COMMUNITIES AGAINST GATWICK NOISE EMISSIONS

Gatwick Airport Expansion
and the
Impact of Flightpaths on Communities

Drawn by Esther (age 6) of Rudgwick, West Sussex

Gatwick Airport proposes
NO break from aircraft overflight with TWO Runways

Gatwick Airport expansion - a Nightmare for Residents:

Page 6 onwards gives an idea who will be impacted by Gatwick 2 flight paths and proposals and a map of flight paths can be found on page 12.

In Brief

- It is Government policy to minimise the number of people significantly affected by aircraft noise, but Gatwick's second runway proposals ignore this requirement

- Gatwick has chosen not to include options that might reduce impact, even if it were to be by only by a small amount. Its proposals focus on Heathrow in an effort to make the impact of a second runway at Gatwick look insignificant by comparison. Yet Gatwick has proposed no mitigation measures to meet current Government policy.

- Gatwick has chosen not to implement measures to reduce noise impact - mixed mode, no ban on night flights, no steeper approach, no displaced thresholds (although these may be used occasionally to increase Air Traffic Movements). Gatwick consistently refers to Performance Based Navigation (PBN) - satnav for aircraft - that brings concentration as though this is a major improvement. But, as communities are already experiencing, concentration on departures and arrivals causes great distress and anger, and this policy has lead to the formation of almost 20 active protest groups.

- Gatwick would essentially become Heathrow, but in a relatively tranquil area. To many communities Gatwick is already the 'neighbour from Hell' with insincere gimmicks rather than a strategy to reduce the impact on communities now. Even Gatwick's own commissioned 'independent' consultants criticised the airport for its lack of a noise mitigation strategy and for its poor community relations, and for it's sadly lacking communication with those affected. (Gatwick Submission to Airports Commission).

Aviation Policy Framework

The Government sets out in the Aviation Policy Framework (APF), its expectations of the roles airports should play in reducing noise impacts, particularly in the case of proposals for new capacity.

Below, in italics, are extracts from this document that set out the Government's expectations as set out in the APF, versus, our understanding of Gatwick's expansion proposals in relations to noise mitigation

- **Mitigation and respite – APF Page 60**

3.28 *"The Government expects airports to make* ***particular efforts to mitigate noise*** *where changes are planned which will adversely impact the noise environment. This would be particularly relevant in the case of proposals for new airport capacity, changes to operational procedures or where an increase in*

movements is expected which will have a noticeable impact on local communities. ***In these cases, it would be appropriate to consider new and innovative approaches such as noise envelopes or provision of respite for communities already affected."***

Gatwick's proposals -

- **'Runway mode operations – Providing respite'**

When considering mitigation and respite in relation to which mode it will operate its runways, Gatwick consulted on two proposals for runway separation, the wider of which enabled independent parallel operations. Independently operating runways means that there are choices in how these runways are operated. They can be operated in "segregated mode" i.e. one runway for arrivals and one runway for departures (remembering that arrivals and departures are always in the same direction i.e. into the wind), where relief could be provided through runway and route alternation. However, in this option, there would likely be impact to capacity. Alternatively, they can both be operated in "mixed mode". This maximises capacity but respite from aircraft noise is not provided.

Gatwick's stated preference, and the option it selected for its proposals, is to operate both runways in mixed mode to maximise capacity at the expense of the impact on local communities, in particular with respect to respite. Gatwick proposes to operate an airport that is busier than Heathrow today yet without offering the provision of noise respite. This means that communities that are ***currently*** overflown miss out on the opportunity to have some respite for the first time; and communities that are ***newly*** overflown would go on to receive no respite from aircraft overhead.

With a second runway, if Gatwick had proposed to use runways in "segregated mode", it would have reduced the noise impact on local communities that will be regularly overflown. In both cases, Gatwick has chosen not to implement a mode of operation that would be of benefit to local communities, conflicting with Government objectives "to reduce the number significantly affected by aircraft noise" but geared towards profit maximisation for its mainly off-shore shareholders.

By choosing to operate two runways in "mixed mode" Gatwick has significantly limited its ability to meet Government expectations, as documented in the APF, for airports to mitigate noise impacts through the provision of respite when new airport capacity is being proposed.

- **Steeper approaches**

Once arriving aircraft reach the final approach, they will descend at a fixed angle – for most airports in the world the international standard of approach is set at 3 degrees. A steeper approach involves increasing the angle of decent for arrivals aircraft once they are on final approach. This means that aircraft fly higher as they approach the airport, consequently having the potential to be quieter for communities located under the final approach.

However, Gatwick has chosen not to implement steeper approaches on the basis that it believes the benefits are marginal. Stating: "We believe increased approach slopes deliver marginal benefits in terms of noise reduction…Whilst not discounting their use, we do not believe they would materially impact noise exposure on populations around Gatwick Airport, noting also that both under current and expanded operations have a significantly lower level of population exposure than other airports."

(A Second Runway for Gatwick, Updated Scheme Design Submission. Page 31).

In this decision, Gatwick once again did not seek community input nor did it demonstrate consideration through exploring the possibility of implementing a steeper descent that would be of benefit to communities, even if marginally. Gatwick has the added problem that Heathrow and other airport flight paths go above Gatwick's routing at higher altitudes, and thus CDA (Continuous Descent Arrival) into Gatwick is made more difficult to implement as are CDC (Continuous Departure Climb).

When other European airports, such as Frankfurt, have implemented a steeper approach angle, this would seem to have delivered tangible benefits for communities under the final approach.

- **Gatwick Airfield Masterplan**

Displaced thresholds - displacing the runway threshold means moving the point that aircraft take-off or land to a point on the runway other than the physical beginning or end of it. For arrivals, moving the threshold (the point at which they touch down) further down the runway would keep aircraft higher for longer over communities located under the final approach.

Gatwick has proposed an airfield design that maximises efficiency, profits and runway movements rather than balancing the noise impacts and providing respite to local communities. Gatwick is not proposing to implement displaced thresholds that would keep aircraft higher for longer, consequently reducing the noise impacts for communities affected by arrivals under the final approach.

Whilst measures such as steeper approaches and displaced thresholds offer limited noise improvements as a single entity, combined with other noise mitigating measures, noise reduction has the potential to be much more significant.

By opting not to implement steeper approaches and/or displaced threshold Gatwick is not meeting Government expectations for airports to mitigate noise impacts through innovative approaches when new airport capacity is being proposed.

- **Night Noise – APF Page 62**

3.35 "In recognising these higher costs upon local communities, we expect the aviation industry to ***make extra efforts to reduce and mitigate noise*** *from night flights through use of best-in-class aircraft,* ***best practice operating procedures, seeking ways to provide respite wherever possible*** *and minimising the demand for night flights where alternatives are available. "*

➢ Gatwick will have scheduled flights during every hour of the night, yet its proposals talk little of its plans to mitigate the impact of night flights on communities. Although Gatwick has said that it will explore the options of offering respite at night, there is no guarantee of this, even though the number of people exposed to night noise doubles.

Gatwick's number one customer, EasyJet, in its presentation at the Department for Transport Night Flight Workshop stressed how a ban on night flights would impact connectivity and routing available due to lack of arrivals during the night period. Please note Heathrow does not cater for budget flights and only 50% of its flights go to Europe.

By providing no guarantee on how Gatwick plans to migrate the noise impacts of flights throughout the night, Gatwick is not meeting Government expectations for airports operating night flights to make extra efforts to mitigate noise including seeking ways to provide respite. Gatwick is also not reducing the number of flights it is operating at night, again not meeting Government expectations to make efforts to reduce night noise.

- **Airspace – APF Page 61**

3.31 *"The routes used by aircraft and the height at which they fly are two significant factors that affect the noise experienced by people on the ground. This is consistent with the long-standing concept of noise preferential routes which departing aircraft are required to follow at many airports, including the noise-designated airports. Within the countryside, in common with other relevant authorities, the CAA has legal duties to have regard to the purposes of National Parks and Areas of Outstanding Natural Beauty and must therefore take these into account when assessing airspace changes".*

3.32 "***However, in certain circumstances, such as where there is intensive use of certain routes, and following engagement with local communities, it may be appropriate to explore options for respite which share noise between communities on an equitable basis, provided this does not lead to significant numbers of people newly affected by noise."***

➢ When considering Gatwick's airspace plans, a key aspect of expansion is the impact and changes these will have on airspace design and the opportunity this

creates to explore the use of satellite technology to provide respite routes. Providing respite through the use of multiple routes could be deemed critical when airspace is 'modernised' in the 2020s, which will then see the introduction of highly concentrated routes.

However, Gatwick is currently only proposing one airspace design option, and this does not consider providing respite. Other than stating it will avoid flying over densely populated areas, Gatwick makes no proposals to alternate flight paths, which would aid in mitigation of the impacts on local communities living under flight paths, including those that will be newly or more intensively overflown.

- **Consultation**

When considering how Gatwick conducted its initial consultation with local residents with regards to the mode in which it will operate two runways, Gatwick ran a consultation on whether it should be: 1) segregated mode, 2) mixed mode, 3) dependent runways, or 4) have no new runway at all.

When the consultation closed, Gatwick said that it had consulted with local residents on its runway plans. Gatwick said that the views and concerns of local communities had been taken into account in its final submission, and that the results of the consultation endorsed Gatwick's preferred option of mixed mode.

However, when collating the data, Gatwick expunged 4,000 of the 7,000 responses it received on the basis that these responses were from an organised campaign and because these responses were identified as being identical or near identical.

Even more concerning, and indeed questionable, was the timing of Gatwick's submission to the Airports Commission. The Airports Commission's consultation closed on the 16 May 2014 - one month **before** Gatwick had submitted its plans to the Airports Commission. This date was prior to Gatwick's 'Gatwick 2' roadshow where Gatwick detailed that no flight path plans were available. This raises questions on the validity and integrity of Gatwick's claim that the results of the consultation supported Gatwick's preferred option of mixed mode.

- **Compensation**

As a result of expansion at Gatwick, around 27,000 households will get no break from aircraft overflight. Around 25,000 of those households would not be eligible for Gatwick's £1,000 council tax contribution scheme. Of these new areas overflown, 90% of households will not be eligible for Gatwick's council tax scheme. In addition, people who aren't overflown today will face significant disruption, with no form of compensation as Gatwick currently impacts communities in a 30 mile radius.

Those overflown will always be overflown

- Many new villages will be overflown by approaches to the new runway. The impact of arrivals could have been mitigated to an extent – but Gatwick has chosen not to. Gatwick already impacts communities in a 30-mile radius but ignores these as they are outside the Government minimum requirements for noise contours of 55Lden (Technically, this is defined at the 55Lden contour, i.e. the area where noise averages out at 55 decibels or more over a 24 hour period. It is the measurement used by the European Union).
- The issue of ground noise for Crawley will increase and impact more communities closer to the runway. Thus, even though they are not necessarily overflown, they will experience an increase in noise as movements more than double from 270,000 to 560,000 a year.
- Go-arounds (when a landing is aborted for one reason or another) in such congested airspace, it would be reasonable to anticipate the number of go-arounds will increase as Gatwick seeks to maximise ATM (Air Traffic Movements) on both runway for maximum profit.

Many new areas to be overflown in the West will have no respite from Gatwick Airport Expansion -

New Departure Routes

- There will be new flights over Ewhurst and Cranleigh, Rowly and Shamley Green as well as other areas towards Godalming.
- Route 4 is likely to have a similar number of flights as today if ATM [Air Traffic Movements] is equally split between route 4 and route 3. It is feasible that Capel, South Holmwood, Leigh, Sidlow and some areas of Reigate will experience an increase in concentration.
- Warnham, Rusper, Broadbridge Heath and Slinfold will witness a new departure route over areas not previously flown over with maximum concentration.
- Horsham will be much closer to aircraft noise and will be overflown whereas it is not today.
- The trial route of ADNID (Feb-Aug 2014) will be a new route off the new runway impacting Rusper with the traffic from two runways. Rusper will receive no respite from two runways.
- Wizad (formally TIGER) route over Horsham. Today it is only used in emergencies and poor weather conditions. This route would fly over new areas of Ifield, Faygate, Handcross, Balcombe, Ardingly, Staplefield, Balcombe, Horsted Keynes, impacting Areas Outstanding Natural Beauty and coming close to Lindfield.

Departures to the east

- Seaford route south would remain but with a spur route increasing the vectoring (turning) noise impacting new areas of Shipley Bridge, Crawley Down, High Brook, Ardingly and Staplefield. This route could impact a new easterly arrival route and so cause aircraft to be much lower so having a greater impact on communities below. This routing would experience a westerly departure route and easterly arrival routes.
- A new easterly route to the north would newly impact Crockham Hill, Toys Hill, Brasted Chart, Sevenoaks.
- Route 3 would impact Godstone, Nuffield, and Reigate with concentration and seemingly no respite.

Arrivals to the west

- There would be a significant increase in concentration as Gatwick uses PBN. The impact from the northern runway would be experienced by Plaistow, Ifold, Kirdford, and Alfold, with no respite during easterly arrivals, this being increased due to the proposals in the 2016 Arrival Review.
- There is to be a new approach to the southern runway newly impacting from Brooks Green to Slinfold and Rudgwick with concentration, (PBN), to the new runway with increases expected due to the fleet mix operating in and out of Gatwick.
- A new approach to the new southern runway would greatly impact Rusper and Kingsfold area and other rural properties and small communities that currently experience none at present, being overflown with approx. 30 arrivals per hour.

Arrivals to the east

- Runway 2 approaches will impact new towns with its westerly arrivals – Cowden, Dormansland, Felbridge, Shipley Bridge, with no respite.
- The existing ILS (Instrument Landing System – automatic landings) approach will have greater concentration due to PBN, over areas of Eridge, Langton, Tunbridge Wells, Penshurst, Hever, Chiddingstone, Marsh Green, Lingfield and Newchapel with no respite.
- It would seem that two parallel approaches are proposed and thus these would give no respite with over 20 ATM an hour.

Areas with no relief from aircraft noise include

- No break from easterly and westerly departures - Sidlow, Leigh, South Nutfield, South Godstone and possibly Reigate, Dorking and Betchworth.
- Overflown by both easterly departures and westerly arrivals – Marsh Green, Hever, Edenbridge, Lingifield, Newchapel, Smallfield, Shipley Bridge,
- No break from departures - Balcombe, Staplefield, Handcross, Ardingly, Horsted Keynes and other communities in these areas.
- No break from easterly arrivals and westerly departures Slinfold and Five Oaks.

- No break from easterly arrivals and westerly departures Kingsfold, Alfold, Ellens Green, Okewood Hill, Rusper, Walliswood, Rudgwick, Billingshurst and Bucks Green.

Sleep Deprivation

The number of people exposed to noise from night flights doubles from 11,200 today to 22,300 by 2030, with rural areas being impacted the most due to low ambient noise.

The Airports Commission has indicated that a night flight "ban" would not be possible at Gatwick. It is likely that a night flight restriction would be implemented in a similar manner to today. However between 6am-7am there are no restrictions on movements. Therefore it is likely to see significant growth in that period and CAGNE believes this is not possible due to Gatwick's financial objectives and business plan as a night ban would remove a 1/3 from their projected business plan and profits and reduce connectivity, as detailed by EasyJet (DfT Night Flight Workshop June 2016).

Sleep disturbance refers to the period 11pm to 7am. During a typical summer night there are over 110 flights (the Airports Commission states that the average is 108) between 11pm and 7am, over 60 arrivals and 50 departures. Many of these flights are at critical times for sleep quality:

Getting to sleep: (11pm to 2am) there are around 43 arrivals. This period is critical to sleep quality. There are few departures in this period. Arrivals continue through the 2am and 3am with around 5 in each hour.

Being woken: Departures start at around 5.30am with around 10 before 6am. In the 6am hour there are around 40 departures and around 10 arrivals.

It appears that Gatwick has proposed to fly over key areas during the night and early morning periods. These are:

- Warnham, Rusper, Horsham, Broadbridge Heath, Faygate and Roffey, Balcombe easterly departures at 5.30am.
- Night easterly arrivals and westerly departures from 5.30am would be suffered constantly by Okewood Hill, Walliswood, Ellens Green, and Kingsfold.
- Night westerly arrivals and easterly departures from 5.30am would be constantly suffered by Newchapel, Domansland, Lingfield, Burstow, Shipley Bridge, Copthorne, and Smallfield.
- Night departures at 5.30am would impact Turners Hill, Copthorne, Sharpthorne.
- Rusper could be overflown by 10 flights an hour from 11pm to 2am and during westerly departures will find a second runway could get 30 flights a hour from 5.30am with a concentration during 6-7am as they are unrestricted ATM times.
- With a second runway, residents living between Copthorne and Felbridge would experience being overflown by 10 flights an hour from 11pm to 2am.

Areas of Outstanding Natural Beauty

Every year these AONBs attract visitors bringing funds into rural areas through home grown tourism. These areas would be severely impacted by Gatwick expansion with tranquil woodlands, areas of beauty, footpaths, bridle paths, cyclist trails, campsites, National Trust and English Heritage properties all suffering. Two runways at Gatwick operated in a dual mode would offer no respite from both arrivals and departures

Fact missed by Gatwick

With concentration comes 'noise walls' on both arrivals and departures. These create the effect of communities believing that the aircraft are directly above them, and so experiencing the full impact of noise and visual impact – even though the aircraft can actually be some 3nautical miles to the left or right of the flight path.

With rural areas comes even greater impact on communities, day and night, as ambient noise is much lower at 30-35db with aircraft creating a noise impact on approach, when overhead and after passing, (as there is very little to absorb noise) at some 70db+. This is about the same as the ambient noise in a town high street, where an overflying plane may not be noticed.

Gatwick hides behind a noise measurement criteria called the 55Lden. This is an outdated and inappropriate European noise measurement system, although still required by Government, to access noise impact. 55Lden 'averages out' the noise during the day, evening and night and when aircraft are present and when they are not. As a result, the dramatic 'impact' of the noise of each aircraft ('noise events') in rural areas with low ambient noise, relative to rural areas with high ambient noise, is not conveyed in any meaningful way

Those that are outside the 55Lden have been repeatedly ignored by Gatwick's marketing propaganda and thus its proposals for no respite with two runways reflect badly on the Gatwick management behind its expansion plans. Gatwick also maintains a no charge for winter night landings.

- **Summary**

  Gatwick's masterplan proposal consistently puts operational efficiency and shareholder profits before considerations of the impact of aircraft noise on communities, or its obligations under the Government's over-arching Aviation Policy Framework (APF) expectations.

  The proposals indicate that Gatwick has chosen not to implement many options available to them that would have mitigated noise for local communities. As a collective, these measures are fundamental in providing local communities with respite, relief and a reduction of the impact of aircraft noise on their lives, many in rural areas with very low ambient noise levels.

While the noise benefits of some of the measures may be greater than others, the overall combined beneficial effect of these together could make a significant difference to local communities. However, at the expense of local communities, Gatwick has chosen not to propose the implementation of any of them.

As a result, by not proposing to offer any guaranteed periods of respite through its runway operations or through its airspace design, Gatwick is proposing to subject local communities to continuous noise for 20+ hours a day with movements scheduled throughout the night.

The airfield layout and mixed mode operations, which have been proposed by Gatwick, mean that each runway will operate similarly to the whole of Gatwick Airport today (270,000 total aircraft movements today, to be increased to 560,000 with expansion) ***resulting in approximately twice as many people being exposed to noise than today.***

Not even under the most generous interpretation has Gatwick met its own stated objective to "reduce the number significantly affected by aircraft noise", as detailed in its proposals.

Together with failing to meet its own objectives, however insincere, Gatwick's proposals do not meet the stated aims of the Government's Aviation Policy Framework "to limit and, where possible, reduce the number of people in the UK significantly affected by aircraft noise".

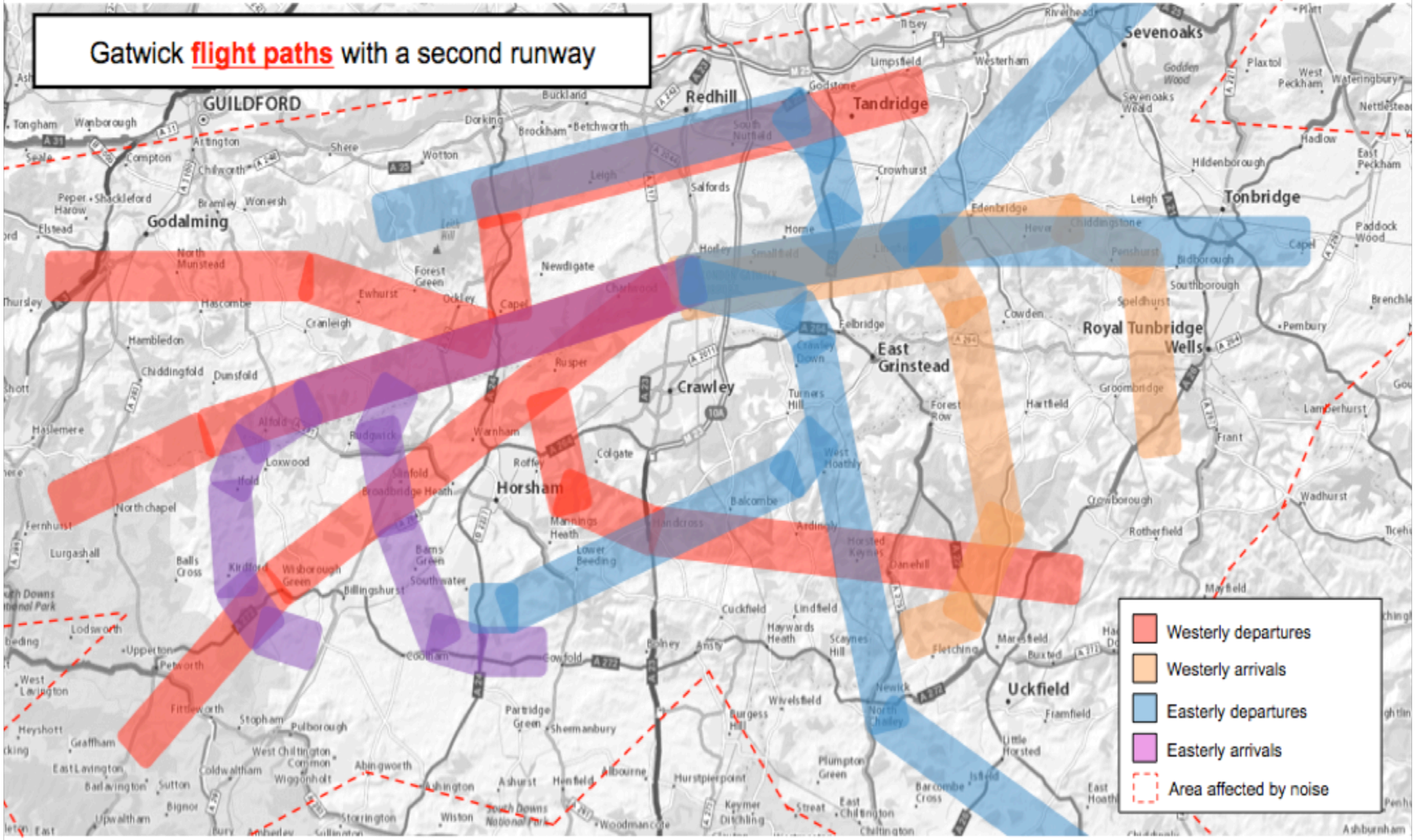
Further, by consciously not proposing options that would reduce the noise impacts on local communities, Gatwick is not meeting the Government expectation that airports seeking to increase capacity will make ***particular efforts to mitigate noise where changes are planned.***

Regardless of the number of people affected by aircraft noise, it is the duty of a designated airport to seek ways to reduce the impacts of their operations. Gatwick has failed to do so – especially when it had the opportunity to engage with, and to demonstrate a responsibility towards, the communities that surround it.

In addition, throughout its noise assessment, Gatwick has chosen to talk about the noise impacts of Heathrow, attributing its deliberate decisions not to introduce operational procedures that would mitigate the impact of noise, to the fact that the number of people exposed to noise is lower. This ignores the key factor of low ambient noise in the rural areas that surround Gatwick, and the higher relative impact of aircraft noise (or 'noise events') upon those rural communities.

Gatwick states that its airfield and mode of operations proposals for Gatwick 2 were chosen following the results of a public consultation. However, as outlined above, there are reasons to doubt the validity of this consultation and therefore the subsequent decision that to propose operating in mixed mode was endorsed by local communities. The validity of this claim is extremely doubtful.

- *Reference taken from documents submitted by Gatwick Airport to the Airports Commission and documents produced by the Airports Commission and as part of the Commission work*.


Gatwick flight paths with a second runway
Westerly departures
Westerly arrivals
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Area affected by noise
GUILDFORD
Godalming
Redhill
Tandridge
Sevenoaks
Tonbridge
Royal Tunbridge Wells
East Grinstead
Crawley
Horsham
Uckfield