

Dear Sirs,

Interested Party Reference number: 20046365

My objections to Gatwick's application may be summarised as follows:

The proposal is against government policy
The claimed local support is erroneous
The scale of the proposal is disproportionate to the existing infrastructure
The proposal is incomplete
The noise proposals are unacceptable
Night flights are damaging to health
The rail transport links are unsuitable or non-existent
The road transport links are insufficient
Water pollution is an issue
There is insufficient housing, schooling or medical facilities for an enlarged workforce
Local councils at every level oppose the application
The imminent Horse Hill decision in the Supreme Court is relevant
Hydrogen fuels are a very distant holy grail

A more detailed summary is set out below.

Government policy

Gatwick's proposal flies in the face of the government's Levelling Up policy, putting yet more infrastructure and economic capacity in the South East of the country. It does not comply with the findings of the Airports Commission, nor with the Airports National Policy Statement, nor with the government's Jet Zero policy, nor with the Climate Change Committee's requirements.

Local support

Gatwick claim 78% of "local" people support its expansion. This is extremely surprising. In 2013/14 Gatwick wanted to put their three alternative proposals for a second runway to local people in a series of presentations all around the airport. Attendees were to be asked which of the three alternative runway proposals they preferred. Gatwick at the last minute succumbed to pressure and included a fourth option - none of the above.

Nevertheless, 66% of respondents chose the option hidden away on page 16 of the glossy brochure and rejected all of Gatwick's proposals for expansion. Attitudes have hardened since then due to ever increasing flights, traffic, noise, pollution and the ongoing failure of Gatwick's Noise Management Board to address public concerns. Yet astonishingly Gatwick now claim that 78% of local people support expansion. This figure was arrived at by a YouGov poll following exhibitions by Gatwick, So what has bought about this dramatic turn around in public opinion?

There appear to be six reasons:

1. Gatwick asked an over simplistic question, whether the respondents supported “...plans to bring its standby runway into routine use.” No reference at was made as to what this would entail.
2. The exhibitions were held in areas where the negative effects of the airport are not apparent. The operational axis of the airport is east/west, yet the two principal exhibitions were held some distance away to the north and south of the airport in Croydon and Brighton, neither of which are overflowed, nor could they be said to be especially affected by Gatwick road traffic, noise, or air pollution, the former being in greater London and the latter on the south coast.
3. Croydon and Brighton are centres of population that have lower cost housing and a higher proportion of Gatwick’s largely lower paid workforce live in these two urban centres.
4. The remaining exhibitions were held in towns which are not overflowed, but are also home to significant numbers of Gatwick workers, EG Horley and Horsham.
5. Gatwick then massaged the resultant figures by excluding the high proportion of respondents who did not express an opinion, presenting the results with a caveat as “78% of local people **who expressed an opinion** support airport expansion.”
6. In reality about 600 people, about 13% of those who responded to the poll, "strongly support" the proposal. That is not "78% of local people" and is totally insignificant given the population in the area around the airport.

Scale of the proposal

The Airports Commission’s report stated that airports other than Heathrow were “... to make best use of existing infrastructure.” The amount of new infrastructure now proposed by the applicant is out of all proportion to the narrow strip of existing tarmac which "best use" is to be made of.

The findings of the Airports Commission was that Heathrow was to be the site of principal expansion, not Gatwick. Nor is the current proposal all that is needed, it is likely the thin end of a wedge for Heathrow currently has five terminals whereas Gatwick has just two. If a second runway were to go ahead it seems highly likely that Gatwick’s two terminals would be insufficient to handle the same number of passengers as Heathrow’s five terminals do now and so further development would be needed, yet there is no mention of this requirement.

Noise

Gatwick have claimed that a reduction in individual aircraft noise of 2dBA will offset the increased number of flights they are proposing. This is totally unrealistic and is not accepted. The human ear can barely differentiate a change of 2dBA and most people will not notice the slight reduction, but they will most certainly notice an increase of up to 105,000 unwelcome noise events per annum.

Night flights

At 15,000 per annum Gatwick already has more night flights than any other airport in the country, and most of them in the summer when windows need to be open at night, something that climate change is exacerbating. Gatwick claim that three aircraft rotations per day is part of their business model and that night flights are essential. Interrupted sleep has been proven to be detrimental to human health. Regardless of any business model, new developments should not facilitate activities that are now known to be damaging to human health.

Rail connections

Gatwick is served by the Brighton line. This is already a very busy line which is frequently standing room only now and it is understood it may not be expanded due to physical constraints north of the airport. The increased passenger capacity necessary for the proposal is simply unavailable via the rail connection.

Underground connections

International airports are invariably connected to the mass transit systems of the cities that they serve, the Paris Metro, New York Subway etc etc. The London Underground is the capital's mass transit system, 333 and in a low carbon future mass transit will become increasingly important. The Underground is amongst the largest such systems in the world with 252 miles of track, 272 stations and it carries around five million passengers a day. You would expect it to connect to London Gatwick, but there is no connection the airport. The nearest tube station is 20 miles away.

Road connections

Because of the limited rail and non-existent Underground connections outlined above most passengers and staff will access the airport by road. Gatwick is served from the north by the M23 alone, and from the south by the A23. Access from east and west from south of the M25 is extremely poor. For example, rather than travel around three sides of a square, traffic from the areas south west of the M25 converges on to the A25 outside Guildford heading east, then via a variety of country lanes to the south of that road, through an area of National Landscape (formally known as an AONB) to access Gatwick. The village of Charlwood is just one of the necks of this funnel as it were. A 2018 traffic survey in the village revealed more than 54,000 vehicles a week were using The Street, an unclassified road through the village. Expansion of the airport is going to worsen this unacceptable situation on a large number of totally unsuitable rural roads and lanes both east and west of the airport.

Water Pollution

Increasing the numbers of passengers using Gatwick, doubling the area of parking, and increasing the area of concrete and tarmac will put an increased load on the drainage systems for both surface water and foul drainage. Climate change will increase heavy rainfall and therefore increase the load and the risk of pollution on the River Mole.

Housing

Gatwick's proposal states that 14,000 additional workers will be needed, a figure that is questionable due to increasing automation and AI, but if it is correct, where will these new workers come from and where will they live? Gatwick is an area of low unemployment and with a shortage of housing for purchase or rental, together with already stretched schooling and medical facilities. Additionally environmental damage has been found to be caused by a falling water table due to previous excessive water abstraction. Because of this there is currently a moratorium on other than water neutral development over much of the area. If the new workforce commutes from further afield then there are additional carbon emissions, traffic congestion and pollution considerations.

County, District, Borough, Town and Parish Councils.

It is notable that none of the local councils adjacent to Gatwick support its expansion. When West Sussex County Council debated the matter it was stated that Gatwick's expansion was the single most environmentally damaging planning proposal that had ever come before the Council. This is typical of the view expressed by other councils, most of

which have formally recognised that there is a climate emergency and that they must respond to it.

Climate change

The elephant in the room. Gatwick airport prides itself that it has a relatively low carbon footprint but this is completely irrelevant. Gatwick's sole purpose is to facilitate aviation, the proposal seeks to expand that. Minute by minute flying is the most environmentally damaging activity that humans undertake and extraordinarily difficult to de-carbonise. While most businesses and the majority of people are on a successful drive to reduce carbon emissions, Gatwick's proposal is the reverse, increasing emissions by over one million tons of CO₂ per annum. This is totally unacceptable. If aviation is to be expanded then a means of making it carbon neutral needs to be found first. This is very difficult and may require entirely new technology. We are probably 20 plus years away from achieving carbon neutral aviation on a commercial long distance scale and until we do there should be demand limiting as proposed by the Climate Change Commission, not further airport expansion.

The Horse Hill decision

An application to drill for oil, coincidentally not far from Gatwick, is currently being considered by the Supreme Court having been through the planning process, the High Court and the Court of Appeal. The matter hinges around whether the downstream emissions from a development need to be considered in the Environmental Impact Statement. The applicant, Sarah Finch maintains that they do, whereas current planning requirements require that they do not. The Supreme Court's decision is therefore relevant to the DCO application because the downstream emissions from Gatwick's proposal are over 1m tons of CO₂ emissions per annum.

Hydrogen fuel

Absolute zero, the lowest temperature that can be achieved is -272C. Hydrogen evaporates just above this at -256C at atmospheric pressure. It must be kept below this temperature or be pressurised to above about 8,000 psi/550 bar, to remain in liquid state. Being in the dense liquid state is the only way that the gas can contain sufficient energy to fuel an aircraft over even modest distances.

Gatwick makes much of using hydrogen as a fuel, and maintains that in the near future its use will remove the greenhouse gas emissions from flying. Gatwick cites that it has buses running on this fuel now. Having a bus running on hydrogen is reasonably straightforward; the bus has a limited daily range, can refuel during its daily operation if needed, operates in a relatively narrow temperature range and has no significant volume or weight considerations. If there is a failure of the safety features, the bus can stop and the passengers may disembark.

An aircraft has entirely different requirements, passenger space must be maximised and weight kept to a minimum. An aircraft must also accommodate huge temperature variations, from +55C on the tarmac in Dubai to -70C at 35,000 feet, together with significant air pressure variations. Added to which is the overriding problem that the passengers may only disembark once the plane has safely landed.

The ultra low temperature refrigeration needed - cryogenics - is complex, bulky and heavy. Very high pressure vessels, which the hydrogen tanks would certainly be, would need to be spherical to accommodate the huge pressure and temperature differences they would

be subjected to. This would preclude the use of conventional wing tanks. Hydrogen is highly flammable and under immense pressure it poses great safety problems.

Additionally, the airport is currently continuously supplied with aviation fuel via a 8" diameter pipe pumped under pressure from the Fawley oil refinery, near Southampton. This would be unsuitable for hydrogen and all the alternative fuel would need to arrive by road, adding to congestion, emissions, and worsening air quality.

Gatwick seeks to gloss over all these huge difficulties, clinging to the totally unrealistic holy grail that hydrogen fuelled long haul aircraft will be in common use in the near future.

In conclusion

The Airports Commission studied the matter for three years to bring to an end to decades of indecision as to where additional airport capacity should be provided. Its "unanimous and unequivocal" conclusion was not at Gatwick. When Gatwick protested vigorously, Sir Howard Davies, the chair of the Commission, described the airports reasoning that it should have a second runway as "Gatwick's propaganda". We are now seeing a lot more of Gatwick's propaganda in this DCO application.

The Secretary of State for Transport, Chris Grayling, stated in parliament, "We are not in the business of changing our mind" yet this is exactly what Gatwick's proposal would amount to.

I hope the above views are helpful and that they will be taken into account.

Yours sincerely,

Gareth Hayton