aircraft noise exposure with cognitive performance was examined by means of a cross-sectional field survey. Two hundred thirty six children attending 10 primary schools around Heathrow Airport in west London were tested on reading comprehension, immediate/delayed recall and sustained attention. In order to obtain the information about their background, a questionnaire was delivered to the parents and 163 answers were collected. Logistic regression models were used to assess performance on the cognitive tests in relation to aircraft noise exposure at home and possible individual and school level confounding factors. A significant dose-response relationship was found between aircraft noise exposure at home and performance on memory tests of immediate/delayed recall. However there was no strong association with the other cognitive outcomes. These results suggest that aircraft noise exposure at home may affect children's memory.

2. Aircraft and road traffic noise and children's cognition and health: a cross-national study.

Stansfeld SA1, Berglund B, Clark C, Lopez-Barrio I, Fischer P, Ohrström E, Haines MM, Head J, Hygge S, van Kamp I, Berry BF; RANCH study team.

Lancet. 2005

Abstract

BACKGROUND:

Exposure to environmental stressors can impair children's health and their cognitive development. The effects of air pollution, lead, and chemicals have been studied, but there has been less emphasis on the effects of noise. Our aim, therefore, was to assess the effect of exposure to aircraft and road traffic noise on cognitive performance and health in children.

METHODS:

We did a cross-national, cross-sectional study in which we assessed 2844 of 3207 children aged 9-10 years who were attending 89 schools of 77 approached in the Netherlands, 27 in Spain, and 30 in the UK located in local authority areas around three major airports. We selected children by extent of exposure to external aircraft and road traffic noise at school as predicted from noise contour maps, modelling, and on-site measurements, and matched schools within countries for socioeconomic status. We measured cognitive and health outcomes with standardised tests and questionnaires administered in the classroom. We also used a questionnaire to obtain information from parents about socioeconomic status, their education, and ethnic origin.

FINDINGS:

We identified linear exposure-effect associations between exposure to chronic aircraft noise and impairment of reading comprehension ($p=0.0097$) and recognition memory ($p=0.0141$), and a non-linear association with annoyance ($p<0.0001$) maintained after adjustment for mother's education, socioeconomic status, longstanding illness, and extent of classroom insulation against noise. Exposure to road traffic noise was linearly associated with increases in episodic memory (conceptual recall: $p=0.0066$; information recall: $p=0.0489$), but also with annoyance ($p=0.0047$). Neither aircraft noise nor traffic noise affected sustained attention, self-reported health, or overall mental health.

INTERPRETATION:

Our findings indicate that a chronic environmental stressor-aircraft noise-could impair cognitive development in children, specifically reading comprehension. Schools exposed to high levels of aircraft noise are not healthy educational environments.

3. Exposure-effect relations between aircraft and road traffic noise exposure at school and reading comprehension: the RANCH project.

Clark C1, Martin R, van Kempen E, Alfred T, Head J, Davies HW, Haines MM, Lopez Barrio I, Matheson M, Stansfeld SA.

Am J Epidemiol. 2006 Jan 1;163(1):27-37. Epub 2005 Nov 23.

Abstract

Transport noise is an increasingly prominent feature of the urban environment, making noise pollution an important environmental public health issue. This paper reports on the 2001-2003 RANCH project, the first cross-national epidemiologic study known to examine exposure-effect relations between aircraft and road traffic noise exposure and reading comprehension. Participants were 2,010 children aged 9-10 years from 89 schools around Amsterdam Schiphol, Madrid Barajas, and London Heathrow airports. Data from The Netherlands, Spain, and the United Kingdom were pooled and analysed using multilevel modelling. Aircraft noise exposure at school was linearly associated with impaired reading comprehension; the association was maintained after adjustment for socioeconomic variables ($\beta = -0.008$, $p = 0.012$), aircraft noise annoyance, and other cognitive abilities (episodic memory, working memory, and sustained attention). Aircraft noise exposure at home was highly correlated with aircraft noise exposure at school and demonstrated a similar linear association with impaired reading comprehension. Road traffic noise exposure at school was not associated with reading comprehension in either the absence or the presence of aircraft noise ($\beta = 0.003$, $p = 0.509$; $\beta = 0.002$, $p = 0.540$, respectively). Findings were consistent across the three countries, which varied with respect to a range of socioeconomic and environmental variables, thus offering robust evidence of a direct exposure-effect relation between aircraft noise and reading comprehension.

4. A follow-up study of effects of chronic aircraft noise exposure on child stress responses and cognition.

Haines MM1, Stansfeld SA, Job RF, Berglund B, Head J.

Int J Epidemiol. 2001 Aug;30(4):839-45.

Abstract

BACKGROUND:

Children are a high-risk group vulnerable to the effects of chronic aircraft noise exposure. This study examines the effects of aircraft noise exposure on children's health and cognition around London Heathrow airport and tests sustained attention as an underlying mechanism of effects of noise on reading and examines the way children adapt to continued exposure to aircraft noise.

METHODS:

In this repeated measures epidemiological field study, the cognitive performance and health of 275 children aged 8-11 years attending four schools in high aircraft noise areas (16-h outdoor Leq > 66 dBA) was compared with children attending four matched control schools exposed to lower levels of aircraft noise (16-h outdoor Leq < 57 dBA). The children first examined at baseline were examined again after a period of one year at follow-up. Health questionnaires and cognitive tests were group administered to the children in the schools.

RESULTS AND CONCLUSIONS:

At follow-up chronic aircraft noise exposure was associated with higher levels of annoyance and perceived stress, poorer reading comprehension and sustained attention, measured by standardized scales after adjustment for age, social deprivation and main language spoken. These results do not support the sustained attention hypothesis previously used to account for the effects of noise on cognition in children. The reading and annoyance effects do not habituate over a one-year period and do not provide strong evidence of adaptation.

Economy

The commission has not considered the fact that any benefit to the local economy is outweighed by the enormous cost of the detrimental impact on health, environment and living standards of those living within Heathrow's sphere.

Heathrow is already one of the busiest airports in the world, it has more flights to business centres than any other airport in Europe. Heathrow and London's position on the world stage, will not die if it doesn't get a third runway.

Huge investment will be needed from the taxpayer to cater for an estimated 25 million extra road passenger journeys on existing infrastructure.

Competition, efficiency and interconnectivity will be stifled in favour of creating a vast (92% foreign owned) monopoly on the edge of London, resulting in less consumer choice and capacity- a move that is inconsistent with a forward-thinking economy.

The increase in point-to-point travel and other hubs in Dubai for example reveal that the economic models used for expansion are outdated.

The 37% of passengers travelling through Heathrow who are transfers, have no preference for Heathrow and their contribution to the economy is negligible. If transfer traffic were to move elsewhere and low capacity flight places redistributed, this would free up 30 million additional passenger spaces a

year.

In the future, if our way of life is to be sustainable, within the context of climate change. existing employment opportunities in 'dirty' industries will be replaced with 'cleaner' industries. Interconnectivity and stimulating economic growth in the regions will be an important focus.

Current Usage

In our view the Commission has not considered adequately the current level of use of Heathrow. At present Heathrow puts through more passengers, at 72.3 million per year, than any other airport in the World apart from Atlanta and Beijing. Not only does Heathrow already take more passengers by a substantial margin than any other airport in Europe, no other airport in Europe has more than 480,000 aircraft movements per year, which is the current limit set for Heathrow. To compare, JFK managed 406,000 in 2013 and Amsterdam with its 6 runways managed 440,000 for the same year [source Airports Council International <http://www.aci.aero/Data-Centre>].

We believe the prospects of a legal challenge have not been addressed properly (see under section 8)

We would call in to question the validity of the "consultation" and the Commission's analysis without there being certainty about how the flight paths will change in line with what will be selected as the preferred option. The public is in effect, being asked to respond with only half of the information.

Safety and anti-terrorism: **The prospect of an accident amongst a highly populated area has not been fully considered.** There have been some notable "Near misses", which if different would have caused devastation. The crash of BA Flight 308, a Boeing 777, in January 2008, within feet of the Heathrow perimeter, just missing the Southern Perimeter road, tube station and residential area, could have killed hundreds of people. The pilot had to effectively glide the plane in when the throttle needed, failed on descent due to ice particles in the fuel system. Captain Burkill, in an interview with the BBC (quoted in the Guardian Newspaper 9th Feb 2010), revealed that he had initially feared the plane would fail to reach the airport.

"I could see the impact point was going to be around about the Hatton Cross area, which includes catering buildings, a tube station and a petrol station," he added...When I realised we were coming in far too steeply with the loss of power and we were heading towards the buildings, I had to reduce the drag and, as we were going to crash on ground, I needed the [landing] gear.. The gear was going to take most of the brunt of the crash, so I daren't raise that up."

A crash to another Boeing 777, Asiana Flight 214, occurred whilst landing in San Francisco when automated control systems shut off the auto-throttle due to pilot error resulting in fatalities. To expose people nearby to these risks is needless. A former Transport Secretary has already told the Commission, "we cannot beat the odds forever". In the 1972 Staines Crash, one of the worst air disasters in

Britain, Flight BE548 crashed within three minutes of taking off from London Heathrow airport, with the loss of 118 lives.

Nor has the prospect of a terrorist attack been taken into account.

Concerns have been raised about a potential attack especially in relation to the proposal to extend one of the existing runways over the M25. It would be impossible to protect the resulting tunnel from a possible car bomb attack, as hundreds of vehicles would pass through it every hour. A successful attack would damage the tunnel, runway and the M25 causing massive disruption to a main artery of the UK road transport system as well as to airport operations. Even a hoax threat would be cause gridlock for hours. Heathrow is a terrorist target as evidenced by the IRA's mortar bomb attack in 1994.

An airport managing 700,000 plane movements instead of 480,000 per year with a corresponding increase in passenger movements up from 72 million per year to some 105 million per year would make Heathrow the busiest airport in the World by a substantial margin. **Such an airport if taken out by a terrorist attack would cause untold damage to the economy. It is far safer to have more and smaller hubs. This pattern is followed throughout the World. New York for example has two major international airports to serve it – JFK (50.4 million passengers p.a.) and Newark (35 million passengers p.a.) – both less than Heathrow now."**

Q 5 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?

Specific Areas of the Commission's Appraisal

Maximising efficiency

All of the options should be considered in connection with other airports. Thus some usage at Gatwick could be sent to Stansted, which itself might be expanded by 2050, as a second additional runway is mentioned. Heathrow is not expandable without creating social and environmental carnage. Heathrow, while full now, need not be full with a proper coordinated airports strategy.

Finance

The financial costs of Heathrow have been seriously underestimated while those of Gatwick are probably not accurate either.

Quality of Life and Place Assessments

The most significant deficiencies in the Consultation documents are in the Noise, Quality of Life and Place assessments.

Jacobs' Noise report is simply not credible. Although a 57% increase in air traffic this report advises on a relatively small number of people will be adversely affected compared with a 'Do Minimum' scenario. One might reasonably suspect this was the desired outcome before the work was commissioned.

Many of the deficiencies of this report have been exposed in the All Party Parliamentary Report dated 18 December 2014. This involves the primary reliance on averages set at artificially high noise thresholds and the failure to use (in fact total disregard of) World Health Organisation and European Standards. **It is difficult to comprehend this as the largest urban catchment of an airport in the world is under consideration.**

The Study Area is inappropriately defined, totally ignoring areas such as Teddington which have recently experienced over 17 hours a day of continuous noise at levels of up to 100 dB. This together with the absence of sensitivity analyses using WHO standards and targets is staggering.

The assumptions involving the introduction of quieter planes are clearly unproven and actually outside of Heathrow's direct control, as it can only be with international agreement that quieter planes will ultimately be introduced. The failure to use WHO standards in Heathrow's own noise analysis is not going to help this cause.

Given uncertainty over what planes will be used as well as the flight paths that will be adopted discredits the conclusions of this report. **We believe the adoption of a more scientific approach and use of WHO standards will reveal that millions, not hundreds of thousands of people will suffer serious detriment if Heathrow is allowed to expand by 57%.**

Astonishingly the health implications are not considered in detail in the consultation documentation, although it is being increasingly revealed that noise from airplanes is seriously detrimental to health and wellbeing. The Commission has failed to address adequately the health impact of the three options on the local populations. **It is impossible for the Commission to have met its objective "To maintain and where possible improve the quality of life for local residents and the wider population" without it having undertaken a thorough assessment of the potential impacts on health of increased aircraft noise and pollution.** Good health is fundamental to quality of life. The recommendations of the Commission cannot have any credibility until a thorough assessment on this issue is carried out, which should include reference to current medical research.

The fact the 'Quality of Life' Assessment draws heavily on the flawed noise assessment undermines its credibility and usefulness in what is a crucial area, especially given the number of people who will be affected by expansion.

We were astounded to see the 'Quality of Life' report specifically excludes the impact on children in its analysis. It is difficult to contemplate a more important area for an impact analysis to focus on but this seems to be ignored completely.

As highlighted in this submission a number of research projects have identified the severe impacts on childrens' learning and development. It is obvious that if children can't get to sleep until 11 pm and are woken up at 6 am (perhaps with night flights disturbing sleep further) – and thereafter exposed to high level plane noise all day – their development will be severely affected. When this becomes more widely known (most of the public are not aware of the potential impacts yet) a wide area will become acutely blighted for families, many of whom will have little practical choice about where they live for employment reasons. It is very questionable that any Government's would wish to put its citizens in this position in its vision of Britain in the future?

All of these factors will have huge indirect economic costs to the country (for example blighted property prices which the 'Quality of Life' report acknowledges). This does not appear to be factored into the economic analysis at all.

Nor is the injury to world famous heritage sites such as Windsor Castle, Hyde Park, Richmond Park, Kew Gardens and Hyde Park even highlighted as a consideration. It is ironic but true that Runnymede, the home of Magna Carta, and world famous school, Eton College (where the prime minister and Prince William were educated) will be blighted enormously by the expansion proposals.

If these adverse impacts to world famous and iconic locations are allowed to happen, this will be of the utmost detriment to our country's reputation as a civilised progressive society. The impacts will be suffered in the interests of satisfying global corporations' commercial ambitions at the expense of people who live in the country.

Q 6 Do you have any comments on the Commission's sustainability assessments, including methodology and results?

Local Communities/ Businesses

Other businesses around Heathrow are likely to suffer in the long term in parallel with the environmental carnage that would take place together with the damage and destruction of local communities. Well over 1 million people around Heathrow would be adversely affected by either a third runway or an elongated northern runway. History has shown that lowering the desirability of an area will deplete its wealth and prosperity with consequent damage to long-term employment. The suggestion in the Sustainability Assessment that prices of property in the area may reduce as a result of a third or extended runway is highly pertinent. The concept of making an area less attractive in which to live so as to reduce property prices and counting this as an advantage of that community is not one that carries any merit at all.

Noise

We have already noted many of the issues surrounding the deficient noise analysis report in Appendix 5 of the consultation documents. The Sustainability

Assessment of Heathrow, "Noise" section, seems to ignore the 30% of the time that the planes will take off in an easterly direction. Is the commission aware of statistics relating to easterly take-offs? Residents in affected areas most certainly are so aware.

The Noise Contour maps 9.2 and 9.3 do not seem to include easterly take offs at all. Giving no consideration to 30% of take offs being in an easterly direction means that the commission has failed to properly assess noise impact of increased take-offs and overflights to the east of Heathrow, and is therefore working with partial data.

Recent events have shown that the easterly take off can be for a considerable period of time. November 2014 saw well over 50% of all flights take off easterly into the wind and the Sustainability Assessment seems to have ignored the communities affected.

The Commission has referred to larger planes taking more people and therefore reducing the number of aircraft movements but this fails to consider the effects of larger planes having a much slower climb rate with consequent noise and vibration effects for the people on the ground. Practical experience shows that the newer larger planes are actually far noisier on the ground than older smaller planes. In addition the new planes may be given lower noise Quota Counts than they should be. This seems to be a possibility with the Airbus A380, which appears noisier than assessed – see paragraph 4.13 *DfT Night Flying Restrictions at Heathrow, Gatwick and Stansted Stage 1 Consultation* January 2013.

Nevertheless the comparison between the two Sustainability Assessments shows that Gatwick would be "Adverse" and "Neutral" after mitigation. Heathrow would be "Highly Adverse" and "Adverse" after mitigation. We believe that the difference would be substantially greater than as stated by the Commission's documents.

Q 7 Do you have any comments on the Commission's business cases, including methodology and results?

Allocation of different usage

None of the Business Cases consider the allocation of different types of usage (business, tourist, freight, transfer passengers) between the different airports. This must put into question the validity of the various arguments and statement of needs

VAT

The Commission has failed to address the current situation of no VAT being charged on aviation fuel used for international flights. In addition commercial flights are zero rated for VAT. This is a situation that is quite unjustifiable and

will almost certainly change in the future. The imposition of these taxes will most likely reduce demand.

Back Heathrow

The pressures brought to bear by powerful vested interests and foreign investors to raise the profile of a third runway at Heathrow, as well as the spurious and discredited 'Back Heathrow' campaign, indicate a worrying lack of balance between the noisy wants of vested interests and the health and needs of local communities.

To form a so called community group called "Back Heathrow", which is in fact 100% financed and controlled by Heathrow Airport Limited is cynical enough. It then published false claims and data. It claims that all Local Authorities apart from Hillingdon are in favour of Heathrow - incorrect. It claims that Heathrow may close and that peoples' jobs are at risk if Heathrow does not expand - incorrect. It claims that a Populous Poll found that "50% of residents expressed support for Heathrow expansion compared to 33% opposed. The rest remained neutral." That was in a public blog of the 22nd January at <http://www.backheathrow.org/blog> and was quite simply untrue. The Populous Poll did not ask that question

This approach (which in our view is highly in egalitarian) is further evidenced by the fact that those people most affected by airport noise levels and air pollution, that is, ordinary people in local communities, owing to expertise, time and financial constraints, are often those least able to respond to an extremely complex consultation such as this.

Recently 'Back Heathrow' has been distributing leaflets to incoming and outgoing passengers inviting them to complete a short statement in favour of expansion and to post these into post-boxes placed around the airport. This is in clear breach of the spirit of consultation.

Q 8 Do you have any other comments?

Regions- sharing the burden

The Commission has come to the conclusion that an additional runway will be required by 2030 with a likely demand for a second additional runway by 2050. It does not seem though to have considered how the expanded airport and the non-expanded one could work with the other existing airports. Why has the Commission not given greater consideration to the devolution and sharing of the burden of airport traffic and pollution around existing regional airports?

How can the Commission predict what the necessary requirements are of a particular airport if it has not considered how the demand may reasonably be allocated between the numerous airports in the South / South East / Midlands?

The concept of a hub airport is unnecessary and undesirable. The environmental impacts of having a hub airport are enormous and completely inappropriate to a densely populated region such as the area around Heathrow. The load should be spread.

In 2013, Caroline Pidgeon, Chair of the London Assembly's Transport Committee, said,

"Evidence we received shows that the Airport Commission must examine whether better use of existing airport capacity could be an intelligent cost-effective alternative to building new airports or runways.

"The need for additional hub capacity is also under debate, with strong data showing rather than runway capacity limiting airlines ability to fly to emerging markets, it could be low passenger demand from each airport's geographical area. As 700,000 residents already suffer from noise pollution as a result of Heathrow flights

Transfer passengers

The 37% transfer passengers at Heathrow confer no economic benefit save to the airport and its owners (foreign in the case of Heathrow). If Transfer Passenger numbers were reduced from the current 37% of the total, then the vacuum could be filled with business users, who would spend money in the Country. At present only 30% of Heathrow's passengers are business users, so there is plenty of room for expansion within the existing confines, provided that either transfer passengers or tourists make way. Heathrow currently puts through more passengers, at 72.3 million per year, than any other airport in the World apart from Atlanta and Beijing. Not only does Heathrow put through more passengers by a substantial margin than any other airport in Europe, no other airport in Europe has more than 480,000 aircraft movements per year, which is the current limit set for Heathrow. To compare, JFK managed 406,000 in 2013 and Amsterdam with its 6 runways managed 440,000 for the same year [source Airports Council International <http://www.aci.aero/Data-Centre>].

Legal Challenge

In our view there is a significant possibility of a legal challenge, which has a sufficient prospect of success to be a material danger to expansion of Heathrow beyond its current size. This is not mentioned in any Operation Module and is not mentioned in the "Operational Viability" Module either.

The leading case on the possibility of a legal challenge is the appeal case judgment of the Grand Chamber of the European Court of Human Rights in the case of ***Hatton & Others v. United Kingdom [2003]***. That case was an application brought by a group of residents against the UK for allowing night flights at Heathrow. The judgment of the Grand Chamber is long and involved but in essence produced 4 facts or principles:

1. Residents on the ground affected by noise from commercial aircraft do have a right and the legal standing to bring a claim against the state for violation of the right to an effective remedy before a national authority under Article 13 of the European Convention of Human Rights.
2. The UK failed to provide an effective remedy to UK nationals in relation to overflying of commercial aircraft into Heathrow in 2000 both through the provisions of the Civil Aviation Act and the reluctance of courts to judicially review government decisions
3. Residents on the ground affected by noise from commercial aircraft do have a right and legal standing to bring a claim against the state for violation of the right to respect for private and family life under Article 8.
4. On the facts of the case of *Hatton*, the balance lay at that time (and in the particular circumstances of the case) in favour of the State and the residents lost their application for a judgment for violation of Article 8. The Court referred to a "margin of appreciation" which should be given to a member state

We believe that the ruling on Article 8 in statement 4 above could well be different in current circumstances with the proposed expansion affecting very many people and in the light of subsequent medical research. In particular the following should be brought to the Commission's attention:

- a) The aircraft movements will have increased from 480,000 per year to over 700,000 per year affecting many more people than in 2000 when the ***Hatton*** case was started. In addition the number of people affected by noise at Heathrow will have risen from the current level of 28% of all people in Europe affected - which is hugely more than the next noisiest airport (Manchester at 3.7%)
- b) People will have been dispossessed of their homes
- c) It has been suggested flight paths may be narrowed greatly increase the effect of noise upon a substantial number of people
- d) Aircraft will have got bigger and more aircraft will fly low creating yet more noise
- e) The Commission's noise measurement methodology is flawed as stated elsewhere
- f) Heathrow Airport Limited has used their own organisation masked as a local community organisation called "Back Heathrow" to produce material that is both inaccurate and not in compliance with the directions of the Commission in obtaining responses. Much of that material is being sent to the Commission and might, if considered by the Commission, have interfered with the process of the Inquiry.
- g) Subsequent medical research – particularly on children

In the light of the above the prospects of a legal challenge taking place, are likely to be considerable (meaning 40% or more). Should a group of residents be successful, the effects upon Heathrow and indeed the Country as a whole, if expansion has been allowed by the government, could be catastrophic. People not previously having received any compensation would have to be compensated, Heathrow would probably have to reduce operations to the 2000

level, jobs created or moved from other parts of the Country would be put at risk and airport planning would be put at risk.

If the ECHR Judgment were not to be complied with, the UK would lose substantial credibility as a democracy. Its international reputation would be greatly diminished, affecting the world's perception of the UK possibly hindering other important tasks such as the war on terrorism, criticism of states practicing torture and its influence on the world stage. Not to comply with an Article 8 ruling of the ECHR would be almost unthinkable.

This is much more of a risk factor for Heathrow than Gatwick due to the substantially greater number of the people impacted by an expanded Heathrow. It is a factor that not only has not been evaluated with external legal opinion, it has not even been mentioned.

There might also possibly be a legal challenge from Gatwick Airport itself. The chairman of Gatwick Sir Roy McNulty has been quoted in the Guardian on the 31st January 2015 as saying that there "would be all Hell to pay" from people living under the Heathrow flight paths. All three major parties have previously pledged themselves to oppose an expansion of Heathrow. No one Government can bind a successor, but in view of the misinformation that has been given by Heathrow, there is now at least a risk of a claim that a finding in favour of Heathrow might not be well founded. Heathrow have said that all local authorities apart from Hillingdon are in favour (Daily Mail on 8.1.15 and manifestly untrue), they have claimed in their hoarding promotions that more people in the area support an expansion than do not, which is suspect to say the least and is based on a poll commissioned by them by Populous which asked highly leading questions. They have also said that Heathrow will be quieter after expansion (the "Back Heathrow" blog and highly unlikely in the light of evidence).

Conclusion

There are 4 runways for London now at its major airports (2 at Heathrow and 1 each at Gatwick and Stansted). There are also a further three runways between Luton, Southend and City Airports. The construction of a further runway will make London one of the most prolifically served capitals in the World. Existing airports could be used more effectively and the need for expansion is highly dubious. If airport expansion has to happen we believe it not should be over such a densely populated area as the Heathrow hinterland - or one that is already in breach of EU Pollution Targets. The logical thing to do is to spread the load in a properly co-ordinated airports strategy.