Planning Inspectorate, Temple Quay House, 2 The Square, Bristel BS1 6PN

Your Ref. TRO 20005 My Ref. GATW -007 5th August 2024

Dear sir/madam,

Re. Gatwick northern runway application

1. The issue of Noise

Please see my "Representation" document of 28.10.23: there is no point my repeating myself.

I enclose noise contour levels (day and night) for the wider Gatwick area, for 2019 when airport activity was at its highest, and I describe in my 28.10.23 document how bad noise problems were then locally. Passenger levels at Gatwick were 46.3 million in 2019, and Gatwick wants to increase them. 75 million by tate 2030s. Gatwick has not made these noise contour levels widely available (and should have).

I enclose also a summary of research on increased risk of admission to hospital and death from cardiac problems and stroke, due it is hypothesised to noise, at Heathrew and in the USA in relation to airports. A 10 to 20% increased risk of hopital admissions and death for cardiac problems and stroke in people subject to noise ever 63 decibels living in the Heathrew area was found. Research in the USA also found a link between heart disease and airport noise. One needs to be aware also of high air pollution levels near airports and high non-ionising electromagnetic radiation levels also: which can promote cardiac problems.

I enclose a document regarding the 2018 WHO Noise and Health Report. WHO has set the recommended noise limit from aircraft at 45Lden (day) and 40Lnight.

It can be seen from the enclosed noise contour levels round Gatwick, the wide areas within the WHO problematic noise levels, and within the areas subject to increased risk of cardiac and stroke problems and death relating, it is thought, to aircraft noise.

I have felt very serry for people begging the inspectorate to extend double glazing funding to noise contour level areas below those Gatwick is offering. No double glazing can solve the problems of aircraft and airport noise, and increased traffic noise. People have been legitimately living in their homes long before Gatwick has wanted to expand to the detriment of these people, their health, their wellbeing, their length of life, the value of their homes, their ability to use their gardens. Gatwack abould have no right to rob people of their health, life, the value of their homes, the use of their gardens. At issue is not "growth" but Robbery.

2. The issue of air quality

Air pellution near airports (PM2.5, PM10, CO, NO2) was reported as higher for Gatwick than Heathwew when the issue of which airport should expand. It has been suggested that aircraft at Gatwick are older than those for Heathrew and thereby more pelluting and that this may explain the findings. Air pellution has been associated with cardiac arrest, strekes, respirately conditions (asthma, pneumonia,...).

3. The issue of non-ionising electromagnetic radiation

Such radiation will be very high near airports (ground radar, radar from under aircraft, high frequency communications associated with aircraft, increased mobile communication near airport and associated roads,...).

The medical problems are well decumented. Much of such radiation is in fact ionising (and therefore able to cause cancer). Unfortunately, much of the research has been done on animals instead of focussed on human beings and their medical problems: this has been to the detriment of animals and humans, and has held-up research into relevant human medical problems.

4. Interim conclusions

I apologise that I have been too short of time to present more information, in time for your submission deadline. I have NHS recognition for being

This highlights the fact that non-ionising (so-called) radiation pollution and chemical pollution are important health problems. Airports and aircraft, airport expansion (with its accompanying building expansion) are major sources of radiation and chemical pollution and consequent health problems. Such expansion should be resisted.

Yours sincerely.

Dr J. Cuthbert MSc PhD

Living near airport raises risk of heart disease, study finds

Chris Smyth Health Correspondent

Living near a noisy airport appears to raise the risk of heart disease and strokes, research suggests.

Tens of thousands of people living in the loudest areas near Heathrow had a 10-20 per cent increased risk of suffering and dying from the conditions, a study concluded. A US study found a similar link, giving the firmest evidence yet that plane noise contributes to death from heart problems.

Researchers cautioned that they could not be certain that aircraft noise caused heart disease, but said policymakers needed to take the link "into the mix" when considering a third runway at Heathrow or other proposed sites. They reassured people living under a flight path that any risk from noise was much less than from smoking, poor diet or lack of exercise.

Anna Hansell, of the school of public health at Imperial College London, who led the study, said: "The exact role that noise exposure may play in ill health is not well established; however it is plausible that it might be contributing, for example by raising blood pressure or by disturbing people's sleep."

She added: "There is some biological plausibility for noise having an impact

on heart disease. There is a startle reaction and if you're suddenly exposed to a loud noise, blood pressure increases and heart rate increases."

Her team looked at 2001 data on 3.6 million people living in areas near Heathrow where aircraft noise averaged more than 50 decibels — about as loud as a normal conversation. They found a raised risk of hospital admission and death from heart disease and stroke in areas where noise levels averaged more than 63 decibels, affecting about 70,000 people. After adjusting for ethnicity, age, sex and smoking, the researchers concluded that the loudest aircraft noise was linked to a 10-20 per cent increase on the risk of hospital admission for heart problems.

Further research at other airports would be needed to provide incontrovertible evidence that aircraft noise increased morbidity and mortality.

The study was published in the *British Medical Journal* alongside Harvard research that found a similar link in data on six million older people living near 89 airports. That study attributed 2.3 per cent of hospital admissions for heart disease to aircraft noise.

Paul Elliott, senior author of the Heathrow study, said the research was "something that policymakers have to

Noise over Heathrow nolse (dB) 📧 >54-57 ■ >63 Area of Increased risk

take into account. They're well aware of annoyance levels and what we're adding into the mix is the effect on heart disease and stroke". He added: "The issue here is about the highest level of aircraft noise and that's partly about planning"

Kevin McConway, professor of applied statistics at the Open University, said: "Both of these studies are thorough and well-conducted. But, even taken together, they don't prove that aircraft noise actually causes heart dis-

ease and strokes. The studies can't do more than suggest very strongly that we should find out much more about aircraft noise and circulatory disease."

Matt Gorman, Heathrow's director of sustainability, said: "We are already taking significant steps to tackle the issue of noise by charging airlines more for noisier aircraft, offering insulation and double glazing to local residents and are working with noise campaigners to give people predictable periods of respite from noise."

HS2 plans enter a real battlefield

Danielle Sheridan

A lost battlefield from the Wars of the Roses has been rediscovered along the HS2 route, adding further complications to plans for the high-speed rail link.

The line is to pass through an area of Northamptonshire where the Battle of Edgecote was fought on July 26 1469, when the forces of Richard Neville — Warwick the Kingmaker — defeated those of King Edward IV.

English Heritage has announced that the previously lost area will be given listed status after historians from the Battlefields Trust found the site.

Because the exact location of the fighting was not known, the site, which is six miles from Banbury, was not put on the national Register of Historic Battlefields when it was established by English Heritage in the 1990s.

The battlefield's new listing does not give it statutory protection from development but it does mean its status must be considered in the planning process. The Government's National Planning Policy Framework says that development of historic battlefields should be "wholly exceptional".

The battle ended when the Royalist forces, seeing more of their opponents arriving, broke away and fled. They were pursued and it is thought they were routed in the area, through which about 300 yards of track should pass.



Guide To The 2018 WHO Noise & Health Report



By John Stewart

The World Health Organisation (WHO) report published on 10th October, updating its earlier noise guidelines, contains a wealth of information. It includes probably the most comprehensive body of research on noise and health ever assembled in one place. It ought to be the driver of future policy on noise. Whether it will be depends largely on how much pressure governments and industry come under to follow its findings. But, first of all, it is important to understand what it is saying – and what it is not saying. This short article aims to be a plain person's guide to the report.

Has this kind of report being published before?

The report updates the guidelines produced by WHO in 1999 and night guidelines it published in 2009.

Does it only apply to Europe?

It applies to all European countries (not just those within the European Union). It was published by the WHO European office but they hope and expect is will influence noise policy across the world.

Who wrote it?

The work was done by WHO staff supervised by some of the biggest names in noise and acoustics. Each section of it was carefully peer-reviewed.

Did they do research of their own?

No, they pulled together and analysed all the research that had been done into noise and health.

Are all aspects of noise covered?

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Not quite. It covers environmental noise. It deals with road, rail and air noise and, for the first time, wind farm and recreational noise. It doesn't include neighbour noise.

Are its guidelines legally binding?



No. However, given the extent of the health problems associated with noise that report found, it will be difficult for governments to dismiss the guidelines out of hand.

How big a problem is noise in Europe?

WHO has not calculated how many people are exposed to noise above their new recommended safe thresholds but indicate that it will be between 100m and 200m, the big majority of these exposed to traffic noise. A 2016/17 survey, quoted by WHO, found that 32% in Europe have some problem with noise (rising to 49% in the cities and suburbs) and that 15% rate noise as one of the top five environmental problems.

Is WHO saying over 100m Europeans will suffer bad health due to noise?

The report is not saying that. It argues that the health of a percentage of these people will be affected, the exact percentage dependent on the particular noise source.

What health effects are included?

It looked at all the health impacts for which there is evidence. This included 'annoyance' and 'self-reported' sleep disturbance.

What are the key recommended limits?

Road	53 L _{den}	45 L _{night}
Rail	54 L _{den}	44 L _{night}
Aircraft	45 L _{den}	40 L _{night}
Wind Turbines	45 L _{den}	no recommendation*
Leisure	70 LA _{eq}	

^{*} WHO felt that there was insufficient evidence to make a recommendation

What metrics were used?

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 L_{den} averages the noise out over an 8 hour day, a 4 hour evening and an 8 hour night, with 5 and 10 decibels added to the evening and night figures respectively to account for generally lower background levels at those times. L_{night} averages the noise just during the night period. LA_{eq} , as used by WHO in this report, is an annual average.

What is the methodology the WHO used?



It can probably be summed up in the word 'bench-marking.' It is critical we know what this means if we are to understand its recommendations. When 10% of people said they were annoyed by a particular noise source (during the day) at a given level, that level became the bench-mark, became health threshold, the new health guideline.

So, for example, the report found that 10% of people were annoyed by aviation noise at 45 L_{den}. This, therefore, became the bench-mark, the relevant health guideline. WHO acknowledged that 10% could be a relatively small number in any one place but argued that spread across Europe it amounted to a considerable number of people and so should be the benchmark. As we'll show in some tables further on, WHO is *not* saying that *most* people will be annoyed or experience health problems from aviation noise at 45 L_{den}. But what it *is* saying is that, in its view, *enough* people will do so for it to be the recommended guideline.

WHO's night time guidelines, generally, are lower because the evidence showed that regular sleep disturbance can have a worse impact on health than annoyance. Therefore the benchmark was set at a lower level. The recommended threshold was the level at which 3% of people were 'highly sleep-disturbed'.

Was the noise measured inside or outdoors?

WHO is talking about levels of outdoor noise. Indoors, the noise can be 10 decibels lower even if the window is open; 15 decibels lower with a half open window; and 25 decibels less if the window is shut.

We concentrate on air: What are the AIR findings?

Recommended guidelines:

Aircraft 45 L_{den}

40 Lnight

At present 3 million people in Europe are exposed to aircraft noise above 55 L_{den} , with 1.2 million exposed to night noise above 50 L_{night} . Numbers would be higher if the new recommended guidelines were to be used but the numbers would still be less than for road or rail noise. However, WHO report confirms that people start to get highly annoyed by lower levels of aircraft noise when compared with road or rail. Because WHO found 10% of people are annoyed at levels of 45 L_{den} (and therefore their health might be affected) and the benchmark 3% are 'highly sleep-disturbed' at 40 L_{night} , these are recommended as the safe noise guidelines for aircraft noise.

The levels at which people are highly annoyed by aircraft noise (from the report):

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Table 30. The association between exposure to aircraft noise (L_{um}) and English (%HA)

L _{ess} (dB)	%HA
40	1.2
45	9.4
50	17.9
55	26.7
60	36.0
65	45.5
70	



Does the WHO Report recommend solutions?

Under each section it looks as possible solutions. There are more proven solutions for some noise sources than for others. The report gives the very strong impression that it wants to see its report lead to action.

Our turn now...

The WHO has done it job. It is over to us now – Governments, industries, communities, campaign groups – to make sure we use it to create a quieter and healthier future.

Link to **the full report** (http://www.euro.who.int/__data/assets/pdf_file/0008/383921/noise-guidelines-eng.pdf)

John Stewart is author of Why Noise Matters

UECNA stands for:

Union Européenne Contre les Nuisances Aériennes European Union Against Aircraft Nuisances

Third-party contributions do not necessarily reflect a position of UECNA



