



72 TWAANG Summary of Questions Stage 2 TWAANG Responses - 20190517

TWAANG RESPONSE TO GATWICK CONSULTATION STAGE 2

Should Gatwick include a principle that seeks to create an airspace design that aims to limit and where possible seek to reduce the adverse impacts of aircraft noise?

YES / NO

Additional comments: You quote Government policy, but there is, for example, conflict between the interests of AONBs and populated areas, so your explanation does not adequately cover the issues.

Should Gatwick adopt the design principle to limit adverse noise impacts as a core principle?

YES / NO

Additional comments: None

Do you agree with the adjustments to the following design principles:

a. Safer by Design YES / NO

b. Long-term Predictability & Adaptation YES / NO c. Optimise Use of Aircraft Capabilities YES / NO d. Deconfliction by Design YES / NO

Additional comments: Predictability should be emphasised as it allows the public to plan events.

Should Gatwick adopt a principle to 'Build in Resilience' where practical?

YES / NO

Additional comments: None

Should Gatwick adopt a principle of 'Locally Tailored Designs'?

YES / NO

Additional comments: None

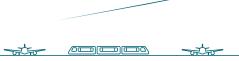
Do you believe any of the six non-core design principles warrant a higher relative priority?

YES /NO

Please explain why: Prefer optimising use of aircraft capabilities to replace use of enhanced navigation standards.











73 ESCCAN AIRSPACE MODERNISATION Feedback Questions May 19 - 20190514

1. YES

But it should not just be an AIM. It should be stated positively that the principle "seeks to create an airspace that WILL limit the adverse effects of aircraft noise"

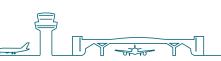
2. YES

Provided there are no restrictions on areas to be overflown. The new design should be carried out with no limitations such as "not overfly people not previously overflown"

- 3. a. YES But must not be used as a get out to negate other Principles.
 - b. Unclear Predictability and Adaptation are in conflict and need clarification
 - c. YES
 - d. YES provided people overflown are affected by 1 route only at a minimum 5nm spacing to adjacent routes
- 4. YES but not at any cost!

Feedback on the historical situation would assist in our understanding of this requirement and the likely affect. It should not be used as an excuse for poor management and where possible solutions should happen "off shore".

- 5. YES But full consideration should be given to the length and time of exposure by those overflown. Noise shadow affects should maximise route spacing and must take the ground elevation into account.
- 6. NO They are all of equal importance.











74 APCAG - Airspace Design Response DP2 - 20190512

AIRSPACE MODERNISATION - OUTLINE DESIGN PRINCIPLES FEEDBACK FROM ASSOCIATION of PARISH COUNCILS AVIATION GROUP (APCAG)

Our feedback on the questions in Gatwick's Outline Design Principles document is below.

We believe a core objective should ensure that airspace modernisation achieves a fair balance between benefits for the industry and for the people it impacts, taking account of the additional capacity it will facilitate for the industry. This objective would not, in our view, be achieved by the principles set out in Gatwick's document.

1 Should Gatwick include a principle that seeks to create an airspace design that aims to limit and where possible seek to reduce the adverse impacts of aircraft noise?

No. Gatwick should include a core principle that airspace modernisation must achieve a fair balance between benefits for the industry and for the people it impacts, taking account of the additional capacity it will facilitate for the industry. At the heart of this principle must be an absolute obligation for the industry to reduce and mitigate noise as capacity grows, in accordance with government policy.

2 Should Gatwick adopt the design principle to limit adverse noise impacts as a core principle?

Gatwick should include the revised principle set out in our answer to question 1 as a core principle.

- 3 Do you agree with the adjustments to the following design principles:
- a. Safer by Design

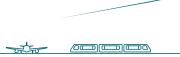
No. The definition of safety should be extended to include the health of people impacted by aviation noise. We do not consider that this is adequately addressed by the alternative principle proposed by Gatwick.

b. Long-term Predictability & Adaptation

No. Gatwick's proposed change is inadequate because it focuses solely on respite as a tool to manage the impact of aircraft noise on communities. GAL should commission and publish authoritative research on the health and other consequences of concentrated flight paths to inform this debate. It should also propose arrangements through which any increase in noise for any community will be capped, mitigated and compensated for, including through operating restrictions.











74 APCAG - Airspace Design Response DP2 - 20190512

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d. Deconfliction by Design

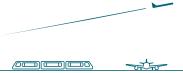
Not at this stage.

Partially. We favour the adoption of enhanced aircraft capabilities where they would result in the reduction of noise emissions, exposure and impacts. We are concerned, however, that enhanced capabilities are more likely to increase capacity than reduce noise. We suggest the principle is amended to say "The airspace design should enable aircraft operators to optimise the capabilities of their fleets to improve operational efficiency and reduce both per flight and total environmental impacts"

Yes.
4 Should Gatwick adopt a principle to 'Build in Resilience' where practical?
Yes
5 Should Gatwick adopt a principle of 'Locally Tailored Designs'?
Yes
6 Do you believe any of the six non-core design principles warrant a higher relative
priority?











Introduction

CAGNE was formed on the 17th February 2014 due to the ADNID trial departure route being instigated by Gatwick Airport for a PRNAV route (concentrated flight path) over rural areas not previously flown over.

CAGNE has grown and diversified since as an umbrella community group to embrace the many issues that Gatwick presents through their desire for growth including new flight paths, changes to flight paths, increases in noise, and a major campaigning/lobbying force opposing the second and third runway for environmental reasons.

CAGNE has an extensive network of members covering areas to the east, west, north and south, in rural and urban areas, of the airport concerned with totality of aircraft noise produced by arrivals and departures, environmental issues, airspace and surface access for Sussex and Surrey and beyond.

The CAGNE committee consists of volunteers/residents to the east and west of the airport coming from many professional backgrounds including aviation.

An Annual General Meeting open to the public takes place each year in February where the chair and committee are elected.

CAGNE sends out informative newsletters to members, consult its members to formalise responses, and is active on social media – Facebook, twitter and instagram.

CAGNE also operates an independent forum (www.cagnepcforum.org.uk) to engage and consult with town and parish councils called the CAGNE Town and Parish Council Aviation Forum. This is for councils and is run by councillors.

CAGNE is not just concerned with Gatwick Airport, but all airspace and gets involved in other airports in the UK and overseas; the environmental damage aviation has on climate change and air quality worldwide.

We works closely with CPRE Sussex and Surrey and other CPRE offices as well as other bodies such as SE Climate Alliance, Airport Watch, Aviation Environment Federation, Members of Parliament, local authorities and other aviation community groups in the UK and overseas. CAGNE has a seat on Gatwick groups – Noise Management Board and attends GATCOM.













The CAGNE General Overview

The design principle paper proposes to fly over new areas by not mentioned that noise preferential routes are to remain; it seeks to use Continuous Climb Operations/ making best use of technology to fly over new areas with new flight path for 'Build in Resilience' as if NPRs remain or disappear, planes will be able to fan/disperse at 3,000ft over new unsuspecting communities; and it seeks to accommodate airspace for 3 runway airport when the master plan has not been accepted. The design principles of stage 1 and 2 are unacceptable due to lack of time for engagement, cherry picking non elected bodies to engage with instead of democratically elected members; misleading information is documented to mislead respondents to obtain Gatwick's desire for unsustainable growth of more flights; both stages should be repeated.

Q1 Should Gatwick include a principle that seeks to create an airspace design that aims to limit and where possible seek to reduce the adverse impacts of aircraft noise?

Yes/No

This should however not mean new flight paths outside of the Noise Preferential Routes below or above 2,500ft.

Q2 Gatwick adopt the design principle to limit adverse noise impacts as a core principle?

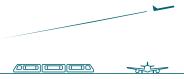
YES / NO

Additional comments:

Yes but noise preferential routes must remain and we strongly object to any new flight paths over new communities. The suggestion by airlines, no new airspace below 2,500ft (2.5) has to be endorsed but with CCO, new technology, this could mean new departure routes over new areas such as ADNID.











- Q3 Do you agree with the adjustments to the following design principles? Yes / **No**
 - a. Safer by Design
 - b. Long-term Predictability & Adaptation Y E S / NO
 - c. Optimise Use of Aircraft Capabilities Y E S / NO
 - d. Deconfliction by Design Y E S / NO
- a Safety has to be paramount for all concerned, those in flight and those on the ground.
- Adaption this suggests flying outside of Noise Preferential Routes over new areas. There is a lack of any mention of safeguarding communities that have not been impacted by departing aircraft before. If this relates only to arrivals this might be acceptable as it would suggest respite/ rotation of arrivals routes within the current arrival swathe
- c Currently due to lack of trust of Gatwick Airport management this can not be accepted as it will be used to maximise growth for the airport instead of reducing noise for those on the ground as suggested by airlines in 2.5 'General aviation stakeholders were in favour for multiple arrival pathways provided this didn't create new controlled airspace below 2500 feet.'
- Deconfliction by design could benefit those impacted by multiple routes but not if it means flying over new communities with departing aircraft using CCO to allow growth of Gatwick as detailed in point 2.4 'Airspace design should offer long term predictability of flight paths and respite and offer adaptation for the future airport development scenarios outlined in our draft Masterplan'

This would be accepting expansion of Gatwick Airport with 3 runways.











Q4 Should Gatwick adopt a principle to 'Build in Resilience' where practical?

YES / NO

Additional comments:

This would mean flying over new areas to allow for Gatwick to operate without time delays whilst giving no consideration to the new communities impacted by Gatwick flying over new areas to avoid bad weather and to fan/disperse departures. PPR, in it present form, would allow this!

Q5 Should Gatwick adopt a principle of 'Locally Tailored Designs'?

YES / NO

This is only acceptable if Gatwick seeks to consult all and not, as is currently the case, cherry pick who they consult/ engage with. Over the past 4 years Gatwick have only listen to those that 'shout the loudest' to determine airspace change, ie the Arrival Review was flawed as it did not take into account the totality of aircraft noise for all communities; the Noise Management Board decisions have been unsafe due to not meeting Terms of Reference 25 – a geographical spread of representation of community groups; This CAP 1616 process stage 1 and 2 is now flawed due to Gatwick only consulting the NMB community group, non-constitutional, with no geographical spread instead of democratically elected councils.

Multiple paths vs single – the feedback has been biased towards arrivals as such it is unsafe. You cannot tailor departure airspace with arrival airspace procedures. Multiple routes for arrivals is very different to Noise Preferential Routes that safeguarded communities and allows for predictability. The removal of NPR would be a criminal act especially as Gatwick has only engaged NMB CNG members (dominated by arrivals at 14nm+ from the runway and two specific departure routes).

Q6 Do you believe any of the six non-core design principles warrant a higher relative priority?

YES/NO

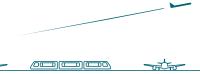
Priority 1 - Reduce Noise

Priority 2 - Improved conservation of tranquility

Priority 3 – Not to impact/ fly over new communities not previously impacted by aircraft noise











77 PAGNE Design Principle Feedback 170519

Should Gatwick include a principle that seeks to create an airspace design that aims to limit and where possible seek to reduce the adverse impacts of aircraft noise?

No.

Although pleased that a core principle has been introduced to address the adverse impacts of plane noise, we are very concerned about the proposed wording which we believe uses undefined terms, leading to misinterpretation, potentially delivering unexpected or undesirable outcomes. "Limit" and "where possible seek to reduce" are terms that we have seen before. Although appearing to support noise reduction, there lack of definition and potential for misinterpretations could result in the adverse impacts of aircraft noise not being effectively addressed. We would therefore request that alternative wording is used, which is better defined, fully understood and provides a clear commitment to reduce the adverse impacts of aircraft noise.

We would also suggest that, although the proposed airspace changes will deliver noise benefits on an individual flight basis, these benefits will very likely be negated by increased frequency of overflight as airport capacity grows. It is our view that the core principle should be that airspace modernisation must deliver a fair balance between the benefits accruing to the industry and for the communities it impacts, taking account of additional airport capacity. This principle must be unequivocal, ensuring, that as capacity grows, the airport and other industry stakeholders reduce and mitigate noise impacts.

2 Should Gatwick adopt the design principle to limit adverse noise impacts as a core principle?

Gatwick should include the revised principle highlighted in our answer to question 1 as a core principle.

Do you agree with the adjustments to the following design principles:

1. Safer by Design

No.

We note that other respondents have suggested that the definition of safety should be broadened to include the health of people impacted by aviation noise. We agree and feel that the reworded design principle falls short in this regard and needs to be re-worded.

2. Long-term Predictability & Adaptation

No.

We continue to believe that "predictability" is simply a pseudonym for concentration. Before there is any long-term commitment to such an approach, an in-depth analysis of the health and other effects is required to determine the consequences on impacted communities. Only when these impacts are established can suitable mitigation strategies, including operating constraints be appropriately determined and implemented such that any increase in noise for any community will be capped, mitigated and compensated for.









77 PAGNE Design Principle Feedback 170519

	3.	Optimise Use of Aircraft Capabilities
		No
		The proposed wording fails to place sufficient emphasis on the reduction of noise emissions and that the likely focus will be on using enhanced aircraft capabilities to increase capacity. In our view, the wording needs to make it clear that operators should optimise fleet capabilities to enhance operational efficiency and to reduce both individual plane noise and overall environmental impacts.
	4.	Deconfliction by Design
		Yes
4	Should	Gatwick adopt a principle to 'Build in Resilience' where practical?
4	Yes	
	Should	Gatwick adopt a principle of 'Locally Tailored Designs'?
5	Yes	
	Do νου	believe any of the six non-core design principles warrant a higher relative priority?
6	20 you	some to any of the our non-core design principles warranca nighter relative priority.
	No	

Other Comments

In our view, the document is currently very circumspect about the full impact of airspace modernisation. It is essential that the document sets out fully the increase in capacity that modernisation might facilitate at Gatwick and the adverse noise and other effects that this could have on communities, under a range of operational scenarios.

As a Community Noise Group whose membership is located between 8 – 16nm from the airport PAGNE believes Gatwick's design principles and in due course its development and analysis of options must consider **all** people impacted and potentially impacted by aircraft noise including the many people who are clearly adversely impacted by aircraft noise, but who live in areas currently considered to be outside the Lowest Observable Adverse Effect Level.











Our feedback on the questions in Gatwick's Outline Design Principles document is below.

We also have a number of overarching comments as follows:

- The process Gatwick is currently conducting is intended to achieve "a range of strategic outcomes which we set out in our Statement of Need". The outcomes set out in the Statement of Need are solely the airport's. There has been no consultation on them with communities or other stakeholders, and as a result they do not reflect the needs of other stakeholders. We note that no such consultation is required by the CAA. Nonetheless we do not believe that it is proper or sustainable for a fundamental redesign of airspace to be based on the needs of the airport alone. In our view a set of needs that reflects the objectives of all stakeholders should be developed and agreed before the process is allowed to proceed further.
- We recognise that airspace modernisation has the potential to deliver noise benefits on a per-flight basis. But those benefits may be substantially outweighed by noise from additional flights facilitated by the potentially significant increase in capacity that modernisation will enable. We are therefore concerned that airspace modernisation will result in a "win/lose" outcome, where Gatwick and its industry partners achieve substantial cost and capacity benefits but communities are subjected to greater total noise. That would not be an acceptable or sustainable basis on which to take forward a fundamental redesign of airspace around Gatwick. We believe a core objective should that airspace modernisation achieves a fair balance between benefits for the industry and for the people it impacts, taking account of the additional capacity it will facilitate for the industry. This objective would not, in our view, be achieved by the principles set out in Gatwick's document.
- 3. We do not believe Gatwick's document is fully honest or transparent about the potential effects of airspace modernisation on local communities and those under flight paths. We are therefore concerned that it is not compatible with the engagement and consultation requirements of CAP 1616. Specifically we do not believe the document adequately "consider[s] the impacts on others and the implications those impacts may have" (para 70) or that it ensures that "those who are consulted by sponsors should be able to base their views on a reasonable understanding of the situation, clear information about what is proposed and the potential impact of the changes on them" (Appendix C2).
- 4. In particular the additional core principle Gatwick has proposed to address the potential adverse impacts of airspace modernisation and, in its view, to "balance the overall design" is, in our view, disingenuous.

The proposed new core principle is "The airspace design should aim to limit and where possible seek to reduce the adverse effects of aircraft noise". Any reader of that principle who is not familiar with GAL's contorted interpretations of the language would be likely to conclude that there will be an objective, quantified **limit** on the effects of aircraft noise, presumably arrived at through a process of regulation or discussion, and that noise effects are expected to reduce.











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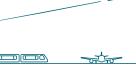
- 1. The process Gatwick is currently conducting is intended to achieve "a range of strategic outcomes which we set out in our Statement of Need". The outcomes set out in the Statement of Need are solely the airport's. There has been no consultation on them with communities or other stakeholders, and as a result they do not reflect the needs of other stakeholders. We note that no such consultation is required by the CAA. Nonetheless we do not believe that it is proper or sustainable for a fundamental redesign of airspace to be based on the needs of the airport alone. In our view a set of needs that reflects the objectives of all stakeholders should be developed and agreed before the process is allowed to proceed further.
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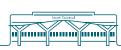
We presume those are in fact the conclusions Gatwick intend people to draw. The use of logos signifying reduced noise, reduced overflight, reduced frequency and improved conservation bears out that presumption. But that is not what Gatwick means, unless its intentions in this context are very different from those in documents recently issued to its Noise Management Board on growth and noise. In the latter context GAL says:

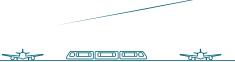
- a. "limit" "does not mean an absolute limit", and that Gatwick will not agree to an absolute, i.e. a numerical, limit
- b. "seek to reduce" in fact means that "it will not always be possible to reduce the number of people significantly affected by noise".

We believe Gatwick should write to all parties with whom it is engaging to explain precisely what it means, and does not mean, by the proposed new core principle. In the absence of clarification we believe Gatwick's document is misleading in this area and that any conclusions it draws from responses on it will be unreliable. We intend to make the CAA aware of this issue.

- 5. In addition we believe it is essential that the document sets out fully the increase in capacity that modernisation might facilitate at Gatwick and the adverse noise and other effects that could have on communities, if necessary under a range of operational scenarios.
- 6. Full compensation for people who suffer greater impacts as a result of airspace changes (and intensification of use) arising from modernisation should be an integral element of Gatwick's proposals. The airport should set out and consult on its compensation proposals as part of its engagement and consultation processes.
- 7. In all cases we believe Gatwick's design principles and in due course its development and analysis of options must consider all people impacted and potentially impacted by aircraft noise including the many people who are clearly impacted by aircraft noise but who live in areas currently regarded as being outside the Lowest Observable Adverse Effect Level.







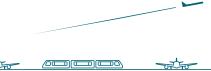




	Feedback
1	Should Gatwick include a principle that seeks to create an airspace design that aims to limit and where possible seek to reduce the adverse impacts of aircraft noise?
	No.
	For the reasons set out above the principle proposed by Gatwick is misleading and disingenuous. It would not, as Gatwick claim, "balance the overall design".
	Gatwick should include a core principle that airspace modernisation must achieve a fair balance between benefits for the industry and for the people it impacts, taking account of the additional capacity it will facilitate for the industry. At the heart of this principle must be an absolute obligation for the industry to reduce and mitigate noise as capacity grows, in accordance with government policy.
	We believe this would be consistent with the comment on page 2 of Gatwick's document "There was widespread recognition that the maximum overall benefits were most likely to be gained by the development of a solution that sought to find a compromise that offered benefits to all stakeholders". Gatwick's current proposals as a whole, and the proposed new principle in particular, do not offer such a compromise.
2	Should Gatwick adopt the design principle to limit adverse noise impacts as a core principle?
	Gatwick should include the revised principle set out in our answer to question 1 as a core principle.











3 Do you agree with the adjustments to the following design principles:

a. Safer by Design

No. We support the suggestion made by other respondees that the definition of safety should be extended to include the health of people impacted by aviation noise. We do not consider that this is adequately addressed by the alternative principle proposed by Gatwick.

b. Long-term Predictability & Adaptation

No. Gatwick's proposed change is inadequate because it focuses solely on respite as a tool to manage the impact of aircraft noise on communities. As set out in our response to question 3 of its Design Principle Development document, GAL should commission and publish authoritative research on the health and other consequences of concentrated flight paths to inform this debate. It should also propose arrangements through which any increase in noise for any community will be capped, mitigated and compensated for, including through operating restrictions.

c. Optimise Use of Aircraft Capabilities

Partially. We favour the adoption of enhanced aircraft capabilities where they would result in the reduction of noise emissions, exposure and impacts. We are concerned, however, that enhanced capabilities are more likely to increase capacity than reduce noise. We suggest the principle is amended to say "The airspace design should enable aircraft operators to optimise the capabilities of their fleets to improve operational efficiency and reduce both per flight and total environmental impacts"

d. Deconfliction by Design

Yes.





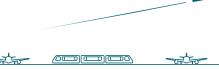




4	Should Gatwick adopt a principle to 'Build in Resilience' where practical?
	Yes
5	Should Gatwick adopt a principle of 'Locally Tailored Designs'?
	Yes
6	Do you believe any of the six non-core design principles warrant a higher relative priority?
	Not at this stage.
Other comments	On page iv the document says "Gatwick will present assessments based on 2018 traffic, with assumptions applied to factor in for anticipated changes, such as airline fleet mix adjustments ahead of implementation". We believe Gatwick's assessments should be based on both 2018 traffic and anticipated 2025 traffic to show the potential real impact on local communities.
	In our previous response we proposed there should be a specific design principle that all arriving aircraft should, on all occasions, adopt the noise emission minimising profile in relation to height and low power low drag and that the airspace design should ensure this goal is achieved for all categories of aircraft using Gatwick, taking account of the mixed fleet currently and prospectively in use. The current document indicates this will be considered as an option rather than a design principle. We do not understand why that should be the case. We believe GAL should reconsider this or explain its reasoning in more detail.
	In our previous response we argued that the proposed design principle "Airspace design should adopt the most beneficial form of enhanced navigation standards for arrival and departure routes" was inappropriate because the term "beneficial" is subjective. The current document does not acknowledge that point and retains the original drafting. We believe the language in the airport's consultations should be clear and objective, and that this design principle currently fails to meet those tests.











Regrettably we must start this response by saying we are very concerned that you have failed to treat our response to the first questionnaire - in the document 'Introduction to Design Principle Development' – on equal terms with other respondents.

This is because we made a number of suggestions in response to Question 14 which are not included in Annex B to the document 'Outline Design Principles', upon which you are now seeking responses. In fact Plane Justice does not feature in Annex B at all.

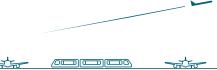
The Design Principle Suggestions we made in response to Question 14 were specifically:-

- In modernising airspace routes in and out of Gatwick below 7,000 feet, airspace planners and decision makers should take where the aircraft were actually flying in 2012 as their baseline starting point for any design.
- RNAV1 technology should be used in all cases rather than RNP, because the latter tends to concentrate flight paths more than RNAV1.
- Some emulation of the dispersion experienced when flying RNAV1 coded overlays should be designed-in. This can be accomplished by taking each RNAV1 route design and developing two or three marginally different route designs around its nominal track, which could be designated to be flown by different aircraft types or airlines through agreement between stakeholders. (To be clear, we are here not talking about what are often described as 'multiple routes or multiple pathways'. What we envisage would be for example Route 1A, 1B & 1C where the lateral distance between the nominal tracks of each sub-route design would be something like 0.3 kilometres.)
- We see FASI as providing a unique opportunity to dispense with NPRs and maintain the focus where it ethically should be – on where the aircraft are actually flying.
- Departures should rapidly climb to between 7,000 & 10,000 feet after take-off & arrivals
 remain in the 7,000 -10,000 ft altitude zone for longer until they were closer to the airport.

We also regret to say that these omissions **cast considerable doubt** upon the claim made in the current document ('Outline Design principles') and your email below that it builds on the responses to the first document and that you have made changes "in light of your feedback", when seemingly a respondent's design principle suggestions have been ignored.









Accordingly before any feedback to the current Questionnaire is issued, we must respectfully request:-

- a) That you issue to respondents an Addendum to Annex B summarising the design principle suggestions we made –with Gatwick's comments alongside them - as has been done for other respondents.
- b) That you comment upon the intention of the current document & questionnaire exercise i.e. that it builds on the responses in the first document with changes made 'in light of your feedback' in view of the fact the 5 design principle suggestions we put forward in responding to that first document have been ignored.

We now respond to Gatwick's questions as follows:

1 Should Gatwick include a principle that seeks to create an airspace design that aims to limit and where possible seek to reduce the adverse impacts of aircraft noise?

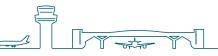
YES, but see additional comment below

Additional comments: The answer is yes, on the assumption that Gatwick:-

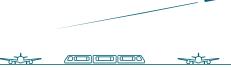
- interprets "to limit" as an instruction to limit the spread of aircraft noise and other environmental impacts by taking every feasible step possible to avoid the overflight of new communities¹;
- interprets the remainder of the principle as an instruction to take every feasible opportunity to reduce noise and other environmental impacts for communities already overflown (for example by altering vertical profiles and incentivising quieter aircraft) whilst doing everything possible to avoid breaching the first instruction "to limit".
- 2 Should Gatwick adopt the design principle to limit adverse noise impacts as a core principle?

NO, but see additional comment below

Additional comments: This principle is too vaguely expressed to have any meaningful value in practice. We believe the principle in Question 1 strikes the right balance, and renders superfluous the vague principle in this question.











3 Do you agree with the adjustments to the following design principles:

a. Safer by Design

YES, but see additional comments below

Additional comments:

In answering this question 'yes', we assume the adjusted design principle this question refers to, is in section 2.2 of the 'Outline Design Principles' document:

'Airspace design must at least maintain, and ideally enhance, aviation safety, by reducing or removing safetyrisk factors, provided enhancement does not have a disproportionately detrimental impact on other benefits'

b. Long-term Predictability & Adaptation

NO, and see additional comments below

Additional comments:

In reading section 2.4 of the 'Outline Design Principles' document, it seems evident to us that the ambiguity in the term 'predictability' has meant that different respondents have interpreted it differently in the first round of engagement.

We have to say that as we read section 2.4, Gatwick have then taken this ambiguity as justification to make changes to this design principle which are not justified even by the respondent comments they have quoted in section 2.4, let alone by any that are not quoted (at which we can only guess of course).

The proposed design principle has been changed from:

'Airspace design should offer long term predictability of flight path routes and enable benefits from new air traffic management systems'

to:

'Airspace design should offer long term predictability of flight paths and respite and offer adaptation for the future airport development scenarios outlined in our draft Masterplan'



¹ In addition Gatwick have identified limiting the overflight of AONBs. But if it should come to a trade-off between overflying new communities and overflying AONBs, then a design principle should be that 'new overflight of people's homes is the more important', because on a day to day basis people cannot choose to avoid overflight of their home.



To take these proposed changes to the design principle in turn:

"and respite": We see no justification in the feedback that has been quoted, to suddenly introduce the concept of respite. Indeed in our own response to Question 8 in the first round of engagement, we said that we saw managed respite as "a recipe for prolonged discord between communities, and for undue influence being wielded by those who 'umpire' the allocation of the respite". If Gatwick believe they have justification in the responses received to introduce respite into this design principle then they should produce the relevant quotes from respondents.

"offer adaptation for the future airport development scenarios outlined in our draft Masterplan"
How on earth does Gatwick even begin to justify changing "and enable benefits from new air traffic management systems" into "and offer adaptation for the future airport development scenarios outlined in our draft Masterplan"?

If Gatwick wishes to build in a contingency for the expansion plans in its draft Masterplan, which are by any measure controversial with communities and councils, then it needs to re-run its questionnaire and ask respondents to comment on this. Otherwise its engagement on this matter will be fundamentally flawed.

c. Optimise Use of Aircraft Capabilities

YES, but see additional comments below

Additional comments: In answering this question 'yes', we assume the adjusted design principle this question refers to, is in section 2.4 of the 'Outline Design Principles' document:

'The airspace design should enable aircraft operators to optimise the capabilities of their fleets to improve operational efficiency and environmental performances'

d. Deconfliction by Design

NO, and see additional comments below











Additional comments:

We strongly reject deconfiction by design, for the reasons we gave in sections B & D3 of our paper 'Ethical Principles for Airspace Design' (EPAD), submitted as part of our response to the first round of engagement; We consider that deconfliction would inevitably lead to overflying new communities, or subject overflown communities to a *step-change in frequency* of overflight.

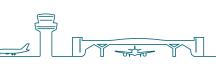
We are concerned that our EPAD paper was not properly considered (if at all) in the first round of engagement on this and other subjects (reference our earlier comments about being omitted from Annex B), so we are here summarising what this paper stated for your convenience:-

Section B, EPAD: The ethical principle of pre-knowledge: If a householder chooses to move under a stream of aircraft, they literally 'buy into' that situation, and that decision has consequences, the pros and cons of which we suggest are as follows:-

- (i) The householder accepts the level of aircraft noise and the frequency of aircraft (ATMs) present when they moved in (including whether they are overflown by one, or more, routes)
- (ii) They should expect a realistic level of organic growth in ATMs over time, in a similar way that people would normally expect levels of road traffic to increase over time. But at the same time it is also reasonable that they should expect all feasible steps to be taken to mitigate the noise that affects them, **short of overflying new communities**.

Section D3, EPAD: Overflight by more than one route: The fact a community is already overflown by more than one route does nothing to alter the fact this community 'bought into' that situation. Airspace planners faced with a community in this position should therefore only posit the idea that one or more routes could be removed from that community or their impact lessened if this can be accomplished without overflying new communities (large or small).

As we also said in our response to the first round of engagement, the only situation in which we would support deconfliction, is where deconfiction was being undertaken in order to return the pattern of Gatwick overflight to that existing in 2012².











² Returning the pattern of Gatwick overflight to that existing in 2012 is one of the Design Principle Suggestions we made in response to Question 14 in the first round of engagement which appears to have been ignored (see earlier, above). We reproduce this suggested design principle again here:-

[&]quot;In modernising airspace routes in and out of Gatwick below 7,000 feet, airspace planners and decision makers should take where the aircraft were actually flying in 2012 as their baseline starting point for any design."



Key Question:

Furthermore, we would request that those who have said they support deconfliction as a general principle, be asked to answer this key ethical question:

"People who've chosen to live beside one or more highways for the past 20 years have no realistic expectation they'll wake up one morning to find the highway gone, or the volume of vehicle traffic halved.

Why then should people who've chosen to live where there's one or more flight paths overhead **be treated any differently** (i.e. by deconflicting flight paths), if doing so would mean overflying new people who didn't choose to live where there's a flight path overhead?"

We could only endorse this deconfliction design principle if it was reworded as follows:-

'The airspace design should seek to deconflict routes by design below 7000ft, and the prevalence of overflight of a community by flights on different routes and/or by neighboring airport traffic, provided this does not significantly extend a departure route overfly new communities'

4 Should Gatwick adopt a principle to 'Build in Resilience' where practical?

NO, but see additional comments below

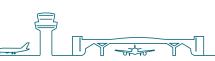
Additional comments:

The actual wording of the design principle you are proposing is: "The airspace design should be materially unaffected by most disruptions, including poor weather and technical failures, through the provision of adequate contingencies"

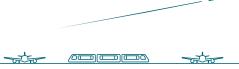
The difficulty we have is that question 4 refers to resilience 'where practical', but there is no reference to any such qualification in the wording you are proposing. Nor is there any sense of a limit to the measures that might be taken to build-in resilience, which could open the way to a whole host of airspace additions which unduly affect communities even when disruptions are not present.

We propose this principle should be modified, by borrowing language from the safety design principle in 2.2:

"The airspace design should be materially unaffected by most disruptions, including poor weather and technical failures, through the provision of adequate contingencies, provided this does not have a disproportionately detrimental impact on other benefits"









5 Should Gatwick adopt a principle of 'Locally Tailored Designs'?

YES, and see additional comments below

Additional comments:

We believe it is generally advantageous to look at whether there are issues specific to the locality of a route which might be taken into account in route designs. To take departure Route 4 as an example, the fact the current now temporary route has been censured in a judicial review is of the utmost relevance to any design going forward (and in this respect renders it unique amongst the departure routes).

Evidently not every such issue is susceptible to being considered or incorporated and it may be that 'local tailoring' proves to be the exception rather than the rule, but listening to and considering the views of communities in the area of a route and its local history is of course an important preliminary step in approaching design.

6 Do you believe any of the six non-core design principles warrant a higher relative priority?

YES, some of them - please see below

Please explain why:

Optimise use of aircraft capabilities should be given higher priority - BUT only where this will result in a reduction in noise impacts for communities already overflown, and is NOT used to justify overflying new communities - unless the new overflight is substantially above 7,000 ft.

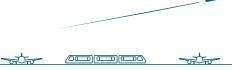
Time Based Arrival Operations should be given higher priority - IF time based operations can reduce or eliminate holding stacks and landing delay techniques then we are in favour of a higher priority for this design principle *for that purpose* PROVIDED it does not lead to the overflight of new communities below 7,000 feet (taking 2012 as the baseline in determining which communities were and were not overflown (section D6 &7(b), EPAD, page 3), unless any new overflight is fully compensated including diminution of property value(reference footnote 2, EPAD, page 3).

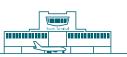
Conversely:

Predictable & Adaptable Routes should not feature as a design principle at all, for the reasons given in Question 3b above, unless and until the serious matters we raised in Question 3b have been addressed.











Deconfliction by Design should not feature as a design principle at all, for the reasons given in Question 3d above, UNLESS it is being undertaken in order to return the pattern of Gatwick overflight to that existing in 2012 (reference our comments in Question 3d).

If deconfliction is to remain as a general design principle, then we would wish to see how those advocating deconfliction answer the Key Question we posed in our comments on Question 3d above (see page 5).

Finally we would comment as follows on one or two of the responses in the current Annex B to the 'Outline Design Principles' document:

Annex B

Norwegian Airlines: It is interesting that Gatwick's comment in Annex B makes no reference to the way in which Gatwick have proposed to alter the Predictability and Adaptation design principle – see our comments under Question 3b above.

ANS – We are dismayed to see ANS advocate vertical separation on departures, which could impede achieving the maximum altitude as soon as possible after take-off. We believe this is the worst kind of example of industry convenience at the expense of communities on the ground, and we hope we are right in thinking that Gatwick's comment amounts to a rejection of this suggestion.

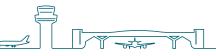
GATCOM – we think it would be too simplistic to treat the three examples of buildings GATCOM have offered as all of equal character in terms of sensitivity to noise. A careful analysis of each type of building and its internal noise profile would need to be undertaken.

Kent County Council – we fully endorse the Council's suggestion, and we find Gatwick's comment encouraging.

Reigate & Banstead BC — We endorse 'minimising newly overflown people' and 'minimising the total population overflown', provided that if there's conflict at any time between these two principles then the FORMER shall prevail. Any new overflight of communities which cannot be avoided must be fully compensated (see footnote 2 to our Ethical Principles (EPAD) paper). In Gatwick's comments, if offering "as many improvements for all stakeholder groups" is a reference to deconfliction, then please refer to our comments in Question 3d above.

TWAANG – the government policy objective is "to limit and where possible reduce the number of people..." This sets into context that if a population was historically overflown, then its noise impacts should only be reduced if that can be done without overflying new communities (because that would breach the first instruction "to limit"). Whether a historically overflown area is highly populated should not be the issue. Please also refer to our EPAD paper.

Plane Wrong – We endorse this design principle suggestion, and indeed this was one of the 5 design principle suggestions we put forward which have been ignored.













We have a number of issues to raise in addition to responding to your six questions.

1. In our original feedback we suggested a design principle that do not appear to have been addressed in the feedback document dated 26th April. We do not believe that we are the only respondents to have raised this issue. We would like to understand why it has been rejected.

For ease of reference I have copied below our original comment on this principle.

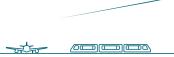
NPRs

All existing NPRs should be retained. In addition a design principle for NPRs should be that 100% of aircraft remain within the NPR and that individual aircraft are spread within the NPR. The Navigational Data Base and Flight Management System manufacturers should be consulted on how best to achieve these aims

- 2. We are aware of the response to this document from GON and fully agree with those comments
 - a. The process Gatwick is currently conducting is intended to achieve "a range of strategic outcomes which we set out in our Statement of Need". The outcomes set out in the Statement of Need are solely the airport's. There has been no consultation on them with communities or other stakeholders, and as a result they do not reflect the needs of other stakeholders. We note that no such consultation is required by the CAA. Nonetheless we do not believe that it is proper or sustainable for a fundamental redesign of airspace to be based on the needs of the airport alone. In our view a set of needs that reflects the objectives of all stakeholders should be developed and agreed before the process is allowed to proceed further.
 - b. We recognise that airspace modernisation has the potential to deliver noise benefits on a perflight basis. But those benefits may be substantially outweighed by noise from additional flights facilitated by the potentially significant increase in capacity that modernisation will enable. We are therefore concerned that airspace modernisation will result in a "win / lose" outcome, where Gatwick and its industry partners achieve substantial cost and capacity benefits but communities are subject to greater total noise. That would not be an acceptable or sustainable basis on which to take forward a fundamental redesign of airspace around Gatwick. We believe a core objective should that airspace modernisation achieves a fair balance between benefits for the industry and for the people it impacts, taking account of the additional capacity it will facilitate for the industry. This objective would not, in our view, be achieved by the principles set out in Gatwick's document.
 - c. We do not believe Gatwick's document is fully honest or transparent about the potential effects of airspace modernisation on local communities and those under flight paths. We are therefore concerned that it is not compatible with the engagement and consultation requirements of CAP 1616. Specifically we do not believe the document adequately "consider[s] the impacts on others and the implications those impacts may have" (para 70) or that it ensures that "those who are consulted by sponsors should be able to base their views on a reasonable understanding of the situation, clear information about what is proposed and the potential impact of the changes on them" (Appendix C2).







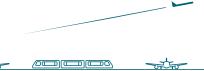




- d. In particular the additional core principle Gatwick has proposed to address the potential adverse impacts of airspace modernisation and, in its view, to "balance the overall design" is, in our view, disingenuous. The proposed new core principle is "The airspace design should aim to limit and where possible seek to reduce the adverse effects of aircraft noise ". Any reader of that principle who is not familiar with GAL's contorted interpretations of the language would be likely to conclude that there will be an objective, quantified limit on the effects of aircraft noise, presumably arrived at through a process of regulation or discussion, and that noise effects are expected to reduce. We presume those are in fact the conclusions Gatwick intend people to draw. The use of logos signifying reduced noise, reduced overflight, reduced frequency and improved conservation bears out that presumption. But that is not what Gatwick means, unless its intentions in this context are very different from those in documents recently issued to its Noise Management Board on growth and noise. In the latter context GAL says: a "limit " "does not mean an absolute limit ", and that Gatwick will not agree to an absolute, i.e. a numerical, limit, "seek to reduce " in fact means that "it will not always be possible to reduce the number of people significantly affected by noise ". We believe Gatwick should write to all parties with whom it is engaging to explain precisely what it means, and does not mean, by the proposed new core principle. In the absence of clarification we believe Gatwick's document is misleading in this area and that any conclusions it draws from responses on it will be unreliable. We intend to make the CAA aware of this issue.
- e. In addition we believe it is essential that the document sets out fully the increase in capacity that modernisation might facilitate at Gatwick and the adverse noise and other effects that could have on communities, if necessary under a range of operational scenarios.
- f. Full compensation for people who suffer greater impacts as a result of airspace changes (and intensification of use) arising from modernisation should be an integral element of Gatwick's proposals. The airport should set out and consult on its compensation proposals as part of its engagement and consultation processes.
- g. In all cases we believe Gatwick's design principles and in due course its development and analysis of options must consider all people impacted and potentially impacted by aircraft noise including the many people who are clearly impacted by aircraft noise but who live in areas currently regarded as being outside the Lowest Observable Adverse Effect Level.











Section 4 - Feedback Question Summary

Q1

Should Gatwick include a principle that seeks to create an airspace design that aims to limit and where possible seek to reduce the adverse impacts of aircraft noise?

NO

For the reasons set out above the principle proposed by Gatwick is misleading and disingenuous. It would not, as Gatwick claim, "balance the overall design". Gatwick should include a core principle that airspace modernisation must achieve a fair balance between benefits for the industry and for the people it impacts, taking account of the additional capacity it will facilitate for the industry. At the heart of this principle must be an absolute obligation for the industry to reduce and mitigate noise as capacity grows, in accordance with government policy. We believe this would be consistent with the comment on page 2 of Gatwick's document "There was widespread recognition that the maximum overall benefits were most likely to be gained by the development of a solution that sought to find a compromise that offered benefits to all stakeholders". Gatwick's current proposals as a whole, and the proposed new principle in particular, do not offer such a compromise.

Q2

Q3

Should Gatwick adopt the design principle to limit adverse noise impacts as a core principle Gatwick should include the revised principle set out in our answer to question 1 as a core principle.

Do you agree with the adjustments to the following design principles:

- a. Safer by Design
- b. Long-term Predictability & Adaptation
- c. Optimise Use of Aircraft Capabilities
- d. Deconfliction by Design
- a. 'Airspace design must at least maintain, and ideally enhance, aviation safety, by reducing or removing safety risk factors, provided enhancement does not have a disproportionately detrimental impact on other benefits'

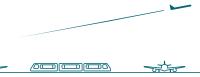
 No.

This principle is very dependent on the way in which "disproportionate" is interpreted and we would like to see a more detailed definition of this term.

As suggested by others in the first round of this engagement, we believe that this principle should be extended to include the health of people impacted by noise.











b. 'Airspace design should offer long term predictability of flight paths and respite and offer adaptation for the future airport development scenarios outlined in our draft Masterplan'

No.

Gatwick's proposed change is inadequate because it focuses solely on respite as a tool to manage the impact of aircraft noise on communities. GAL should commission and publish authoritative research on the health and other consequences of concentrated flight paths to inform this debate. It should also propose arrangements through which any increase in noise for any community will be capped, mitigated and compensated for, including through operating restrictions.

Respite can be defined in a number of different ways. We believe that respite through time based movement of concentrated flight paths would be totally unacceptable. Even short periods of concentrated flight paths has an unacceptable impact.

You state that the FASI process is not about providing capability for Gatwick expansion with a second runway, yet the "Masterplan is all about a second runway. The design should offer adaptation for future growth but that should not be designed specifically around a Gatwick second runway (including an effective second runway created by use of the emergency runway). As we have stated before we are totally opposed to the use of the emergency runway as a means of expansion as we are to the retention of land to build a second runway.

c. 'The airspace design should enable aircraft operators to optimise the capabilities of their fleets to improve operational efficiency and environmental performance'

Partially. We favour the adoption of enhanced aircraft capabilities where they would result in the reduction of noise emissions, exposure and impacts. We are concerned, however, that enhanced capabilities are more likely to increase capacity than reduce noise. We suggest the principle is amended to say "The airspace design should enable aircraft operators to optimise the capabilities of their fleets to improve operational efficiency and reduce both per flight and total environmental impacts in particular noise impact"

d. 'The airspace design should seek to deconflict routes by design below 7000ft, and the prevalence of overflight of a community by flights on different routes and/or by neighboring airport traffic, provided this does not significantly extend a departure route'

We do not agree with the final phrase "...provided this does not significantly extend a departure route" which should be deleted.

The departure phase, whilst the aircraft is within an NPR, is a minimal percentage of the whole flight in terms of time, cost and emissions and during that phase the noise impact should have a much higher weighting than the cost to the airline or total emissions.











Q4

Should Gatwick adopt a principle to 'Build in Resilience' where practical?

'The airspace design should be materially unaffected by most disruptions, including poor weather and technical failures, through the provision of adequate contingencies'

YES

We agree in principle but this must not be taken as an ability to infringe night flying bans to retain resilience.

Q5

Should Gatwick adopt a principle of 'Locally Tailored Designs'?

'Airspace design should enable decisions which affect how aircraft noise is best distributed to be informed by local circumstances and consideration of different options including multiple routes and the management of overflights (as per principle 3)'

Yes, provided that local community representatives are given a real opportunity to influence "local designs"

Q6

Do you believe any of the six non-core design principles warrant a higher relative priority?

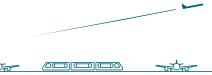
Deconfliction by Design and Locally Tailored Designs should have a higher priority.

Other comments

On page iv the document says "Gatwick will present assessments based on 2018 traffic, with assumptions applied to factor in for anticipated changes, such as airline fleet mix adjustments ahead of implementation ...". We believe Gatwick's assessments should be based on both 2018 traffic and anticipated 2025 traffic to show the potential real impact on local communities.











85 GACC Response Part 2 Airspace Modernisation Design Principles - 20190517

As part two of our engagement on design principles we are asking for specific feedback on the following questions:

- 1 Should Gatwick include a principle that seeks to create an airspace design that aims to limit and where possible seek to reduce the adverse impacts of aircraft noise? YES Additional comments:
- 2 Should Gatwick adopt the design principle to limit adverse noise impacts as a core principle? YES Additional comments:
- 3 Do you agree with the adjustments to the following design principles:
- a. Safer by Design Y E S
- b. Long-term Predictability & Adaptation Y E S
- c. Optimise Use of Aircraft Capabilities Y E S
- d. Deconfliction by Design Y E S

Additional comments:

4 Should Gatwick adopt a principle to 'Build in Resilience' where practical? YES Additional comments:
But ensue any resilience design does not change the priority of Q1 & Q2 above

5 Should Gatwick adopt a principle of 'Locally Tailored Designs'? YES / NO Additional comments:

6 Do you believe any of the six non-core design principles warrant a higher relative priority? NO

Please explain why: Each airpsace design will have different impacts in different areas. To prioritise may remove the opportunity to reduce a particular impact in a particular area.







