



AIRSPACE MODERNISATION AIRSPACE CHANGE PROPOSAL

STAKEHOLDER ENGAGEMENT APPENDIX H

SHORTLISTING APPROACH CORRESPONDENCE & MATERIAL



V1.0

Heathrow

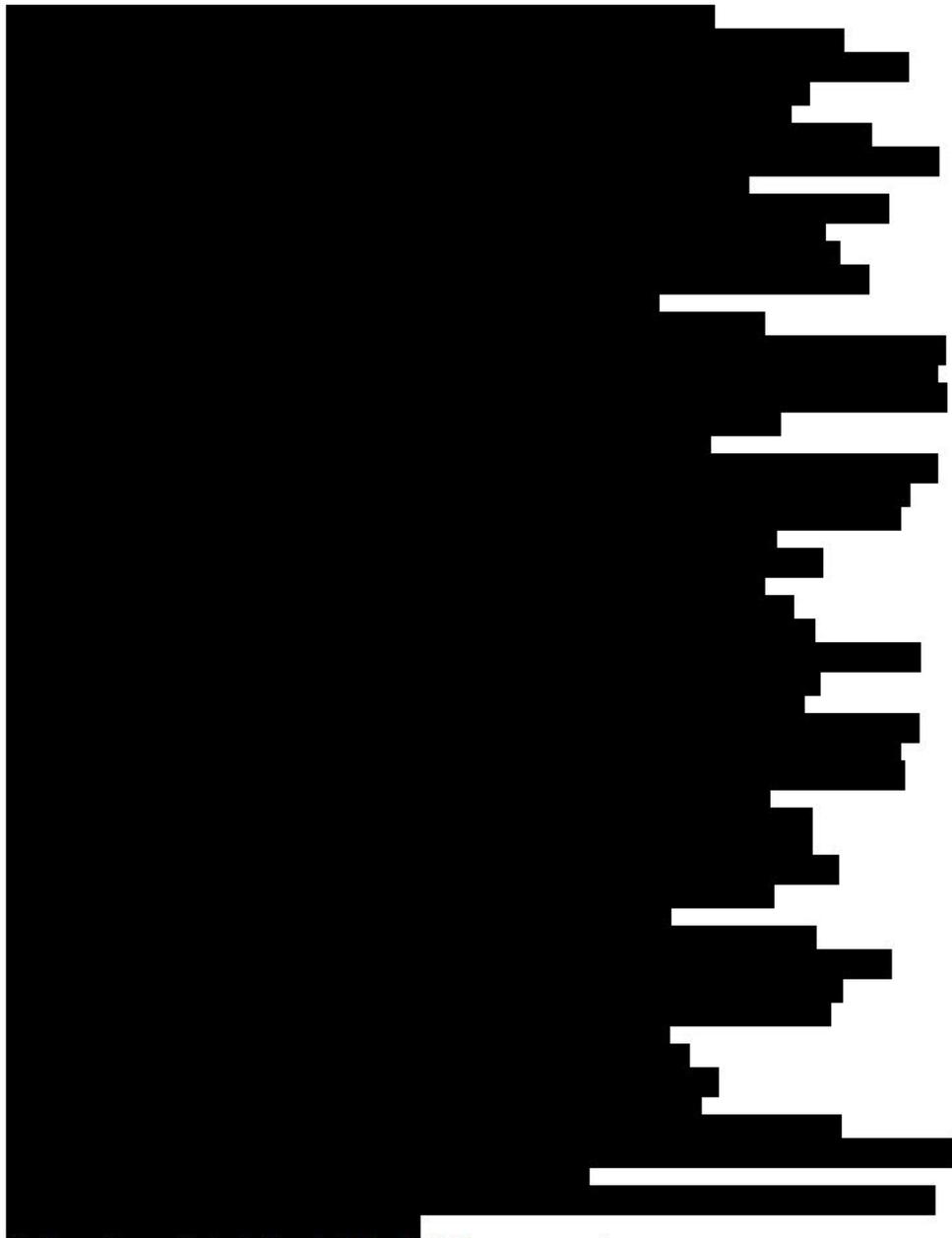


Table of Contents

1. <i>Engagement session invitations</i>	3
2. <i>Engagement session material issued</i>	22
3. <i>Engagement session RSVPs</i>	40
4. <i>NACF query</i>	77
5. <i>Richmond Heathrow Campaign query</i>	80
6. <i>Confirmation invitations</i>	112
7. <i>Heathrow response to queries</i>	146
8. <i>Notification of feedback extension</i>	149
9. <i>Stakeholder feedback</i>	159
10. <i>Heathrow response to feedback</i>	242
11. <i>Richmond Heathrow Campaign: Further queries</i>	267
12. <i>Engagement session note</i>	277
13. <i>Stakeholder feedback summary</i>	283

From: [DD - Airspace](#)
To: [DD - Airspace](#)
Bcc:





Subject: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 28 March 2024 15:28:23
Attachments: [image001.png](#)
[Heathrow Airspace Modernisation Stage 2 Re-Engagement March 2024.pdf](#)

Dear All,

We are writing to provide an update on our Airspace Modernisation Airspace Change Proposal (ACP).

As you will know, the CAA informed us in late October that we had not passed the CAP1616 Stage 2 Gateway. The CAA decided that we did not meet the criteria relating to stakeholder engagement.

It was the CAA's view that: *"Having engaged on a proposed shortlisting approach to its initial options appraisal, and invited stakeholders to provide feedback on that approach, the change sponsor (Heathrow) then took a different approach on which it had not engaged and had not given stakeholders an opportunity to provide feedback on."* We were surprised by this decision since it was certainly not our intention to mislead stakeholders. Heathrow made every effort to

undertake open and transparent stakeholder engagement throughout Stage 2, going well beyond the engagement requirements of the CAA's [airspace change process](#).

The CAA has requested that we undertake additional stakeholder engagement, focussed on our approach to the shortlisting of options based on the Initial Options Appraisal (IOA) results. The attached slide pack sets out our understanding of the CAA's decision and the next steps that they have advised us to take.

The slide pack clarifies the approach that Heathrow is taking to the shortlisting of options based on the Stage 2 Initial Options Appraisal results and provides you with an opportunity to provide feedback on this approach.

The slide pack provides you with all of the information you should need to provide feedback, however, we will also be hosting 2 online sessions (using Teams) for anyone who would like to join. We will talk through these slides during the sessions and will provide an opportunity for you to ask questions.

The sessions will be held on:

Tuesday 16 April (10:00-11:00am)

Wednesday 17 April (2:00-3:00pm)

If you would like to attend a session, please let us know by responding to this email with your preferred time and we will send you an invite with a Teams link.

Any feedback on our approach to shortlisting options can be sent to: airspace@heathrow.com. The deadline for feedback is Monday 29th April at 5pm.

We will consider all feedback and will email you after the deadline with:

- a) A summary of feedback received (all feedback will be anonymised); and
- b) How this feedback has influenced the shortlisting approach that we will apply prior to re-submission of relevant material to the CAA for a future Stage 2 Gateway.

Kind regards,

[Redacted]

[Redacted]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

From: [DD - Airspace](#)
To: [REDACTED]
Cc: [DD - Airspace](#)
Subject: FW: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 04 April 2024 16:35:07
Attachments: [image001.png](#)
[Heathrow Airspace Modernisation Stage 2 Re-Engagement March 2024.pdf](#)

Classification: Internal

Dear [REDACTED]

I hope you are well?

[REDACTED] provided us with your details as the Virgin point of contact for Heathrow's Airspace Modernisation engagement. Please find the latest update in the email below and attached material.

If you have any questions, please feel free to email us back at this address.

Kind regards,

[REDACTED]

[REDACTED]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

w: [heathrow.com](https://www.heathrow.com) t: twitter.com/heathrowairport
a: heathrow.com/apps

From: DD - Airspace <airspace@heathrow.com>
Sent: Thursday, March 28, 2024 3:28 PM
To: DD - Airspace <airspace@heathrow.com>
Subject: Heathrow Airspace Modernisation: Invitation for further engagement

Classification: Internal

Dear All,

We are writing to provide an update on our Airspace Modernisation Airspace Change Proposal (ACP).

From: [DD - Airspace](#)
To: [DD - Airspace](#)
Bcc: [REDACTED]
Subject: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 04 April 2024 16:48:40
Attachments: [Heathrow Airspace Modernisation Stage 2 Re-Engagement March 2024.pdf](#)
[image001.png](#)

Dear All,

We are writing to provide an update on our Airspace Modernisation Airspace Change Proposal (ACP).

As you will know, the CAA informed us in late October that we had not passed the CAP1616 Stage 2 Gateway. The CAA decided that we did not meet the criteria relating to stakeholder engagement.

It was the CAA's view that: *"Having engaged on a proposed shortlisting approach to its initial options appraisal, and invited stakeholders to provide feedback on that approach, the change sponsor (Heathrow) then took a different approach on which it had not engaged and had not given stakeholders an opportunity to provide feedback on."* We were surprised by this decision since it was certainly not our intention to mislead stakeholders. Heathrow made every effort to undertake open and transparent stakeholder engagement throughout Stage 2, going well beyond the engagement requirements of the CAA's [airspace change process](#).

The CAA has requested that we undertake additional stakeholder engagement, focussed on our approach to the shortlisting of options based on the Initial Options Appraisal (IOA) results. The attached slide pack sets out our understanding of the CAA's decision and the next steps that they have advised us to take.

The slide pack clarifies the approach that Heathrow is taking to the shortlisting of options based on the Stage 2 Initial Options Appraisal results and provides you with an opportunity to provide feedback on this approach.

The slide pack provides you with all of the information you should need to provide feedback, however, we will also be hosting 2 online sessions (using Teams) for anyone who would like to join. We will talk through these slides during the sessions and will provide an opportunity for you to ask questions.

The sessions will be held on:

Tuesday 16 April (10:00-11:00am)

Wednesday 17 April (2:00-3:00pm)

If you would like to attend a session, please let us know by responding to this email with your preferred time and we will send you an invite with a Teams link.

Any feedback on our approach to shortlisting options can be sent to: airspace@heathrow.com. The deadline for feedback is Monday 29th April at 5pm.

We will consider all feedback and will email you after the deadline with:

- a) A summary of feedback received (all feedback will be anonymised); and
- b) How this feedback has influenced the shortlisting approach that we will apply prior to re-submission of relevant material to the CAA for a future Stage 2 Gateway.

Kind regards,

[Redacted]

[Redacted]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

From: [DD - Airspace](#)
To: [DD - Airspace](#)
Bcc: [REDACTED]
Subject: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 04 April 2024 16:59:13
Attachments: [Heathrow Airspace Modernisation Stage 2 Re-Engagement March 2024.pdf](#)
[image001.png](#)

Dear All,

We are writing to provide an update on our Airspace Modernisation Airspace Change Proposal (ACP).

As you will know, the CAA informed us in late October that we had not passed the CAP1616 Stage 2 Gateway. The CAA decided that we did not meet the criteria relating to stakeholder engagement.

It was the CAA's view that: *"Having engaged on a proposed shortlisting approach to its initial options appraisal, and invited stakeholders to provide feedback on that approach, the change sponsor (Heathrow) then took a different approach on which it had not engaged and had not given stakeholders an opportunity to provide feedback on."* We were surprised by this decision since it was certainly not our intention to mislead stakeholders. Heathrow made every effort to undertake open and transparent stakeholder engagement throughout Stage 2, going well beyond the engagement requirements of the CAA's [airspace change process](#).

The CAA has requested that we undertake additional stakeholder engagement, focussed on our approach to the shortlisting of options based on the Initial Options Appraisal (IOA) results. The attached slide pack sets out our understanding of the CAA's decision and the next steps that they have advised us to take.

The slide pack clarifies the approach that Heathrow is taking to the shortlisting of options based on the Stage 2 Initial Options Appraisal results and provides you with an opportunity to provide feedback on this approach.

The slide pack provides you with all of the information you should need to provide feedback, however, we will also be hosting 2 online sessions (using Teams) for anyone who would like to join. We will talk through these slides during the sessions and will provide an opportunity for you to ask questions.

The sessions will be held on:

Tuesday 16 April (10:00-11:00am)

Wednesday 17 April (2:00-3:00pm)

If you would like to attend a session, please let us know by responding to this email with your preferred time and we will send you an invite with a Teams link.

Any feedback on our approach to shortlisting options can be sent to: airspace@heathrow.com. The deadline for feedback is Monday 29th April at 5pm.

We will consider all feedback and will email you after the deadline with:

- a) A summary of feedback received (all feedback will be anonymised); and
- b) How this feedback has influenced the shortlisting approach that we will apply prior to re-submission of relevant material to the CAA for a future Stage 2 Gateway.

Kind regards,

[REDACTED]

[REDACTED]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

w: [heathrow.com](https://www.heathrow.com) t: twitter.com/heathrowairport

a: [heathrow.com/apps](https://www.heathrow.com/apps)

From: [DD - Airspace](#)
To: [REDACTED]
Cc: [DD - Airspace](#)
Subject: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 04 April 2024 17:16:30
Attachments: [Heathrow Airspace Modernisation Stage 2 Re-Engagement March 2024.pdf](#)
[image001.png](#)

Classification: Internal

Dear All,

We are writing to provide an update on our Airspace Modernisation Airspace Change Proposal (ACP).

As you will know, the CAA informed us in late October that we had not passed the CAP1616 Stage 2 Gateway. The CAA decided that we did not meet the criteria relating to stakeholder engagement.

It was the CAA's view that: *"Having engaged on a proposed shortlisting approach to its initial options appraisal, and invited stakeholders to provide feedback on that approach, the change sponsor (Heathrow) then took a different approach on which it had not engaged and had not given stakeholders an opportunity to provide feedback on."* We were surprised by this decision since it was certainly not our intention to mislead stakeholders. Heathrow made every effort to undertake open and transparent stakeholder engagement throughout Stage 2, going well beyond the engagement requirements of the CAA's [airspace change process](#).

The CAA has requested that we undertake additional stakeholder engagement, focussed on our approach to the shortlisting of options based on the Initial Options Appraisal (IOA) results. The attached slide pack sets out our understanding of the CAA's decision and the next steps that they have advised us to take.

The slide pack clarifies the approach that Heathrow is taking to the shortlisting of options based on the Stage 2 Initial Options Appraisal results and provides you with an opportunity to provide feedback on this approach.

The slide pack provides you with all of the information you should need to provide feedback, however, we will also be hosting 2 online sessions (using Teams) for anyone who would like to join. We will talk through these slides during the sessions and will provide an opportunity for you to ask questions.

The sessions will be held on:

Tuesday 16 April (10:00-11:00am)

Wednesday 17 April (2:00-3:00pm)

If you would like to attend a session, please let us know by responding to this email with your preferred time and we will send you an invite with a Teams link.

Any feedback on our approach to shortlisting options can be sent to:
airspace@heathrow.com. **The deadline for feedback is Monday 29th April at 5pm.**

We will consider all feedback and will email you after the deadline with:
a) A summary of feedback received (all feedback will be anonymised); and
b) How this feedback has influenced the shortlisting approach that we will apply prior to re-submission of relevant material to the CAA for a future Stage 2 Gateway.

Kind regards,

[Redacted]

[Redacted]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

From: [DD - Airspace](#)
To: [REDACTED]
Cc: [DD - Airspace](#)
Subject: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 04 April 2024 17:19:02
Attachments: [image001.png](#)
[Heathrow Airspace Modernisation Stage 2 Re-Engagement March 2024.pdf](#)

Classification: Internal

Dear All,

We are writing to provide an update on our Airspace Modernisation Airspace Change Proposal (ACP).

As you will know, the CAA informed us in late October that we had not passed the CAP1616 Stage 2 Gateway. The CAA decided that we did not meet the criteria relating to stakeholder engagement.

It was the CAA's view that: *"Having engaged on a proposed shortlisting approach to its initial options appraisal, and invited stakeholders to provide feedback on that approach, the change sponsor (Heathrow) then took a different approach on which it had not engaged and had not given stakeholders an opportunity to provide feedback on."* We were surprised by this decision since it was certainly not our intention to mislead stakeholders. Heathrow made every effort to undertake open and transparent stakeholder engagement throughout Stage 2, going well beyond the engagement requirements of the CAA's [airspace change process](#).

The CAA has requested that we undertake additional stakeholder engagement, focussed on our approach to the shortlisting of options based on the Initial Options Appraisal (IOA) results. The attached slide pack sets out our understanding of the CAA's decision and the next steps that they have advised us to take.

The slide pack clarifies the approach that Heathrow is taking to the shortlisting of options based on the Stage 2 Initial Options Appraisal results and provides you with an opportunity to provide feedback on this approach.

The slide pack provides you with all of the information you should need to provide feedback, however, we will also be hosting 2 online sessions (using Teams) for anyone who would like to join. We will talk through these slides during the sessions and will provide an opportunity for you to ask questions.

The sessions will be held on:

Tuesday 16 April (10:00-11:00am)

Wednesday 17 April (2:00-3:00pm)

If you would like to attend a session, please let us know by responding to this email with your preferred time and we will send you an invite with a Teams link.

Any feedback on our approach to shortlisting options can be sent to:

airspace@heathrow.com. The deadline for feedback is Monday 29th April at 5pm.

We will consider all feedback and will email you after the deadline with:

- a) A summary of feedback received (all feedback will be anonymised); and
- b) How this feedback has influenced the shortlisting approach that we will apply prior to re-submission of relevant material to the CAA for a future Stage 2 Gateway.

Kind regards,

[Redacted]

[Redacted]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

From: [DD - Airspace](#)
To: [REDACTED]
Subject: FW: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 08 April 2024 17:04:36
Attachments: [image001.png](#)
[Heathrow Airspace Modernisation Stage 2 Re-Engagement March 2024.pdf](#)

Dear [REDACTED]

Please see below (and attached) an update on Heathrow's Airspace Modernisation ACP. I'm sorry that you appear to have been missed off the distribution list for this email.

Please let us know if you would like to attend one of the update sessions next week.

Many thanks,

[REDACTED]

From: DD - Airspace <airspace@heathrow.com>
Sent: Thursday, March 28, 2024 3:28 PM
To: DD - Airspace <airspace@heathrow.com>
Subject: Heathrow Airspace Modernisation: Invitation for further engagement

Dear All,

We are writing to provide an update on our Airspace Modernisation Airspace Change Proposal (ACP).

As you will know, the CAA informed us in late October that we had not passed the CAP1616 Stage 2 Gateway. The CAA decided that we did not meet the criteria relating to stakeholder engagement.

It was the CAA's view that: *"Having engaged on a proposed shortlisting approach to its initial options appraisal, and invited stakeholders to provide feedback on that approach, the change sponsor (Heathrow) then took a different approach on which it had not engaged and had not given stakeholders an opportunity to provide feedback on."* We were surprised by this decision since it was certainly not our intention to mislead stakeholders. Heathrow made every effort to undertake open and transparent stakeholder engagement throughout Stage 2, going well beyond the engagement requirements of the CAA's [airspace change process](#).

The CAA has requested that we undertake additional stakeholder engagement, focussed on our approach to the shortlisting of options based on the Initial Options Appraisal (IOA) results. The attached slide pack sets out our understanding of the CAA's decision and the next steps that they have advised us to take.

The slide pack clarifies the approach that Heathrow is taking to the shortlisting of options based on the Stage 2 Initial Options Appraisal results and provides you with an opportunity to provide feedback on this approach.

The slide pack provides you with all of the information you should need to provide feedback, however, we will also be hosting 2 online sessions (using Teams) for anyone who would like to join. We will talk through these slides during the sessions and will provide an opportunity for you

to ask questions.

The sessions will be held on:

Tuesday 16 April (10:00-11:00am)

Wednesday 17 April (2:00-3:00pm)

If you would like to attend a session, please let us know by responding to this email with your preferred time and we will send you an invite with a Teams link.

Any feedback on our approach to shortlisting options can be sent to:

airspace@heathrow.com. The deadline for feedback is Monday 29th April at 5pm.

We will consider all feedback and will email you after the deadline with:

- a) A summary of feedback received (all feedback will be anonymised); and
- b) How this feedback has influenced the shortlisting approach that we will apply prior to re-submission of relevant material to the CAA for a future Stage 2 Gateway.

Kind regards,

██████

████████████████████

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

From: [DD - Airspace](#)
To: [REDACTED]
Cc: [REDACTED]
Subject: FW: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 08 April 2024 17:09:17
Attachments: [image001.png](#)
[Heathrow Airspace Modernisation Stage 2 Re-Engagement March 2024.pdf](#)

Dear [REDACTED]

Please see below (and attached) an update on Heathrow's Airspace Modernisation ACP. I'm sorry that you appear to have been missed off the distribution list for this email.

Please let us know if you would like to attend one of the update sessions next week.

Many thanks,

[REDACTED]

From: DD - Airspace <airspace@heathrow.com>
Sent: Thursday, March 28, 2024 3:28 PM
To: DD - Airspace <airspace@heathrow.com>
Subject: Heathrow Airspace Modernisation: Invitation for further engagement

Dear All,

We are writing to provide an update on our Airspace Modernisation Airspace Change Proposal (ACP).

As you will know, the CAA informed us in late October that we had not passed the CAP1616 Stage 2 Gateway. The CAA decided that we did not meet the criteria relating to stakeholder engagement.

It was the CAA's view that: *"Having engaged on a proposed shortlisting approach to its initial options appraisal, and invited stakeholders to provide feedback on that approach, the change sponsor (Heathrow) then took a different approach on which it had not engaged and had not given stakeholders an opportunity to provide feedback on."* We were surprised by this decision since it was certainly not our intention to mislead stakeholders. Heathrow made every effort to undertake open and transparent stakeholder engagement throughout Stage 2, going well beyond the engagement requirements of the CAA's [airspace change process](#).

The CAA has requested that we undertake additional stakeholder engagement, focussed on our approach to the shortlisting of options based on the Initial Options Appraisal (IOA) results. The attached slide pack sets out our understanding of the CAA's decision and the next steps that they have advised us to take.

The slide pack clarifies the approach that Heathrow is taking to the shortlisting of options based on the Stage 2 Initial Options Appraisal results and provides you with an opportunity to provide feedback on this approach.

The slide pack provides you with all of the information you should need to provide feedback,

however, we will also be hosting 2 online sessions (using Teams) for anyone who would like to join. We will talk through these slides during the sessions and will provide an opportunity for you to ask questions.

The sessions will be held on:

Tuesday 16 April (10:00-11:00am)

Wednesday 17 April (2:00-3:00pm)

If you would like to attend a session, please let us know by responding to this email with your preferred time and we will send you an invite with a Teams link.

Any feedback on our approach to shortlisting options can be sent to:

airspace@heathrow.com. The deadline for feedback is Monday 29th April at 5pm.

We will consider all feedback and will email you after the deadline with:

- a) A summary of feedback received (all feedback will be anonymised); and
- b) How this feedback has influenced the shortlisting approach that we will apply prior to re-submission of relevant material to the CAA for a future Stage 2 Gateway.

Kind regards,

[Redacted]

[Redacted]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

From: [DD - Airspace](#)
To: [REDACTED]
Subject: FW: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 10 April 2024 16:05:13
Attachments: [Heathrow Airspace Modernisation Stage 2 Re-Engagement March 2024.pdf](#)
[image001.png](#)

Hi [REDACTED]

Thanks for providing your email address again – I’m afraid my colleague accidentally deleted your email and couldn’t find it anywhere!

Please could you let us know if you would like to attend one of the sessions next week, and I will send you the Teams link.

Many thanks,

[REDACTED]

[REDACTED]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

From: DD - Airspace <airspace@heathrow.com>
Sent: Thursday, April 4, 2024 4:59 PM
To: DD - Airspace <airspace@heathrow.com>
Subject: Heathrow Airspace Modernisation: Invitation for further engagement

Dear All,

We are writing to provide an update on our Airspace Modernisation Airspace Change Proposal (ACP).

As you will know, the CAA informed us in late October that we had not passed the CAP1616 Stage 2 Gateway. The CAA decided that we did not meet the criteria relating to stakeholder engagement.

It was the CAA’s view that: *“Having engaged on a proposed shortlisting approach to its initial options appraisal, and invited stakeholders to provide feedback on that approach, the change sponsor (Heathrow) then took a different approach on which it had not engaged and had not given stakeholders an opportunity to provide feedback on.”* We were surprised by this decision since it was certainly not our intention to mislead stakeholders. Heathrow made every effort to undertake open and transparent stakeholder engagement throughout Stage 2, going well beyond the engagement requirements of the CAA’s [airspace change process](#).

The CAA has requested that we undertake additional stakeholder engagement, focussed on our approach to the shortlisting of options based on the Initial Options Appraisal (IOA) results. The

attached slide pack sets out our understanding of the CAA's decision and the next steps that they have advised us to take.

The slide pack clarifies the approach that Heathrow is taking to the shortlisting of options based on the Stage 2 Initial Options Appraisal results and provides you with an opportunity to provide feedback on this approach.

The slide pack provides you with all of the information you should need to provide feedback, however, we will also be hosting 2 online sessions (using Teams) for anyone who would like to join. We will talk through these slides during the sessions and will provide an opportunity for you to ask questions.

The sessions will be held on:

Tuesday 16 April (10:00-11:00am)

Wednesday 17 April (2:00-3:00pm)

If you would like to attend a session, please let us know by responding to this email with your preferred time and we will send you an invite with a Teams link.

Any feedback on our approach to shortlisting options can be sent to: airspace@heathrow.com. The deadline for feedback is Monday 29th April at 5pm.

We will consider all feedback and will email you after the deadline with:

- a) A summary of feedback received (all feedback will be anonymised); and
- b) How this feedback has influenced the shortlisting approach that we will apply prior to re-submission of relevant material to the CAA for a future Stage 2 Gateway.

Kind regards,

[Redacted]

[Redacted]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

March 2024

Airspace Modernisation: Airspace Change Proposal

Further Engagement on Shortlisting of Stage 2 Options



Heathrow



DISCLAIMER:

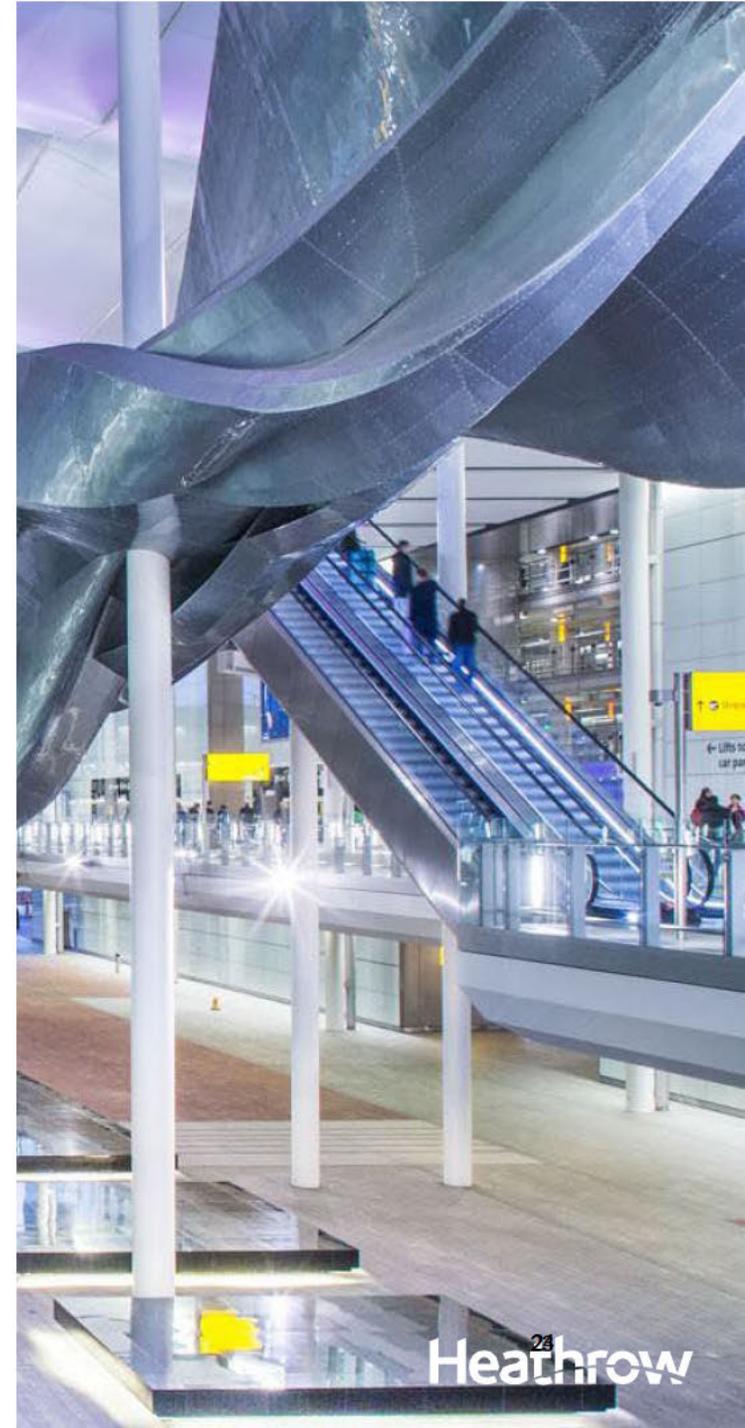
The information contained within this document does not constitute a formal company position and does not necessarily reflect a final view.

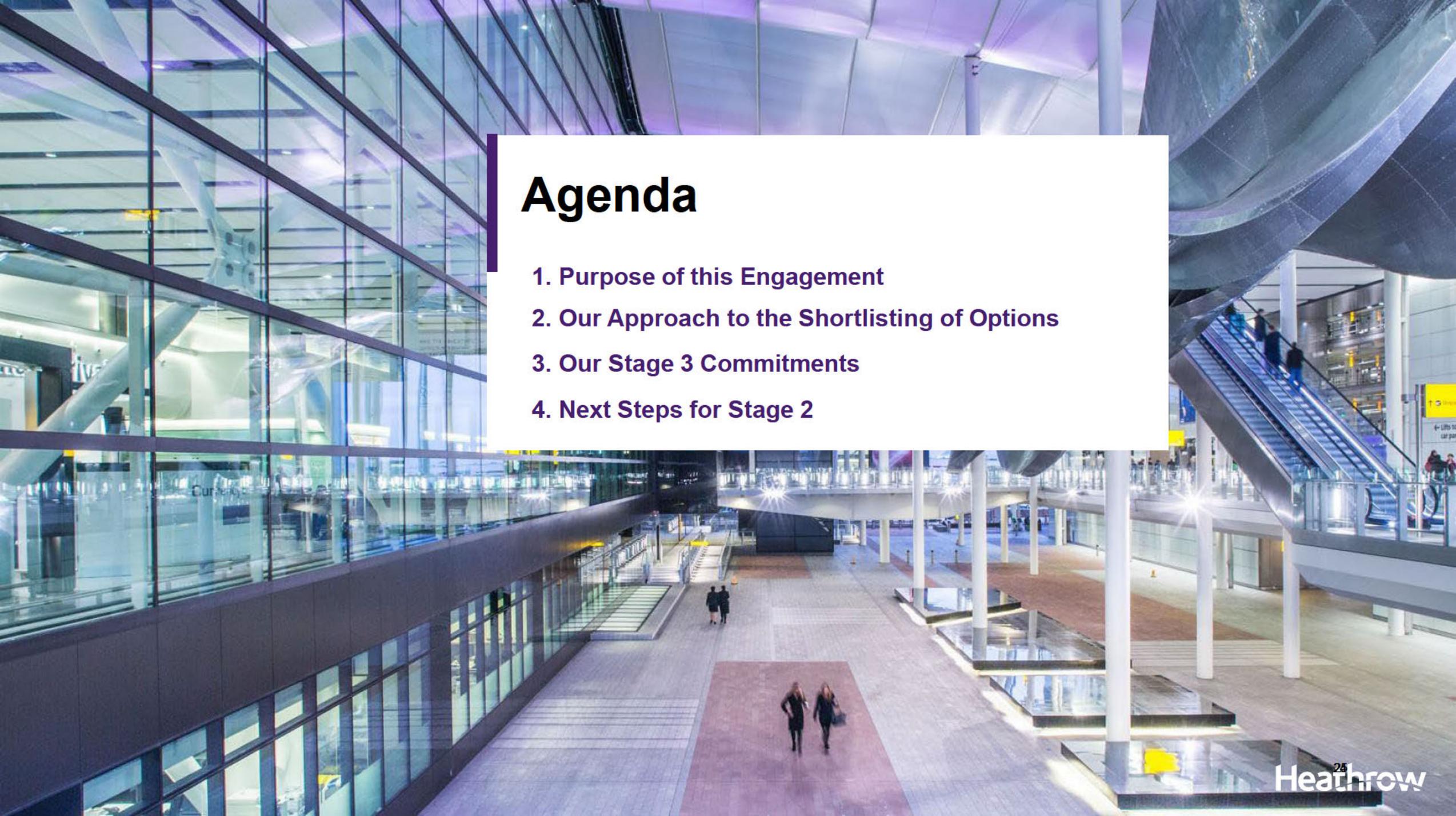
It is provided to you to facilitate discussions with Heathrow Airport on our developing proposals. The incomplete and preliminary nature of the information should be recognised when reviewing this material.

Heathrow Airport Limited will not accept or assume any responsibility or liability for the accuracy or correctness of the information, or any assumptions that may be drawn from them.

This information is intended for your sole purpose, is confidential and should not be shared outside your organisation or with any third party without the express consent of Heathrow Airport Limited.

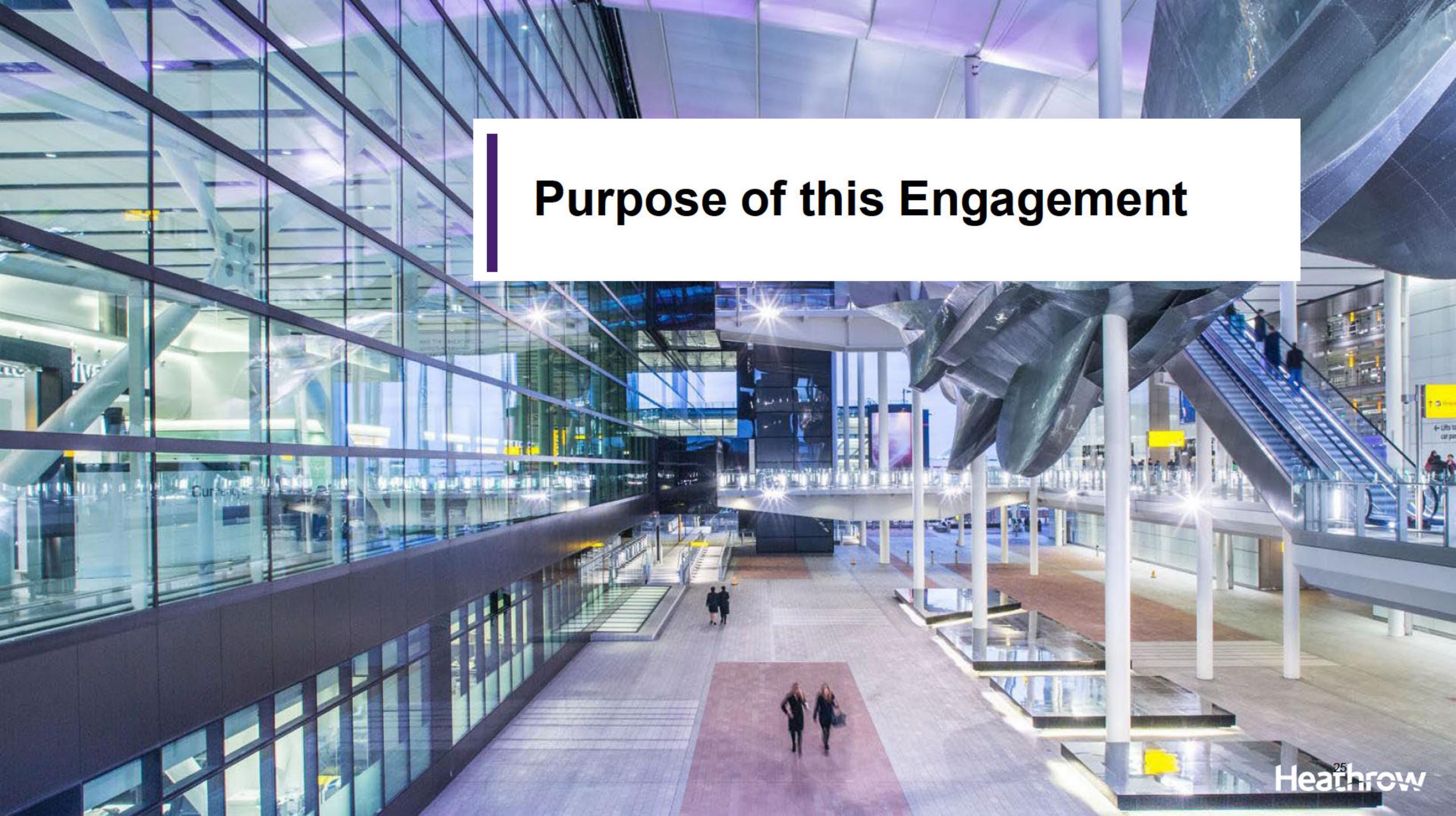
Any options or data in this document are subject to change throughout the airspace change process as options are matured in detail and refined in accordance with safety requirements, our Design Principles, our appraisals and stakeholder engagement and consultation.





Agenda

1. Purpose of this Engagement
2. Our Approach to the Shortlisting of Options
3. Our Stage 3 Commitments
4. Next Steps for Stage 2



Purpose of this Engagement

PURPOSE OF THIS ENGAGEMENT

- Heathrow submitted documentation for a Stage 2 Gateway in July 2023: we were informed by the CAA in October 2023 that we had not passed the Stage 2 Gateway
- The CAA stated that Criterion 2 was not met: *“the change sponsor must have engaged with relevant stakeholders to explore...options to the CAA’s satisfaction against the requirements in Appendix C.”* The CAA gave the following reasons:

“1. Having engaged on a proposed shortlisting approach to its initial options appraisal, and invited stakeholders to provide feedback on that approach, the change sponsor then took a different approach on which it had not engaged and had not given stakeholders an opportunity to provide feedback on.

2. More information is required from the change sponsor with regard to its summary of feedback, to ensure that all feedback is captured and responded to consistently”



Heathrow sought clarification on point 1 from the CAA, since it was not our intention to take *“a different approach on which (we) had not engaged”*. Some clarification was provided by the CAA in January/February 2024 and **we are now able to provide clarity and offer another opportunity for stakeholders to provide feedback**

For point 2, Heathrow will make some amendments to the summary of feedback within the [Step 2A Options Development](#) document prior to re-submitting this document to the CAA. No engagement is required on this issue.

PURPOSE OF THIS ENGAGEMENT

Heathrow hosted two inform sessions with stakeholders in June 2023, prior to submitting all Stage 2 work to the CAA in July.

In those sessions we shared the shortlisting methodology and a summary of the results. We stated that these were indicative and subject to change.

Prior to submission, two changes were made:

Change:	Stakeholder information:
One of the PBN arrival options (Option I to runway 27R) was reinstated, since an internal review showed that the decision to discontinue it was not entirely consistent with the approach taken to other options	An email was sent to stakeholders on 11 August
Heathrow recognised that it would be better to address the impacts associated with two of the shortlisting “tests” (Tests 4 and 5) at Stage 3	An explanation for this approach was included within the Stage 2 submission (<i>document ref</i>)

- **The CAA considers that these changes constituted “a different approach” to the one we engaged on, since Heathrow had set an expectation that Option I would be discontinued and that Tests 4 and 5 would lead to the discontinuation of options**
- **The CAA decided not to pass Heathrow at the Stage 2 Gateway**

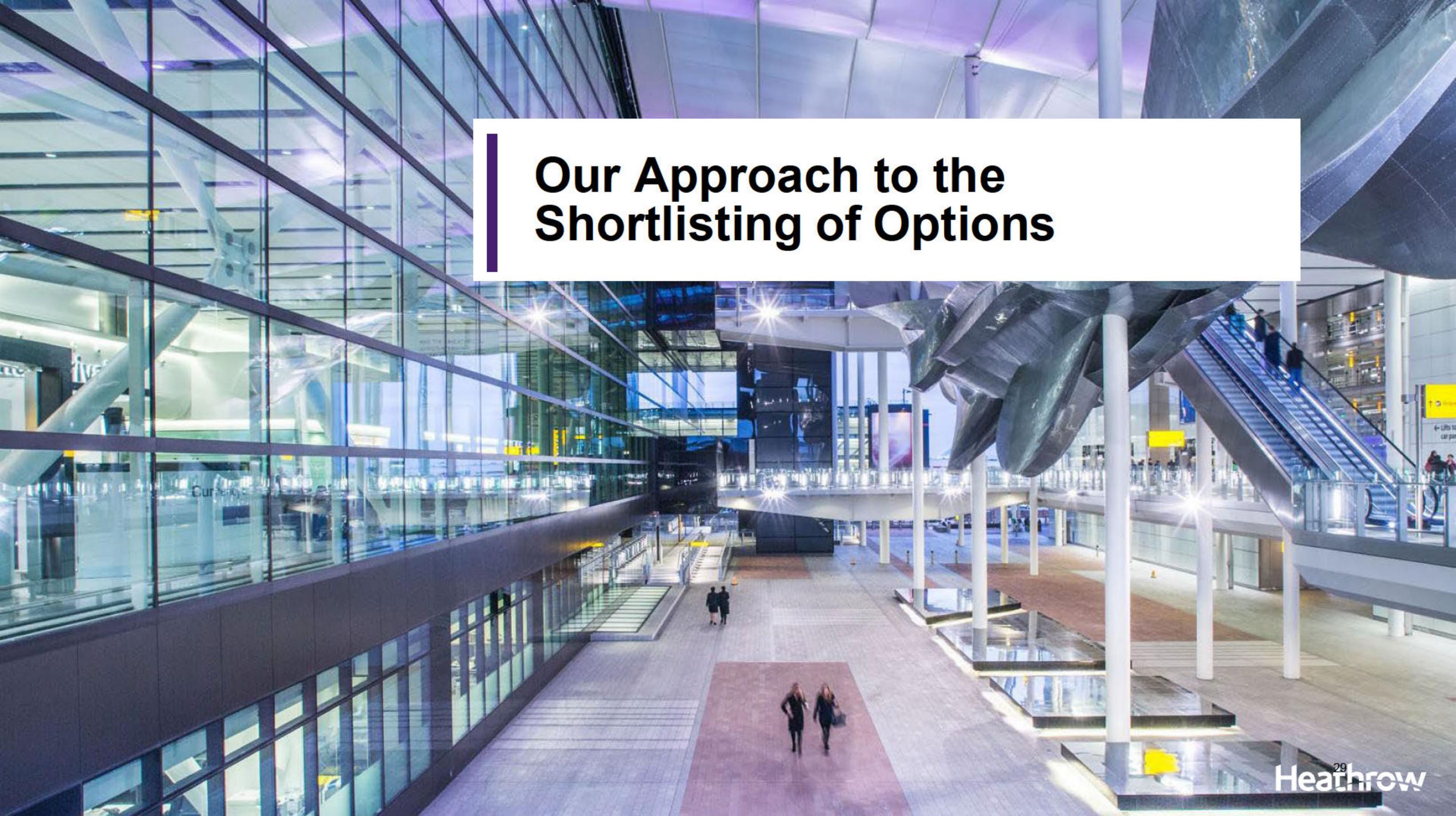
REQUIREMENTS OF THIS ENGAGEMENT

To resolve this issue, the CAA has requested that Heathrow:

1. *Re-engage with all stakeholders on our proposed methodology for shortlisting options after the initial options appraisal;*
2. *Take into account any views on the proposed shortlisting methodology received from those stakeholders;*
3. *Make a fresh decision on a shortlisting methodology; and*
4. *Apply the chosen shortlisting methodology to our flight path options objectively, consistently and transparently.*

Stage 2 outputs	Scope of this Engagement
Comprehensive List of Options (CLOO)	✗
Design Principle Evaluation (DPE)	✗
Initial Options Appraisal (IOA)	✗
Approach to Shortlisting of Options	✓

We are not seeking feedback on previous stages or outputs of the ACP or on the wider political/regulatory landscape



Our Approach to the Shortlisting of Options

HEATHROW'S PREVIOUS SHORTLISTING OF OPTIONS AT STAGE 2 WAS BASED ON KEY PRINCIPLES SET OUT IN GOVERNMENT POLICY

There is no methodology in the CAA's [CAP1616](#) guidance for shortlisting options.

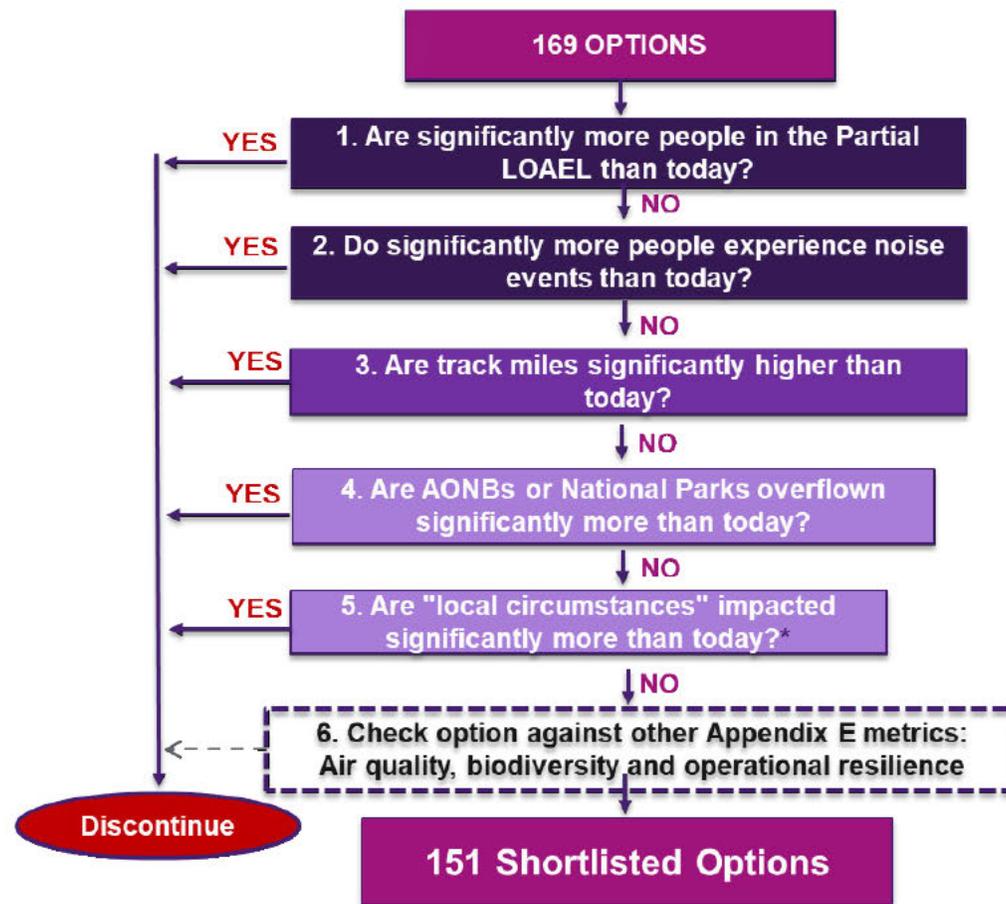
We based our approach to shortlisting options on Appendix E in CAP1616 and on the government's Air Navigation Guidance (ANG17).

We developed 6 "tests" that we applied to each of the options to determine whether it should be:

- a) Discontinued at Stage 2, or
- b) Shortlisted for further consideration at Stage 3.

This methodology was shared with stakeholders in June 2023.

Previous Shortlisting Methodology: June 2023



IT WAS LATER IDENTIFIED THAT IMPACTS ASSOCIATED WITH TESTS 4 AND 5 WOULD BE BETTER ADDRESSED AT STAGE 3

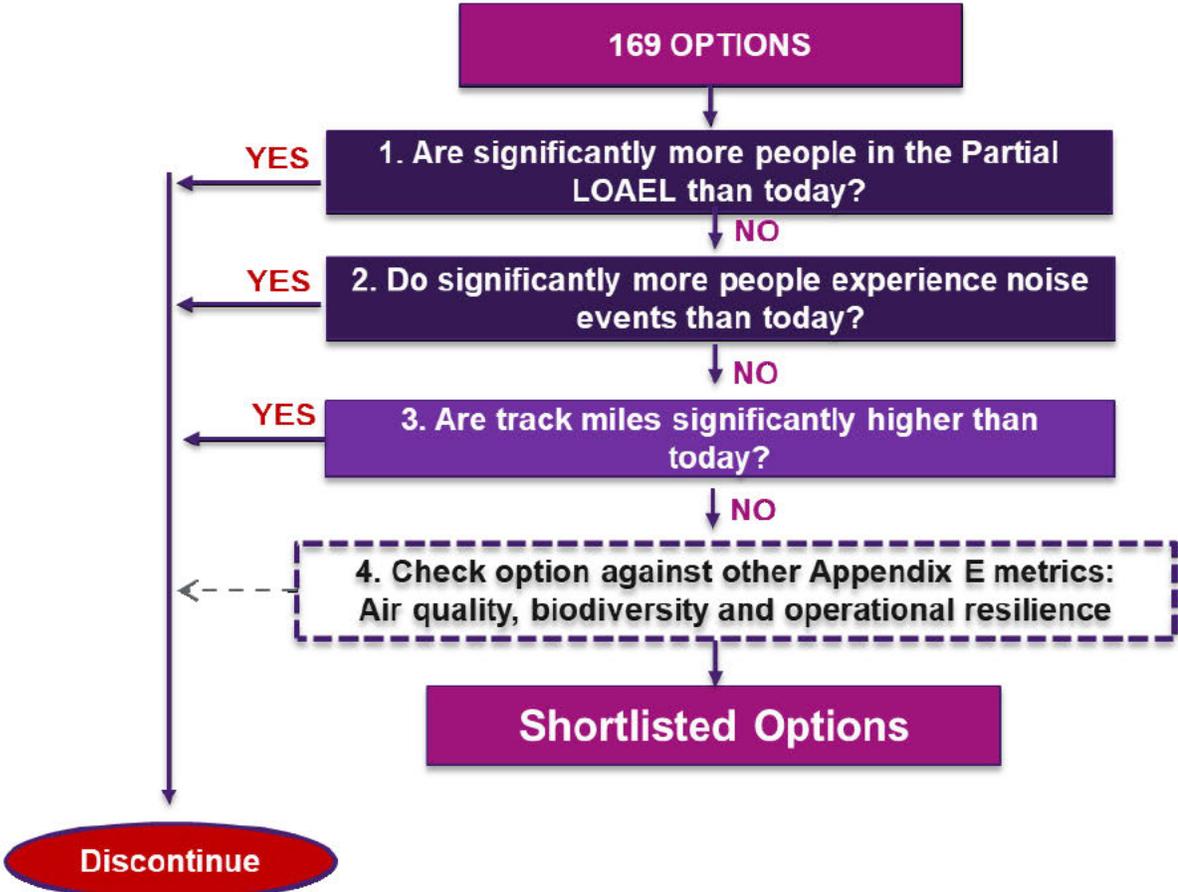
1. The Initial Options Appraisal (IOA) results for overflight of AONBs are likely to be overstated with the information we have at this time: we expect to see a reduction in areas of AONBs overflow once assumptions around Continuous Climb Operation (CCO) and Continuous Descent Operation (CDO) have been applied, since these operational procedures will result in aircraft being higher than currently assumed within the data.

2. At Stage 3, the remaining options will be grouped into “system options” (arrivals + departures, for easterly and westerly operations). The compilation of system options will inevitably result in some refinement of the routes; we will be able to better identify and address potential overflight and/or impacts to AONBs or “local circumstances” at this stage.

3. At Stage 3 we will undertake tranquility and biodiversity assessments to help identify the more sensitive areas within AONBs or “local circumstances”.

WE HAVE NOW REVISED OUR SHORTLISTING METHODOLOGY TO REMOVE PRIOR TESTS 4 & 5: THESE IMPACTS WILL BE ASSESSED AT STAGE 3

Proposed Shortlisting Methodology: March 2024



➤ We are now seeking your feedback on this proposed shortlisting approach, with the impacts of the prior Tests 4 and 5 assessed at Stage 3



Our Stage 3 Commitments

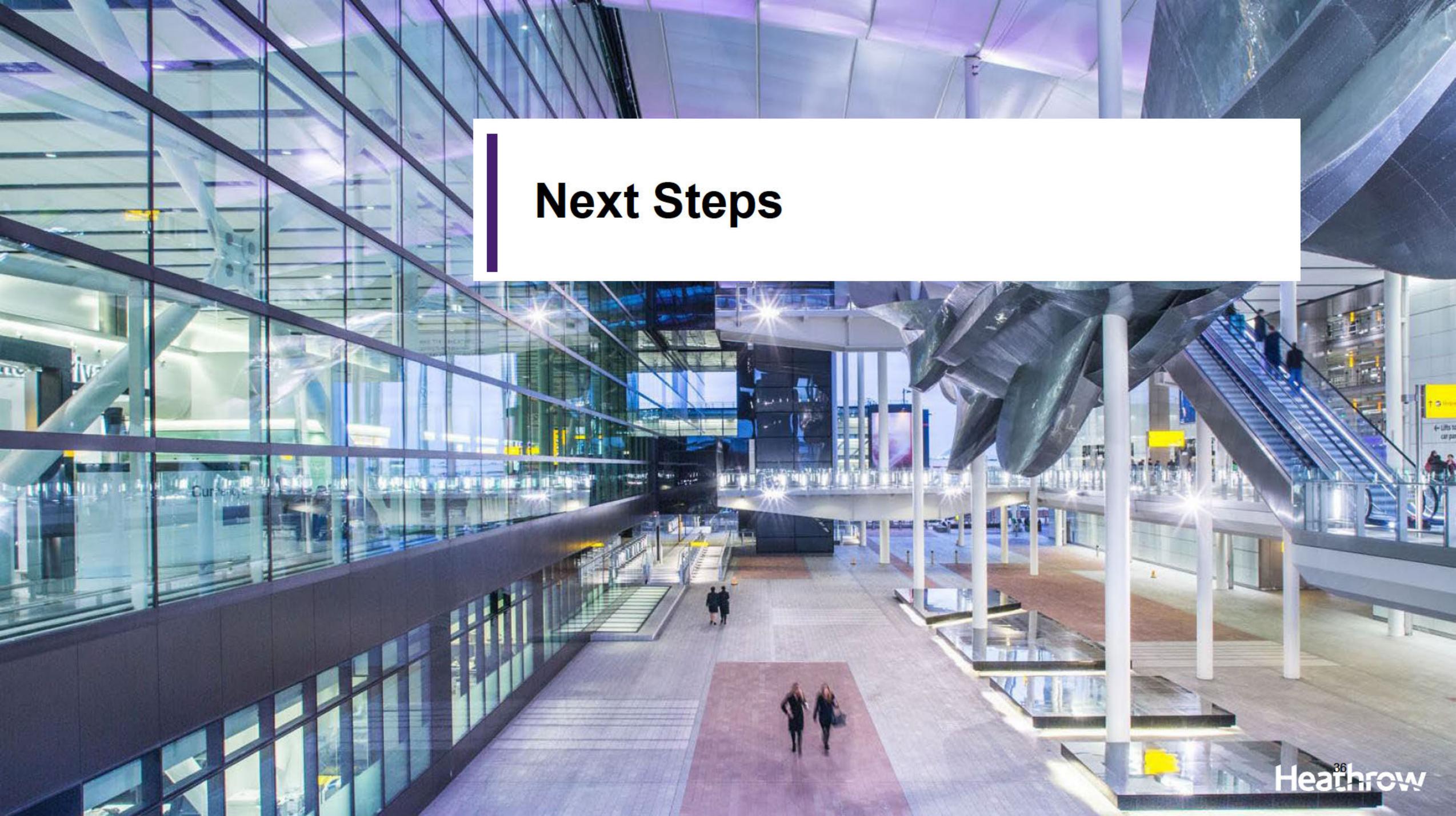
HEATHROW IS COMMITTED TO MINIMISING IMPACTS OF OVERFLIGHT TO AONBS, NATIONAL PARKS AND “LOCAL CIRCUMSTANCES”

Heathrow has already made the following commitments:

- Heathrow will seek to **reduce potential overflight and/or impacts to AONBs and Richmond Park** where possible at Stage 3 of the process
- Impacts on **tranquillity will be assessed** at Stage 3, in accordance with current government policy. We will also consider how important habitats or species within statutory protected sites might be affected and **seek to reduce impacts**.
- Stage 3 design will involve overlaying appropriate approaches to **respite, night flights and noise efficient operational practices** to ensure the impacts of flight paths are mitigated wherever possible.

HEATHROW HAS ALSO MADE SPECIFIC COMMITMENTS TO RICHMOND PARK AND WILL CONSIDER OTHER “LOCAL CIRCUMSTANCES”

- When compiling system options, we will seek to **minimise impacts to Richmond Park** where possible and will engage closely with interested stakeholders in this process
 - We will **assess the overall viability and impacts of PBN Arrival options**, including their impact on Richmond Park
 - We will undertake a **more detailed Biodiversity & Tranquillity assessment** of Richmond Park at Stage 3: We will engage with interested stakeholders on the proposed methodology and emerging findings
 - We will undertake a **full Environmental Assessment** of each option's environmental impacts to Richmond Park at Stage 3
- **Heathrow will also consider whether other “local circumstances” should be considered (e.g. Bushy Park)**

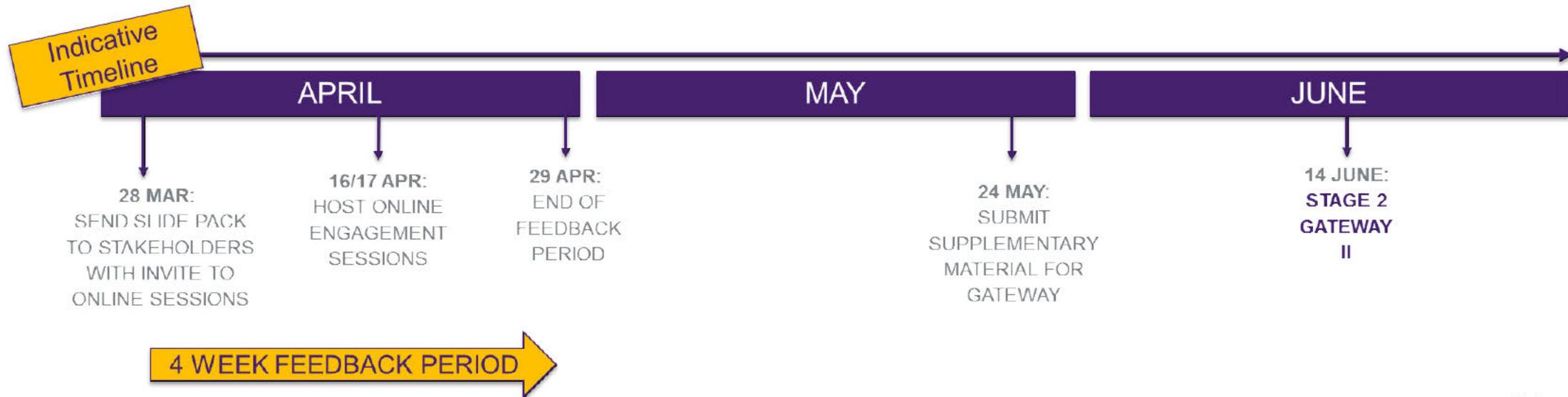


Next Steps

NEXT STEPS FOR STAGE 2

Following this period of engagement, we will:

1. Take into account any feedback on the proposed shortlisting methodology;
 2. Make a fresh decision on a shortlisting methodology; and
 3. Apply the chosen shortlisting methodology to our flight path options objectively, consistently and transparently.
- We will provide a summary of all feedback once the feedback period has ended



The timeline is subject to change depending on stakeholder feedback

THANK YOU FOR YOUR ENGAGEMENT

We welcome your feedback on our approach to shortlisting options

Please provide feedback to: airspace@heathrow.com before Monday 29 April 2024 at 5pm

We will provide a summary of all feedback to you once the feedback period has ended

All Stage 2 work undertaken to July 2023, including evidence of engagement with stakeholders, is published on the CAA's Airspace Change Portal. The portal also contains the CAA's statement on the outcome of our Stage 2 Gateway and further communication between Heathrow and the CAA: <https://airspacechange.caa.co.uk/>

Heathrow

From: [REDACTED]
To: [DD - Airspace](#)
Subject: Re: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 28 March 2024 15:49:33
Attachments: [PastedGraphic-2.png](#)

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Hi [REDACTED]

Thanks for this. Could I register for 16th April session please?

Hope you and colleagues have a relaxing Easter weekend!

Kind regards

[REDACTED]

[REDACTED]

[REDACTED]

www.hacan.org.uk



From: [REDACTED]
To: [DD - Airspace](#)
Cc: [REDACTED]
Subject: Heathrow Airspace Modernisation: Invitation for further engagement - Wednesday 17 April (2:00-3:00pm)
Date: 28 March 2024 17:01:27
Attachments: [image001.png](#)

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Please do add us to the engagement session.

Regards,

[REDACTED]

[REDACTED]

The Old Police House, Hyde Park, London, W2 2UH



The Royal Parks are:

Bushy Park | The Green Park | Greenwich Park | Hyde Park | Kensington Gardens | The Regent's Park

& Primrose Hill | Richmond Park | St. James's Park | plus Brompton Cemetery & Victoria Tower Gardens

The Royal Parks is registered in England and Wales: Company Registration No: 10016100
Registered Charity No: 1172042. Registered Offices: The Old Police House, Hyde Park, London, W2 2UH

Disclaimer

The information contained in this communication from the sender is confidential. It is intended solely for use by the recipient and others authorized to receive it. If you are not the recipient, you are hereby notified that any disclosure, copying, distribution or taking action in relation of the contents of this information is strictly prohibited and may be unlawful. This email has been scanned for viruses and malware, and may have been automatically archived by **Mimecast Ltd**

From: [REDACTED]
To: [DD - Airspace](#)
Subject: RE: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 28 March 2024 17:05:19
Attachments: [image010.png](#)

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Dear [REDACTED]

Thanks for the email below. Please could I attend the teams session on Wednesday the 17th ?

Many thanks [REDACTED]

[REDACTED]
[REDACTED]
London Borough of Newham

Newham Dockside | 1000 Dockside Road, London E16 2QU

[REDACTED]
[newham.gov.uk](https://www.newham.gov.uk)



WE ARE NEWHAM.

Read more about our Building a Fairer Newham plan [here](#) and watch [here](#).

From: [REDACTED]
To: [DD - Airspace](#)
Subject: Re: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 28 March 2024 22:23:04
Attachments: [image001.png](#)

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

I would like to attend one of these days but my diary is in a state of flux to choose which of the two days



Sent from my iPhone

From: [REDACTED]
To: [DD - Airspace](#)
Subject: Re: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 28 March 2024 23:51:58

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

I would like to attend the Tuesday 16th April Teams session.

Thank you;

[REDACTED]

Sent from my iPhone

From: [REDACTED]
To: [DD - Airspace](#)
Cc: [REDACTED]
Subject: RE: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 29 March 2024 12:59:21
Attachments: [image001.png](#)

Classification: Internal

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

I would like to attend the 16 Apr session

[REDACTED]
British Helicopter Association
Unit C2
Fairoaks Airport
Chobham
Surrey. GU24 8HU

[REDACTED]
www.britishhelicopterassociation.org

From: [REDACTED]
To: [DD - Airspace](#)
Subject: RE: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 29 March 2024 13:31:10
Attachments: [image001.png](#)

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

[REDACTED]

I would like to attend:

Tuesday 16 April (10:00-11:00am)

[REDACTED]

[REDACTED]

The Friends of Richmond Park
www.frp.org.uk



From: [REDACTED]
To: [DD - Airspace](#)
Subject: Re: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 31 March 2024 19:44:39
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)

Classification: Internal

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Hi Team,

Please could I attend the session on the 17th April.

Thanks,

[REDACTED]



[REDACTED] Blackbushe Airport Ltd
W: www.blackbusheairport.co.uk



From: [REDACTED]
To: [DD - Airspace](#)
Subject: RE: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 01 April 2024 12:02:18
Attachments: [image001.png](#)

Classification: Internal

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

[REDACTED]
Many thanks for the email. I would like to join the teams session on Tuesday 16th April.

From: [REDACTED]
To: [DD - Airspace](#)
Cc: [REDACTED]
Subject: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 02 April 2024 10:48:40
Attachments: [image001.png](#)

You don't often get email from [REDACTED]. [Learn why this is important](#)

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Hi [REDACTED]

Please could you add [REDACTED] and myself to the list to attend the following engagement session:

Tuesday 16 April (10:00-11:00am)

Kind Regards



NATS

From: [REDACTED]
To: [DD - Airspace](#)
Subject: RE: EXT: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 02 April 2024 11:35:07
Attachments: [image002.png](#)
[image003.png](#)

Classification: Internal

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Hello

I would like to attend the TEAMS session on Tue 16 Apr.

Regards,

[REDACTED]
[REDACTED] r
Farnborough Airport | M [REDACTED] | www.farnboroughairport.com
Help us to secure the long-term future of Farnborough Airport and its local region by providing a supportive comment on our planning application on the [Rushmoor Borough Council website](#). One Airport. One Town. Our Future.



Our privacy notice can be accessed at www.farnboroughairport.com/legal/privacy-notice

This communication and the information it contains, is intended only for the person(s) and/or organisation(s) to whom it is addressed and may contain information that is confidential, legally privileged and protected by law. If the reader of this message is not the intended recipient or an authorised representative, you are hereby notified that any dissemination of this communication is strictly prohibited. If you have received this communication in error, please notify our DPO immediately by forwarding the email to dpo@farnboroughairport.com and delete the message and attachments from your system.

From: [REDACTED]
To: [DD - Airspace](#)
Subject: Re: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 02 April 2024 12:05:49

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Thank you for your email. I would like to attend on the 16th April. Can you please provide the link to the shortlisted options as I can't seem to find them.

Thank you

[REDACTED]
CAGNE

From: [Redacted]
To: [DD - Airspace](#)
Subject: RE: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 02 April 2024 15:12:44
Attachments: [image002.png](#)
[image003.png](#)

Classification: Internal

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Hello [Redacted]

Could I attend the Wednesday 17 April (2:00-3:00pm) session please?

Many thanks,

[Redacted]

The logo for the Association of Obstetric and Gynaecological Consultants (ACOG), featuring the letters 'ACOG' in a bold, blue, sans-serif font.

[Redacted]
[Redacted]

[Redacted]
[Redacted]
[Redacted]

[Redacted]
[Redacted]

From: [REDACTED]
To: [DD - Airspace](#)
Subject: RE: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 03 April 2024 13:55:20
Attachments: [image001.png](#)

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

I would like to attend the session on Tuesday 16 April (10:00-11:00am).

[REDACTED]
The Friends of Richmond Park

From: [REDACTED]
To: [DD - Airspace](#)
Cc: [REDACTED]
Subject: RE: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 04 April 2024 10:09:53
Attachments: [image001.png](#)

You don't often get email from [REDACTED]. [Learn why this is important](#)

Classification: Internal

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Dear [REDACTED]

Thank you for your update. My colleague [REDACTED] and I would like to attend your session on Tuesday 16 April (10:00-11:00am).

Many thanks in advance.

Best regards,

[REDACTED]

[REDACTED]

Lufthansa Group
Swiss International Air Lines Ltd
P.O. Box ZRHS/OFPC/ANVA
CH-8058 Zurich Airport

[REDACTED]

[REDACTED]

[SWISS.COM](#)
[lufthansagroup.com](#)

From: [REDACTED]

Sent: Friday, April 5, 2024 12:48 PM

To: DD - Airspace <airspace@heathrow.com>

Subject: Re: Heathrow Airspace Modernisation: Invitation for further engagement

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Dear [REDACTED]

I would like to attend the engagement session on Wednesday 17th April at 2:00pm

Thanks

[REDACTED]

FRP

From: [REDACTED]
To: [DD - Airspace](#)
Subject: Re: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 06 April 2024 12:21:07

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Can I please sign up for the session on 17 April at 2-3pm

[REDACTED]

From: [REDACTED]
To: [DD - Airspace](#)
Subject: Re: Heathrow Airspace Modernisation: TEAMS link
Date: 08 April 2024 11:57:41

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

HI [REDACTED]

Thank you - my clumsy typing, sorry

17th April is in my calendar and is fine for me

Best

[REDACTED]

From: [REDACTED]
To: [DD - Airspace](#)
Cc: [REDACTED]
Subject: Heathrow Airspace Modernisation: Invitation for further engagement [UNC]
Date: 08 April 2024 14:25:22
Attachments: [image001.png](#)

You don't often get email from [REDACTED] [Learn why this is important](#)

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Good afternoon

Please can I have an invite to the Teams presentation below:

Tuesday 16 April (10:00-11:00am)

Kind regards

[REDACTED]

Guildford Borough Council

[REDACTED]

[Guildford Borough Council](#)

[Twitter](#) | [Facebook](#) | [Instagram](#) | [Sign up to our newsletter](#)



Find out more [Clean Air Night | Global Action Plan \(actionforcleanair.org.uk\)](#)

Guildford Borough Council has arrangements for handling sensitive emails. For more information on how you may be affected please go to www.guildford.gov.uk/SecureEmail. If you have received this message in error, please (a) notify the sender immediately, (b) destroy this email and any attachments, and (c) do not use, copy, and/or disclose this email or any attachments to any person.

Guildford Borough Council regularly updates virus software to ensure as far as possible that its networks are free of viruses. However, you will need to check this message and any attachments for viruses as Guildford Borough Council can take no responsibility for any computer virus that might be transferred by this email.

The contents of this email may not reflect Guildford Borough Council policy. We store and monitor all emails and attachments sent and received by Guildford Borough Council employees in our Cryoserver system for up to 5 years to prevent misuse of the Council's networks.

From: [REDACTED]
To: [DD - Airspace](#)
Subject: RE: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 09 April 2024 07:58:22
Attachments: [image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)
[image008.png](#)
[image009.png](#)
[image007.png](#)

You don't often get email from [REDACTED] [Learn why this is important](#)

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

I would like to attend on 16 April please.

NATS



From: [REDACTED]
To: [DD - Airspace](#)
Subject: Re: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 09 April 2024 10:14:05

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Many thanks for your email and the attached presentation. Please may I put my name down to attend the Teams session on Tues 16 April from 10 - 11am.

Many thanks,

[REDACTED]

Embridge & MRA

From: [REDACTED]
To: [DD - Airspace](#)
Subject: RE: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 09 April 2024 11:39:51
Attachments: [image001.png](#)

You don't often get email from [REDACTED] [.Learn why this is important](#)

Classification: Internal

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Hi [REDACTED]

Thanks for sending the information. I would like to attend the session on Tuesday 16 April (10:00-11:00am) if possible.

Thanks

Regards
[REDACTED]

From: [REDACTED]
To: [DD - Airspace](#)
Subject: RE: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 09 April 2024 13:21:11
Attachments: [image002.png](#)
[image003.png](#)

You don't often get email from [REDACTED]. [Learn why this is important](#)

Classification: Internal

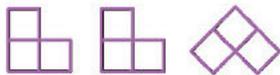
Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Hi [REDACTED]

Many thanks for adding me to the distribution list and sending me an update on Heathrow's Airspace Modernisation ACP.

I would like to attend the online session on 16th April, 10:00-11:00am.

Kind regards



London Luton Airport

[REDACTED]
London Luton Airport
Percival House, Percival Way
Luton, LU2 9NU

E [REDACTED]
W london-luton.co.uk

From: [REDACTED]
To: [DD - Airspace](#)
Subject: Re: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 09 April 2024 14:42:13
Attachments: [image001.png](#)
[Heathrow Airspace Modernisation Stage 2 Re-Engagement March 2024.pdf](#)

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Dear [REDACTED]

Thank you for the update. Please book us in for the session on 17 April 14:00 to 15:00.

Thank you

[REDACTED]

From: [REDACTED]
To: [DD - Airspace](#)
Subject: Re: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 10 April 2024 08:35:32
Attachments: [image001.png](#)

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Near [REDACTED]

I would be grateful if you could send me a link for one of the Teams sessions. I would prefer the 16th Feb but in practice could attend either.

Kind Regards

[REDACTED]

[REDACTED]

[REDACTED]

Sutton and Kingston Councils

Environment, Housing and Neighbourhoods Directorate
London Borough of Sutton
Civic Offices, St Nicholas Way
Sutton SM1 1EA

[REDACTED]

www.sutton.gov.uk

Follow us on twitter [@SuttonCouncil](#)

My normal working days are Monday to Thursday.

From: [REDACTED]
To: [DD - Airspace](#)
Cc: [REDACTED]
Subject: Re: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 10 April 2024 16:12:05
Attachments: [image001.png](#)

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

I wish to sign up for the Tuesday 16 April 10 - 11 session.

After all the comments made at the latest NACF meeting against the hurry to rush through the stakeholder engagement with tight consultation/feedback deadline, I am sorry that HAL has chosen to do just this. Decisions made on Stage 2A CLOOS will last decades when we do not have a clear idea of the impacts of those decisions.

I also made the point that in-person meetings are far more beneficial and give the opportunity for real discussion.

These offered Zoom meetings are neither fair nor constructive stakeholder engagement.

[REDACTED]

From: [REDACTED]
To: [DD - Airspace](#)
Cc: [REDACTED]
Subject: Re: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 11 April 2024 12:19:06
Attachments: [image001.png](#)
[Airspace Modernisation - Heathrow submission to CAA July 2023.pdf](#)

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Dear [REDACTED]

Airspace Modernisation Engagement

Thanks for invite to Teams meetings next week.

I would like to attend on Tuesday 16 (10:00 to 11:00), please. Also, it would be very help if my RHC colleague [REDACTED] could attend the Teams on Wednesday (2:00-3:00). I'm copying [REDACTED] in with [REDACTED] email address for you to send the Teams invite. I would appreciate it if you could confirm to us both your receipt of our request to attend the meetings.

At the last NACF meeting on 20 March I had wanted to raise a question regarding the option analysis but this was not possible at the meeting but I did discuss the issue with Heathrow afterwards and left you with a hard copy of the slide I attach here. I have had no response yet from Heathrow and would appreciate learning the outcome.

Kind regards

[REDACTED]

[REDACTED]

[REDACTED] Richmond Heathrow Campaign

Richmond Heathrow Campaign represents three amenity groups in the London Borough of Richmond upon Thames: The Richmond Society, The Friends of Richmond Green, and the Kew Society, which together have over 2000 members

Airspace Modernisation - Heathrow submission to CAA July 2023.
Noise Contour and Population Discrepancies

The noise contours for summer 2019 as presented in CAP 2001 for Departures on Easterlies during the Day are shown in Figure 1 over-page. The noise contour for the Base/Do Nothing case used by Heathrow in their modelling of airspace change options seemingly is intended to replicate the contours in Figure 1. And this they seem to do as shown by Figure 2 over-page, which has been taken from Appendix A13.8 page 9 on the CAA airspace Change Portal for Heathrow's airspace modernisation.

However, using the key provided on page 9, the 51dB contour is actually the 57dB contour in CAP 2001, for example. All the contours exhibit a similar mismatch.

Also, on page 9 it says 'The Total population within Partial LOAEL(>51 dB LAeq,16h) 07:00 - 23:00 is 169,000. Yet in CAP 2001 it is stated on page 27 that the population exposed above 54 dB is 435,300. The population at >51 dB surely must be much greater than that at >54 dB and therefore the 169,000 in the airspace change report is seemingly substantially understated.

The other airspace change options have not been examined in this detail but looking at the population estimates they appear to be substantially under-estimating the number of people exposed. Also, the noise contours maps for all the options appear to have similar discrepancies.

Of course there may be a perfectly good explanation but it would be appreciated if Heathrow could explain the seeming discrepancies in population numbers exposed and the noise contour maps.

 Richmond Heathrow Campaign

29 October 2023

Figure B6 Heathrow 2019 and 2006 average summer day 54-72 dB 100% E_{LAeq,16h} noise contours (with 2006 N-S runway usage)

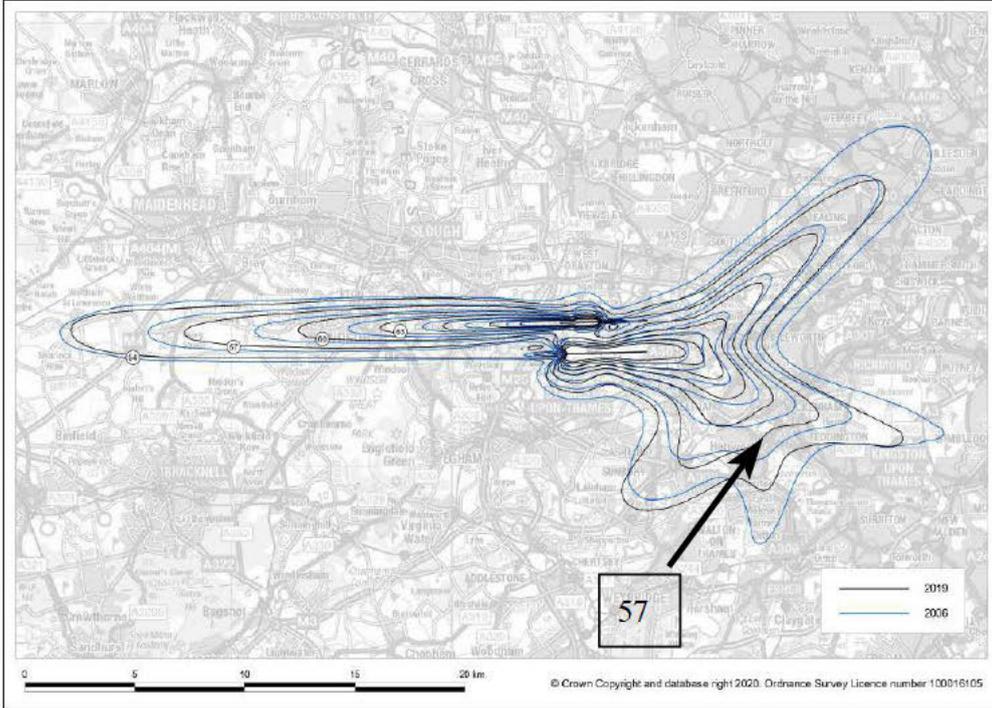


Figure 1 Heathrow Airport 2019 Summer Noise Contours and Noise Action Plan Contours CAP 2001 page 69

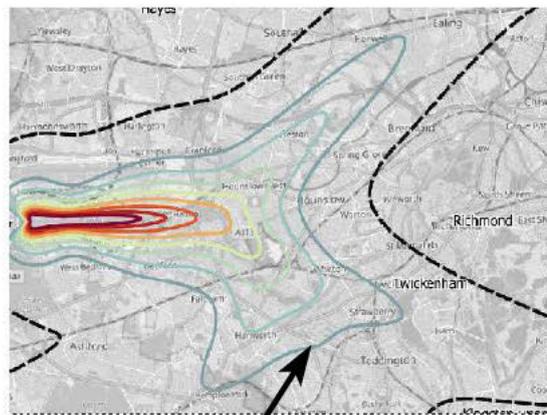


Figure 5 Dep To East Southern PBN Day 09R BaseDN

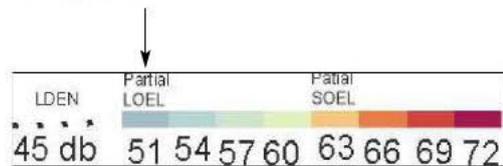


Figure 2 Heathrow Stage 2B submission to CAA July 2023 Appendix E A13.8 page 11

From: [REDACTED]
To: [DD - Airspace](#)
Subject: RE: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 12 April 2024 14:12:19
Attachments: [image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)
[image008.png](#)
[image009.png](#)
[image007.png](#)

You don't often get email from [REDACTED] [Learn why this is important](#)

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Hi,

Please could you send me the invite for the Wednesday session?

Thank you

Kind regards,

[REDACTED]

NATS

From: [REDACTED]
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: TEAMS link for tomorrow's session
Date: 15 April 2024 17:31:10
Attachments: [image001.png](#)
[Heathrow Airspace Modernisation Invitation for further engagement.msg](#)

Classification: Internal

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Hi [REDACTED]

I had original invitation attached – but I've not been sent a link for the session before now?! I've double checked...

Can you send me one for Weds too – just in case – a manic day tomorz

[REDACTED]

From: [REDACTED]
To: [DD - Airspace](#)
Subject: RE: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 16 April 2024 09:11:38
Attachments: [image001.png](#)

Classification: Internal

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Hi – would it be possible to join the session today – or if not, the one tomorrow? Many thanks.

[REDACTED]

From: [REDACTED]

Sent: Tuesday, April 16, 2024 9:13 AM

To: DD - Noise and Airspace Community Forum <nacf@heathrow.com>

Subject: Re: Heathrow Airspace Modernisation Documents

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Hi [REDACTED]

I had confirmed my attendance at tomorrow's teams meeting. I don't think I've received a link as yet. Would you be kind enough to send me one? I think [REDACTED] also would like to have a link send to her.

Many thanks – kind regards – [REDACTED]

Sent from my iPhone

From: [REDACTED]
To: [DD - Airspace](#)
Subject: Re: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 16 April 2024 09:45:06

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Hi [REDACTED]
I was looking to join this morning's meeting, may I have the Teams Link, please.

[REDACTED]

From: [REDACTED]
To: [DD - Airspace](#)
Subject: Re: Heathrow Airspace Modernisation: TEAMs link for Wednesday
Date: 16 April 2024 14:30:45

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Hi [REDACTED] thank you very much for the link. I thought I had booked in for the Wednesday session and look forward to seeing you tomorrow. Kind regards, [REDACTED]

PS I will forward the link to [REDACTED].
Sent from my iPhone

From: [REDACTED]
To: [DD - Airspace](#)
Subject: RE: Heathrow Airspace Modernisation: TEAMS link
Date: 17 April 2024 08:40:35
Attachments: [image001.png](#)
[image002.png](#)

You don't often get email from [REDACTED]. [Learn why this is important](#)

Classification: Internal

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Good morning [REDACTED]

I had a few technical issues yesterday and was unable to attend,

Are you able to invite me to the session at 14.00 today.

Kind regards

[REDACTED]

[REDACTED]

Guildford Borough Council

[REDACTED]

[Guildford Borough Council](#)

[Twitter](#) | [Facebook](#) | [Instagram](#) | [Sign up to our newsletter](#)



Find out more [Clean Air Night | Global Action Plan \(actionforcleanair.org.uk\)](#)

From: [REDACTED]
To: [DD - Airspace](#)
Subject: Re: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 17 April 2024 10:12:13
Attachments: [image001.png](#)

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Morning,

Please can you send me the link for today's Teams call?

Kind regards,

[REDACTED]

From: [REDACTED]
To: [DD - Airspace](#)
Subject: Heathrow Airspace Modernisation / Stage 2
Date: 15 April 2024 15:24:23
Attachments: [scan.pdf](#)

You don't often get email from [REDACTED]. [Learn why this is important](#)

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Hi [REDACTED]

Please see attached pdf regarding the above.

Should you have any queries regarding this, please let me know.

Best

[REDACTED]
PS I've had to use my colleague's email address here at my office – my usual email for responses
[REDACTED]

This email and any attachments are confidential and intended solely for the addressee and may also be privileged or exempt from disclosure under applicable law. If you are not the addressee, or have received this email in error, please notify the sender immediately, delete it from your system and do not copy, disclose, or otherwise act upon any part of this email or its attachments.

Internet communications are not guaranteed to be secure or virus-free. Kossway Ltd does not accept responsibility for any loss arising from unauthorised access to, or interface with, any internet communications by any third party, or from the transmission of any viruses. Replies to this email may be monitored by Kossway for operational or business reasons.

Any opinion or other information in this email or its attachments that does not relate to the business of Kossway Ltd is personal to the sender and is not given or endorsed by Kossway Ltd.

Kossway Automatics Limited (registered no. 747250)

Registered Office: Unit 8, The Ridgeway Trading Estate, Iver, Bucks. SL0 9HJ

15 April 2024

To Heathrow Airspace Modernisation (██████████),

Heathrow Airspace Modernisation - Stage 2 Re-engagement

We the undersigned community noise groups are writing to request clarification regarding the methodology of this and future Stages of Heathrow's Airspace Change Proposals, and to express our strong disagreement that the feedback deadline for a revised Stage 2 application should be set as soon as the 29 April. Given the significance of the potential environmental impacts of Heathrow's airspace modernisation proposals, the context of revised CAP 1616 guidance, and the discussion and commitments made at the 20 March NACF meeting, we believe the time limit should be extended to a sufficient period to allow for genuine re-engagement, during which time Heathrow should produce the necessary and required documentation to support proper consideration of the issues these factors will entail.

We ask you to clarify at the forthcoming Stakeholder Engagement Teams presentations the basis on which the re-engagement consultation is being carried out. CAP1616 version 5 came into force on the 2 January 2024. There are significant differences with the previous iteration which have an important bearing on how Stage 2 and later Stages are to be processed, and impacted communities need, and are entitled, to know how Heathrow's revised Stage 2 is to be prepared, the options that need to be included and the basis on which shortlisting and assessment of preferred options are to be considered.

In particular, in relation to transitional provisions for CAP 1616 VS the CAA state;

*This airspace change process (CAP 1616, version 5) came into force on 2 January 2024 for permanent airspace change proposals. Any permanent airspace change proposals commenced on or after that date will be assessed against the requirements of the process as described in this document. **All change sponsors with permanent airspace change proposals in process under CAP 1616 (i.e., where an assessment meeting has already taken place) and in Stages 1-4, will be informed of the requirements that apply to their submissions and this will be published on the portal.** The CAA aims to inform all change sponsors of such requirements shortly. Airspace change proposals in Stages 5-6 will continue as planned and will not be affected by the publication of CAP 1616, version*

<https://www.caa.co.uk/commercial-industry/airspace/airspace-change/review-of-cao-16161>

Heathrow's Initial Option Appraisal (IOA) filed under Step 2B (Version 4) gives little or no real information of the environmental effects of the options proposed to be taken forwards. From the Heathrow document, it is simply not possible to judge these. Under the revised CAP guidance CAP 1616 V5, Heathrow's IOA is even more deficient since there are no current and 10-year baselines versus options comparisons.

Heathrow says in its IOA that it "does not consider that a 'do minimum' option is feasible or appropriate to define at this stage and a 'do nothing' scenario provides for a suitable, existing baseline against which to compare design options". This runs counter to the subsequent commitments given at the 20 March NACF regarding working up and assessment of 'do minimum' scenarios and avoiding prejudgement of outcomes.

The extremely limited scope proposed for the revised Stage 2 application and unrealistic shortened timescales for re-engagement and submission gives the appearance (and perhaps the reality) of a pre-decided course of action. The framework set out in the slide pack for the Teams meetings leaves insufficient time for Heathrow to provide necessary supporting documentation to enable proper consideration by stakeholders, precious little time for consideration or feedback prior to a Stage 2 resubmission, and no time for Heathrow to have "evaluated the baseline scenarios and design options against the design principles, specifying if they have met, partially met or not met each design principle" [CAP1616 v5].

It is worth reflecting that under established legal principles (Gunning), any consultation has to be done properly and must be undertaken at a time when proposals are still at a formative stage; it must include sufficient reasons for particular proposals to allow those consulted to give intelligent consideration and an intelligent response; adequate time must be given for this purpose; and the product of consultation must be conscientiously taken into account when the ultimate decision is taken.

A response to this letter is requested as soon as possible, particularly in the context of the currently proposed Stage 2 resubmission process, updated CAP 1616 guidance since the first Stage 2 application was made and the commitments and responses given at the 20 March NACF meeting.

Yours

[Redacted signature block]

[Redacted] (TAG)

[Redacted] (Richmond Heathrow Campaign)

[Redacted] (Windsor and Maidenhead)

[Redacted] (Elmbridge)

[Redacted] (Englefield Green)

[Redacted] (Plane Hell Action - SE London)

[Redacted] (Ealing)

[Redacted] (Richings Park Residents Association)

From: [REDACTED]

Sent: Wednesday, April 24, 2024 8:59 PM

To: [REDACTED]
[REDACTED]

Cc: [REDACTED]
[REDACTED]

Subject: CAP 1616 Stage 2 Info Request from RHC

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Dear [REDACTED]

I would be grateful if you could forward this email and its attachment to your colleagues and in particular to those that I have directly corresponded with on the topic raised here, namely [REDACTED]

There is a broad issue that concerns the underlying modelling criteria for the IOAs and in particular flight frequencies, angles of ascent and descent, and a proxy for noise at source such as aircraft type(s) or fleet for each option. I believe many of the options probably have the same inputs for these variables and only differ in terms of their lateral positioning, so the information RHC seeks should not be too burdensome. We think it essential to have this information if we are to assess properly the options in Stage 2 and this is not something to defer to Stage 3.

The attached note lists the options in Annex A and provides space for the frequencies and other info. sought.

I know Heathrow has responded to a particular issue of contours that RHC has raised but Heathrow's explanation that the comparative contours in Heathrow's Noise Action Plan are 100% easterlies for example and yet the equivalent IOAs are approx 30%, being the

proportion of easterlies in the Summer 2019 period, just seems impossible. As the charts show the contour shapes match exactly and they only differ in the dB values and by an exact 6dB (i.e 2 contour levels) - surely the contour shapes would be different for 100% compared to 30% easterlies and it would be an extraordinary co-incidence for the differences to be an exact 6 dB. I have raised this issue again with this email. I hope there is an answer and if it is something we are not understanding we would appreciate Heathrow's guidance. It is one reason we are requesting flight frequencies.

I would appreciate it if our concerns could be addressed in the very near future, especially as Heathrow seeks our imminent response on Stage 2.

Kind regards

██████

██████████

██████ Richmond Heathrow Campaign

Richmond Heathrow Campaign represents three amenity groups in the London Borough of Richmond upon Thames: The Richmond Society, The Friends of Richmond Green, and the Kew Society, which together have over 2000 members.

Richmond Heathrow Campaign (RHC)**CAP 1616 Stage 2 Initial Options Appraisal - Heathrow
Request for Information, 24 April 2024**

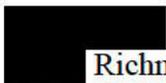
RHC has assessed the Initial Options submitted to the CAA Portal on 31 July 2023. The list of options is shown in Annex A attached here as prepared by RHC using the Reports on the CAA Portal.

An example of our analysis is provided here in Annex C for the Base Do Nothing Case and a set of options for Departures to the East from the Southern runway 09R during the Day using PBN. A specific Option from this set of options is shown in Annex B. The Charts show the Base Do Nothing Case on the left and Option B on the right and provide increasing detail as the charts go down the page ending up with the comparison between Base Do Nothing Case and Option B in a noise difference chart.

Annex D raises a concern regarding an apparent discrepancy for Option B where the values of the contours for the Base Do Nothing Case do not reconcile with the same contours taken from Heathrow Airport's 2019 Summer Noise Contours and Noise Action Plan Contours CAP 2001 page 69. For example, the 57 dB contour for the latter is shown as the 51 dB contour for the Base Do Nothing Case. The 6 dB difference feeds through into population numbers resulting in under-estimates of the population in the Base Do Nothing Case. The differences apply to each contour.

RHC emailed Heathrow on 29 October 2023 raising the issue as set out in Annex D here. The shape of all the contours match exactly so it seems impossible that the explanation is due to the CAP 2001 contours being 100% Easterlies and the Base Do Nothing Case contours in the Options appraisal being the easterly proportion of flights of around 30% in the summer period 2019, which is the explanation given by Heathrow in a series of emails recorded in Annex E.

In order to understand and properly assess the options appraisal, RHC believes it essential that the flight frequencies of all the Base Cases and the Options are provided to the communities with whom Heathrow is engaged. Furthermore, the options are three dimensional but the contour output is lateral and for a proper assessment there is a need to know the angles of ascent and descent between ground and 7,000 feet or whatever the highest modelling level might be. The other main input is the noise at source and therefore the type(s) of aircraft or fleet mix needs to be specified. Accordingly, Annex A includes four blank columns for this information which RHC would appreciate receiving from Heathrow.



Richmond Heathrow Campaign
24 April 2024

Richmond Heathrow Campaign represents three amenity groups in the London Borough of Richmond upon Thames: The Richmond Society, The Friends of Richmond Green, and the Kew Society, which together have over 2000 members.

From: [REDACTED]

Sent: Thursday, April 25, 2024 1:50 PM

To: [REDACTED]

[REDACTED]

Cc: [REDACTED]

[REDACTED]

Subject: CAP 1616 Stage 2 Info Request from RHC Addendum 25 April

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Dear [REDACTED]

Further to RHC's email request for information yesterday, 24 April, we have prepared an addendum that explains the requested information in more detail. Unfortunately, we did not have time to include this addendum but the Annex numbering etc runs on from the initial request of yesterday.

I would be grateful if you could forward this email and its attachment to your airspace team colleagues.

Kind regards

[REDACTED]

[REDACTED]

[REDACTED] Richmond Heathrow Campaign

Richmond Heathrow Campaign represents three amenity groups in the London Borough of Richmond upon Thames: The Richmond Society, The Friends of Richmond Green, and the

Kew Society, which together have over 2000 members.

Richmond Heathrow Campaign (RHC)**CAP 1616 Stage 2 Initial Options Appraisal - Heathrow
Request for Information, Addendum 25 April 2024**

An RHC Request for information concerning CAP 1616 Stage 2 modelling for Heathrow was emailed to Heathrow on 24 April. This addendum should be read in conjunction with the original request and expands on the requests for:

1. Flight Frequency data (see Annexes E, F and G) attached to this addendum.
2. Vertical dimension and angles of ascent and descent (see Annex H).
3. Fleet mix, passenger loads, occupancy and noise at source. (see Annex I).
4. Population exposed to Heathrow noise (see Annex J).

We were concerned in July 2022 that the flight path modelling would be a 'black box' as far as we are concerned. We wrote to Heathrow on 18 July 2022 to try and head off this problem and Heathrow responded on 3 October 2022 (see Annex K).

Richmond Heathrow Campaign remains concerned as of 25 April 2024 that we are not able to properly assess the Initial Options because of lack of information on the modelling process as highlighted by our Request for Information and its Addendum dated respectively 24 and 25 April 2024.



Richmond Heathrow Campaign
25 April 2024

Richmond Heathrow Campaign represents three amenity groups in the London Borough of Richmond upon Thames: The Richmond Society, The Friends of Richmond Green, and the Kew Society, which together have over 2000 members.

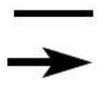


Figure 2 Dep to East Southern BaseDN

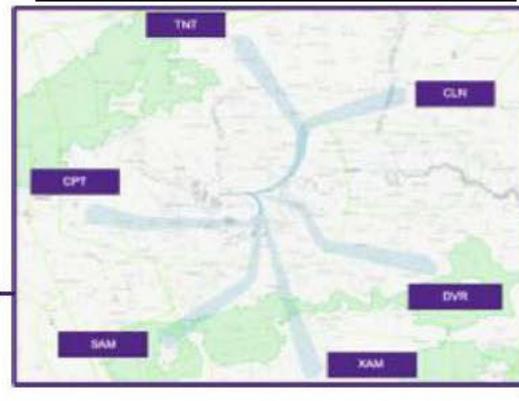


Figure 1 Dep To east Southern PBN Option B

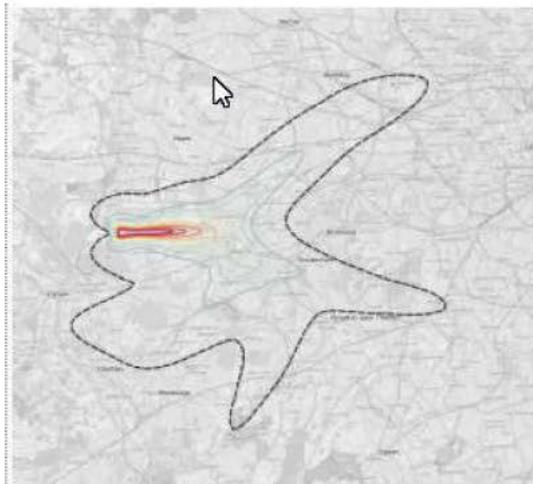


Figure 3 Dep to East Southern Base DN



Figure 4 Option B

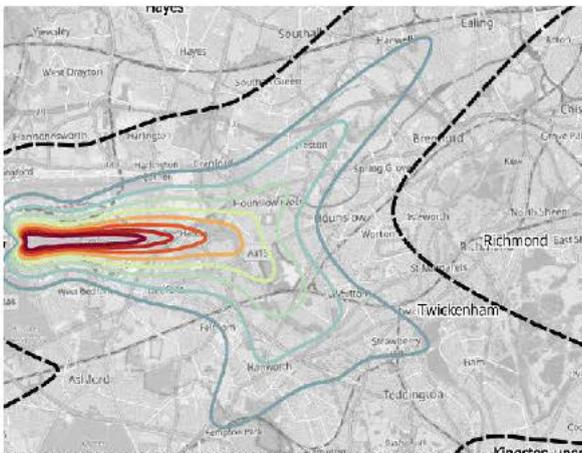


Figure 5 Dep To East Southern PBN Day 09R BaseDN

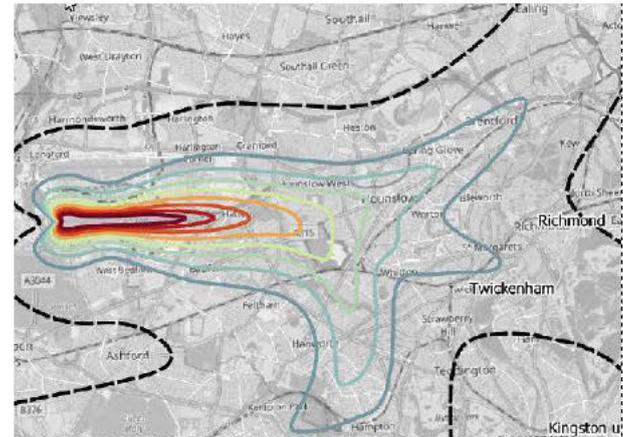
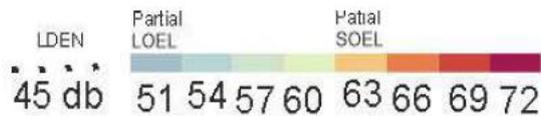


Figure 6 Dep To East Southern PBN Day Option B



Green - 1dB difference or more
Brown + 1dB difference or more

21/10/23

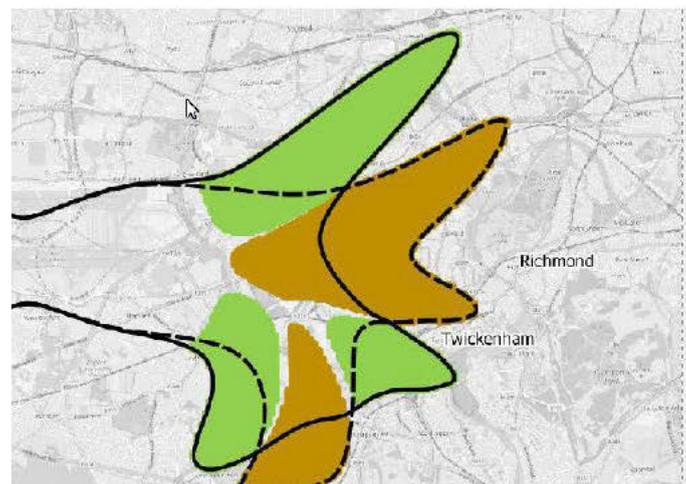


Figure 7 Option B

3. Dep. To East. Southern. PBN. Day. 09R

Ref. Option	A 13.8	A 13.8	A 13.9	A 13.9	A 13.10	A 13.10	A 13.10	avg	std	std%	med	
	BaseDN	B	C	F	G	I	J					
Pop > Partial LOAEL (day-time LAeq, 16h)	169	194	175	178	172	174	175	177	8	4%	175	
Pop at least one event of N60 Lmax (day-time)	3,603	1,690	1800	1222	1604	1341	1414	1,811	755	42%	1,604	
Air Quality												
Climate Track distance	Miles	444	432	423	437	446	433	435	7	2%	433	
AONB/Nat Parks overflown once a day on avg (day-time)	km2	115	25	15	37	37	11	9				
AONB/Nat Parks at least one event of N65 Lmax (day-time)	km2		10	9	11	1	7	7				
Richmnd Pk overflown at least once a day on avg (day-time)	km2	4	7	5	7	4	5	0				
RAMSAR, SAC, SPA, SSSI sites overflown 0-1640ft change	Number	na	0	3	0	0	3	3				
RAMSAR, SAC, SPA, SSSI sites overflown 0-3000ft change	Number	na	4	7	4	7	6	4				
Capacity/Resilience												
General Aviation comment												
Change in fuel Burn +/-	Tonnes/yr		-870	-1510	-530	90	-920	-920				
Pop Overflown (60° 7kft) per day frequency >=												
1	Pop 1k	3,603	1,690	1800	1222	1604	1341	1414	1,811	755	42%	1,604
5	Pop 1k	2,050	1,480	1591	1086	1456	1127	1193	1,426	312	22%	1,456
10	Pop 1k	1,357	1,294	1417	1003	1319	1034	1094	1,217	156	13%	1,294
20	Pop 1k	673	976	1056	852	1028	890	951	918	120	13%	951
50	Pop 1k	5	31	6	20	16	6	6	13	9	72%	6
100	Pop 1k		3	1	2	1	1	1	2	1	51%	1
200	Pop 1k											
Pop Noise Events per day frequency >= N65 Lmax												
1	Pop 1k	2,205	1,942	1997	1738	2041	1825	1844	1,942	145	7%	1,942
5	Pop 1k	857	772	823	850	848	854	899	843	36	4%	850
10	Pop 1k	526	484	528	542	510	535	595	531	31	6%	528
20	Pop 1k	342	314	351	364	335	350	382	348	20	6%	350
50	Pop 1k	110	151	106	131	112	104	105	117	16	14%	110
100	Pop 1k	34	52	39	47	22	34	34	37	9	24%	34
200	Pop 1k	0	0	0	0	0	0	0				
Noise Exposure												
Pop > WHO Threshold (>45dB Lden)	Pop 1k	734	677	741	752	739	768	814	746	38	5%	741
Pop > Partial LOEL (>51 dB LAeq 16hr)	Pop 1k	169	194	145	178	172	174	175	172	13	8%	174
Noise Exposure Change												
Pop with at least 1 dB decrease above Partial LOEL	Pop 1k -	0	89	43	71	60	60	51	53	26	48%	60
Pop with at least 1 dB decrease brought out of Partial LOEL	Pop 1k -	0	60	26	42	28	27	18	29	17	60%	27
Pop no change within Partial LOEL	Pop 1k 0	0	43	89	61	57	73	84	58	28	48%	61
Pop with at least 1 dB increase above Partial LOEL	Pop 1k +	0	123	69	89	82	68	58	70	35	49%	69
Pop with at least 1 dB increase brought into Partial LOEL	Pop 1k +	0	86	32	51	30	32	23	36	25	68%	32

**Airspace Modernisation - Heathrow submission to CAA July 2023.
Noise Contour and Population Discrepancies**

The noise contours for summer 2019 as presented in CAP 2001 for Departures on Easterlies during the Day are shown in Figure 1 over-page. The noise contour for the Base/Do Nothing case used by Heathrow in their modelling of airspace change options seemingly is intended to replicate the contours in Figure 1. And this they seem to do as shown by Figure 2 over-page, which has been taken from Appendix A13.8 page 9 on the CAA airspace Change Portal for Heathrow's airspace modernisation.

However, using the key provided on page 9, the 51dB contour is actually the 57dB contour in CAP 2001, for example. All the contours exhibit a similar mismatch.

Also, on page 9 it says 'The Total population within Partial LOAEL(>51 dB LAeq,16h) 07:00 - 23:00 is 169,000. Yet in CAP 2001 it is stated on page 27 that the population exposed above 54 dB is 435,300. The population at >51 dB surely must be much greater than that at >54 dB and therefore the 169,000 in the airspace change report is seemingly substantially understated.

The other airspace change options have not been examined in this detail but looking at the population estimates they appear to be substantially under-estimating the number of people exposed. Also, the noise contours maps for all the options appear to have similar discrepancies.

Of course there may be a perfectly good explanation but it would be appreciated if Heathrow could explain the seeming discrepancies in population numbers exposed and the noise contour maps.

 Richmond Heathrow Campaign

29 October 2023

Figure B6 Heathrow 2019 and 2006 average summer day 54-72 dB 100% E_{LAeq,16h} noise contours (with 2006 N-S runway usage)

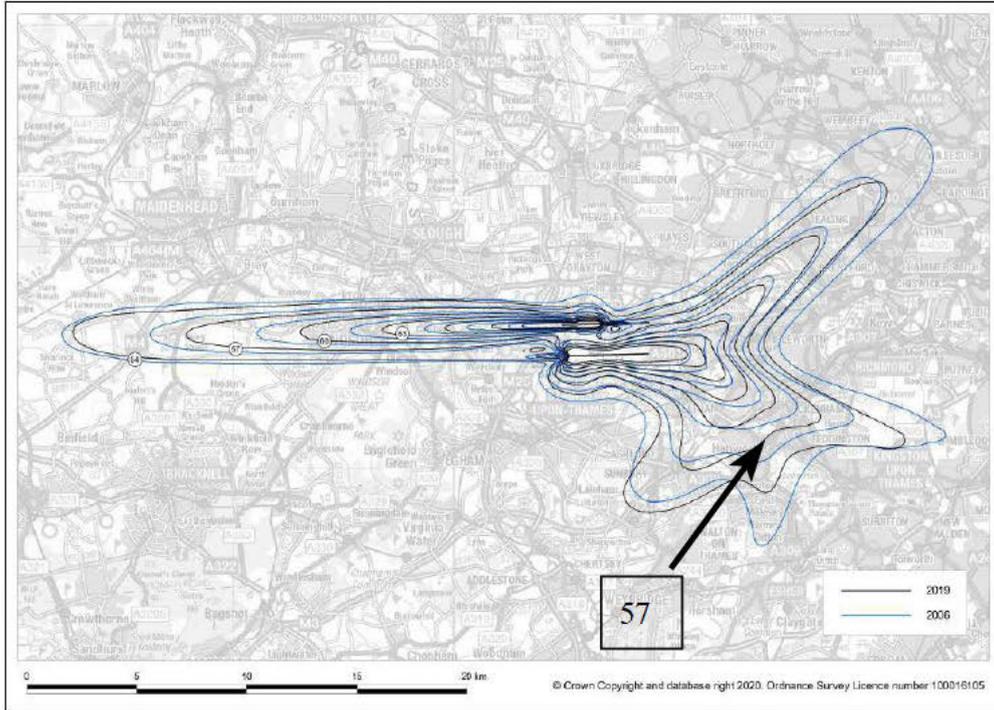


Figure 1 Heathrow Airport 2019 Summer Noise Contours and Noise Action Plan Contours CAP 2001 page 69

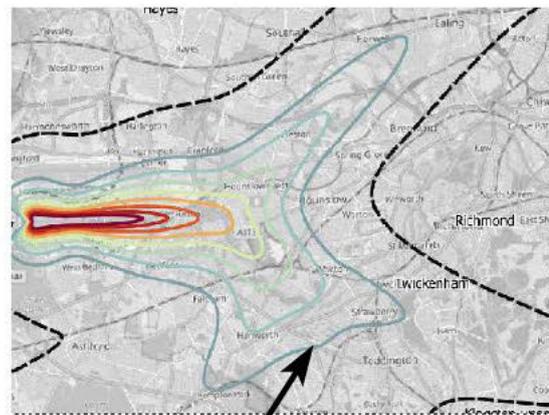


Figure 5 Dep To East Southern PBN Day 09R BaseDN

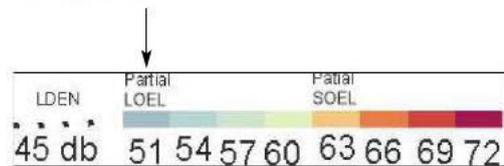


Figure 2 Heathrow Stage 2B submission to CAA July 2023 Appendix E A13.8 page 11

Correspondence between [REDACTED] (Richmond Heathrow Campaign) and Heathrow regarding seeming discrepancy between Noise Action Plan Contours CAP 2001 page 69 and Base Do Nothing Case for a set of options for Departures to the East from the Southern runway 09R during the Day using PBN.

Email from [REDACTED] on 29 October 2023 and email response (in italics) from [REDACTED] on 14 November 2023 - see Question 3.

1. **RHC Question:** Are these [the IOAs], including the comparative Base/do nothing case, based on a single flight event per day or traffic frequencies per day typical of summer 2019 (the base year) or some other average. I realise they are single mode?

HAL Response: The IOA is based on the average 92-summer day operations in 2019. The noise contours are not 100% single mode like the example you have provided but instead reflect the actual modal split between westerly and easterly operations.

2. **RHC question:** In the case of the easterlies and the introduction of departures from the northern runway (09L) and arrivals on the southern runway (09R) resulting from removal of the Cranford Agreement restrictions, I presume alternation is introduced and the flight frequencies for modelling purposes use of the frequencies in 2019 for 09L arrivals and 09R departures which are halved and instead taken on board by 09R arrivals and 09L departures. But this assumes traffic frequencies rather than single flight.

HAL Response: The number of departures and their distribution across the different Standard Instrument Departures (SIDs) from runway 09R in 2019 (for a 92-summer day period) was used to assess options for future 09L departures from the northern runway. The full number of easterly departure movements was used when assessing departures from both 09L and 09R (i.e. they were not halved) to ensure a more accurate assessment of the flight path options compared with the baseline. The same approach was taken when assessing options for future arrivals to runway 09R. If we split the movements across the two runways to account for easterly alternation, the 09L departure options (and the 09R arrival options) would not have been fairly compared with the baseline due to the very low number of movements from 09L (or to 09R) in 2019.

3. **RHC Question:** I have another question which is attached. Put simply, the contour maps and population noise exposure numbers submitted by Heathrow to the CAA seem substantially under-estimated. This is demonstrated by the case of the easterlies departures during the day from the southern runway (09R) illustrated in the attachment. The actual 57 dB contour for summer 2019 as in CAP 2001 is the 51 dB contour submitted to the CAA for the 2019 base case. Also, the actual population numbers in Cap 2001 for 2019 are substantially greater than in the submission to the CAA. There may be a perfectly good explanation but on the face of it the seeming discrepancy spread across all the options would be a major problem and a cursory examination suggests this is indeed the case.

HAL Response: I can confirm that our noise contours differ to those show in Figure B6 of ERCD Report 2001 because our contours show:

- a) *Single direction operations (just departures in the case of Figure 2 in your note) and,*
- b) *Average easterly/westerly split (i.e. easterly routes only in use ~30% of the time).*

Conversely, Figure B6 in the ERCD Report assumes 100% use of easterly operations (this is explained in paragraph 3.10 of the ERCD report) which would lead to a greater number of people being within the higher noise contours.

We calculated population numbers and contours for 100% operation of both easterlies and westerlies (single mode) and can assure you that our results are more closely aligned with those in the ERCD report. However, at this early stage of the process we only shared the results for average route use. A range of different noise contours will be shared at public consultation once we have undertaken the Full Options Appraisal at Stage 3.

The issue was raised again in March and April 2024 as follows:

██████████ requested ██████████ raise the issue at the NACF on 20 March 2024 in an email to the Chair dated 19 March but the Chair responded in an email dated 20 March saying *'With regards to the additional slides I suggest that you write directly to the airspace modernisation team on this, or I can if you wish forward this on for a response. We will not have time for a response at the forum and of course it make time for them to prepare one.'*

██████████ wrote in an email dated 11 April 2024 to ██████████ saying 'at the last NACF meeting on 20 March I had wanted to raise a question regarding the option analysis but this was not possible at the meeting but I did discuss the issue with Heathrow afterwards and left you with a hard copy of the slide I attach here. I have had no response yet from Heathrow and would appreciate learning the outcome. In an email dated 11 April 2024 ██████████ said *'I wasn't able to be at the last NACF, but I see that your query relates to noise contours and population numbers. I think this question was answered in November via email (see attached) but do let us know if this is a separate query.'*

At the virtual Heathrow workshop on 16 April 2024 for Heathrow's re-submission to the CAA, ██████████ requested the flight frequencies for each of the options and again after the CISHA open forum meeting on 18 April he asked ██████████ for the flight frequencies. There has been no response from Heathrow as of 24 April 2024.

Flight path Frequencies 1

Attached is a schematic generated by RHC's airspace model for the existing 30 flight paths. The departure frequencies are shown as an example and are for a previous year (probably 2016). The frequencies are determined by the airlines and change from time to time for commercial reasons. The frequencies change according to summer and winter season.

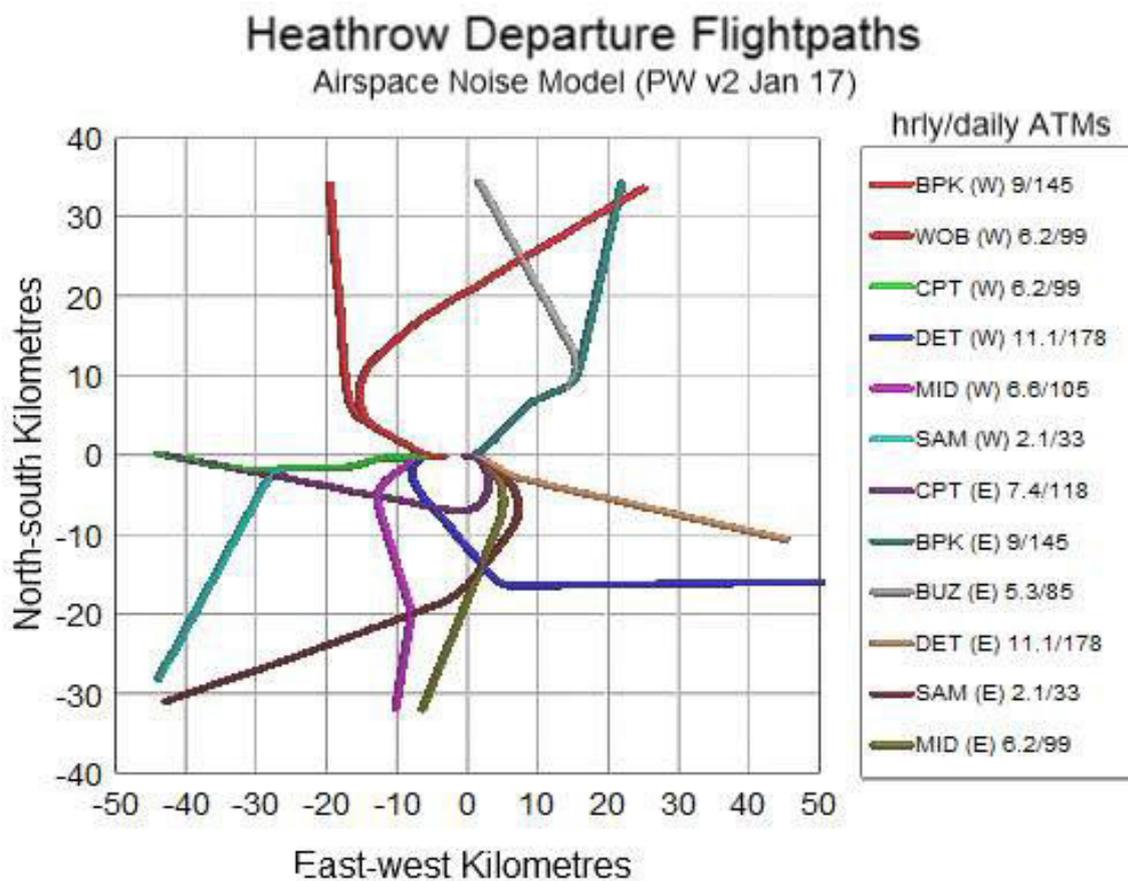
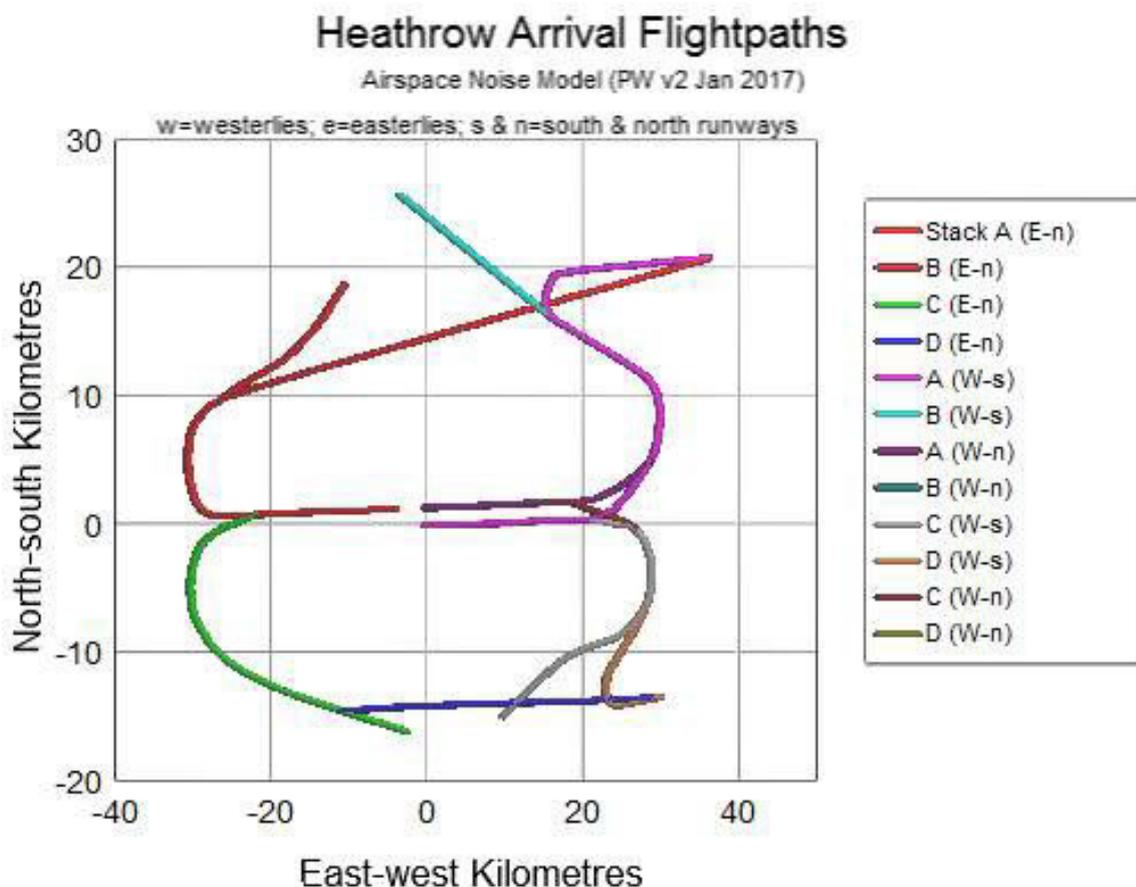
The cessation of the Cranford Agreement increase the number of flight paths from 30 to 40, which number is presumably used for the Initial Options. The 40 flight paths comprise 4 arrival points for the two runways and 4 stacks, i.e. total 16 arrival flight paths and 4 departure points for the two runways and 6 exit points to the upper airspace, i.e. 24 flight paths - totalling 40 flight paths.

The schematic is derived from the current departure SIDs and RHC's estimate of the centre of vectored arrival swathes.

In order to properly assess the Initial Options we need Heathrow's assumed frequencies for each departure and arrival flight path. In the case of arrivals it would help to know the assumed location of the joining points for the final approach.

HEATHROW FLIGHT PATHS

Prepared by [REDACTED], Airspace Noise Model v2 12 February 2017
 FOR ILLUSTRATION ONLY - TEST DATA



Flight Frequencies and Noise Contours

The charts over-page illustrate the impact of flight frequency on noise contours. These are derived by Richmond Heathrow Campaign's Noise Model and are indicative and for illustration only. They are for Heathrow's Brookmans Park (BPK) departures on Westerlies.

The charts show both the lateral noise contours and noise cross sections. Charts 1A and 1B are for a single flight. Charts 2A and 2B are based on an hourly frequency of 9 flights an hour and it can be seen how much smaller the noise contours are. Charts 3A and 3B are for the Day. If there were alternation these contours would be smaller but in this case there is none and they match the hourly contours. Charts 4A and 4B are the annual contours and take account of the westerly/easterly mix and are still smaller. It can be seen how important it is to be clear in any published contours what is the basis on which they are prepared.

Richmond Heathrow Campaign has not been able to properly assess the Initial Options because the published data is unclear on the model basis for contour preparation. We learned late in the process that modelling is not on a single flight basis but the basis for each flight path remains unclear, especially in relation to respite.

AIRSPACE NOISE MODEL (vs pw 2 - 4.1.17)

Case 8 - 17.1.17 Heathrow Brookmans Park (BPK) departures on Westerlies

TEST ASSUMPTIONS AND RESULTS. FOR ILLUSTRATION ONLY.

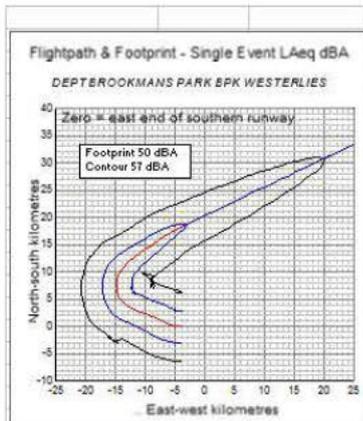


Chart 1A

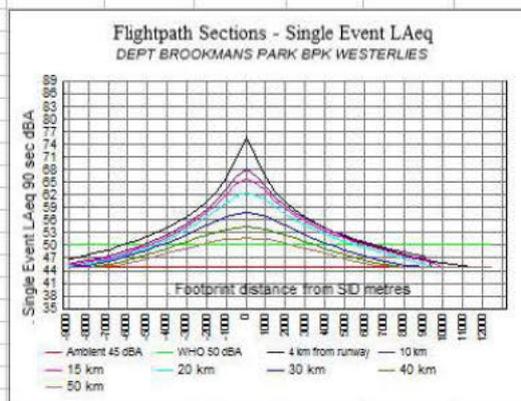


Chart 1B

INPUT		
Case	8	17-Jan-17
Flightpath	DEPT BROOKMANS PARK BPK w	
Gradient	degrees	NAPD 1&2 avg
Speed at 12k ft	knots	320
Ambient	dBA	45
Footprint	dBA	50
LAeq 90s 3kft	dBA	65.9
Hourly flights	number	9
Daily sched respite	hours	0
Yrly west-eastlies	%	70%
Prepared by	[REDACTED]	
Model version	vs 2 pw 4.1.17	

1 foot = 0.305 metres
 1 statutory mile = 1.609km
 1 nautical mile = 1.852km
 1 knot = 1 nm/hr
 1 knot = 1.150779 stat miles/hr
 1 knot = 1.852km/hr

TEST DATA
 For ILLUSTRATION ONLY

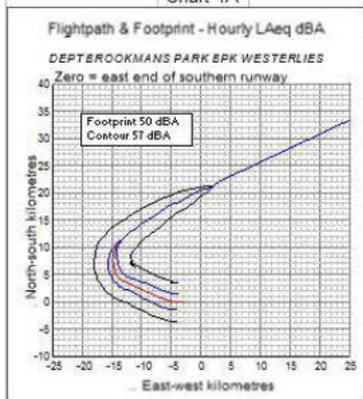


Chart 2A

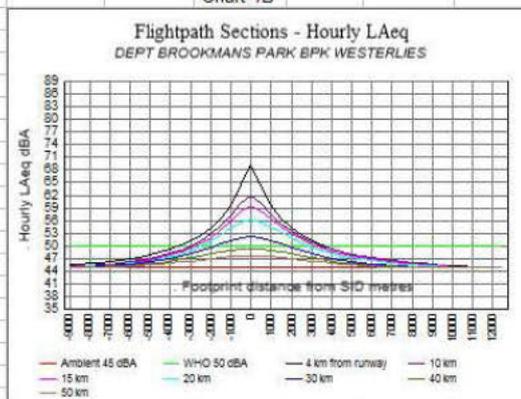


Chart 2B

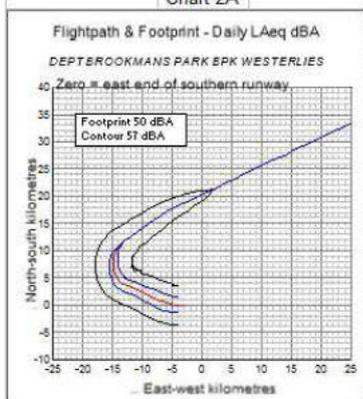


Chart 3A

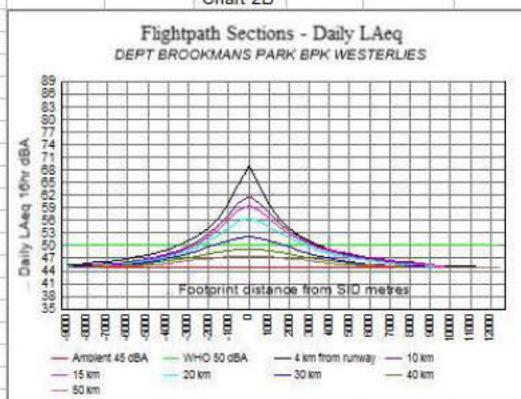


Chart 3B

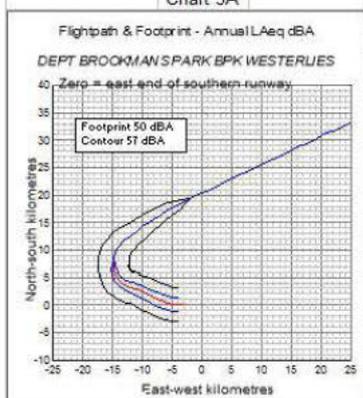


Chart 4A

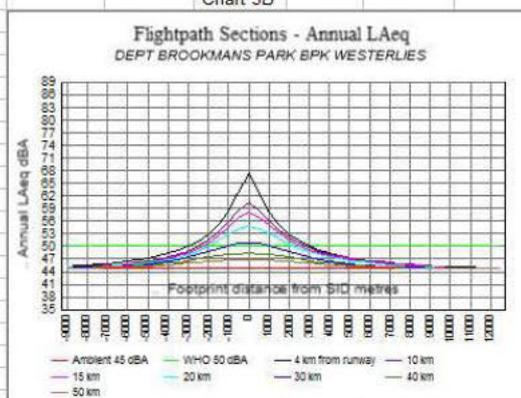
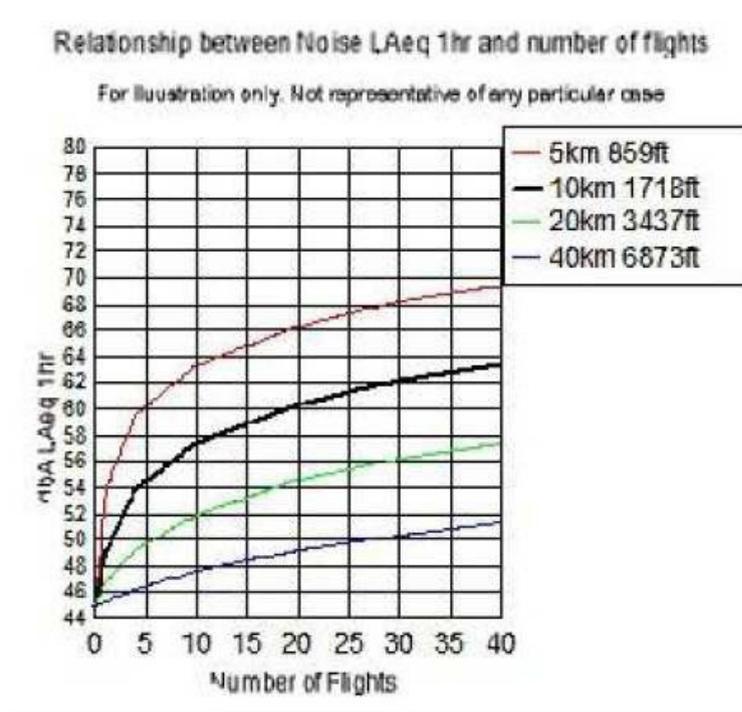


Chart 4B

Flight Frequencies (Traffic volumes)

The number of flights on Heathrow’s departure flight paths number between 1 and 12 per hour per flight path. Arrival numbers vary between 10 and 40 flights per hour per flight path. The following chart illustrates the acoustic impact in decibels from increasing flight frequency. The decibels rise much faster at lower frequencies. This is not to suggest the effect on people is less at higher frequencies; the dose-response relationship has also to be taken into account and the higher the decibel level the greater the negative effect on health and quality of life.

The purpose of this Annex is to illustrate the importance of flight frequencies being published for CAP 1616 Stage 2. **Richmond Heathrow Campaign has not been able to properly assess the Initial Options in the absence of flight frequency data.**



Vertical Dimensions - angles of ascent and descent

The charts over-page illustrate angles of ascent and descent. These are derived by Richmond Heathrow Campaign's Noise Model and are indicative and for illustration only. They are for Heathrow's Brookmans Park (BPK) departures on Westerlies.

Charts 1A and 1B show the distance travelled and height. Charts 2A and 2B show the ground speed which is important for the overflight period of noise exposure. The speed depends on acceleration which shares the engine power and hence noise at source with climb rate. Charts 3A and 3B show the ground noise in dBA with distance travelled (chart heading is incorrect). Chart 4B shows ground noise with height.

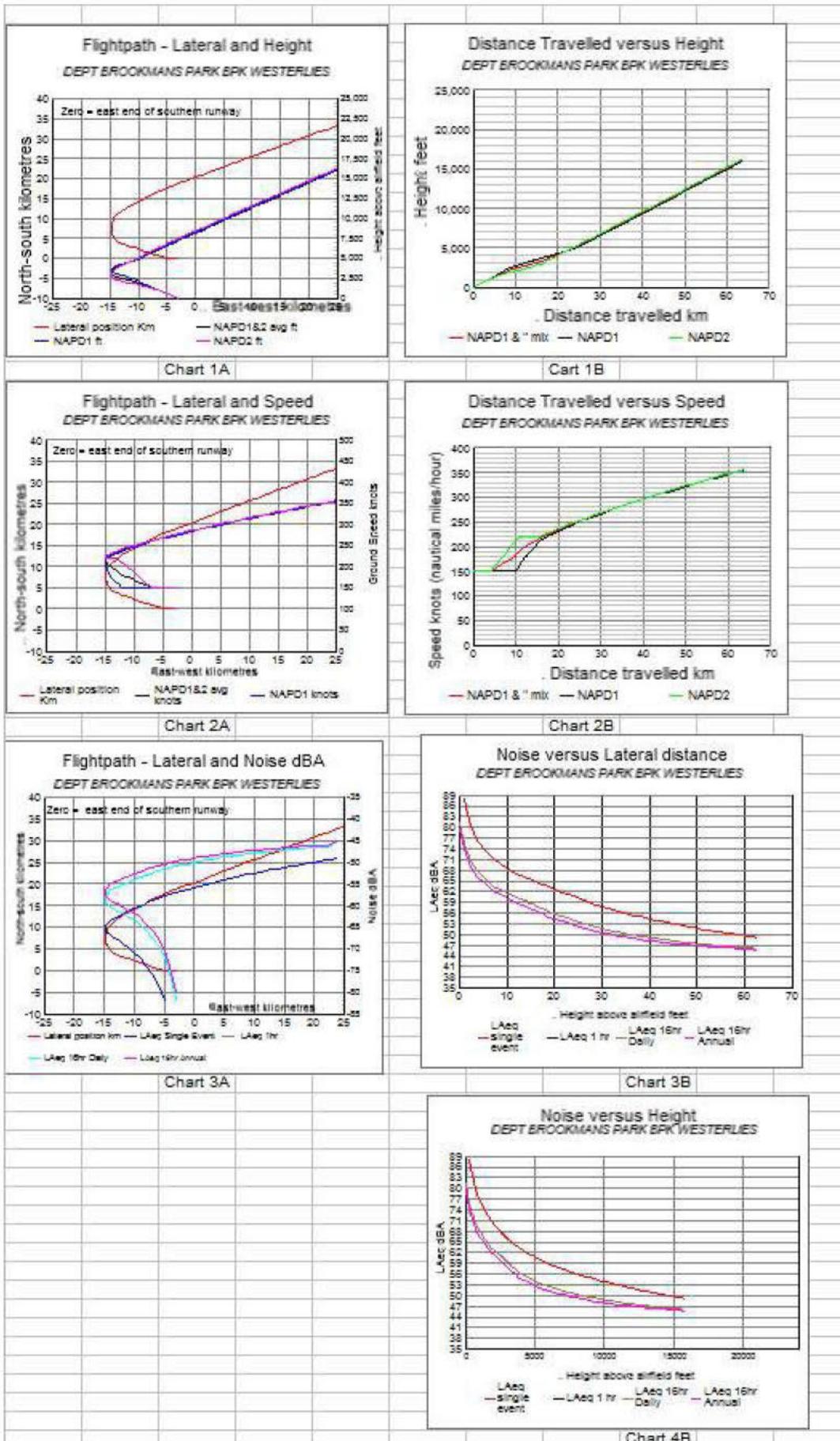
Heathrow says it has modelled all flight paths at 5.24% (3 degree) descent rate and 5.5% ascent rate and that these will be refined in Stage 3. However, RHC's understanding is that the Do Nothing contours are based on actual 2019 summer operations and therefore reflect a spread of descent and ascent rates. This could make a significant difference when making a comparison with Do Nothing Base Case especially in regard to departures.

Richmond Heathrow Campaign has not been able to properly assess the Initial Options because the published data is unclear on the model basis for the angles of ascent, descent acceleration and speed.

AIRSPACE NOISE MODEL (vs pw 2- 4.1.17)

Case 8 - 17.1.17 Heathrow Brookmans Park (BPK) departures on Westerlies

TEST ASSUMPTIONS AND RESULTS. FOR ILLUSTRATION ONLY



Fleet mix, passenger loads, seat occupancy and noise at Source

The two charts below are shown as example information for modelling the Initial Options. They show the global fleet mix predicted by Airbus in 2006 through to 2036. In order to properly assess the Initial Options, the Heathrow’s fleet mix and its noise footprint is required. There need to be actuals for 2019 and estimates going forward in terms of aircraft types and their loads and the noise at source. A proxy for the fleet noise at source might be based on the quota count system used for night flights. Presumably the aircraft using the different flight paths will vary depending on the originating/destination airports and route distance, etc. Seat occupancy rates also need to be included in the model.

As far as Richmond Heathrow Campaign is aware none of this information has been published for Stage 2 making it difficult to properly assess the Initial Options.

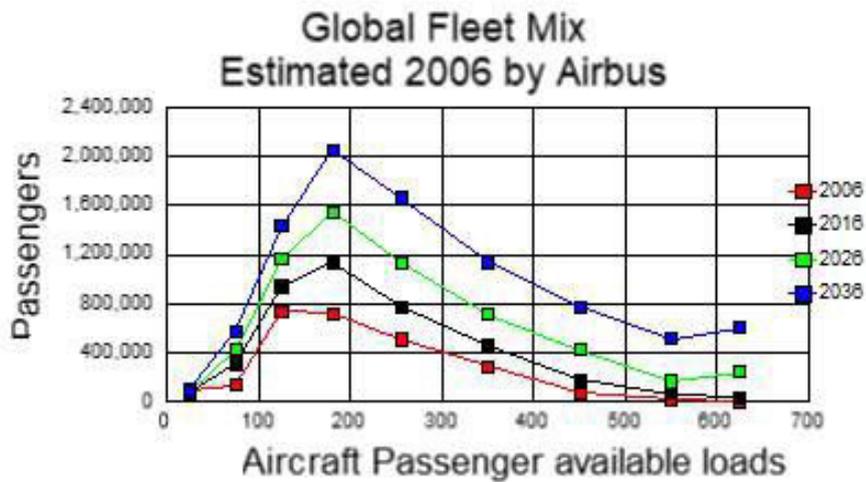


Figure 1



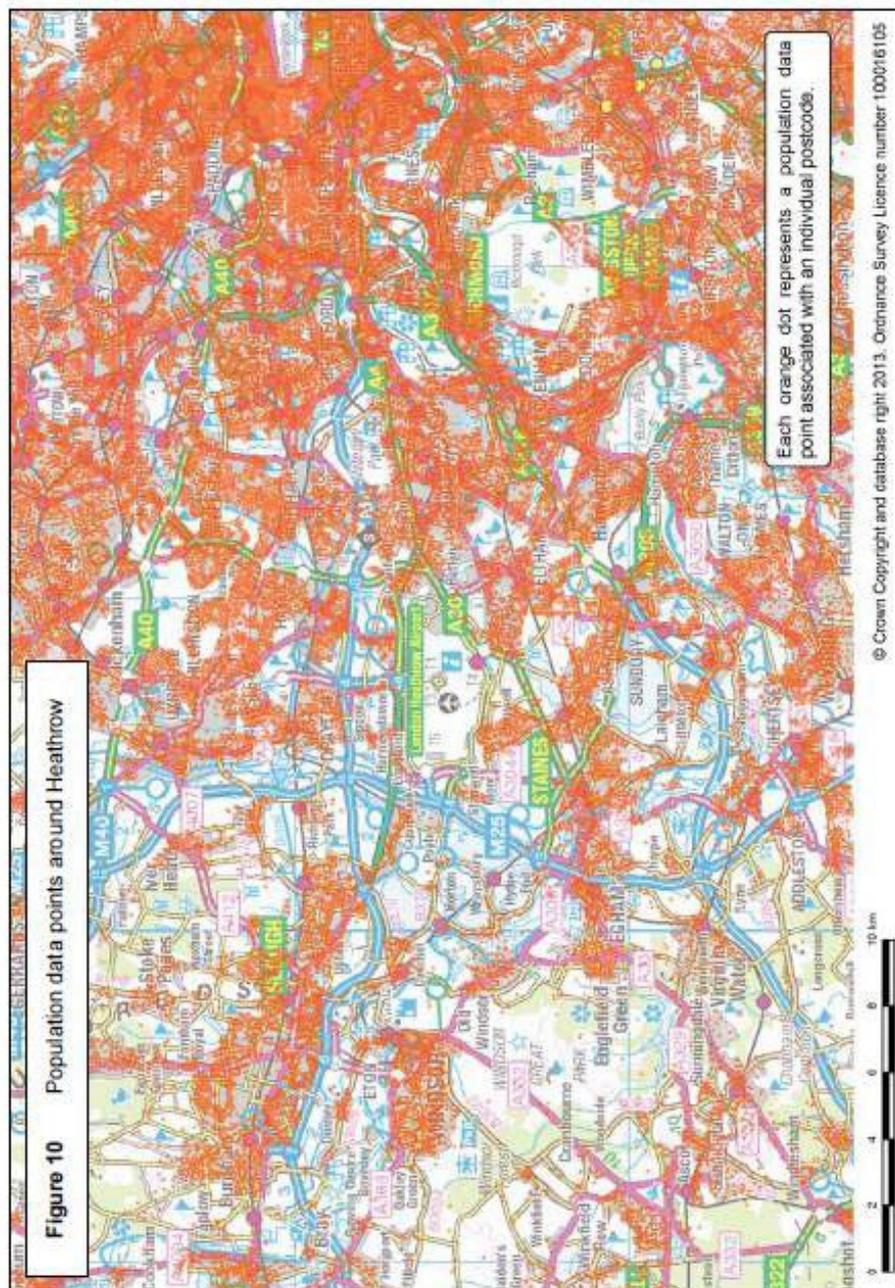
Figure 2

Population Exposed to Heathrow Noise

The population density map below is sourced from CAA- ERCD Report 1301, Noise Contours 2012 and is clearly out of date but is shown here for illustration. Population growth is a major factor determining the number of people exposed to aircraft noise with estimates of London wide growth of 37% by 2050 (London Plan). **Richmond Heathrow Campaign has not been able to assess the impact of population growth on the Initial Options Appraisal because of lack of information provided by Heathrow.** Furthermore, it is virtually impossible to identify locations in the contour maps provided because of the poor quality.

ERCD Report 1301

Noise Exposure Contours for Heathrow Airport 2012



Heathrow Airspace Modelling**Letter to Heathrow Airport Limited from Richmond Heathrow Campaign, 18 July 2022 with responses from [REDACTED] 3 October 2022 (in italics)**

To

[REDACTED]

Dear [REDACTED]

Ref: Heathrow Airspace Modernisation (FASI South) (ACP-2021-056)
Sponsor: Heathrow; Stage 2, Design and Assess

INTRODUCTION

1. The purpose of the letter is to record issues that we consider need to be addressed and to seek clarifications and assurances from Heathrow on the preparation and implementation of Heathrow's Airspace Change Proposal - Stage 2 Plan and the Engagement Process. Stage 2 started in February 2022 and is planned to complete in Q3 2023. We are concerned that the issues be addressed early in Stage 2. This letter focusses on the CAA's CAP 1616 Guidance on the airspace change process as applied to Heathrow's airspace modernisation.

2. We look forward to receiving Heathrow's draft Plan for Stage 2/Engagement Strategy as soon as possible. We have seen a summary timetable but we believe a comprehensive Plan is required, in which a grid sets out the gathering of evidence and the decisions, their inter-relationship and critical-path timing. We thank Heathrow for the arranging a technical workshop on 5 July, which started the process by focussing on the methods and metrics.

[HEATHROW: We will continue to share regular updates on our stakeholder engagement plans for this ACP. We found our workshop on Methods & Metrics to be valuable and we will continue to offer opportunities for technical engagement where appropriate. We will also include a body of evidence for decisions taken on the ACP at each CAA Gateway, and this will be available on the CAA's Airspace Change Portal.]

3. It would help to extend the grid to the 'Full Appraisal' in Stage 3a, ahead of the Public Consultation and to include a Needs analysis in the form of a 'Do-Nothing' scenario and an upfront Project Scoping Study to establish the potential costs and benefits from modernisation.

[HEATHROW: Our Stage 3 engagement plan and proposed timeline will be shared with you when available, but we need to confirm the process for Stage 3 public consultations with surrounding airports before we can provide a more detailed longer-term timeline. This is being

coordinated by ACOG through their Masterplan. The costs and benefits of Airspace Modernisation across the UK are set out in the Government's Airspace Modernisation Strategy. Heathrow's Statement of Need sets out our rationale for the project. We are required to modernise our airspace so "do nothing" is not a viable option. However, in accordance with CAP1616, we will compare airspace design options with a 2019 baseline to show the impacts of the proposed changes at Heathrow]

4. Communities around Heathrow approach Airspace Modernisation with great concern. We already experience very significant adverse health impacts from noise and air pollution from the airport's operations (increasingly so with incremental concentration of flight paths and lower flying). We believe there is a very real possibility of conditions worsening significantly for many communities around Heathrow and the wider area as a result of this process and we seek to engage with Heathrow in avoiding environmental harm.

5. We would like to engage constructively in a process that is transparent, open (i.e. not pre-determined), is evidence based, with time allowed for our consideration and with our contribution being given due consideration by Heathrow. We trust that Heathrow will be open to our raising concerns and differences (both residual and new) during option development and evaluation and that we can work together constructively through Stage 2.

[HEATHROW: Heathrow is keen to engage constructively with interested stakeholder representatives throughout the airspace design process. We have developed a comprehensive programme of engagement, including the recent Methods & Metrics workshop which was set up to ensure constructive and collaborative engagement with our most technically-minded community stakeholders. We have also set up a dedicated email address (airspace@heathrow.com) for stakeholders to share feedback, suggestions and concerns with us.]

6. The CAA's CAP 1616 Guidance (CAP 1616) and the DfT's Air Navigation Guidance 17 (ANG 17), et al, encompass issues that are essential to the Plan and Engagement Process. Communities have collectively expressed concerns regarding both the Design Principles and the initial Engagement Process leading up to the Design Principles submission to the CAA in Stage 1. These concerns are significant because some of the Design Principles are capable of different interpretation and inherent conflicts, which could impact on how they will be applied during Stage 2 of option development. (The Communities' letter of 24 January 2022 sets out these concerns).

7. In places, several relevant policies and guidelines overlap, which raises issues of primacy. Also, roles and responsibilities for the evidence and decisions sometimes overlap. We would welcome assistance from Heathrow in mapping the overlaps so that we are better able to engage with the CAA, DfT, NATS and ACOG, as well as with Heathrow. This should also help identify gaps in policies and guidelines and ownership of the decisions.

[HEATHROW: Our 12 design principles for airspace modernisation were developed to address the varied objectives and priorities of our broad range of stakeholders. CAP1616 recognises that some of the principles may contradict with one another, and at Stage 2A we are developing a comprehensive list of options to meet each of the varied design principles. Later in Stage 2 we

will undertake a Design Principle Evaluation and we will engage with key stakeholders at this point. We will be explicit about how the design principles have been interpreted and the metrics we have used to assess design options against them. The full results of the Design Principle Evaluation will be shared on the CAA's Airspace Change Portal and there will be an opportunity for interested stakeholders to give feedback. Design principles 1-5 have primacy over the other principles since these are requirements that our airspace design "must" meet, including all relevant policy. We will seek to develop options that meet all of the design principles as far as possible.]

8. Having regard to this, we would welcome responses from Heathrow on the Stage 2 Plan and Engagement Process.

STAGE 2 PLAN

The Need for Modernisation.

9. We appreciate that Heathrow has already provided some material to the CAA on the Need for airspace modernisation around Heathrow, including at Stage 1a of CAP 1616, as has the Airspace Change Organising Group (ACOG) in its UK Airspace Modernisation Masterplan.

10. However, at the current stage we would like a greater understanding of the existing problems that modernisation may help to solve and the opportunities for improvement. Heathrow's letter of 14 January 2022 to the CNG states 'There would be a separate process required if Heathrow were to introduce mixed mode or to increase capacity above 480,000 flights (ATMs) per year.' Can Heathrow therefore share information (based on the no expansion scenario) on the following specific and wider issues, for example:

- (i) What are the projections of lost time and cost due to lack of punctuality and resilience?
- (ii) To what extent do existing flight paths deviate from operationally efficient paths from start to finish?
- (iii) What specific conflicts and constraints are there with flights from other airports, General Aviation and new entrants such as drones and air taxis?
- (iv) What are the issues with Air Traffic Control and how can technology help?
- (v) What are the opportunities for noise, air pollution and CO2 emission reductions that could be delivered by airspace change at Heathrow?

Practically, it would assist to have these issues expressed in the context of a Base Year (say 2019) and a 'Do-Nothing' (Baseline) scenario.

[HEATHROW: Heathrow is introducing airspace modernisation in line with Government Policy and the primary objective of this ACP is to meet our commitments to the Airspace Modernisation Strategy (AMS). We recognise the benefits set out in the AMS and we are required to undertake this ACP as part of our commitment to the AMS. We have not therefore undertaken our own assessment of specific benefits to Heathrow at this stage. We will assess airspace design options against a 2019 baseline at the Initial Options Appraisal. Where possible we will share information on how the potential design options compare to today's operation from an operational perspective as well as from community and environmental perspectives.]

11. We assume that Heathrow will return to pre-covid numbers of flights which were near to the planning limit of 480,000 ATMs a year. The scheduling of these flights varies according to the summer and winter seasons and time of day. In responding to point (i) above on resilience, it would help to understand what airspace headroom capacity there is above the scheduled usage (a) for resilience and (b) for additional flights. Also, it would be helpful to see the projections for passenger numbers in the light of trends for larger aircraft and higher load factors.

[HEATHROW: Future traffic forecasts will be shared at public consultation at Stage 3 and will inform the assessment of impacts of the proposed airspace change. Forecasts will take account of anticipated technological change as well as trends in aircraft types and passenger load factors.]

12. Can Heathrow assist in seeking an update to NATS' (2017) estimated UK Need in its feasibility study supporting the Airspace Modernisation Strategy. We are concerned that based on an average 2.0% pa demand growth by UK aviation this is now significantly overstated compared to the Climate Change Committee's 6th Carbon Budget, which in turn leads to a significantly overstated 'Do-Nothing' scenario.

[HEATHROW: We are investigating this and will come back to you in due course. Upfront Airspace Modernisation Project Scoping.]

13. We also believe a normal requirement of any option appraisal process, would be the establishment at the outset of targets and a framework for evaluating the potential costs and benefits, measured against the 'Do-Nothing' scenario (such a scoping study should reflect the update referred to in para 12 above). We realise final conclusions and decisions can only be arrived at the end of the design process when flight paths have been finalised, but this does not obviate the need for an upfront project scoping study. If this is to be left to the 'Initial Appraisal' at the end of Stage 2 or the 'Full Appraisal' in Stage 3, it will be far too late for meaningful community engagement.

[HEATHROW: Heathrow is introducing airspace modernisation in line with Government Policy and the primary objective of this ACP is to meet our commitments to the Airspace Modernisation Strategy (AMS). We recognise the benefits set out in the AMS but, given we are required to undertake this ACP, we have not undertaken our own assessment of specific costs or benefits to Heathrow. All options will be compared against a 2019 baseline at the Initial Options Appraisal stage. The public consultation at Stage 3 is intended to allow for meaningful community engagement on the proposed flight path options and the relative costs and benefits of them.]

14. We believe that as part of an outline business case it is essential to understand the range of cost-benefit estimates that Heathrow expect as outcomes of modernisation, as this will be fundamental to the identification and assessment of options. The sharing of extant or newly prepared cost-benefit estimates will be invaluable to all stakeholders so that they can understand better how these expectations inform the modelling and other processes needed to develop modernisation proposals.

15. As part of the Scoping Study can Heathrow also assist in reconciling and co-ordinating ACOG's Airspace Modernisation Masterplan and Heathrow's Business Plan that include

Heathrow expansion with the Heathrow's Airspace Change Proposal that excludes expansion? The process of integration with the ACOG Masterplan is not clear at the moment and we would welcome an early discussion on the subject. If Heathrow's proposal includes adding airspace capacity for resilience or potentially additional flights (notwithstanding the proposal is based on usage by 480,000 ATMs a year) it would help for these capacity changes to be identified.

[HEATHROW: This airspace modernisation ACP will propose a new airspace design for the current cap of 480,000 ATMs. Any plans to increase the ATM cap at Heathrow would require planning permission via a separate process. A lot has happened since we were last working on Expansion, however, we still have the policy framework of the ANPS in place. It's been a challenging couple of years for the business with the pandemic, so we are currently going through a process to make sure that we've got everything lined up before we move forward again. The pandemic has demonstrated that there is significant pent-up demand from passengers and new airlines to operate out of Heathrow. Meeting that demand at the UK's hub airport will be essential to a country that has global and levelling up ambitions. This must be achieved within strict environmental limits and the industry is committed to decarbonisation. We appreciate uncertainty about Heathrow expansion is difficult for the communities around the airport and we will keep local communities informed and engaged as and when any plans change.]

16. Also, we are not clear whether it is Heathrow's intention to follow the recommendation in the policies for the 6th Carbon Budget that 'there should be no net expansion of UK airport capacity unless the sector is assessed as being on track to sufficiently outperform a net emissions trajectory that is compatible with achieving Net Zero'. Can Heathrow explain their position on this, please.

Early Collection of Robust Evidence.

17. In a project of this scale and impact it is fundamental that the appraisal and project decisions are supported by a robust evidence base. We believe an early audit of the evidence needed to make rational design decisions is essential and that steps are then taken to address knowledge gaps in a timely manner so as to properly feed into the relevant decisions. In particular, the following will be essential to inform accurate flight path appraisals:

- (i) A new social survey of day and night noise, to remedy the acknowledged deficiencies of the previous SoNA survey.
- (ii) A decision on the application of WHO Guidance values on noise and/or the rationale behind the choice of other metrics or thresholds.
- (iii) Impact evidence on PBN use (in the light of Heathrow's 2014 PBN trials, London City Airport and US experience) and related solutions for the inherent concentration of noise impact.
- (iv) Evidence on the mitigation of concentrated noise by use of multiple flight paths and/or respite.
- (v) Up-to-date air pollution evidence (NOX and particulates) of the impact of the proposed changes, as increasingly the harm on peoples' health and life expectancy is shown to be more serious than previously thought.
- (vi) Current population density and projected growth across the Heathrow Study Area.
- (vii) Location of noise sensitive hospitals, schools and parks.
- (viii) Assumptions regarding potential aviation fleet change (and the economic,

operational and environmental consequences) and its timing.
(ix) Evidence on the reduction of CO2 and timely pathway to Net Zero.

[HEATHROW: Where possible we will consider each of the matters raised here and will undertake sensitivity tests where appropriate. We recognise community groups have some concerns regarding SoNA and comparisons with WHO. However, these are issues for Government and whilst these remain Government Policy, Heathrow needs to take account of them in this ACP]

Uncertainty and Risk.

18. We would like to understand how uncertainty and risk and sensitivity analysis will be addressed and factored into the project appraisal and decisions, and what risk assessment, management and mitigation steps Heathrow might take. We note that in the US the AM 'NextGen' project has failed to deliver the projected benefits as well as causing very adverse environmental impacts on some communities and it will be important to understand how these outcomes will be avoided in the case of Heathrow.

[HEATHROW: As part of the CAA's airspace change process the CAA will conduct a post-implementation review (PIR), usually 12 months after implementation. The purpose of the review is to evaluate whether the anticipated impacts and benefits in the original proposal and published decision are as expected. Where there are differences, the review would identify the reasons for these and any steps required to be taken. The PIR is intended to give confidence to local communities that the airspace change will not deliver unanticipated impacts.]

Design Tools.

19. Heathrow will need to employ design tools in its project decisions and appraisal, such as the ANCON, AEDT and INM noise models and the government's TAG transport model (presumably updated to reflect the latest evidence). We would welcome early engagement with Heathrow on the use of these tools and models and the decision criteria, as well as the use of Environment and Economic Impact Assessments. We would like to understand what factors can be controlled by Heathrow and those that cannot, and which ones can be quantified and monetised and those where decisions will need to be based on qualitative assessment. We suggest that the Eurocontrol Standard Inputs for Economic Analyses, Edition 9.0, December 2020 (and updates and the Aviation Intelligence portal) could be a useful data sources for modelling.

[HEATHROW: We recognise that some of our community stakeholders are highly engaged and technically-minded and we are keen to work collaboratively with you. Our recent Methods & Metrics workshop was set up to initiate constructive engagement on the approach we will take to Stage 2 of the ACP and further technical workshops will be held if appropriate. Our intention at Stage 2 is to use a model developed for AEDT. This model will be the subject of a validation exercise in line with CAA CAP2091 guidance which sets out the parameters and describes the various inputs and their origin. In addition to the validation exercise, we will undertake comparative work with the ANCON model. This work will be reported at the end of Stage 2 to establish relative uncertainty in the modelling at this stage. The outputs from the modelling will be fed into the Government's TAG models.]

Optimisation Decision Process.

20. Generating options. We would like to continue the process started with the 5 July workshop of understanding how flight paths will be modelled in terms of lateral, vertical and time descriptors (4D) and how they will be operated in future in terms of frequency of flights, aircraft types and passenger loads and passenger kms including periods of respite. We seek to understand the efficiency rating and the noise, air pollution and CO2 emissions and the environmental impact of each flight path option as well for the system as a whole.

[HEATHROW: Where available, this information will be shared at either Stage 2 or at Stage 3 public consultation, in accordance with the CAP1616 process. We will share more detailed technical information, and seek feedback on it, at a future Methods & Metrics session if appropriate.]

21. Short-listing options. We would like to understand the process of elimination of flight paths in short listing and the choice of a final set of flight paths and how the options will be assessed against the Design Principles and Policies. It will be important to show how ANG 17 has been applied in relation to noise, altitude-based priorities, CO2, and air pollution and to other factors while ensuring safety. It will be important to extend the population numbers affected to the health impacts and to assess the impact of PBN and concentration versus dispersion.

[HEATHROW: This information will be presented when we engage with you on the Initial Options Appraisal during Stage 2 engagement sessions.]

22. Fairness. We would anticipate the option design process to be one of re-allocating legacy flight paths to improve efficiency and environmental impact. Fairness will be an important consideration and we hope the impact of change (recognised by ICAO) can be addressed.

[HEATHROW: "Fairness" is subjective and previous engagement on airspace topics has clearly demonstrated that one person's idea of a "fair" airspace design can be very different to another person's view. We are not aware of an ICAO position on "impact of change" so please could you share any source with us.]

23. On-going proposals by communities and others. Over time a number of proposals have been made to reduce noise and air pollution by the CNGs, Heathrow and others - for example:take-off procedures, reducing night flights and solutions for particular noise hot spots. We would like to see how these improvements and ICAO's Balanced Approach have been incorporated in the Airspace Change Proposal and the Stage 2 Plan.

[HEATHROW: ICAO's balanced approach is considered in the development of our Noise Action Plan, which is reviewed every 5 years. Our ACP will need to deliver outcomes that align with our Noise Action Plan.]

ENGAGEMENT

24 To help ensure the engagement process for Stage 2 is robust we would welcome assurances from Heathrow regarding the following:

- (i) Timely Information. Heathrow should circulate reports an appropriate and reasonable

period ahead of meetings to discuss the documents and well ahead of deadlines for community responses.

(ii) Hierarchy of decisions. As part of a grid for the Stage 2 Plan we wish to understand the hierarchy of decisions which influence route options and what criteria and evidence underpins them.

(iii) Stakeholder Input. We also wish to understand how stakeholder input will be used and what genuine influence it may have in the formation of the new airspace design. We seek to avoid pre-determined decisions.

(iv) Consultations. When Heathrow gathers evidence from consultations and focus groups we would like to be advised how these groups have been chosen, what briefing material has been provided and have access to the response data, where necessary in redacted or statistical form. Differences in interpretation may arise but it is important for Heathrow, ourselves and others to understand where we differ.

(v) Views of other Stakeholders. Clearly, there are other stakeholders and it is appreciated they may have different views to ourselves; it will be important to us to understand these and how they have influenced the design outcomes.

(vi) Monitoring the Plan. It will be important for communities to engage with Heathrow as the Stage 2 Plan progresses and for there to be the opportunity to identify gaps in the process and engagement and the remedial action needed to ensure the process and engagement are working to Plan.

[HEATHROW: Our plans for engagement have been developed to ensure we share information with, and collect feedback from, stakeholders at key points throughout the airspace change process. Our engagement plans go beyond the requirements of the CAP1616 process to include opportunities for more collaborative technical discussions with our most highly engaged community representatives, such as at the recent Methods & Metrics workshop.]

NEXT STEPS

25. This letter stems from potentially being impacted and wishing to understand and participate as fully as we can in the process by which flight path options will be designed and assessed. We see this letter as a starting point for positive engagement with Heathrow and would welcome your consideration of the issues raised on preparation and implementation of a Plan for Stage 2 and the Engagement Process. It would be appreciated if the letter could be circulated to the appropriate colleagues at Heathrow.

Yours Sincerely,

[REDACTED]

Richmond Heathrow Campaign represents three amenity groups in the London Borough of Richmond upon Thames: The Richmond Society, The Friends of Richmond Green, and the Kew Society, which together have over 2000 members.

Single flightpath contours and model optimisation

1. Annex A shows departure SIDs - currently 18 but to be increased to 24 with the cessation of the Cranford Agreement. The flight paths are from each of the 4 runway ends heading towards the 6 exit points into upper airspace. Instead of seeking the optimal path for each of the 24 routes, Heathrow has combined these into sets of Initial Options for each of the 4 runway ends, i.e. 6 flight routes per option. The optimisation of each route is seemingly omitted from the model. Heathrow's Initial Options started at 169 in number. But there are many hundreds of flight paths that could be placed in the wide spatial gaps between departure flight paths. Heathrow must have used some process to reduce all feasible paths to a much smaller number included in the Initial Options. **RHC requests information how this Stage 1 of the optimisation was performed. This important first stage of optimisation seemingly is missing from the published information.**
2. The six exit points into upper air space are TNT (Woburn/Buzzard), CLN (Bookmans Park), DVR (Detling), XAM (Midhurst), SAM (Southampton) and CPT (Compton) appear to vary when examining the contours of each option. These names may be out of date. It is not clear whether the exits points are constraints and what variation is permitted. Clearly, it is important to know to what extent the exit points have impacted the choice of flight paths.
3. The contours for departures to the east seemingly do not show any contour west of Heathrow for the Compton route and given that there might be around 120 flights a day on the Compton route during Easterlies this needs explaining.
4. Heathrow's model seeks to optimise the options that each contain 6 flight paths. This is almost certainly sub-optimal because of underperforming flight paths for which there is no separate identification or optimisation. The preferable modelling approach would be to produce a number of flight paths for each route with ranking 1st, 2nd, 3rd etc. Each six flight path option would then be optimised to include as far as possible the highest ranking flight paths but inclusion of less favourable flight paths when on combination this achieves optimal results.
5. In turn these combined flight path options could then be ranked and the third process would extend options to a full systems approach as in Stage 3.
6. But this approach of three optimisation stages is deficient. RHC would have preferred all three stages, starting with single flight paths, to have been combined and the optimisation process not split into three sequential processes. The problem with the approach adopted by Heathrow is that there will almost certainly be less than optimal flight paths in the systems bundle that cannot be identified as such or remedied and there will be optimal flight paths that have been excluded.
7. The other weakness of Heathrow's modelling approach is that information input is being refined throughout the sequential process. Inevitably there will be refined information over time and qualitative input converted into quantitative data. However, RHC believes that in a multi-optimisation sequential process, the more refined data cannot be re-input into the initial optimisation which means the results of the first stage optimisation are likely to be less than optimal input into the second stage and then into the third stage. 'Multi criteria Analysis' is often used in these circumstances and RHC would appreciate learning as to whether Heathrow is using an MCA approach and how is this being applied.

Performance Based Navigation (PBN)

1. Inclusion of PBN in the ASM is problematic because of advancing technology and noise implications. The ACOG Discussion Paper: Technology options that support airspace modernisation explains some of the issues. The paper explains the three basic PBN types:

‘RNAVI – the basic standard for new routes in the terminal airspace, which refers to the use of area navigation (RNAV) with a track-keeping accuracy of +/- 1 nautical mile. Over 98% of the commercial air transport fleet operating in the UK’s airspace are equipped to fly RNAVI routes and no dedicated regulatory approval is required for flight crews to use them.

RNP1 – is a more advanced standard for new routes in the terminal airspace, which refers to a Required Navigation Performance (RNP) with a track keeping accuracy of +/-1 nautical mile and additional avionics functionality to improve precision in the turn, monitor the aircraft’s navigational performance and automatically alert the pilot if there is a track-keeping divergence. Recent fleet equipage surveys conducted by large UK airports indicate that approximately 70% to 80% of commercial air transport aircraft operating in the UK’s airspace are RNP1 capable. RNP1 routes are entirely reliant on satellite navigation systems, fully decoupling the flight paths from ground beacons.

RNP-AR – the most advanced standard specifically for the final approach phase of flight, which refers to Required Navigation Performance Authorisation Required (i.e. the authorisation from the regulator for the specific flight crew training needed to use the routes), enabling track keeping accuracy of between 0.3 and 0.1 nautical miles and the flexibility to fly curved approaches. Many aircraft operating in today’s fleet are equipped to use RNP-AR, but the regulatory approvals are linked to specific airlines and flight crews operating on specific routes. There are currently no RNP-AR routes in use in the UK, so none of the existing fleet is approved (although many of the aircraft are adequately equipped).’

2. RHC’s understanding is that PBN introduction does not of itself require a CAP 1616 Change Process. Furthermore, the intention is to introduce PBN at Heathrow (as required by ICAO) and that the current CAP 1616 process for ASM includes PBN for departures and night arrivals but not for day arrivals, which for the time being will continue to use vectoring.
3. So far Heathrow’s modelling appears to have compared the new Initial Options based on RNP-AR with Do Nothing Base Cases that exclude any form of PBN, as was the situation in 2019. Since PBN-AR concentrates flights, inevitably the noise contour population numbers will reflect a reduction. So comparison with the Do Nothing Base Case will in most cases result in a net reduction in population but Heathrow have not demonstrated to what extent the net difference is due to PBN and separately to routing. The PBN effect will vary: for example, near the airport, flights paths are inevitably relatively concentrated.
4. If PBN is to be included in the Do Minimum Cases (and not only in the Initial and Final Options) then the impact of PBN concentration of flight paths will be presumed and not part of the ASM decision process. This would be unfortunate and unacceptable to communities experiencing the effects of concentration.

From: [DD - Airspace](#)
To: [REDACTED]
Cc: [DD - Airspace](#)
Subject: RE: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 03 April 2024 15:17:24
Attachments: [image001.png](#)
[image002.png](#)

Classification: Internal

Hi [REDACTED],

Thanks – hope you had lovely long Easter weekend too!

Thank you for signing up to Heathrow's Airspace Modernisation further engagement session taking place on Tuesday 16th April at 10:00 - 11:00. Please add a personal reminder to your calendar and click on the TEAMS link below to join the call.

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 316 860 950 423

Passcode: zigxgC

[Download Teams](#) | [Join on the web](#)

We look forward to seeing you there. If you have any questions, please feel free to email airspace@heathrow.com.

Kind regards,

[REDACTED]

[REDACTED]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

w: heathrow.com t: twitter.com/heathrowairport
a: heathrow.com/apps

From: [DD - Airspace](#)
To: [REDACTED]
Subject: RE: Heathrow Airspace Modernisation: Invitation for further engagement - Wednesday 17 April (2:00-3:00pm)
Date: 03 April 2024 15:21:40
Attachments: [image002.png](#)
[image003.png](#)

Classification: Internal

Dear [REDACTED],

Thank you for signing up to Heathrow's Airspace Modernisation further engagement session taking place on Wednesday 17th April at 14:00 - 15:00. Please add a personal reminder to your calendar and click on the TEAMS link below to join the call.

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 396 678 107 901

Passcode: kTtuTD

[Download Teams](#) | [Join on the web](#)

We look forward to seeing you there. If you have any questions, please feel free to email airspace@heathrow.com.

Kind regards,

[REDACTED]

[REDACTED]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

w: heathrow.com t: twitter.com/heathrowairport
a: heathrow.com/apps

From: [DD - Airspace](#)
To: [REDACTED]
Cc: [DD - Airspace](#)
Subject: RE: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 03 April 2024 15:23:08
Attachments: [image002.png](#)

Classification: Internal

Dear [REDACTED],

Thank you for signing up to Heathrow's Airspace Modernisation further engagement session taking place on Wednesday 17th April at 14:00 - 15:00. Please add a personal reminder to your calendar and click on the TEAMS link below to join the call.

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 396 678 107 901

Passcode: kTtuTD

[Download Teams](#) | [Join on the web](#)

We look forward to seeing you there. If you have any questions, please feel free to email airspace@heathrow.com.

Kind regards,

[REDACTED]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

w: heathrow.com t: twitter.com/heathrowairport

a: heathrow.com/apps

From: [DD - Airspace](#)
To: [REDACTED] [DD - Airspace](#)
Subject: RE: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 03 April 2024 15:26:39
Attachments: [image001.png](#)

Classification: Internal

Dear [REDACTED]

Thanks for your interest in attending one of our engagement sessions. I will add you to the list for both sessions for now and then if you could confirm with us closer to the time, we will send across the Teams link for the session you'd like to attend.

Kind regards,
[REDACTED]

[REDACTED]

The logo for Heathrow Airport, featuring the word "Heathrow" in a bold, purple, sans-serif font.

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

w: [heathrow.com](https://www.heathrow.com) t: twitter.com/heathrowairport
a: [heathrow.com/apps](https://www.heathrow.com/apps)

From: [DD - Airspace](#)
To: [REDACTED]
Cc: [DD - Airspace](#)
Subject: RE: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 03 April 2024 15:28:42
Attachments: [image001.png](#)

Classification: Internal

Dear [REDACTED],

Thank you for signing up to Heathrow's Airspace Modernisation further engagement session taking place on Tuesday 16th April at 10:00 - 11:00. Please add a personal reminder to your calendar and click on the TEAMS link below to join the call.

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 316 860 950 423

Passcode: zigxgC

[Download Teams](#) | [Join on the web](#)

We look forward to seeing you there. If you have any questions, please feel free to email airspace@heathrow.com.

Kind regards,

[REDACTED]

[REDACTED]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

w: heathrow.com t: twitter.com/heathrowairport
a: heathrow.com/apps

From: [DD - Airspace](#)
To: [REDACTED]
Subject: RE: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 03 April 2024 15:29:34
Attachments: [image001.png](#)

Classification: Internal

Dear [REDACTED]

Thank you for signing up to Heathrow's Airspace Modernisation further engagement session taking place on Tuesday 16th April at 10:00 - 11:00. Please add a personal reminder to your calendar and click on the TEAMS link below to join the call.

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 316 860 950 423

Passcode: zigxgC

[Download Teams](#) | [Join on the web](#)

We look forward to seeing you there. If you have any questions, please feel free to email airspace@heathrow.com.

Kind regards,

[REDACTED]

[REDACTED]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

w: [heathrow.com](https://www.heathrow.com) t: twitter.com/heathrowairport
a: [heathrow.com/apps](https://www.heathrow.com/apps)

From: [DD - Airspace](#)
To: [REDACTED]
Cc: [DD - Airspace](#)
Subject: RE: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 03 April 2024 15:32:30
Attachments: [image001.png](#)

Classification: Internal

Dear [REDACTED],

Thank you for signing up to Heathrow's Airspace Modernisation further engagement session taking place on Tuesday 16th April at 10:00 - 11:00. Please add a personal reminder to your calendar and click on the TEAMs link below to join the call.

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 316 860 950 423

Passcode: zigxgC

[Download Teams](#) | [Join on the web](#)

We look forward to seeing you there. If you have any questions, please feel free to email airspace@heathrow.com.

Kind regards,

[REDACTED]

[REDACTED]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

w: [heathrow.com](https://www.heathrow.com) t: twitter.com/heathrowairport
a: [heathrow.com/apps](https://www.heathrow.com/apps)

From: [DD - Airspace](#)
To: [REDACTED]; [DD - Airspace](#)
Subject: RE: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 03 April 2024 15:34:02
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)

Classification: Internal

Dear [REDACTED]

Thank you for signing up to Heathrow's Airspace Modernisation further engagement session taking place on Wednesday 17th April at 14:00 - 15:00. Please add a personal reminder to your calendar and click on the TEAMS link below to join the call.

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 396 678 107 901

Passcode: kTtuTD

[Download Teams](#) | [Join on the web](#)

We look forward to seeing you there. If you have any questions, please feel free to email airspace@heathrow.com.

Kind regards,

[REDACTED]

[REDACTED]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

w: [heathrow.com](https://www.heathrow.com) t: twitter.com/heathrowairport

From: [DD - Airspace](#)
To: [REDACTED] [DD - Airspace](#)
Subject: RE: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 03 April 2024 15:35:05
Attachments: [image001.png](#)

Classification: Internal

Dear [REDACTED]

Thank you for signing up to Heathrow's Airspace Modernisation further engagement session taking place on Tuesday 16th April at 10:00 - 11:00. Please add a personal reminder to your calendar and click on the TEAMS link below to join the call.

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 316 860 950 423

Passcode: zigxgC

[Download Teams](#) | [Join on the web](#)

We look forward to seeing you there. If you have any questions, please feel free to email airspace@heathrow.com.

Kind regards,

[REDACTED]

[REDACTED]

Heathrow

From: [DD - Airspace](#)
To: [REDACTED]
Cc: [DD - Airspace](#)
Subject: RE: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 03 April 2024 15:37:47
Attachments: [image002.png](#)
[image003.png](#)

Classification: Internal

Hi [REDACTED]

Thank you for signing up to Heathrow's Airspace Modernisation further engagement session taking place on Tuesday 16th April at 10:00 - 11:00. Please add a personal reminder to your calendar and click on the TEAMS link below to join the call.

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 316 860 950 423

Passcode: zigxgC

[Download Teams](#) | [Join on the web](#)

We look forward to seeing you there. If you have any questions, please feel free to email airspace@heathrow.com.

Kind regards,

[REDACTED]

[REDACTED]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

w: [heathrow.com](https://www.heathrow.com) t: twitter.com/heathrowairport
a: [heathrow.com/apps](https://www.heathrow.com/apps)

From: [DD - Airspace](#)
To: [REDACTED] [DD - Airspace](#)
Subject: RE: EXT: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 03 April 2024 15:40:23
Attachments: [image001.png](#)
[image002.png](#)

Classification: Internal

H [REDACTED]

Thank you for signing up to Heathrow's Airspace Modernisation further engagement session taking place on Tuesday 16th April at 10:00 - 11:00. Please add a personal reminder to your calendar and click on the TEAMS link below to join the call.

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 316 860 950 423

Passcode: zigxgC

[Download Teams](#) | [Join on the web](#)

We look forward to seeing you there. If you have any questions, please feel free to email airspace@heathrow.com.

Kind regards,

[REDACTED]

[REDACTED]

Heathrow

From: [DD - Airspace](#)
To: [REDACTED] [DD - Airspace](#)
Subject: RE: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 03 April 2024 15:50:54
Attachments: [image001.png](#)
[image002.png](#)

Classification: Internal

Dear [REDACTED]

Thank you for signing up to Heathrow's Airspace Modernisation further engagement session taking place on Wednesday 17th April at 14:00 - 15:00. Please add a personal reminder to your calendar and click on the TEAMS link below to join the call.

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 396 678 107 901

Passcode: kTtuTD

[Download Teams](#) | [Join on the web](#)

We look forward to seeing you there. If you have any questions, please feel free to email airspace@heathrow.com.

Kind regards,
[REDACTED]

[REDACTED]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

w: [heathrow.com](https://www.heathrow.com) t: twitter.com/heathrowairport

From: [DD - Airspace](#)
To: [REDACTED] [DD - Airspace](#)
Subject: RE: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 03 April 2024 15:51:45
Attachments: [image001.png](#)

Classification: Internal

Dear [REDACTED]

Thank you for signing up to Heathrow's Airspace Modernisation further engagement session taking place on Tuesday 16th April at 10:00 - 11:00. Please add a personal reminder to your calendar and click on the TEAMS link below to join the call.

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 316 860 950 423

Passcode: zigxgC

[Download Teams](#) | [Join on the web](#)

We look forward to seeing you there. If you have any questions, please feel free to email airspace@heathrow.com.

Kind regards,

[REDACTED]

[REDACTED]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

w: heathrow.com t: twitter.com/heathrowairport
a: heathrow.com/apps

From: [DD - Airspace](#)
To: [REDACTED]
Cc: [DD - Airspace](#)
Subject: RE: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 03 April 2024 16:54:07
Attachments: [image001.png](#)

Classification: Internal

Dear [REDACTED]

Thank you for signing up to Heathrow's Airspace Modernisation further engagement session taking place on Tuesday 16th April at 10:00 - 11:00. Please add a personal reminder to your calendar and click on the TEAMS link below to join the call.

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 316 860 950 423

Passcode: zigxgC

[Download Teams](#) | [Join on the web](#)

Heathrow's Stage 2 submission can be found on the [CAA's Airspace Change Portal](#) – a summary of the June 2023 shortlisting and results can be found in the [Step2B Initial Options Appraisal v1.0](#) document in **section 5.5**.

If you have any questions, please feel free to email airspace@heathrow.com.

Kind regards,

[REDACTED]

[REDACTED]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

w: heathrow.com t: twitter.com/heathrowairport
a: heathrow.com/apps

From: [DD - Airspace](#)
To: [REDACTED]
Subject: RE: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 04 April 2024 17:27:16
Attachments: [image001.png](#)

Classification: Internal

Dear [REDACTED],

Thank you for signing up to Heathrow's Airspace Modernisation further engagement session taking place on Tuesday 16th April at 10:00 - 11:00. Please add a personal reminder to your calendar and click on the TEAMS link below to join the call.

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 316 860 950 423

Passcode: zigxgC

[Download Teams](#) | [Join on the web](#)

We look forward to seeing you there. If you have any questions, please feel free to email airspace@heathrow.com.

Kind regards,

[REDACTED]

[REDACTED]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

w: heathrow.com t: twitter.com/heathrowairport
a: heathrow.com/apps

From: [DD - Airspace](#)
To: [REDACTED]
Subject: RE: Heathrow Airspace Modernisation: TEAMS link
Date: 08 April 2024 11:24:33
Attachments: [image001.png](#)

Dear [REDACTED]

Thank you for signing up to Heathrow's Airspace Modernisation further engagement session taking place on Wednesday 17th April at 14:00 - 15:00.
Please add a personal reminder to your calendar and click on the TEAMS link below to join the call.

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 396 678 107 901

Passcode: kTtuTD

[Download Teams](#) | [Join on the web](#)

We look forward to seeing you there. If you have any questions, please feel free to email airspace@heathrow.com.

Kind regards,



Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

w: heathrow.com t: twitter.com/heathrowairport
a: heathrow.com/apps

From: [DD - Airspace](#)
To: [REDACTED]
Subject: RE: Heathrow Airspace Modernisation: TEAMS link
Date: 08 April 2024 11:49:32
Attachments: [image001.png](#)

Dear [REDACTED]

Thank you for signing up to Heathrow's Airspace Modernisation further engagement session taking place on Wednesday 17th April at 14:00 - 15:00.
Please add a personal reminder to your calendar and click on the TEAMS link below to join the call.

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 396 678 107 901

Passcode: kTtuTD

[Download Teams](#) | [Join on the web](#)

We look forward to seeing you there. If you have any questions, please feel free to email airspace@heathrow.com.

Kind regards,



Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

w: [heathrow.com](https://www.heathrow.com) t: twitter.com/heathrowairport
a: [heathrow.com/apps](https://www.heathrow.com/apps)

From: [DD - Airspace](#)
To: [REDACTED]
Subject: RE: Heathrow Airspace Modernisation: TEAMS link
Date: 08 April 2024 16:16:39
Attachments: [image002.png](#)
[image003.png](#)

Hi [REDACTED]

Thank you for signing up to Heathrow's Airspace Modernisation further engagement session taking place on Tuesday 16th April at 10:00 - 11:00.
Please add a personal reminder to your calendar and click on the TEAMS link below to join the call.

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 316 860 950 423

Passcode: zigxgC

[Download Teams](#) | [Join on the web](#)

We look forward to seeing you there. If you have any questions, please feel free to email airspace@heathrow.com.

Kind regards,

[REDACTED]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

w: heathrow.com t: twitter.com/heathrowairport
a: heathrow.com/apps

From: [DD - Airspace](#)
To: [REDACTED]
Subject: RE: Heathrow Airspace Modernisation: TEAMS link
Date: 08 April 2024 11:53:55
Attachments: [image001.png](#)

Dear [REDACTED]

Thank you for your email. Just to confirm, the Wednesday session is on Wednesday 17th April at 14:00 - 15:00 (not 27th April). I hope that is ok for you.

Please add a personal reminder to your calendar and click on the TEAMS link below to join the call.

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 396 678 107 901

Passcode: kTtuTD

[Download Teams](#) | [Join on the web](#)

We look forward to seeing you there. If you have any questions, please feel free to email airspace@heathrow.com.

Kind regards,



Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

w: heathrow.com t: twitter.com/heathrowairport
a: heathrow.com/apps

From: [DD - Airspace](#)
To: [REDACTED]
Subject: RE: Heathrow Airspace Modernisation: TEAMS link
Date: 09 April 2024 09:11:22
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)
[image007.png](#)
[image008.png](#)

Dear [REDACTED]

Thank you for signing up to Heathrow's Airspace Modernisation further engagement session taking place on Tuesday 16th April at 10:00 - 11:00.

Please add a personal reminder to your calendar and click on the TEAMS link below to join the call.

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 316 860 950 423

Passcode: zigxgC

[Download Teams](#) | [Join on the web](#)

We look forward to seeing you there. If you have any questions, please feel free to email airspace@heathrow.com.

Kind regards,
[REDACTED]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

w: heathrow.com t: twitter.com/heathrowairport
a: heathrow.com/apps

From: [DD - Airspace](#)
To: [REDACTED]
Subject: RE: Heathrow Airspace Modernisation: TEAMS link
Date: 09 April 2024 11:03:19
Attachments: [image001.png](#)

Hi [REDACTED]

Thank you for signing up to Heathrow's Airspace Modernisation further engagement session taking place on Tuesday 16th April at 10:00 - 11:00.
Please add a personal reminder to your calendar and click on the TEAMS link below to join the call.

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 316 860 950 423

Passcode: zigxgC

[Download Teams](#) | [Join on the web](#)

We look forward to seeing you there. If you have any questions, please feel free to email airspace@heathrow.com.

Kind regards,

[REDACTED]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

w: heathrow.com t: twitter.com/heathrowairport
a: heathrow.com/apps

From: [DD - Airspace](#)
To: [REDACTED]
Subject: RE: Heathrow Airspace Modernisation: TEAMS link
Date: 09 April 2024 11:43:27
Attachments: [image001.png](#)

Hi [REDACTED]

Thank you for signing up to Heathrow's Airspace Modernisation further engagement session taking place on Tuesday 16th April at 10:00 - 11:00.

Please add a personal reminder to your calendar and click on the TEAMS link below to join the call.

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 316 860 950 423

Passcode: zigxgC

[Download Teams](#) | [Join on the web](#)

We look forward to seeing you there. If you have any questions, please feel free to email airspace@heathrow.com.

Kind regards,

[REDACTED]

From: [DD - Airspace](#)
To: [REDACTED]
Subject: RE: Heathrow Airspace Modernisation: TEAMS link
Date: 09 April 2024 13:47:12
Attachments: [image001.png](#)
[image002.png](#)

Hi [REDACTED]

Thank you for signing up to Heathrow's Airspace Modernisation further engagement session taking place on Tuesday 16th April at 10:00 - 11:00.

Please add a personal reminder to your calendar and click on the TEAMS link below to join the call.

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 316 860 950 423

Passcode: zigxgC

[Download Teams](#) | [Join on the web](#)

We look forward to seeing you there. If you have any questions, please feel free to email airspace@heathrow.com.

Kind regards,



Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

w: heathrow.com t: twitter.com/heathrowairport
a: heathrow.com/apps

From: [DD - Airspace](#)
To: [REDACTED]
Subject: RE: Heathrow Airspace Modernisation: TEAMS link
Date: 09 April 2024 15:19:50
Attachments: [image001.png](#)

Dear [REDACTED]

Thank you for signing up to Heathrow's Airspace Modernisation further engagement session taking place on Wednesday 17th April at 14:00 - 15:00.
Please add a personal reminder to your calendar and click on the TEAMS link below to join the call.

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 396 678 107 901

Passcode: kTtuTD

[Download Teams](#) | [Join on the web](#)

We look forward to seeing you there. If you have any questions, please feel free to email airspace@heathrow.com.

Kind regards,



From: [DD - Airspace](#)
To: [REDACTED]
Subject: RE: Heathrow Airspace Modernisation: TEAMS link
Date: 10 April 2024 09:17:30
Attachments: [image001.png](#)

Dear [REDACTED]

Thank you for signing up to Heathrow's Airspace Modernisation further engagement session taking place on Tuesday 16th April at 10:00 - 11:00.

Please add a personal reminder to your calendar and click on the TEAMS link below to join the call.

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 316 860 950 423

Passcode: zigxgC

[Download Teams](#) | [Join on the web](#)

We look forward to seeing you there. If you have any questions, please feel free to email airspace@heathrow.com.

Kind regards,



Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

w: heathrow.com t: twitter.com/heathrowairport
a: heathrow.com/apps

From: DD - Airspace <airspace@heathrow.com>

Sent: 11 April 2024 18:00

To: [REDACTED]

Subject: RE: Heathrow Airspace Modernisation: TEAMS link

Classification: Internal

Dear [REDACTED],

Thank you for signing up to Heathrow's Airspace Modernisation further engagement session taking place on Wednesday 17th April at 14:00 - 15:00.

Please add a personal reminder to your calendar and click on the TEAMS link below to join the call.

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 396 678 107 901

Passcode: kTtuTD

[Download Teams](#) | [Join on the web](#)

We look forward to seeing you there. If you have any questions, please feel free to email airspace@heathrow.com.

Kind regards,

[REDACTED]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

From: [DD - Airspace](#)
To: [REDACTED]
Subject: RE: Heathrow Airspace Modernisation: TEAMS link
Date: 11 April 2024 18:05:30
Attachments: [image001.png](#)

Dear [REDACTED]

Thank you for signing up to Heathrow's Airspace Modernisation further engagement session taking place on Tuesday 16th April at 10:00 - 11:00.
Please add a personal reminder to your calendar and click on the TEAMS link below to join the call.

We have chosen to engage via TEAMS since it provides the best opportunity for our wide range of stakeholders to participate if they wish to. However, if there is anything in the material that you would like to discuss further after next week's sessions, then please do email us at airspace@heathrow.com.

Kind regards,
[REDACTED]

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 316 860 950 423

Passcode: zigxgC

[Download Teams](#) | [Join on the web](#)

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

w: heathrow.com t: twitter.com/heathrowairport
a: heathrow.com/apps

From: [DD - Airspace](#)
To: [REDACTED] [DD - Airspace](#)
Subject: RE: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 16 April 2024 09:15:09
Attachments: [image001.png](#)

Classification: Internal

Good morning [REDACTED]

No problem – please see the link below for this mornings session:

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 316 860 950 423

Passcode: zigxgC

[Download Teams](#) | [Join on the web](#)

We look forward to seeing you at 10am.

Kind regards,

[REDACTED]

[REDACTED]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

w: [heathrow.com](https://www.heathrow.com) t: twitter.com/heathrowairport
a: [heathrow.com/apps](https://www.heathrow.com/apps)

From: DD - Airspace
To: [REDACTED]
Subject: RE: TEAMS link for tomorrow's session
Date: 16 April 2024 09:23:00
Attachments: [image001.png](#)

Classification: Internal

Morning [REDACTED]

Thanks for your thoughts on HSPG, I will give this one a miss but as always, if any questions come up please drop us an email and we'll be happy to answer anything.

With regard to the Teams sessions, to avoid confusion by sending out two Teams links for the different sessions to everyone, we requested stakeholders email us with their preference so we can send them the correct link and it also helps us to know who to expect on the call.

The link for tomorrows session at 14:00-15:00 is here:

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 396 678 107 901

Passcode: kTtuTD

[Download Teams](#) | [Join on the web](#)

Please let me know if you know of anyone else who is expecting to attend but does not have the link and we can forward it on to them.

Kind regards,

[REDACTED]

[REDACTED]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

w: [heathrow.com](https://www.heathrow.com) t: twitter.com/heathrowairport
a: [heathrow.com/apps](https://www.heathrow.com/apps)

From: [DD - Airspace](#)
To: [REDACTED]
Cc: [DD - Airspace](#)
Subject: RE: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 16 April 2024 09:48:44

Good morning [REDACTED]

No problem – please see the link below for this morning’s session:

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 316 860 950 423

Passcode: zigxgC

[Download Teams](#) | [Join on the web](#)

We look forward to seeing you at 10am.

Kind regards,

[REDACTED]

From: [DD - Airspace](#)
To: [REDACTED] [DD - Airspace](#)
Subject: RE: Heathrow Airspace Modernisation Documents
Date: 16 April 2024 09:58:00

Classification: Internal

Hi [REDACTED],

We don't seem to have an email from you but the link for today's session is below:

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 316 860 950 423

Passcode: zigxgC

[Download Teams](#) | [Join on the web](#)

From: [DD - Airspace](#)
To: [REDACTED] [DD - Airspace](#)
Subject: Heathrow Airspace Modernisation: TEAMS link for Wednesday
Date: 16 April 2024 13:10:17
Attachments: [image001.png](#)

Classification: Internal

Hi [REDACTED]

We didn't see you at the Teams session earlier today so have provided the details for tomorrow afternoon's session (Wednesday 17 April, 1400-1500), if you would like to join.

We don't have email contact details for [REDACTED] so please do forward this email to [REDACTED] if [REDACTED] has told you [REDACTED] would like to join.

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 396 678 107 901

Passcode: kTtuTD

[Download Teams](#) | [Join on the web](#)

If you have any questions, please feel free to email airspace@heathrow.com.

Kind regards,

[REDACTED]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

w: [heathrow.com](https://www.heathrow.com) t: twitter.com/heathrowairport
a: [heathrow.com/apps](https://www.heathrow.com/apps)

From: [DD - Airspace](#)
To: [REDACTED] [DD - Airspace](#)
Subject: RE: Heathrow Airspace Modernisation: TEAMS link
Date: 17 April 2024 10:21:40
Attachments: [image002.png](#)
[image003.png](#)

Classification: Internal

Good morning [REDACTED]

No problem, please see the link below for todays session at 14:00:

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 396 678 107 901

Passcode: kTtuTD

[Download Teams](#) | [Join on the web](#)

Kind regards,

[REDACTED]

[REDACTED]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

w: [heathrow.com](https://www.heathrow.com) t: twitter.com/heathrowairport
a: [heathrow.com/apps](https://www.heathrow.com/apps)

From: [DD - Airspace](#)
To: [REDACTED] [DD - Airspace](#)
Subject: RE: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 17 April 2024 10:23:27
Attachments: [image001.png](#)

Classification: Internal

Good morning [REDACTED]

No problem, please see the link below for todays session at 14:00:

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 396 678 107 901

Passcode: kTtuTD

[Download Teams](#) | [Join on the web](#)

Kind regards,

[REDACTED]

[REDACTED]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

w: [heathrow.com](https://www.heathrow.com) t: twitter.com/heathrowairport
a: [heathrow.com/apps](https://www.heathrow.com/apps)

From: [DD - Airspace](#)
To: [REDACTED]
Subject: Heathrow Airspace Modernisation: Response to your query
Date: 23 April 2024 17:41:40

Dear [REDACTED]

Thank you for joining the engagement session last week. We took a note to come back to you regarding your queries on a 'do-minimum' option.

The CAA has set out clear expectations for the scope of this engagement (in the letter we published on the CAA's Portal [here](#)) and we wanted to ensure that the sessions allowed sufficient time for stakeholders to understand and ask questions on the shortlisting methodology. However, we are, of course, happy to respond to your queries separately.

As you know, Heathrow did not include a 'do-minimum' option in our Comprehensive List of Options at Stage 2. There were a number of reasons for this, and we set out a detailed explanation of these in section 3.2 of the [Initial Options Appraisal document](#).

Separately, the CAA has written to you earlier this month to confirm that *"Heathrow is not required to deliver a 'do minimum' option as they have illustrated a 'do nothing' option, in accordance with CAP 1616. The baseline required for all environmental assessments is a 'do nothing' scenario which largely reflects the current-day scenario, although taking due consideration of known or anticipated factors that might affect it"*.

We recognise that some stakeholders would like to see a 'do minimum' option included in our shortlisted options at Stage 3. We have committed to identifying the system option which closest reflects a 'do-minimum' at Stage 3. As you know, there will also be a number of different baselines considered in the Full Options Appraisal (FOA) that we will undertake at Stage 3. We will be able to share more detail on these closer to the time, but for the moment the team's focus is on undertaking the steps required to pass the Stage 2 gateway.

Kind regards,

[REDACTED]

From: [DD - Airspace](#)
To: [REDACTED] [DD - Airspace](#)
Cc: [REDACTED]
Subject: RE: Heathrow Airspace Modernisation - Stage 2 Re-engagement
Date: 03 May 2024 10:48:34
Attachments: [Heathrow Airspace Modernisation Stage 2 Re-Engagement March 2024.pdf](#)

Classification: Internal

Dear [REDACTED],

Thank you for the letter you sent me on behalf of some of the NACF members. I have cc'ed the members listed in your letter but please feel free to share this email with any other interested stakeholders.

Purpose of Stage 2 Re-engagement:

Our Stage 2 re-engagement is required to address one particular issue identified by the CAA, relating to the reinstatement of PBN Option I to Runway 27R after the previous round of engagement and the application of Tests 4 and 5 in the shortlisting of options based on the IOA results. This issue is set out on slide 6 of the engagement pack sent to all stakeholders (and attached).

We understand that this request for re-engagement has caused some confusion, and we have ourselves needed to take a significant period of time since the Gateway failure in October 2023 to ensure that we:

- a. understood the reason that the CAA decided not to pass Heathrow at that Gateway, and
- b. understood what steps the CAA requires us to undertake prior to re-submission for a second Stage 2 Gateway.

The CAA's requirements are set out in a letter published on the CAA's ACP portal:

[CAA Letter to Heathrow 26-01-2024 \(1\).pdf](#)

The CAA's expectation for this round of re-engagement is set out within that letter: "*the CAA would expect to see evidence that...HAL has re-engaged with the full cohort of its Stage 2 stakeholder group (including the stakeholders emailed on 7 July 2023) on its proposed methodology for short-listing options **after the initial options appraisal***";. This engagement does not therefore relate to the results of the IOA or the potential environmental impacts assessed within that appraisal. Further engagement on environmental impacts will take place once we reach Stage 3.

The attached slide pack sets out the proposed methodology for short-listing options and the details for providing feedback to Heathrow on this issue.

CAP1616 version 4:

The CAA also confirmed within that letter that Heathrow should "*continue to follow the CAP 1616 version 4 process requirements for this Gateway until Stage 2 is completed*". We expect to move to the new version of CAP1616 (v5) once we reach Stage 3.

A 'Do-minimum' option:

This engagement does not relate to the comprehensive list of options (CLOO) created at Stage 2. Heathrow did not include a 'do-minimum' option at that stage and the CAA has confirmed that we did not need to since we illustrated a 'do nothing' option, in accordance with CAP1616. The baseline required for all environmental assessments is a 'do nothing' scenario which largely reflects the current-day scenario, although taking due consideration of known or anticipated factors that might affect it.

Heathrow understands that some stakeholders would like to see a 'do-minimum' option included in our shortlist of options and we have therefore committed to identify the system option which closest reflects a 'do-minimum' at Stage 3.

Timescales for this re-engagement:

We had allocated a period of 4 weeks for stakeholder feedback on this issue. A 4 week engagement period is consistent with the period of time given to previous rounds of engagement on this ACP, and on other ACPs (both Heathrow's and other airports'). As set out above, the CAA's requirement is for us to re-engage stakeholders on the proposed methodology for shortlisting options only (set out on slide 11). It would be disproportionate for us to have invited stakeholders to spend longer considering this issue than the previous topics of engagement on this ACP.

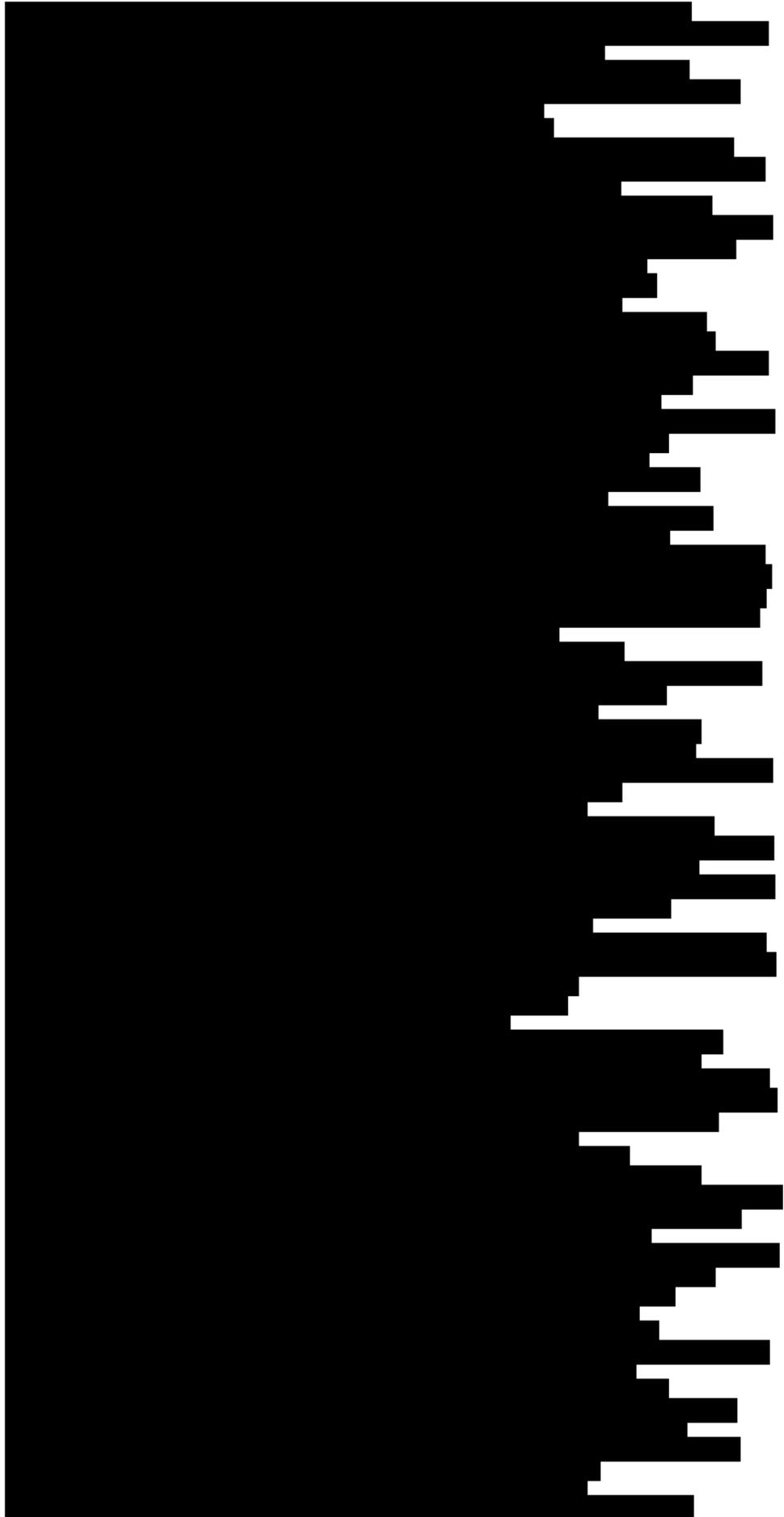
However, following a few stakeholder requests for more time to consider the engagement material, we extended the feedback period until Monday 13th May.

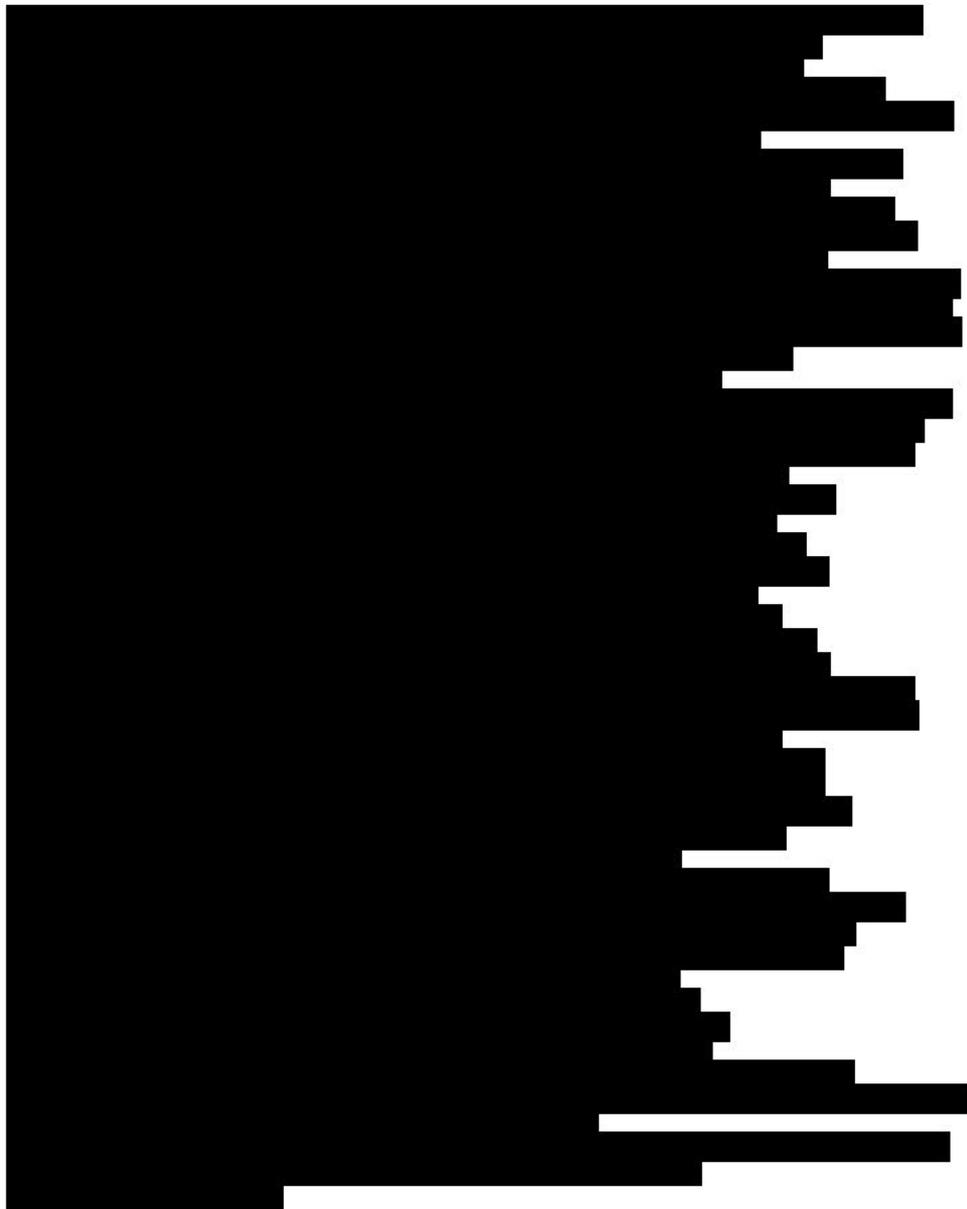
I hope the above provides some further clarity around the bounds of this current round of re-engagement and we look forward to receiving any further feedback from stakeholders who wish to share their views on the proposed shortlisting methodology for Stage 2. As stated in the slide pack, any questions or feedback relating to the proposed methodology can be emailed to us at airspace@heathrow.com.

Kind regards,



From: [DD - Airspace](#)
To: [DD - Airspace](#)
Bcc:





Subject: Heathrow Airspace Modernisation: Feedback Period Extension
Date: 29 April 2024 15:30:53
Attachments: [Heathrow Airspace Modernisation Stage 2 Re-Engagement March 2024.pdf](#)
[image001.png](#)

Dear All,

Thank you to those who have already submitted their feedback to our Stage 2 Re-engagement Material, which was sent to all stakeholders on 28th March.

We originally stated that the feedback period would end today at 5pm (29th April). However we have had feedback from some stakeholders that they would like more time to consider the engagement material and we have therefore decided to extend the feedback period until **5pm**

Monday 13th May.

We'd like to remind stakeholders that we are seeking feedback on our proposed **approach to the shortlisting of options** in Stage 2. This can be found on slide 11 of the material (re-attached). We will provide a summary of all feedback to you once the feedback period has ended.

As a result of this extension to the feedback period, we are requesting a change to our indicative

gateway timeline with the CAA which will be communicated when we circulate the summary of feedback.

Kind regards,

[REDACTED]

[REDACTED]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

m: [REDACTED]

w: [heathrow.com](https://www.heathrow.com) t: twitter.com/heathrowairport

a: [heathrow.com/apps](https://www.heathrow.com/apps)

From: [REDACTED]
To: [DD - Airspace](#)
Subject: Automatic reply: Heathrow Airspace Modernisation: Feedback Period Extension
Date: 29 April 2024 15:31:35

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

I have left Woking Borough Council. Please contact [REDACTED]
[REDACTED]

Kind regards

[REDACTED]

This transmission is intended for the named addressee only. It may contain sensitive material and be marked as CONFIDENTIAL and accordingly must not be disclosed to anyone other than the named addressee, unless authorisation is granted by the sender. If you are not the named addressee (or authorised to receive it for the addressee), you may not copy, use or disclose it to anyone else. If you have received this transmission in error, please notify the sender immediately. All Public Services Network(PSN) traffic may be subject to recording and/or monitoring in accordance with relevant legislation.

From: DD - Airspace <airspace@heathrow.com>

Sent: Monday, April 29, 2024 4:06 PM

To: [REDACTED]

Subject: FW: Heathrow Airspace Modernisation: Feedback Period Extension

From: DD - Airspace <airspace@heathrow.com>

Sent: Monday, April 29, 2024 3:31 PM

To: DD - Airspace <airspace@heathrow.com>

Subject: Heathrow Airspace Modernisation: Feedback Period Extension

Classification: Internal

Dear All,

Thank you to those who have already submitted their feedback to our Stage 2 Re-engagement Material, which was sent to all stakeholders on 28th March.

We originally stated that the feedback period would end today at 5pm (29th April). However we have had feedback from some stakeholders that they would like more time to consider the engagement material and we have therefore decided to extend the feedback period until **5pm Monday 13th May**.

We'd like to remind stakeholders that we are seeking feedback on our proposed **approach to the shortlisting of options** in Stage 2. This can be found on slide 11 of the material (re-attached). We will provide a summary of all feedback to you once the feedback period has ended.

As a result of this extension to the feedback period, we are requesting a change to our indicative gateway timeline with the CAA which will be communicated when we circulate the summary of feedback.

Kind regards,

[REDACTED]



Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

m: 

w: [heathrow.com](https://www.heathrow.com) t: twitter.com/heathrowairport

a: [heathrow.com/apps](https://www.heathrow.com/apps)

From: DD - Airspace <airspace@heathrow.com>

Sent: Monday, April 29, 2024 4:05 PM

To: [REDACTED]

Subject: FW: Heathrow Airspace Modernisation: Feedback Period Extension

Dear [REDACTED]

Please see the below email, forwarded on to you after receiving a bounceback from [REDACTED]

Please could you forward on to the new CEO and let us know [REDACTED] contact details?

Many thanks,

[REDACTED]

[REDACTED]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

w: [heathrow.com](https://www.heathrow.com) t: twitter.com/heathrowairport

a: [heathrow.com/apps](https://www.heathrow.com/apps)

From: DD - Airspace <airspace@heathrow.com>

Sent: Monday, April 29, 2024 3:31 PM

To: DD - Airspace <airspace@heathrow.com>

Subject: Heathrow Airspace Modernisation: Feedback Period Extension

Classification: Internal

Dear All,

Thank you to those who have already submitted their feedback to our Stage 2 Re-engagement Material, which was sent to all stakeholders on 28th March.

We originally stated that the feedback period would end today at 5pm (29th April). However we have had feedback from some stakeholders that they would like more time to consider the engagement material and we have therefore decided to extend the feedback period until **5pm Monday 13th May**.

We'd like to remind stakeholders that we are seeking feedback on our proposed **approach to the shortlisting of options** in Stage 2. This can be found on slide 11 of the material (re-attached). We will provide a summary of all feedback to you once the feedback period has ended.

As a result of this extension to the feedback period, we are requesting a change to our indicative gateway timeline with the CAA which will be communicated when we circulate the summary of feedback.

Kind regards,

[Redacted]

[Redacted]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

m: [Redacted]

w: heathrow.com t: twitter.com/heathrowairport

a: heathrow.com/apps

From: [DD - Airspace](#)
To: [REDACTED]
Cc: [DD - Airspace](#)
Subject: FW: Heathrow Airspace Modernisation: Feedback Period Extension
Date: 29 April 2024 16:07:41
Attachments: [Heathrow Airspace Modernisation Stage 2 Re-Engagement March 2024.pdf](#)
[image001.png](#)

From: DD - Airspace <airspace@heathrow.com>
Sent: Monday, April 29, 2024 3:31 PM
To: DD - Airspace <airspace@heathrow.com>
Subject: Heathrow Airspace Modernisation: Feedback Period Extension

Classification: Internal

Dear All,

Thank you to those who have already submitted their feedback to our Stage 2 Re-engagement Material, which was sent to all stakeholders on 28th March.

We originally stated that the feedback period would end today at 5pm (29th April). However we have had feedback from some stakeholders that they would like more time to consider the engagement material and we have therefore decided to extend the feedback period until **5pm Monday 13th May**.

We'd like to remind stakeholders that we are seeking feedback on our proposed **approach to the shortlisting of options** in Stage 2. This can be found on slide 11 of the material (re-attached). We will provide a summary of all feedback to you once the feedback period has ended.

As a result of this extension to the feedback period, we are requesting a change to our indicative gateway timeline with the CAA which will be communicated when we circulate the summary of feedback.

Kind regards,

[REDACTED]

[REDACTED]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

m: [REDACTED]
w: [heathrow.com](https://www.heathrow.com) t: twitter.com/heathrowairport
a: heathrow.com/apps

From: [REDACTED]
To: [DD - Airspace](#)
Subject: RE: Heathrow Airspace Modernisation: Feedback Period Extension
Date: 01 May 2024 13:52:41
Attachments: [image001.png](#)

Classification: Internal

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

H [REDACTED],

I have forwarded this over to [REDACTED] and our appointed contact for this would be [REDACTED] who I have also sent this through to.

[REDACTED] will have a look through the document and respond.

[REDACTED] contact details are [REDACTED] for you to have to send any further correspondence.

Kind regards,

[REDACTED]

Woking Borough Council, Civic Offices, Gloucester Square, Woking, Surrey, GU21 6YL

[REDACTED] [REDACTED] [REDACTED] [REDACTED] **Web:** www.woking.gov.uk

For general enquiries, please call Woking Borough Council's Contact Centre on 01483 755855

From: [REDACTED]
To: [DD - Airspace](#)
Subject: RE: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 29 March 2024 13:28:25
Attachments: [image001.png](#)

Classification: Internal

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

The BHA supports your approach and wishes you luck with interpreting CAP 1616

[REDACTED]
[REDACTED]
British Helicopter Association
Unit C2
Fairoaks Airport
Chobham
Surrey. GU24 8HU

[REDACTED]
www.britishhelicopterassociation.org

From: [REDACTED]

Sent: Tuesday, April 16, 2024 11:38 AM

To: DD - Airspace <airspace@heathrow.com>

Cc: [REDACTED]
[REDACTED]
[REDACTED]

Subject: RE: TEAMS link for tomorrow's session

Classification: Internal

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Hi [REDACTED]

A quick initial response to the ACP presentation and some questions.

Moving the further Tests to Stage 3 makes sense. Reinstating option 'I' back is sensible. I do think you rather skipped over the CAA point 2 – and offer a bit more explanation on the recording of comments – being seen to be transparent is very important.

Clearly Richmond Park have been lobbying well! – lesson to everyone else to get their act together with nominations for 'Tranquil Areas' etc for Stage 3. Stage 3 will be hugely complex.....

Four questions:

- For Stage 3 Tests are you working on the basis of one or two assumptions about the 'do minimum' / existing operation. i.e. a) operations as today and/ or b) with full Easterly Alternation established by an earlier PPR ACP / Northern Runway project in 2028ish?
- What is happening about the Single Design Entity proposal at ACOG/CAA – I'm really unclear about how and when the interaction of the different airport's systems is going to be resolved (this constrains aspirations for CCO, CDA etc). Timetable implications?

- Really would welcome some approx.. timing of when all the LHR system and operational 'options on the table' will be laid out? – i.e. including clarity on any aspiration to multi-mode (say to help re-time night flights into the AM peak), adjusting the Westerly Preference, shifting wind assumptions 70/30s, any thought to accommodate an increase to ATM etc.
- Will you be doing anything more on eVTOL access at Stage 3?

KR

[REDACTED]

[REDACTED]

[REDACTED]

Heathrow Strategic Planning Group

[REDACTED]
[REDACTED]



From: [REDACTED]
Sent: 17 April 2024 12:38
To: DD - Airspace
Subject: RE: 472149 - Heathrow Airspace Modernisation - Airspace Change Proposal (ACP) - Further Engagement of Shortlisting of Stage 2 Options - online meeting

Follow Up Flag: Follow up
Flag Status: Flagged

You don't often get email from [REDACTED] [Learn why this is important](#)

Classification: Internal

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Dear [REDACTED]

Thank you for recontacting Natural England regarding the Airspace Change consultation. It looks as though Stage 3 will consider impacts on tranquillity and statutory designated sites.

We would be interested in discussing this with you ahead of time through our [Discretionary Advice Service](#). Please feel free to get in touch if you have any questions.

Kind regards,

[REDACTED]
Natural England

www.naturalengland.gov.uk

Eastleigh House
Upper Market Street
Eastleigh
SO50 9YN

From: [REDACTED]
To: [DD - Airspace](#)
Subject: FW: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 17 April 2024 12:52:44
Attachments: [image001.png](#)
[image002.png](#)
[Heathrow Airport revised consultation April 2024.pdf](#)

Classification: Internal

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Thank you for your email below.

Please find attached a response from the Kent Downs National Landscape.

Kind regards

[REDACTED]

[REDACTED]

Kent Downs National Landscape (the new name for the Kent Downs AONB) and aspiring UNESCO Cross-Channel Global Geopark

[REDACTED]

kentdowns.org.uk | crosschannelgeopark.org

Please note I work part-time, usually Monday to Wednesday

On 22 November 2023, all Areas of Outstanding Natural Beauty in England and Wales were renamed National Landscapes



For all the latest news and opportunities from the Kent Downs and Cross-Channel Global Geopark:

[Sign up to our newsletter](#) | Facebook.com/KentDownsNL | Instagram.com/kentdownsnl | Twitter.com/KentDownsNL | Linkedin.com/company/kent-downs-national-landscape



Kent Downs
National
Landscape

HEATHROW AIRPORT
AIRSPACE MODERNISATION CHANGE PROPOSAL
FURTHER ENGAGEMENT
APRIL 2024

CONSULTATION RESPONSE FROM
THE KENT DOWNS NATIONAL LANDSCAPE TEAM

On 22 November 2023, all designated Areas of Outstanding Beauty (AONBs) in England and Wales were renamed 'National Landscapes' (NLs). Accordingly, the Kent Downs AONB is now the Kent Downs National Landscape. Its legal designation and policy status remain the same.

Many thanks for providing the Kent Downs National Landscape the opportunity to comment on the shortlisting of Stage 2 options.

The Kent Downs National Landscape Team is concerned at the proposed revised approach of addressing the impacts associated with overflight of AONBs at Stage 3, rather than Stage 2 as previously proposed and we agree with the CAA that this is a different approach from that previously presented.

Delaying the consideration of this matter appears to indicate a reduction in the importance attached to ensuring AONBs are not adversely impacted over and above the tests set out in 1,2 and 3. We are concerned that it could also result in an increased likelihood of AONBs being impacted and such an approach might result in a reduced ability to fulfil the commitment Heathrow has made to reduce potential overflight impacts to AONBs.

There has been a recent change to the primary legislation on AONBs, introduced through the Levelling Up and Regeneration Act, to the Countryside and Rights of Way

Act. This now places a statutory duty on relevant authorities, which included Heathrow, to seek to further the conservation and enhancement of natural beauty of AONBs in all of their actions. Further detail on the new duty can be found [here](#). Delaying the consideration of potential impacts on AONBs to a later stage may reduce the Airport's ability to comply with this duty, given tranquillity is recognised as a component of the natural beauty of the Kent Downs National Landscape.

It is advised that the Initial Options Appraisals results for overflight of AONBs are likely to be overstated with the information available at this this time and it is expected that there will be a '*reduction in areas of AONB overflown*' once assumptions around continuous climb and continuous descent have been applied as these procedures will result in aircraft being higher than currently assumed within the data. It would have been helpful to have clarification why this is not equally applicable to tests 1,2 and 3. We query whether the refinement of the routes could be carried out now, to enable that assessment to be made at this stage. We are also concerned at this wording which could indicate a potential increase in overflight but on a more concentration route. Furthermore, aircraft flying at a higher altitude can still be impactful to the tranquillity of an AONB although it recognised that this would be less than from lower flying aircraft.

It is advised that at Stage 3, tranquillity and biodiversity assessments will be undertaken to help identify the more sensitive areas within AONBs. We would advise however that all parts of the Kent Downs National Landscape are protected by the same legislation.

I hope this is of assistance to you. I would be happy to discuss further if this would be helpful.



Kent Downs National AONB Unit

17/04/2024

From: [REDACTED]
To: [DD - Airspace](#)
Cc: [REDACTED]
Subject: Heathrow Airspace Modernisation - Stage 2 Re-engagement
Date: 22 April 2024 13:09:29
Attachments: [Heathrow Airspace Modernisation, CNG letter V2 22 April 2024. docx.pdf](#)

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Hi [REDACTED]

Please see attached the following.

Your confirmation of safe receipt would be appreciated.

Best

[REDACTED]

This email and any attachments are confidential and intended solely for the addressee and may also be privileged or exempt from disclosure under applicable law. If you are not the addressee, or have received this email in error, please notify the sender immediately, delete it from your system and do not copy, disclose, or otherwise act upon any part of this email or its attachments.

Internet communications are not guaranteed to be secure or virus-free. Kossway Ltd does not accept responsibility for any loss arising from unauthorised access to, or interface with, any internet communications by any third party, or from the transmission of any viruses. Replies to this email may be monitored by Kossway for operational or business reasons.

Any opinion or other information in this email or its attachments that does not relate to the business of Kossway Ltd is personal to the sender and is not given or endorsed by Kossway Ltd.

Kossway Automatics Limited (registered no. 747250)

Registered Office: Unit 8, The Ridgeway Trading Estate, Iver, Bucks. SL0 9HJ

To Heathrow Airspace Modernisation [REDACTED]

Heathrow Airspace Modernisation – Stage 2 Re-engagement

We the undersigned community noise groups are writing to request clarification regarding the methodology of this and future Stages of Heathrow's Airspace Change Proposals, and to express our strong disagreement that the feedback deadline for a revised Stage 2 application should be set as soon as the 29 April. Given the significance of the potential environmental impacts of Heathrow's airspace modernisation proposals, the context of revised CAP 1616 guidance, and the discussion and commitments made at the 20 March NACF meeting, we believe the time limit should be extended to a sufficient period to allow for genuine reengagement, during which time Heathrow should produce the necessary and required documentation to support proper consideration of the issues these factors will entail.

We ask you to clarify at the forthcoming Stakeholder Engagement Teams presentations the basis on which the re-engagement consultation is being carried out. CAP1616 version 5 came into force on the 2 January 2024. There are significant differences with the previous iteration which have an important bearing on how Stage 2 and later Stages are to be processed, and impacted communities need, and are entitled, to know how Heathrow's revised Stage 2 is to be prepared, the options that need to be included and the basis on which shortlisting and assessment of preferred options are to be considered.

In particular, in relation to transitional provisions for CAP 1616 V5 the CAA state;

*This airspace change process (CAP 1616, version 5) came into force on 2 January 2024 for permanent airspace change proposals. Any permanent airspace change proposals commenced on or after that date will be assessed against the requirements of the process as described in this document. **All change sponsors with permanent airspace change proposals in process under CAP 1616 (i.e., where an assessment meeting has already taken place) and in Stages 1-4, will be informed of the requirements that apply to their submissions and this will be published on the portal.** The CAA aims to inform all change sponsors of such requirements shortly. Airspace change proposals in Stages 5-6 will continue as planned and will not be affected by the publication of CAP 1616, version <https://www.caa.co.uk/commercial-industry/airspace/airspace-change/review-of-cap-1616/>*

Heathrow's Initial Option Appraisal (IOA) filed under Step 2B (Version 4) gives little or no real information of the environmental effects of the options proposed to be taken forwards. From the Heathrow document, it is simply not possible to judge these. Under the revised CAP guidance CAP 1616 V5, Heathrow's IOA is even more deficient since there are no current and 10-year baselines versus options comparisons.

Heathrow says in its IOA that it "does not consider that a 'do minimum' option is feasible or appropriate to define at this stage and a 'do nothing' scenario provides for a suitable,

existing baseline against which to compare design options". This runs counter to the subsequent commitments given at the 20 March NACF regarding working up and assessment of 'do minimum' scenarios and avoiding prejudgement of outcomes.

The extremely limited scope proposed for the revised Stage 2 application and unrealistic shortened timescales for re-engagement and submission gives the appearance (and perhaps the reality) of a pre-decided course of action. The framework set out in the slide pack for the Teams meetings leaves insufficient time for Heathrow to provide necessary supporting documentation to enable proper consideration by stakeholders, precious little time for consideration or feedback prior to a Stage 2 resubmission, and no time for Heathrow to have "evaluated the baseline scenarios and design options against the design principles, specifying if they have met, partially met or not met each design principle" [CAP1616 v5].

It is worth reflecting that under established legal principles (Gunning), any consultation has to be done properly and must be undertaken at a time when proposals are still at a formative stage; it must include sufficient reasons for particular proposals to allow those consulted to give intelligent consideration and an intelligent response; adequate time must be given for this purpose; and the product of consultation must be conscientiously taken into account when the ultimate decision is taken.

A response to this letter is requested as soon as possible, particularly in the context of the currently proposed Stage 2 resubmission process, updated CAP 1616 guidance since the first Stage 2 application was made and the commitments and responses given at the 20 March NACF meeting.

Yours

[Redacted]

[Redacted] (TAG)

[Redacted] (Richmond Heathrow Campaign)

[Redacted] (Windsor and Maidenhead)

[Redacted] (Elmbridge)

[Redacted] (Englefield Green)

[Redacted] (Plane Hell Action – SE London)

[Redacted] (Ealing Aircraft Noise Action Group)

[Redacted] (Richings Park Residents Association)

[Redacted] (HASRA)

[Redacted] (Buckinghamshire ward Councillor for Iver and Richings Park)

From: [REDACTED]
To: [DD - Airspace](#)
Subject: Feedback on Heathrow's Approach to Shortlisting Options
Date: 22 April 2024 13:49:14
Attachments: [Feedback on approach to shortlisting options .docx](#)

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Kind regards

[REDACTED]

Dear [REDACTED],

Here is my feedback on the recent engagement session re **feedback on the approach of Heathrow's shortlisting options**:

Heathrow Airport did not pass the CAP1616 Stage 2 Gateway as it was judged not to have met the criteria **relating to stakeholder engagement**, so the airport were asked to undertake **additional engagement** focussed on its approach to the shortlisting of options.

That Heathrow have effectively acknowledged the importance of this criteria and this decision by the CAA's judgment **isn't** demonstrated in the narrow remit of its efforts to improve this engagement criteria for a number of reasons:

1. Only two online sessions were offered limiting the engagement. These were timetabled in the same week as the CISHA Open Forum making it a congested week re engagements. This is a major change. The CAA criticised stakeholder's engagement yet the response was a session delivered through a slide presentation with no elaboration of its impact nor discussion amongst a wider audience through the medium of TEAMS.
2. The timescale, given the significance of these changes to the health and wellbeing of millions, is comparatively short with only just over a week to submit feedback following these sessions. Given that we expect a dialogue over points raised through email following these sessions, this is insufficient.
3. The engagement I felt was curt and hurried with a desire to complete the presentation and tolerate questions rather than true, open dialogue. Questions posed were halted until specific slides were shown. Persistent questioning was met with the response that we would communicate with you via email. I felt this quashed voices.
4. Face to face engagement sessions were not offered which was disappointing. Millions of people will be impacted by these changes proposed. These changes are complex. Every effort should be extended to ensure the types of engagement meet the needs of all stakeholders with the widest possible scope of engagement. Face to face engagement is more open and gives a greater opportunity to question, seek reassurances and correct misconceptions.
5. Closing the options of access to these engagement sessions is a disappointing decision. Consequently questions and misstatements are left unanswered.
6. It is a concern that the slides have the now familiar disclaimer: "Any options or data in this document are subject to change throughout the airspace change process as options are matured in detail and refined in accordance with safety requirements, our Design Principles, our appraisals and stakeholder engagement and consultation."

Having engaged with stakeholders on a proposed shortlisting approach to its initial options appraisal, Heathrow sought feedback but then took a different approach failing to consult again. I'm not convinced that this will not be a recurring problem.

7. I do not feel that Heathrow has "Re-engaged with all stakeholders on the proposed methodology for shortlisting options after the initial options appraisal."
There was little additional information that accompanied the slide presentation. Consequently I do not think that "more information" that was a requirement from CAA by the change sponsor, was provided by Heathrow "with regard to its summary of feedback, to ensure that all feedback is captured and responded to consistently." This aim was not achieved.
8. I fail to understand why is it that Heathrow does not have to provide engagement on point 2?

“ For point 2, Heathrow will make some amendments to the summary of feedback within the Step 2A Options Development document prior to re-submitting this document to the CAA. No engagement is required on this issue.” Please elaborate.

9. To resolve this issue, the CAA has requested that Heathrow:

1. Re-engage with all stakeholders on our proposed methodology for shortlisting options after the initial options appraisal;
2. Take into account any views on the proposed shortlisting methodology received from those stakeholders;
3. Make a fresh decision on a shortlisting methodology; and
4. Apply the chosen shortlisting methodology to our flight path options objectively, consistently and transparently.

I do not feel this happened. You presented slides. Talked through them stating you are only seeking views on “Approach to Shortlisting of Options”.

10. You state that, “Heathrow recognised that it would be better to address the impacts associated with two of the shortlisting “tests” (Tests 4 and 5) at Stage 3.” yet this decision is not consulted on nor explained in sufficient detail. Why?

11. You stated that the, “Scope of engagement doesn’t address the issues raised on this shortlisting methodology. Heathrow has removed prior tests 4 and 5 to assess later at Stage 3.”

Isn't this moving the goal posts to tick box and prevent failing engagement at this stage? These are two major tests that should not be dismissed without full scrutiny at this stage. Whilst you make certain commitments on Slide 13 this does not seem an open process. How much is being done behind closed doors with specific interest groups? Surely this can't be permitted not if true engagement is the motivator?

Sadly, in our experience stakeholder engagement is very poor by Heathrow. This seems to embed this viewpoint. I feel Heathrow wishes to ram through its own agenda.

Can you elaborate on the discreet types of area that are classified as AONBs?

Finally, I've briefly looked at the feedback that is attached to evidence engagement. Can you clarify that our engagement is categorised as residents of Walton On Thames and will not be construed as representation by us of this as an area, which clearly we are not?

Kind regards



From: [REDACTED]
To: [DD - Airspace](#)
Subject: Waverley Borough Council's Response to the Stage 2 consultation on the Airspace Modernisation Programme
Date: 23 April 2024 16:31:25
Attachments: [Response to Stage 2 Re-Engagement Final.pdf](#)

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Dear Sir/Madam,

Please find attached Waverley Borough Council's response to the consultation on Stage 2 of the Airspace Modernisation Programme.

Regards,

[REDACTED]

[REDACTED]

[REDACTED]

Waverley Borough Council

[REDACTED]

www.waverley.gov.uk

This email, and any files attached to it, is confidential and solely for the use of the individual or organisation to whom it is addressed.

The opinions expressed in this email are not necessarily those of Waverley Borough Council.

The Council is not responsible for any changes made to the message after it has been sent. If you are not the intended recipient of this email or the person responsible for delivering it to them you may not copy it, forward it or otherwise use it for any purpose or disclose its contents to any other person. To do so may be unlawful.

Please visit our website at <https://www.waverley.gov.uk>

Sent via email only to:
airspace@heathrow.com



Dear Sir/Madam,

Heathrow Airport – Heathrow Airspace Modernisation Stage 2 Re-Consultation

Thank you for consulting us on Stage 2 of the Airspace Modernisation programme.

We note the proposals to shift the assessment of flight paths upon National Landscapes and the local community from Stage 2 to Stage 3. The Council is pleased that Heathrow Airport remains committed to assessing the impact of their proposals on these receptors and it is important they are not overlooked during the assessment process.

Waverley Borough Council declared a Climate Emergency in 2019 and seeks a reduction in flight capacity rather than increasing the number of flights. The Council remains concerned about the impact of overflying on communities and the environment.

Yours faithfully



From: [REDACTED]
Sent: 24 April 2024 15:44
To: DD - Airspace
Subject: RE: Heathrow Airspace Modernisation: Invitation for further engagement

Follow Up Flag: Follow up
Flag Status: Flagged

You don't often get email from [REDACTED] [Learn why this is important](#)

Classification: Internal

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Good afternoon,

Thank you for providing the engagement material on your revised shortlisting options for the Heathrow Airspace Modernisation ACP. The MoD has no objection and no further feedback on the revised design options as details, further to feedback already provided any previous engagement.

Kind regards,

[REDACTED]

[REDACTED]

From: [REDACTED]
To: [DD - Airspace](#)
Subject: Consultation Response - ACP - Further Engagement on Shortlisting of Stage 2 Options
Date: 25 April 2024 12:11:17
Attachments: [Consultation Response to Further Stage 2 Engagement on Airspace Modernisation 25 04 24.pdf](#)

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Dear Heathrow Airspace Team,

Please find my consultation response attached.

Kind regards,

[REDACTED]

To: airspace@heathrow.com

25 April 2024

From: [REDACTED] Molesey Residents
Association [REDACTED]

Consultation Response – Airspace Change Proposal – Further Engagement on Shortlisting of Stage 2 Options

I attended the one-hour Microsoft Teams engagement session on Tuesday 16 April. I have also read the Step 2B Initial Options Appraisal document submitted to the CAA in October 2023. My response to the further engagement on Heathrow's shortlisting approach is divided into three sections:

- the consultation process
- the revised approach
- the implications for Stage 3.

1. The Consultation Process

Heathrow failed its Stage 2 Gateway in October 2023. This outcome was communicated briefly to communities and Heathrow said they were seeking clarification from the CAA on the reasons for failure.

Since October 2023 communities sought further information and clarification about the implications of this for Airspace Modernisation. No further information was forthcoming, and Airspace Modernisation formed no meaningful part of any NACF meetings or communications thereafter. In frustration, after five months, the community attendees of the NACF wrote to [REDACTED] on 1 March 2024 formally asking for an update on what was happening. A reply was received on 15 March 2024 from [REDACTED]

At the NACF meeting on 20 March 2024, [REDACTED] of Heathrow gave a brief update on what had been happening and said that another limited consultation on Stage 2 of Airspace Modernisation was going to take place shortly, to address the CAA's concerns. A small slide pack was sent out on 28 March to consultees along with invites to the two, hour long consultation sessions on 16 and 17 April. The deadline for consultation responses was set as 29 April.

Heathrow has very deliberately narrowed the focus of this re-consultation and therefore argues that the consultation timing is sufficient for its limited nature. Nevertheless, there is an inequity in taking c. six months to progress a strategy for addressing consultation shortcomings and then giving c. one month to communities, and really two weeks post Teams sessions, to respond. The revised consultation needs to be seen in the context of the full documentation supplied to the CAA in October.

For HAL to fully explain and communicate the variable combinations and thresholds applied in their route judgements and how the redaction of the two criteria have impacted it, would take longer than the current consultation timings allow. Explaining exactly how they arrived at a changed number of outcomes was not explained at the consultation sessions. For example, no summaries of revised route assessments (where a change in outcome had occurred) with reasons were supplied.

2. The Revised Approach

The Stage 2B document submitted to the CAA in October describes the shortlisting approach adopted then. The current consultation is about a change to that approach, though using the same source data. Essentially, two of the decision criteria have been redacted to Stage 3.

The scope of the revised approach is limited by Heathrow to consulting on:

- the reinstatement of PBN arrivals in the October submission – option 1 to 27R runway (on which no engagement is sought); and
- putting off consideration of AONBs/National Parks to Stage 3; and
- putting off consideration of the impact on “local circumstances” until Stage 3.

We gather the reinstatement of PBN arrivals on 27R runway in the earlier submission was to ensure an even-handed approach to how PBN arrivals are handled. HAL is already aware that significant concern surrounds PBN generally but especially how early morning arrivals will be handled as the potential for concentrated blight and sleep disturbance between 04.30 and 06.00 is significant.

I do not object to the assessments of AONBs and local circumstances being assessed properly at Stage 3 when systems of arrival and departures are put in place. Flexibility to examine this then may be important to reach sensible option outcomes.

Under the new proposed methodology, the three factors examined in order will be:

1. Are significantly more people in the Partial LOAEL than today?
2. Do significantly more people experience noise events than today?
3. Are track miles significantly higher than today?

HAL do not wish to re-engage on points 1 & 2 and the remaining criterion highlighted for current consideration is point 3 about track miles.

Each of the questions 1 – 3 in the revised shortlisting process includes the word ‘significantly’. At 5.3.3. p40 in the Step 2B Initial Options Appraisal October submission, HAL says:

“Heathrow has applied professional judgement to determine the meaning of ‘significantly’ in each test when deciding if an option should be discontinued”.

This makes it an entirely subjective assessment and open to inconsistency. At the follow-up consultation session on 16 April 2024 Heathrow was asked how they define ‘significantly’ and where they have put the thresholds in their modelling judgement for each of the variables. No clear answer has been received. In the descriptions of both retained and discarded routes, for example, there are many references to ‘significantly more’ people being impacted by a route change. There is no clear threshold above or below which a route is discarded or retained.

Point 3 (air-track miles) is the only retained variable on which HAL wishes to re-consult. We understand air-track miles are treated as a proxy for carbon emissions. They also have a financial impact for airlines in terms of the cost of fuel burn. However, in the Teams consultation session on 16 April it was admitted by Heathrow that the variance on track miles was negligible, at most c. 50 miles \pm and usually less, and did not make any significant

difference. It could be queried, therefore, as to how much of a discriminating variable this is, though it is recognised that it is in the criteria HAL has used to address ANG17's altitude-based priorities point c.

Many of the judgements made within the submitted 2B document were admitted as subjective but there appears to have been some inconsistency in how certain options were retained and others not. Importantly, the overflight metrics and noise exposure change - as a proxy for increases and decreases in the number/noise intensity of flights experienced by people - do not appear to be key discriminators. Absolute noise exposure measured using '>51dB Laeq, 16 hr day' & '>45dB Laeq 8 hr night' and the population experiencing ≥ 1 noise event above N65 each day and N60 at night are the key criteria selected.

The judgement thresholds applied to numbers of people brought into or out of the Partial LOAEL leading to route retention or discarding are not clear. The decisions using the combination of metrics do appear to be very qualitative in nature. For example, day-time noise impacts seem to be treated as more important than night-time ones in determining whether a route stays or goes. For example, on p48 of the 2B submission, route option E shortlisted for runway 27R is kept despite there being a significant increase in numbers brought into the LOAEL at night. As HAL is well aware, only these options go forwards into 'systems' of departures and arrivals at Stage 3, so Stage 2 has a material impact on future flight paths.

Communities still have queries and lack of clarity on how the noise contours developed have taken account of flight frequency.

We also understand that the Stage 2 process is being considered under CAP1616 V4, whilst Stage 3 will be considered under CAP1616 V5 which has stronger requirements relating to a base case. The CAA still needs to make explicit what transitional arrangements between the versions are to be applied. We have been told that a 'do minimum' scenario, or the closest outcome to this, will be looked at in Stage 3 on a system basis.

On page 38 of the Stage 2B submission ANG17 altitude-based priorities are set out. In addressing priority b. *"where options are similar in terms of the number of people affected, preference should be given to that option which is most consistent with existing published airspace arrangements"* HAL has said, *"This will be assessed at Stage 3 when Heathrow has a smaller number of system options and will be able to assess how different those options are to the existing airspace design"*.

We would emphasise the importance of a 'do minimum' scenario to communities. It is significant change effects that cause most annoyance and have most noticeable impact on communities. People building their lives and connections, renting or buying, under a certain airspace regime make informed choices. Radical changes foisted upon them with material impacts for annoyance, health/well-being and their investment in their communities is entirely different. Communities wish to minimise significant detrimental changes in the new airspace design whilst acknowledging HAL's requirement for PBN implementation. The overlaying of effective respite options will be critical to a sustainable outcome.

As a broader point, the Design Principles and the Stage 2 criteria that include mention of minimising absolute numbers of people exposed to noise events automatically support route concentration and the potential for 'noise sewers'. As HAL is aware, the potentially dreadful

impacts of PBN route concentration (departures and arrivals – especially early and late) are the most pressing issue for communities. Communities have come to an accommodation that no one community should be disproportionately blighted at the expense of others. Therefore, if track miles are not a telling discriminator (albeit one that is retained), there should be room to accommodate a shortlisting step of assessing the overflight impact and noise exposure change (frequency & intensity) on communities below a given flight path. This is a step that is missing from overall option decision process, though they are reported as supplementary metrics in the submitted 2B route assessments. This should be included at Stage 3.

Exactly how the interactions and judgements on the variables have been made at Stage 2B remains a mystery. We wish to avoid this for the critical Stage 3.

3. Implications for Stage 3

The two criteria removed from Stage 2 which, we are told, will be accommodated in Stage 3 are (in this order):

- Are AONBs or National Parks overflowed significantly more than today?
- Are “local circumstances” impacted significantly more than today?

These are being used to address points e. and f. of ANG17 altitude-based priorities. The previously stated definition and threshold points in relation to the word ‘significantly’ apply also to each of these variables, whether at Stage 2 or 3. These need to be explicit and consistent. Or if more leeway is given to retain an option, the reasons need to be explained.

With reference to AONBs, the lobbying by those on behalf of Richmond Park has been effective and Heathrow has made a special case of Richmond Park for consideration. It is a point of possible contention for other communities as to why their green spaces have not been given equal consideration. However, whilst Richmond Park and other royal and local parks may be used significantly in the day (especially at weekends and in holiday periods), at night, and on normal working days, the parks are not used as heavily and are therefore less populated. Of course, there are flora and fauna (and deer) in (royal) parks, but it will be important to understand how consideration for these spaces will be programmed into a Stage 3 model. My perspective is that especially at night and in the early morning, it is more important that children and vital workers get respite and decent rest, than deer. So when certain routes are used is intrinsic to the fairness and practicality of any model.

How often a route will be flown and at what season/day of week/time of day/easterly/westerly are intrinsic to their impact. Stage 2B has assumed a 92-day summer period using 2019 as a baseline, but we still have concerns and queries about how some of the metrics supporting noise impact modelling have been calculated. HAL said at the 16 April session that system options ‘may’ be looked at for time specific operation at Stage 3. This should be an aspect which is definitely looked at and part of the respite options that Heathrow has said it will overlay on all system options at Stage 3. If this has been a consideration at Stage 2 in route appraisal we also need to have this made clear.

A discussion about what “local circumstances” included took place at the workshop I attended on 16 April. Heathrow was asked whether change effects counted as local circumstances, and they confirmed they were. A raft of metrics including those relating to noise and carbon emissions were discussed but ██████████ said no thresholds to

measure change had been set. Communities wish the spectrum of change impacts and the thresholds used to assess them to be made explicit as part of Stage 3 option system design. Change effects should not just be measured by absolute numbers of people exposed to noise events, but by the frequency and intensity of the noise impacts on those below. For this, the frequency of aircraft movements and the fleet mix assumed will be vital as well as the assumptions on climb and descent gradients, currently assumed as 5.5% for climb and 5.24% for descent. The rationale for choosing these percentages has not been clearly explained, nor whether any modelling has taken place using different gradients producing different noise contours at Stage 2B. My view is that local circumstances (including change effects) should also take precedence over AONBs, so the order of these two variables in meeting ANG17 requirements should be reversed in the model hierarchy.

In its consultation document Heathrow says it will “*consider whether other local circumstances should be considered*” at Stage 3. The way this aspect is described in the slide deck relates more to considering other AONBs/green spaces such as Bushy Park. But given the wider definition of local circumstances admitted and discussed above, not contained on the slides, inclusion of this in the modelling should not be optional but compulsory.

For Stage 3 it will be important for communities to be given a more open understanding of **exactly** how the option modelling and development process is being done. Without this understanding, any consultation is undermined and potentially negated, and Heathrow also misses the opportunity to design in factors that may give it and all its stakeholders a better outcome.

How any supporting analysis programme is constructed and formulated is critical to its future analytical capabilities. If certain flexibilities or variables are not included within the original design, it becomes impossible to accommodate them later without major re-writes or, indeed, rebuilding the model architecture from scratch. We wish to avoid a situation where a model is set in stone and is deeply flawed or limited in its capabilities for assessing shortlisted route options and how they are combined in Stage 3 systems. Stage 2B decision processes are still something of a ‘black box’ and we wish to avoid this at Stage 3. Full transparency is needed. We recognise that airspace modernisation is a national imperative imposed by government, but HAL is a commercial entity also seeking to maximise its profits which will come at potentially great expense (physical, mental and financial) to those living under its densely populated flight paths. Long gone are the days of my grandmother (b. 1905) living in what was then the village of Hayes who saw the original small aerodrome built surrounded by market gardens and fields. HAL has a great responsibility to all those living and working around it to be fair and open in its airspace revisions.

As part of this, we would also like to understand who exactly is doing the modelling/programming (for Stage 3, but also who did it at Stage 2B) and the level of control, oversight and understanding and checking that the Heathrow team has over the detail. If the work is subcontracted to an outside consultancy which asks Heathrow to take the accuracy of their work on trust, it is possible for all sorts of issues to exist in the model that will never come to proper scrutiny. So the validation of the modelling at Stages 2 and 3, whether outsourced or in-house, is a vital step that has been missing from any meaningful communication or consultation. In the 2B submission there are a couple of mentions of validation only at 3.6.7 and 3.6.8 comparing ANCON and AEDT data. In order for

communities to have faith that especially the noise metrics used are correct, the data generation and validation processes should have been given much more time and explanation in the consultation and will be important for Stage 3.

From: [REDACTED]
To: [DD - Airspace](#)
Subject: Fw: Airspace Change Proposal Stage 2 Gateway
Date: 26 April 2024 11:40:47

You don't often get email from [REDACTED] [Learn why this is important](#)

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Resending this email as I made a mistake inputting the email address

[REDACTED]
HASRA COMMITTEE
[REDACTED]

----- Forwarded message -----

From: [REDACTED]
To: Airspace@heathrow.org <airspace@heathrow.org>
Sent: Friday, 26 April 2024 at 11:04:55 BST
Subject: Airspace Change Proposal Stage 2 Gateway

Please find the attached letter as submitted by [REDACTED] and [REDACTED]

Regards [REDACTED]

HASRA COMMITTEE
[REDACTED]



Airspace Change Proposal {ACP} Stage 2 Gateway!

To:airspace@heathrow.com

This letter is about the process Heathrow chose to re-engage with the Communities, having failed Stage 2 Gateway.

In their letter to the CAA dated the 16th November 2023, Heathrow said at point 1.4.1 quote "Heathrow expressed concern that the portal statement implies it mislead its stakeholders, which is inaccurate and risks damaging their relationship with stakeholders". By this statement, Heathrow acknowledges that they have a very difficult relationship with stakeholders and trust is key to constructive engagement. They say that they go beyond what is asked of them, but considering where they are situated near London and the South East, impacting millions of residents and with Airspace Change likely to do so for at least 40 years, one would expect them to do more than other airports.

We were so concerned that we took the unprecedented step to write to the [REDACTED]. We also feel that we may be faced with options at Stage 3 which should have been discussed at Stage 2 and can no longer be challenged then.

Heathrow is calling the clarification "insignificant" and is only prepared to give stakeholders 10 working days to reply. They quoted that they sent the relevant slides on the 28th of March, but would only offer two online sessions of one hour on the 16th and 17th of April 2024(this one lasted only 40 minutes, and was fraught at time). Surely we should not be expected to reply before the online sessions.

If this is so insignificant, why did it take 6 months for Heathrow to re-engage with Communities, and when asked at all subsequent Noise and Airspace Community Forum for update, they failed to do so. We also requested face to face meetings which were denied to us.

As a committee member of the Harmondsworth and Sipson Residents Association, and having engaged with Heathrow for 31 years, I do not feel that this exercise meets the demand imposed by the CAA on HAL to pass Stage 2 of the ACP

Sincerely yours,

[REDACTED]

Harmondsworth Village Resident

From: [REDACTED]
To: [DD - Airspace](#)
Subject: Feedback to Stage 2A Extraordinary Engagement on Shortlisting of Stage 2 Options workshop 16 April 2024 – deadline 29 April 2024
Date: 26 April 2024 18:30:25
Attachments: [PHASE feedback to HAL 26.4.24.pdf](#)

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Feedback to Stage 2A Extraordinary Engagement on Shortlisting of Stage 2 Options workshop 16 April 2024 – deadline 29 April 2024 - document attached.

From

[REDACTED] Plane Hell Action

[REDACTED] Plane Hell Action

Date 26 April 2024

<https://planehellaction.org.uk/>

From: Plane Hell Action

To: airspace@heathrow.com

Subject: Feedback to Stage 2A Extraordinary Engagement on Shortlisting of Stage 2 Options workshop 16 April 2024 – deadline 29 April 2024

Plane Hell Action is concerned

1. at the lack of an in-person workshop
2. by the brief response time allowed to feedback to Heathrow: one month, or only two weeks following the workshop is not what the Gunning Principles would consider fair
3. that important decisions are being moved to Stage 3 where the opportunity to engage constructively with stakeholders before putting the Airspace Change proposals out to wider public consultation may not happen.

These include

the decision not to apply ANG17 requirements until Stage 3 despite published documentation for Heathrow's Stage 2B Initial Options Appraisal including the application of ANG17;

lack of noise metrics and the fear that the flawed SoNA14 data may be used;

no knowledge of noise contours;

no indication of flight paths;

the apparent re-introduction of PBN;

lack of clarity on mixed-mode operations;

no indication of how communities presently overflowed at low level by more than one airport will be considered, specifically in the case of SE London communities which are affected already by arrivals to both Heathrow and London City, and whether those communities overflowed by arrivals will also be overflowed by departures as may the case.

4. that Heathrow is not considering Burgess Park in the same manner as it has considered Richmond Park. The beautiful open space of Burgess Park is much used by the densely-populated area around it in SE London, many of whose residents live in high rise flats with only a small balcony for 'outdoor recreation'. When Heathrow moved the join point further east in 2016 arrivals were concentrated over this once-tranquil place.

5. about how Heathrow can show it has addressed the four points raised by CAA in its letter of 26 January 2024 to Heathrow viz that

1. HAL has re-engaged with the full cohort of its Stage 2 stakeholder group (including the stakeholders emailed on 7 July 2023) on its proposed methodology for short-listing options after the initial options appraisal;
2. HAL has taken into account any views on the proposed short-listing methodology received from those stakeholders;

3. HAL makes a fresh decision on a short-listing methodology to adopt; and
4. HAL has applied the chosen short-listing methodology to its design options objectively, consistently and transparently.

It would seem that points made in Plane Hell Action's feedback on 9.12.22 remain relevant and have not been addressed by the recent workshop attended on 16 April 2024 nor by the slides shown at that workshop. Our 2022 response is included below, italicised:

ANG17 requires adverse change effects in noise to be addressed as a first tier Design Principle. This is entirely missing from the current process. [And it will not now be implemented until Stage 3 cf point 3 above.]

Objectively viewed the incorporation of Design Principles 'should' and 'where possible' are tilted in such a way as to ignore Community stakeholder concerns or that they are considered less important than the requirements of other stakeholders: noise, respite, mitigation at distance from the airport. This matters since the currently affected communities run to hundreds of thousands of individuals; the new flightpaths, yet to be designed, are likely to affect many more hundreds of thousands of individuals, or the same communities already affected but at an increased level. The balance between stakeholders is tilted to the financial benefits at the expense of the negative health impacts on communities.

Workshop slides have only shown 'indicative' flight paths but these are enough to cause concern. It is not clear what data has been used to design the 'indicative' 650,000 flight paths under consideration but:

1 communities overflowed currently by arrivals appear to be overflowed by departures as well in the future;

2 communities overflowed currently by departures appear to be overflowed by arrivals as well in the future;

3 future arrivals flight paths show the greatest number planned for south, SE and SW of the airport. Yet destinations will be no different in the future from current destinations;

4 it was clear from the Workshop that I attended that HAL is not aware that LCY already has its own 'indicative' flight paths. HAL has guesstimated an area that will be used by LCY without any obvious discussions to ensure that the same communities will avoid being affected by operations to/from more than one airport.

Averaging noise over a period of time does not give a true picture of the effect of individual events, very often concentrated down narrow flight paths over extended hours of operation.

While it is understood that HAL works within the framework provided by Government and CAA it would seem a mistake to base any designs on flawed data; I am concerned that at this stage flawed noise sensitivity data is being used to inform design decisions that will be operational for many years. Stage 3 of the Airspace Modernisation programme may be too late to influence the flight paths that will be consulted on.

[REDACTED] Plane Hell Action

[REDACTED] Plane Hell Action

Date 26 April 2024

From: [REDACTED]
To: [DD - Airspace](#)
Subject: Consultation response
Date: 28 April 2024 10:10:53
Attachments: [Consultation response April 24..pdf](#)

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

[REDACTED]
Buckinghamshire Council

[REDACTED]
[REDACTED]
[REDACTED]

DISCLAIMER FOR BUCKINGHAMSHIRE COUNCIL

Any views expressed in this email are those of the individual sender and are not necessarily those of Buckinghamshire Council unless explicitly stated.

This email and any attachments may contain confidential or privileged information and is intended solely for the use of the individual or entity to whom it is addressed. Any confidential, sensitive or protectively marked material must be handled accordingly.

If you are not the intended recipient you must not disclose, distribute, copy, print or rely on any of the information contained in the email or attachments, and all copies must be deleted immediately. If you do receive this email in error please notify the sender immediately and note that confidentiality or privilege is not waived or lost.

Buckinghamshire Council may monitor the contents of emails sent and received via its network for the purposes of ensuring compliance with relevant legislation and the Council's policies and procedures. All such monitoring will take place in accordance with relevant legislation including privacy and data protection legislation. For details of how Buckinghamshire Council uses personal information please see the Council's website.

Buckinghamshire Council has scanned this email and attachments for viruses but does not accept any responsibilities for viruses once this email has been transmitted. You should therefore carry out your own anti-virus checks before opening any documents.

From [REDACTED] representing the communities of Iver and Richings Park.
26th April 2024

Consultation Response – Airspace Change Proposal – Further Engagement on Shortlisting of Stage 2 Options.

Heathrow failed its Stage 2 Gateway in October 2023 and was required to address the four points raised by CAA in its letter of 26 January 2024 to Heathrow:

1. HAL has re-engaged with the full cohort of its Stage 2 stakeholder group (including the stakeholders emailed on 7 July 2023) on its proposed methodology for short-listing options after the initial options appraisal;
2. HAL has taken into account any views on the proposed short-listing methodology received from those stakeholders;
3. HAL makes a fresh decision on a short-listing methodology to adopt; and
4. HAL has applied the chosen short-listing methodology to its design options objectively, consistently and transparently.

Heathrow has failed to address these points in the current engagement exercise. Airspace modernisation is a complex and technical undertaking and Heathrow should undertake proper and meaningful engagement with its local communities to enable them to understand in layman's terms what the options in the current and previous Stage 2 consultations mean for them with regards to the impact on their lives.

This was not done previously and has not been done now. Engagement requires understandable information, explanations, listening and taking account of the points raised, not simply providing a slide pack and 2 Teams meetings called at short notice. All that those who were not able to attend the meetings have to go on is the slide pack that was provided. Face to face meetings were requested as this makes it much easier for those who are not so knowledgeable to seek an understanding of the information provided, but these were denied. The timescale on which responses were required were unreasonably short.

It is not acceptable to respond to point 2 by stating in the slide pack that “Heathrow will make some amendments to the summary of feedback within the Step 2A Options Development document prior to re-submitting this document to the CAA. No engagement is required on this issue”. How can communities re-engage on this matter if they do not know what Heathrow have or have not taken into account? This statement would seem to imply that very little of the comments from stakeholders has or will be taken into account.

Heathrow seems to be placing a lot of emphasis on Richmond Park but there are other designated parks around the airport which should be equally considered. These include Black Park Country Park, Langley Country Park and Thorney Country Park in my ward. We have never been asked to identify any such areas so we have no idea whether they have been considered or not so it is impossible to determine whether it is acceptable to consider the impacts on them at stage 3 or not. The methodology that was used to reach this conclusion is totally lacking. It was simply

presented as a fait accompli and therefore it is not possible to provide an informed response.

It appears that the only points that Heathrow are re-engaging with the communities are its test 4 and 5 which Heathrow itself refer to as not significant. This hardly fulfils the CAA point 3. As has been communicated to Heathrow by the communities at the NACF meetings, there are many concerns around the methodology used for short-listing options as this seems to have been a black box activity and totally lacking in transparency.

Yet again in this consultation the impact on the local communities who live closest to the airport has not been taken into account. It refers to the impacts of flight paths being mitigated. Communities such as mine are not overflowed but are impacted by Heathrow's operation on an almost continual basis with very little respite. The side noise from aircraft that we experience is not measured and not included in the noise models and therefore not taken into account in the modelling that is undertaken for airspace modernisation. The previous feedback on this issue does not appear to have been taken into account.

[REDACTED]
Buckinghamshire Council

[REDACTED]

From: [REDACTED]
Sent: 28 April 2024 18:36
To: DD - Airspace
Subject: Heathrow Airspace Modernisation; Airspace Change Proposal Further Engagement on Shortlisting of Stage 2 Options
Attachments: Heathrow Airspace Modernisation. Re-engagement TAG submission.pdf; Heathrow Airspace Modernisation. Re-engagement TAG submission.docx
Follow Up Flag: Follow up
Flag Status: Flagged

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

FAO [REDACTED]

Dear [REDACTED]

We refer to your email of 28 March 2024 and enclosed slide pack.

We attach on behalf of TAG our response to Heathrow's Stage 2 re-engagement proposals and the Teams presentations held on 16 and 17 April.

We would be pleased to clarify with you (and your colleagues in the Heathrow Airspace Modernisation team) any issues arising out of our submission or more generally to discuss HR's more detailed proposals for Stage 2 resubmission and looking beyond this concerning Stage 3 as they emerge.

Kind regards

[REDACTED]
Teddington Action Group (TAG)

Heathrow Airspace Modernisation; Airspace Change Proposal Further Engagement on Shortlisting of Stage 2 Options

TAG response to Heathrow's re-engagement proposals

28 April 2024

Summary

We support the CAA's October 2023 decision not to pass Heathrow's (HR) 2023 Airspace Modernisation (AM) Stage 2 application. We believe that HR must comply fully with the steps set out in the CAA's letter dated 26 January 2024 (reproduced in Appendix A due to the significance of their requirements) as well as CAA's CAP1616 documents. At present HR fails to do this.

HR's original Stage 2 submission was flawed for reasons that are explained in previous engagement submissions and the following sections of this response. These can be summarised as follows;

- Failure to comply with CAP 1616 v4 requirements
- Failure to align with statutory guidance on environmental impacts contained in ANG 17
- Lack of robust evidence-based decision making in relation to the Initial Option Appraisal (IOA), having regard to the requirements of ANG 17 and the selection and omission of flight path options
- Inadequate and incomplete responses to community representations in relation to Design Principles (DPs), identification of CLOOs, the Design Principle Evaluation (DPE) and in the IOA

HR's proposals for engagement and resubmission of its Stage 2 application do not meet the requirements for stakeholder engagement set out in CAP 1616 v4 Appendix C and more particularly the instructions given by the CAA's in its 26 January 2024 letter.

It is concluded that HR's re-engagement proposals reflect a prejudged approach and as they stand should be rejected.

Heathrow's proposals for re-engagement and re-submission of its Stage 2 application

We understand that Heathrow is bound by v4 of CAP1616 up to and including the Stage 2 resubmission with v5 applying from Stage 3.

We have reviewed HR's email of 28 March 2024 and the enclosed PowerPoint slide pack covering its interpretation of the purpose and requirements of this re-engagement. The re-engagement material outlines HR's original methodology for IOA shortlisting and how it proposes now this might be modified in minor ways. HR's presentation material indicates that it intends to move into Stage 3 of this ACP essentially on the basis of the flight path options and methodology contained in its original Stage 2 submission without a significant change in its approach.

We do not agree with HR's proposals for resubmission for the following reasons;

- The scope of the suggested revisions is far too narrow. The relatively minor adjustments do not meet the requirements set out in the CAA's 26 January letter, which calls for full re-

engagement of stakeholders, the taking into account of stakeholder views, arriving at a fresh decision on shortlisting methodology and application of the outputs to short listing design options objectively, consistently and transparently. In particular the flaws outlined in this Response Summary are not addressed and it seems that the proposed approach is to change as little as possible, rather than conduct open re-engagement and fresh decision making regarding the choice of options or the shortlisting methodology, as specified in the CAA's letter

- The IOA fails to comply with the CAP1616 v4 in that it fails to contain proper qualitative assessments of the different options, even though it acknowledges that it needs to do so. All we have are maps with the very minimum of detail, charts of total numbers within certain brackets of sufferance but no details of the likely effects of the alterations upon the communities affected in reference to the Statement of Need.
- HR's stated deadlines for re-engagement response (29 April 2024) and target for resubmission (14 June 2024) are unreasonably short and not proportionate given the noise impacts of HR and requirements set out in the CAA's 26 January 2024 letter and the significance of passing through Stage 2 (in particular the IOA as a key building block in the entire CAP 1616 option appraisal process, which ultimately should lead into Full and Final Option Appraisals)
- It should be noted also that the one-hour Teams meetings (repeated on consecutive days in mid-April) did not allow for full, open and meaningful interaction, which should precede the review of the Stage 2 application and the associated activities specified in points 1-4 of the CAA's instruction.

Having regard to the above it is evident that the proposed modifications to HR's Stage 2 resubmission are indicative of a pre-judged approach.

The requirements for HR's Initial Option Appraisal

It can only be concluded from the CAA's decision and subsequent correspondence, that HR did not follow an acceptable methodology (or process) for its 2023 Stage 2 application, which is now subject to re-engagement and reconsideration requirements. Most importantly this includes the IOA, which maps out next steps for Stage 3.

CAP 1616 v4 sets out a process which must have continuity and consistency in preparation for the Initial, Full and Final Option Appraisals. CAP1616 v4 states that 'If the overall process is to function correctly, it is crucial that the consultation is open, fair, transparent and effective, and that the CAA can evidence that it is holding the change sponsor to account in this respect'. This cannot be so if HR as change sponsor has not provided the necessary information for engages or consultees to make informed judgements on the overall effects of the ACP proposals.

The Statement of Need along with the Baseline, together with adherence to ANG 17 and CAP 1616 (including Treasury Green Book option appraisal guidance) instructions, form the key foundation for the whole airspace change process, including selecting DPs, formulation of CLOOs (derived from these), the DPE and the IOA. It is essential that these should form a satisfactory foundation for the subsequent stages of the ACP.

HR's Statement of Need is focussed primarily on the basic requirement to comply with the national Airspace Modernisation Strategy. There are no specific ancillary objectives or considerations stated

other than by implication compliance with the environmental instructions contained in ANG 17, the process and requirements specified in CAP 1616 and the Treasury Green Book guidance on Option Appraisal.

Unresolved issues with HR's approach so far

There are a number of flaws encapsulated and inherent in HR's 2023 IOA and Stage 2 application. These have been pointed out to HR in the past (see TAG's SER correspondence) but have not been fully responded to. Inter alia these include;

- HR's Statement of Need does not form a justification for the radical CLOO proposals which the airport apparently wishes to take forwards in its revised Stage 2 submission proposals.
- Many of HR's adopted DPs do not correspond with ANG 17 guidance, in particular in how to assess significant adverse noise impacts (for example using unsupported metrics as well as simple numbers within contours, which ANG specifically advises against). As such the DPs do not form an appropriate foundation for assessing proposed airspace changes against, in particular at lower altitude (below 7000 feet)
- As a consequence, there is misinterpretation of ANG 17 and Green Book requirements in formulating the CLOOs, DPE and IOA. There is no policy backing for use of Partial LOAELS (which are based on single flights, hypothetical flight paths and from a single plane type) although they have been used by HR as a primary basis for to selecting flight paths and as a proxy for judging health and annoyance impacts
- Despite their adoption in Stage 1 HR took an decision (which has not been justified) not to include all of its DPs in the DPE and IOA. In particular these include DP7, avoidance of multiple flight paths over the same areas (unavoidable with the radical arrival CLOOs), those leading to significant loss of Respite (DP 6) and avoidance of increased noise over people (DP 9). The basic IOA requirement is essentially for a qualitative assessment against all of the adopted DPs, and if they had all been used this would have either ruled out or raised red or amber flags to a significant number of the radical arrival CLOOs that have been identified to be taken forwards under HR's IOA
- Absence of reasoned consideration of PBN enabled 'Do Minimum' options in lower airspace. This is a fundamental point and HR's decision, apparently still encapsulated in its Stage 2 resubmission proposals is unjustified (see below).

The significance of including Do Minimum as an option

HR's IOA makes reference to this subject but excludes serious consideration of 'Do Minimum' scenario(s). The IOA contains vague wording about how the full potential of AM cannot be achieved without any form of considered assessment or reasoned case founded on the Statement of Need.

Once more this is indicative of a pre-judged approach.

Due to the huge numbers of people living around HR, many of whom could be very seriously impacted by HR's AM ACP, this is a major deficiency in the work undertaken by HR so far. Hundreds of thousands, if not millions, of people have decided where they live in the knowledge of the environmental conditions that they experience currently in Heathrow's noise catchment. HR's situation in the middle of densely populated areas, is far from ideal (many other countries have

relocated their major airports away from population centres) and any prospect of significant adverse change will be extremely sensitive and potentially highly contentious. Based on the evidence of international experience and HR's own 2014 PBN trials, this could lead to mass public opposition as well as enormous environmental damage. This emphasises the need for HR to be fully transparent and provide a full reasoning and robust justification for all airspace changes it proposes in its ACP.

Whilst calculations identifying net numbers of winners and losers which might be factored into theoretical cost benefit analysis (on an unjustified assumption the benefits and impacts are equivalent), this will not reflect the reality of what will happen to individuals and families who have their lives significantly adversely affected by worsening of living conditions resulting from decisions based on this approach.

Against a background of widespread international opposition and resistance to the introduction of PBN flight technologies (leading to highly concentrated flight paths, termed by a previous CEO of the CAA as 'noise sewers'), ICAO has summarised research on the impact of aviation noise and found the effect of change (most importantly), as well as trust in authority and transparency as key factors to be taken into account when considering the adverse impacts of significant airspace changes.

Due to the extent of HR's noise catchment and the size of its operation, these are key factors that must be addressed at Heathrow above all other UK airports.

The significance of maintaining existing patterns and usage of flight paths at low altitudes is referred to in ANG 17 guidance. The Treasury Green Book on Option Appraisal (cross referenced into CAP 1616) also addresses the significance of producing credible Do Minimum scenarios as well as explaining the approach to be adopted in working these up. The Green Book requires that change proposals need to be justified on a reasoned evidential basis – something that HR's 2023 Stage 2 submission fails to do.

It is essential that HR's Stage 2 re-submission addresses this failure – both in relation to the IOA and especially in the context of future CAP Stages (which will be assessed under CAP 1616 versions 5).

Next Steps

HR needs to address the shortcomings of the work undertaken before and undertake a comprehensive review and substantial redrafting of its IOA and Stage 2 work before resubmission (as required by the CAA). The limited proposals as outlined in HR's slide pack and the Teams presentations go nowhere near satisfying these requirements. In the light of this the deadline for stakeholder feedback and Stage 2 resubmission should be put back to allow a realistic time for genuine re-engagement on the final document for resubmission.

Heathrow's NACF meeting on 20 March 2024 discussed and agreed the importance of considering Do Minimum approaches.

In its Stage 2 resubmission, HR should confirm that it will work up and assess on a 'bona fide' basis Do Minimum scenarios, starting from a base of reflecting existing flight patterns and noise conditions at low altitude and demonstrating on a fully reasoned basis what changes or improvements can be achieved under PBN and what real barriers might apply. HR should also commit to an obligation to demonstrate on a fully reasoned (qualitative and quantitative) basis (if this is their conclusion) why a PBN enabled 'Do Minimum' approach cannot be made to work. Due to airspace capacity considerations HR has already moved towards this position and indicated that it

will continue to operate vectoring as the main basis for arrivals. It should be noted that this should not constrain implementation of airspace modernisation at high level (i.e., above 7000ft).

The DPE leading into the IOA should also be reviewed having regard to DPs 6,7 and 9, and unless it can be demonstrated these DPs can be satisfied, the radical 'bendy' arrival flight paths should be excluded on qualitative grounds from the options being taken forwards into Stage 3.

HR should engage further with communities in relation to the re-submission of the IOA and Stage 2 application to the CAA and not to seek to limit the scope or timescale for the Stage 2 resubmission.


TAG (Teddington Action Group)

Appendix A

CAA requirements for HR resubmission set out in its 26 January 2024 letter

'the CAA would expect to see evidence that HAL has completed the following steps:

- 1. HAL has re-engaged with the full cohort of its Stage 2 stakeholder group (including the stakeholders emailed on 7 July 2023) on its proposed methodology for short-listing options after the initial options appraisal;*
- 2. HAL has taken into account any views on the proposed short-listing methodology received from those stakeholders;*
- 3. HAL makes a fresh decision on a short-listing methodology to adopt; and*
- 4. HAL has applied the chosen short-listing methodology to its design options objectively, consistently and transparently.'*

From: [REDACTED]
Sent: 28 April 2024 19:39
To: DD - Airspace
Subject: Re Feedback - Airspace Modernisation Airspace Change Proposal

Follow Up Flag: Follow up
Flag Status: Flagged

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Dear [REDACTED],

Thank you for inviting me to your Airspace Modernisation meeting. Here is my feedback on the recent engagement session via computer. I had to leave the session early due to a prior engagement but was able to get most of what was said.

Firstly, I am an individual and not a representative of Walton-on-Thames. I noticed I was referred to as WOT but I am in no way a formal representative and this should be made clear. Walton-on-Thames should be represented by those in 'Office'. e.g. Local Government, Elmbridge, Surrey CC, MP's etc. People who are formally representing the area. Heathrow should be engaging with all those area's representatives where noise is a serious issue. Have you contacted any of this area's representatives?

Secondly, I guess my engagement has come from my serious concerns about this area's increase in air traffic noise since 2019 - I have lived in WOT since 1986 and it has become severe here. My questions about the noise go largely unanswered and I receive selective responses which in no way increases my knowledge and understanding. I remain very concerned and worried about the future.

The term stakeholder is misleading and counts for little, from my perspective, in view of how I have been treated with my questions and complaints over the last 4 years from noise@heathrow.

A 'zoom' link is in no way suitable for such an important meeting and topic - it makes questioning and trying to understand things almost impossible, especially for someone like myself with limited technical knowledge. Indeed, I find the whole topic very confusing and especially when I have been sent small and blurred images in the past.

Heathrow's track record on engagement in my experience is poor. Only two online sessions were offered limiting the engagement. The timescale given the significance of these changes to the health and wellbeing of millions is comparatively short. But the nature of this new opportunity to provide feedback was limiting in time and opportunity. The engagement I felt was curt. Face to face engagement is more open and gives a greater opportunity to question, seek reassurances and correct misconceptions.

I also find it concerning that the slides have a now familiar disclaimer. I feel that Heathrow are going to go ahead with their own agenda whatever feedback is given. In my opinion, stakeholder engagement is very poor and unless I am mistaken, those in 'office' in this area (Walton-on-Thames/Elmbridge) are not involved. If there is someone, I would really appreciate you letting me know who so that I can contact them to get a better understanding.

I realise this isn't your remit but just to say I do hope Heathrow understands that a great deal of damage is being done to our health and well-being in areas beset with multiple low planes daily and which Heathrow considers are beyond their responsibility.

Yours sincerely,

A large black rectangular redaction box covering the signature area.

From: [REDACTED]
Sent: 28 April 2024 23:29
To: DD - Airspace
Subject: Feedback on Further Engagement on Shortlisting of Stage 2 Options

Follow Up Flag: Follow up
Flag Status: Flagged

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Hello,

These comments are made on behalf of the Chiltern Society.

Foremost amongst our objectives has always been that routes are designed to minimise adverse noise impacts on the Chilterns, and particularly the AONB, so that, as far as possible, its tranquility is protected for the benefit of both visitors and residents. It is crucial, therefore, that these considerations are taken into account at every stage of the route design process.

We therefore supported the inclusion of the route evaluation metric and test of “are AONBs or National Parks overflowed significantly more than today?” as one element of doing this. We therefore would be very unhappy if a change in the route design methodology resulted in routes emerging **at the end of the overall route design process** which involved more overflying of AONBs, or had other demonstrable adverse impacts on tranquility.

We recognise also that the distance of such protected areas overflowed is a very crude measure, and a more fine-grained analysis of impacts and of the sensitivity of particular locations will also be necessary.

But we do worry that the removal of Test 4 from the Stage 2 shortlisting methodology is an early indication that the weight being given to the impact on AONBs will be eroded as the process progresses.

And we also question the logic of the first reason given for why the impacts are better assessed at Stage 3, namely that the adjustment of data once different climb and descent profiles are taken into account, will lead to the areas being overflowed being reduced. Surely such updating of data will also alter the number of people affected by the LOAEL and noise impact tests (Tests 1 and 2), theoretically leading to ultimately acceptable options being prematurely discounted at Stage 2 as a result of Tests 1 and 2.

However, we also note that the proposed change in methodology at Stage 2 will make minimal difference in practice, since, referring back to the material from the previous engagement session, it seems only one route option was discounted as a result of Test 4. ****We would be grateful to be told if we have misunderstood this, and there is more impact than this from the change, since that may affect our overall opinion.****

Taking all of the above into account, we do not object to the proposed change in Stage 2 methodology; but we do seek strengthened assurances about how impacts on AONBs will be assessed and taken into account at the crucial later stages of the design process. Although the “Stage 3 Commitment” (slides 12-14 of the consultation material) is welcome, it could be read more as a commitment to assessing the impacts on AONBs, rather than a commitment to then amend routes so as to mitigate those impacts.



From: [REDACTED]
To: [DD - Airspace](#); [REDACTED]
Subject: Re: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 29 April 2024 10:44:10
Attachments: [image001.png](#)
[Heathrow approach to shortlisting April 2024 FHSoc final.docx](#)

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Dear [REDACTED]

Attached is a response on behalf of the Forest Hill Society in Lewisham, London SE23.

best wishes

[REDACTED]
Forest Hill Society

Thank you for the opportunity to comment on the shortlisting of options approach. We respond for the Forest Hill Society, a community organisation run by residents in and around Forest Hill, in Lewisham London SE23.

In general we understand and support the approach being taken in the shortlisting methodology set out in "Our approach to the shortlisting of options". We have a few observations on the process.

1. Design Principles

We remain somewhat concerned that certain Design Principles may be being given a higher and earlier priority in this process than others. Tests 1,2 and 3 are important, but we would like to see indications alongside these of how the airport plans to approach shortlisting of routes that will:-

- Recognise the interactions of shortlisted departure and arrivals routes and their combined impacts on communities. For example, overflying the same communities with a departure route in one wind direction and an arrival route in the other wind direction. An example would be westerly wind arrivals flying over SE London one day, and easterly wind departures routed over the same community the next. The potential impact could be no respite for that community.
- Recognise the interactions of shortlisted departure and arrivals routes with current flight paths from other London airports. We are particularly concerned with interactions with London City Airport. It is well known to both airports that London City is not able to fly Continuous Climb or Ascent Operations within the current flight path designs over London. The problem is particularly acute in LCY's low, level flight easterly wind arrivals path over SE London which flies for many miles at circa 2,000 feet to stay underneath Heathrow westerly arrivals and easterly departures flightpaths.

Our concern is that in this process and in the absence of more timely and publicly transparent consultation between LHR and LCY there is potential for routes to be shortlisted that would clearly cause problems when the interactions between airport routes are considered in detail. That is to say they would continue to force other airport(s) and particularly LCY not to be able to implement Continuous Climb or Ascent Operations, both of which have potential to significantly reduce noise over communities.

There is also potential for routes to be excluded that might, if they had not been discontinued by Tests 1,2 and 3, have alleviated some of the existing route interaction problems.

2. Stage 3 Design

Looking forward to the next Stage, on Page 13 we see that:-

- "Stage 3 design will involve overlaying appropriate approaches to respite, night flights and noise efficient operational practices to ensure the impacts of flight paths are mitigated wherever possible"

We think that this should include in addition the specific consideration of the potential interaction of Heathrow shortlisted flight paths with those shortlisted by other airports, with the aim that Heathrow commits to early and transparent support to other airports (including but not restricted to London City) plans for Continuous Climb or Ascent Operations and their parallel need to also provide efficient operational practices and respite routes.

3. Status of Parks/Local Circumstances

Regarding Parks, we see that Richmond Park and possibly Bushey Park have been highlighted or allocated somewhat special status for flight path consideration. This may well be justified, but it is not clear to us how the process has led to this, what the criteria were that led to this decision, and how other overflowed London parks of significant size, we can think in our area – eg Dulwich Park, Burgess Park, Horniman Gardens, Honor Oak Park, have been considered and assessed for impacts by Heathrow alongside Richmond and Bushey for special mention or consideration. What overflight or noise contour or emissions criteria are being used in these assessments of 'local circumstances', for example? What Local Circumstances have been identified so far and how? How will these be then assessed at the next stage?

4. Feedback and Consultation Process

With the delay caused by the CAA decision on this process, we would like some assurance that time will not be made up by cutting time of engagement with community groups in the forthcoming stages. As we set out above, we believe that some of the most difficult and critical elements of the flight path design project have been deferred and put back into Stage 3, delaying crucial discussions and decisions about airport interactions and Continuous Climb or Ascent Operations for all London airports and their communities. We would hope for extensive discussion and consultation with community groups which have engaged in the details of this project so far, before subsequently shortlisted proposals are put to wider public consultation.


Forest Hill Society

From: [REDACTED]
Sent: 29 April 2024 12:23
To: DD - Airspace
Cc: [REDACTED]
Subject: Heathrow Airspace Modernisation - Consultation Response
Attachments: 290424 - Heathrow Airspace Modernisation Consultation Response.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

You don't often get email from [REDACTED] [learn why this is important](#)

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Dear [REDACTED]

Thank you for contacting us seeking feedback regarding Heathrow's proposed approach for the shortlisting of options at Stage 2.

As outlined in the attached letter, we do not support the proposed shortlisting methodology. The council considers that Heathrow's proposed change to the methodology for shortlisting options at Stage 2 does not provide adequate opportunity for stakeholders to engage on the potential impacts of proposed options before shortlisting of options for further review at Stage 3.

Urgent action is needed to clean up the air we breathe and reduce the impact of transport on climate change. The council has previously proposed that any redesign of airspace principles should not result in any more overflying of Islington's residents. Furthermore, we believe that the response to the growing demand for air travel should be to manage and reduce it and for more sustainable aviation to be achieved.

I look forward to hearing from you in relation to the wider feedback from this engagement and about how this feedback has influenced the shortlisting approach.

Regards

[REDACTED]

London Borough of Islington

[REDACTED]

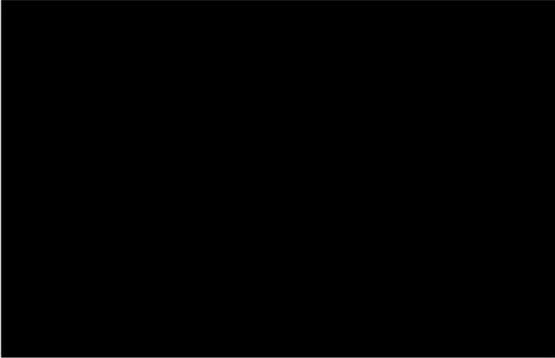
Town Hall
Upper Street
London, N1 2UD

[REDACTED]

The information you have provided will be used for the purposes of assisting you with casework or an enquiry. All data is held securely and will be processed in accordance with the Data Protection Act 2018 and the UK General Data Protection Regulation. In order to satisfy your request, we will share your name and contact details and your request with other services in the council so that a response can be made to you. If the enquiry relates to casework involving an external organisation, such as a housing provider, we will share your data with them for the purposes of processing your enquiry. This will always be limited to what is required for to respond to your query. We will retain your original request and all associated information gathered to process and respond to your request. For further details please visit our privacy notice: [Privacy notice | Islington Council](#).



This e-mail is intended for the addressee only. If you have received it in error, please contact the sender and delete the material from your computer. Please be aware that information in this email may be confidential, legally privileged and/or copyright protected.



Resources
107
Town Hall
London N1 2UD



Via Email: airspace@heathrow.com

Monday 29th April 2024

Dear 

Re: Heathrow Airspace Modernisation: Airspace Change Proposal – further engagement on shortlisting of Stage 2 options consultation

Thank you for the opportunity to respond to the public consultation regarding Heathrow’s proposed approach for the shortlisting of options at Stage 2. This is Islington Council’s response and sets out our stance regarding the airspace change proposals.

The purpose of this consultation is to respond to the Civil Aviation Authority’s (CAAs) requirement for Heathrow to undertake further engagement on the proposed shortlisting methodology. The CAA considered two changes made by Heathrow to the Stage 2 shortlisting methodology in July 2023 constituted “a different approach” to the one previously engaged on in June 2023.

We understand the proposed shortlisting methodology consists of removing two tests from Stage 2 and including the tests at Stage 3. The reasoning provided is that the potential overflights and/or impacts of the options on AONBs or “local circumstances” will be better identified and addressed at Stage 3. We note the two tests proposed to be removed from Stage 2 include:

- Test 4 – are AONBs or National Parks overflowed significantly more than today?
- Test 5 – are “local circumstances” impacted significantly more than today?

The council considers that Heathrow’s proposed change to the methodology for shortlisting options at Stage 2 does not provide adequate opportunity for stakeholders to engage on the potential impacts of proposed options before shortlisting of options for further review at Stage 3. This could result in proposed flight path options that may have a harmful impact on our residents being taken forward to Stage 3 rather than discounted at Stage 2. We therefore oppose the proposed shortlisting methodology.

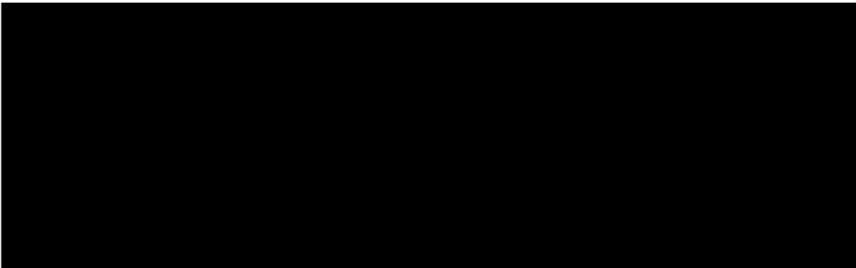
While the focus of this consultation is on the proposed shortlisting methodology, the council’s position on Heathrow’s airspace change proposals remains consistent with our previous

position. We would like any redesign of airspace principles to not result in any more overflying of Islington's residents and our preference is for options that result in the least emissions.

Urgent action is needed to clean up the air we breathe and reduce the impact of transport on climate change. Islington Council believes that the response to the growing demand for air travel should be to manage and reduce it and for more sustainable aviation to be achieved. We support the comprehensive approach to reduce the impacts of current air traffic by replacing shorter air trips within the UK and to Europe with more efficient, affordable and sustainable modes of transport such as rail and bus services. We oppose any proposed increases or changes to flights at Heathrow that would have a negative impact on our residents.

Islington's policy as reflected in our Transport Strategy is for a London wide and national approach to aviation and London's airports to reduce carbon emissions from flights over London and journeys to and from London's airports and is an important component of the council's commitment to making Islington net zero carbon by 2030.

Yours sincerely,



Islington Council

If you would like this document in large print or Braille, audiotape, easy read or in another language, please telephone 020 7527 2000.

If you would like this document in large print or Braille, audiotape or in another language, please telephone 020 7527 2000.

From: [REDACTED]
Sent: 29 April 2024 12:37
To: DD - Airspace
Subject: HACAN feedback on further engagement session
Attachments: 260424 HACAN feedback to Heathrow regarding Further Engagement on Shortlisting of Stage 2 Options for their Airspace Change Proposal.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Hi,

Please find attached the feedback from HACAN on the further engagement sessions regarding the ACP shortlisting of options for Stage 2.

Kind regards

[REDACTED]
[REDACTED]
[REDACTED]

www.hacan.org.uk





HACAN feedback to Heathrow regarding Further Engagement on Shortlisting of Stage 2 Options for their Airspace Change Proposal.

26th April 2024

The further engagement sessions were useful in finally provided some context behind the CAA's refusal to allow Heathrow to pass the Stage 2 gateway.

However, it is still not clear why given the relative minor changes being proposed it has taken 6 months to get to this point of further engagement.

- Will an explanation be provided alongside the submission of the documents?

It seems inequitable for Heathrow and the CAA to take months to agree the next steps yet expect stakeholders to respond to proposed changes in a few weeks.

HACAN needs to see more information regarding route selection. Why were some routes retained and others not, particularly in relation to frequency of overflight and changes to noise exposure? We feel that this part of the process needs to be understandable from the viewpoint of local communities and wholly transparent.

Heathrow has outlined a set of criteria used to decide which route proposals proceed. It has then failed to apply the criteria due to reasons that have not been disclosed. If Heathrow can choose to ignore their own criteria without any explanation, then communities will have no trust in the process.

HACAN also believe that the way that Heathrow apply their methodology to the design options should be shared before the documentation is re-submitted to the CAA. This would enable further stakeholder feedback and help ensure consistency and transparency.

The further engagement session did not make clear why Heathrow believe it is more appropriate to remove tests 4 and 5 at Stage 2 and push them to Stage 3. The document referenced in the presentation we received does not appear to contain any more detailed explanation. We would be happy to discuss this point further.

Surely some options taken forward with them removed may not have been taken forward had they been included at this point. It would aide our understanding of the changes if this were made clear including a summary of any revised route assessments. It is vital to understand clearly what impact this deferral of tests has had on routes. We would welcome clarity and sight of the impact of any new decisions around the shortlisting methodology as soon as possible.

- Can Heathrow please share the relevant document where explanation is given as to the reason for this?
- Will Heathrow make clear before the submission of additional documentation the range of options at Stage 2 Gateway that shows differences between shortlisted routes (with and without tests 4 and 5)? This would provide an opportunity for stakeholders to feedback on the proposed changes.

The engagement session included a discussion about whether change scenarios would be applicable. HACAN would like to better understand what this impact would have on proposed routes at Stage 3



and whether it may increase the preference for greater intensification of existing routes over the introduction of new routes.

- Can 'local circumstance' mean more than just green space - for example a school, place of worship or community building?
- Will Heathrow be producing a summary of 'local circumstances' that they believe merit special consideration?

HACAN support calls made in the engagement session we attended on 16th April for greater clarity around the definition Heathrow have applied to 'significantly' when making judgements about the impact of proposed routes.

From: [REDACTED]
Sent: 29 April 2024 14:32
To: DD - Airspace
Cc: [REDACTED]
Subject: RHC Response to Heathrow Consultation 29 April
Attachments: RHC Response to Heathrow Consultation April 29 Final.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Dear Airspace Team

Please find attached a response from Richmond Heathrow Campaign to Heathrow's consultation on Stage 2 CAP 1616.

We understand Heathrow seeks responses by today and we have done what we can in the limited time available to present our response in the clearest way.

We would be happy to clarify any points.

Yours sincerely

[REDACTED]

[REDACTED] Richmond Heathrow Campaign

Richmond Heathrow Campaign represents three amenity groups in the London Borough of Richmond upon Thames: The Richmond Society, The Friends of Richmond Green, and the Kew Society, which together have over 2000 members.

Richmond Heathrow Campaign (RHC)

CAP 1616 Stage 2 Initial Options Appraisal - Heathrow Response to Consultation by Heathrow 29 April 2024

1. Richmond Heathrow Campaign represents three amenity groups in the London Borough of Richmond upon Thames: The Richmond Society, The Friends of Richmond Green, and the Kew Society, which together have over 2000 members.
2. We have been asked by Heathrow to respond to Heathrow's consultation on its submission to the CAA that aims to resolve issues that are said to prevent the CAA allowing Heathrow to pass through the CAP 1616 Gateway from Stage 2 to Stage 3. We note the specific issues identified by Heathrow in its workshops on 16th and 17th April 2024 and that Heathrow seeks responses by Monday 29 April.
3. We are aware that community groups have wide fundamental concerns with the Initial Options short-listing decisions as recorded in Heathrow's original submission to the CAA on or about 31 July 2023. We are also aware that community groups say the time to respond to the current consultation is too short. RHC has seen and discussed with some of the other community groups their draft responses to the consultation and broadly speaking we support the conclusions and requests for further justification by Heathrow of its submission and the need for more time to respond.
4. RHC's approach is to focus on Heathrow's airspace modelling and in particular the inputs to the model. RHC's assessment is that there is not sufficient input information available, and in some cases where information is available, it is open to question. We have sought to resolve the modelling input dilemma with a request for information dated 24 April and an addendum dated 25 April 2024 and we voiced our concerns in an email letter to Heathrow dated on 18 July 2022 in which we sought to head off the issues we now face. We also raised a seeming discrepancy in an email letter to Heathrow dated 29 October 2023.
5. The letters of 24 and 25 April 2024 sought modelling input/output information as follows:

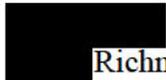
24 April email:

- List of Options (**Annex A**)
- Option: Departures to East, Southern runway, 09R, PBN Day (**Annex B revised**)
- Do Nothing Base Case: Departures, to East, Southern runway, 09R, Day (**Annex C revised**)
- Noise Contour and Population Discrepancies (**Annex D**)
- Correspondence with Heathrow ref Annex D (**Annex E**)

25 April email:

- ATM Frequencies (traffic volumes) (**Annexes F & G**)
- Angles of ascent and descent (**Annex H revised**)
- Fleet composition (**Annex I**)
- Population (**Annex J**)
- Correspondence on modelling to Heathrow on 18 July 2022 and Heathrow's response on 3 October 2022 (**Annex K**)

6. We include here the material emailed to Heathrow on 24 and 25 April so that all the issues raised are contained in this one document. The two brief covering letters are denoted respectively Annex 1 and 2 and then the Annexes to both submissions (A to K) are attached. There are a few revisions and where this is the case the Annex is marked revised. We are now including further issues in Annexes L to M as follows:
 - Single flight path contours and model optimisation (**Annex L**)
 - PBN (**Annex M**)
7. Many of the issues raised are to do with modelling input and we believe information on these matters is essential for us to assess the Initial Options and judge the reasonableness of the Output at the end of Stage 2.
8. We presume this consultation response by RHC will be posted to the CAA portal but if not then we would appreciate Heathrow advising us so. We have raised a number of questions and look forward to responses on these from Heathrow. We are keen to work with Heathrow on reducing the impact of aircraft noise and pollution on peoples' health and well being and we recognise the interests of Heathrow and other interested parties.


Richmond Heathrow Campaign
29 April 2024

From: [REDACTED]
Sent: 30 April 2024 10:26
To: DD - Airspace
Subject: RE: EXT: Heathrow Airspace Modernisation: Feedback Period Extension

Follow Up Flag: Follow up
Flag Status: Flagged

Classification: Internal

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Hi [REDACTED]
Farnborough Airport accepts your approach for shortlisting of options in Stage 2.

Regards,

[REDACTED]
[REDACTED] | www.farnboroughairport.com

Help us to secure the long-term future of Farnborough Airport and its local region by providing a supportive comment on our planning application on the [Rushmoor Borough Council website](#). One Airport. One Town. Our Future.



Our privacy notice can be accessed at www.farnboroughairport.com/legal/privacy-notice

This communication and the information it contains, is intended only for the person(s) and/or organisation(s) to whom it is addressed and may contain information that is confidential, legally privileged and protected by law. If the reader of this message is not the intended recipient or an authorised representative, you are hereby notified that any dissemination of this communication is strictly prohibited. If you have received this communication in error, please notify our DPO immediately by forwarding the email to dpo@farnboroughairport.com and delete the message and attachments from your system.

From: [REDACTED]
Sent: 30 April 2024 11:15
To: DD - Airspace
Subject: RE: [EXTERNAL] Heathrow Airspace Modernisation: Feedback Period Extension

Follow Up Flag: Follow up
Flag Status: Flagged

Classification: Internal

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Dear [REDACTED]

Many thanks for contacting Mole Valley District Council.

The Council understand the approach being taken by Heathrow regarding Tests 4 and 5 and refocussing the assessment of these to Stage 3. MVDC welcome a more focussed consideration of the relevant National Landscapes and Richmond Park at Stage 3, but would ask that the airport also make an allowance to consider Natural England's recent consideration of expanding the Surrey Hills National Landscape boundary in its tranquillity and impact assessments, which were published for consultation in March 2023 ([Surrey Hills Area of Outstanding Natural Beauty Boundary Variation Project - Defra - Citizen Space](#)).

Additional NL areas which were consulted on can be viewed on the DEFRA website and it is anticipated that the outcomes of that consultation will be published within the next month or so.

Best wishes and many thanks

[REDACTED]

[REDACTED]

Mole Valley District Council

[REDACTED]

From: [REDACTED]
Sent: 01 May 2024 13:32
To: DD - Airspace
Cc: [REDACTED]
Subject: NERL feedback

Follow Up Flag: Follow up
Flag Status: Flagged

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

NERL would like to thank Heathrow for the opportunity to respond to their proposed Approach to Short Listing of Options methodology amendment. It is considered that this amendment will have minimal impact to NERL. NERL and Heathrow airport have been working closely throughout and will continue to do so as the FASI programme progresses.

Kind regards

[REDACTED]

NATS

[REDACTED]

[REDACTED]

NATS Corporate & Technical Centre,
4000 Parkway,
Whiteley, Fareham,
Hants, PO15 7FL.
www.nats.co.uk



NATS PRIVATE

NATS Internal

If you are not the intended recipient, please notify our Help Desk at Email.Information.Solutions@nats.co.uk immediately. You should not copy or use this email or attachment(s) for any purpose nor disclose their contents to

any other person.

NATS computer systems may be monitored and communications carried on them recorded, to secure the effective operation of the system.

Please note that neither NATS nor the sender accepts any responsibility for viruses or any losses caused as a result of viruses and it is your responsibility to scan or otherwise check this email and any attachments.

NATS means NATS (En Route) plc (company number: 4129273), NATS (Services) Ltd (company number 4129270), NATSNAV Ltd (company number: 4164590) or NATS Ltd (company number 3155567) or NATS Holdings Ltd (company number 4138218). All companies are registered in England and their registered office is at 4000 Parkway, Whiteley, Fareham, Hampshire, PO15 7FL.

From: [REDACTED]
To: [DD - Airspace](#)
Subject: Comments on the Stage 2 re-consultation.
Date: 07 May 2024 14:37:31

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Firstly many thanks for giving me a little more time to make a submission.

Submission on Airspace **Modernisation: Airspace Change Proposal**, Further Engagement on Shortlisting of Stage 2 Options

It is difficult to make comment on the shortlisting of options without straying into the design of the options available/selected but I will constrain what I have to say.

The CAA were right not to pass Heathrow's proposals through Gateway two for the following reason;

- The removal of Option I to runway 27R without the opportunity for discussion with stakeholders is a breach of the process.
- Discounting options around overflying AONB and local circumstance at this stage is premature, panders to minority lobby groups and removes an opportunity for communities to make representations on the merits of overflying parks rather than people in their homes. This would be grossly unfair.

Reviewing the arrivals options I see that aircraft will be making tight turns relatively close to the airport. Turning will increase aircraft noise and the aircraft will be relatively low which is likely to wake people who have not previously been overflown. This element of the option is reminiscent of Independent Parallel Approach which I thought HAL had scrapped. I would be pleased to receive confirmation that I am correct.

[REDACTED]

Views or opinions expressed in this message are those of the individual sender; Sunninghill & Ascot Parish Council accept no liability for any such views expressed except where the sender specifically states them to be those of the Council. Please let me know if there is any other information you need.

From: [REDACTED]
To: [RD - Airspace](#)
Subject: Feedback to your approach to the shortlisting of options in Stage 2
Date: 09 May 2024 15:07:12
Attachments: [image749502.png](#)
[image875460.png](#)
[image202617.png](#)
[image724970.png](#)
[image011589.png](#)
[image569349.png](#)
[image158000.png](#)
[image950082.png](#)
[image585389.png](#)
[image207844.png](#)
[image725054.png](#)

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Good afternoon.

Having considered your proposed approach to the shortlisting of options in Stage 2, Southampton Airport has no comments to add.

Regards

[REDACTED]



The block contains the Southampton Airport logo (SOU) and contact details. It includes a phone icon, an email icon, and the website www.southamptonairport.com. The address is Southampton International Airport Ltd, Wide Lane, Southampton, SO18 2NL. Below the contact information are two British Safety Council award logos: 'International Safety Awards 2022 Distinction' and 'Five Star Occupational Health and Safety Audit 2022'.

CONFIDENTIAL NOTICE: The information contained in this email and accompanying data are intended only for the person or entity to which it is addressed and may contain confidential and / or privileged material. If you are not the intended recipient of this email, the use of this information or any disclosure, copying or distribution is prohibited and may be unlawful. If you received this in error, please contact the sender and delete all copies of this message and attachments. Please note that Southampton International Airport Limited monitors incoming and outgoing mail for compliance with its Information Security policy. This includes scanning emails for computer viruses. Southampton International Airport Limited is a private limited company registered in England under Company Number 2431858, with the Registered Office at Southampton, Hampshire, SO18 2NL. COMPANY PARTICULARS: For information about Southampton International Airport, please visit www.southamptonairport.com

From: [REDACTED]
To: [DD - Airspace](#)
Cc: [REDACTED]
Subject: Heathrow Airspace Modernisation; Further Stage 2 re-engagement, TAG Supplementary Submission
Date: 10 May 2024 10:49:30
Attachments: [Heathrow Airspace Modernisation. Re-engagement TAG supplementary submission. 10 May 2024.docx](#)
[Heathrow Airspace Modernisation. Re-engagement TAG supplementary submission. 10 May 2024.pdf](#)

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

FAO [REDACTED]

Dear [REDACTED]

Please find attached TAG's Supplementary Submission in relation to the above matter.

Kind regards

[REDACTED]
on behalf of TAG

Heathrow Airspace Modernisation; Airspace Change Proposal Further Engagement on Shortlisting of Stage 2 Options

TAG response to Heathrow's re-engagement proposals – Supplementary Submission

10 May 2024

Introduction

We refer to HR Airspace's extension of the deadline for Stage 2 re-engagement responses to 13 May 2024 and its emails to TAG and [REDACTED] respectively dated 2 and 3 May. Both emails refer to HR's interpretation of the basis for re-engagement in advance of the planned resubmission of HR's Stage 2 application to the CAA.

We have reviewed this correspondence and we believe TAG's original submission stands correct in all respects. We provide in this Supplementary Submission our reasoning together with additional considerations that HR and the CAA should take into account in relation to any review of its Stage 2 work.

Analysis

As described in CAP 1616, Stage 2 is part of a progressive sign off process for HR's Airspace Change Proposals. So far only Stage 1, the Statement of Need and the Design Principles, has been signed off by the CAA. On this basis once the resubmission is made the CAA must consider all of HR's Stage 2 activities, including the production of CLOOs (and their criteria), the DPE, the IOA as well as HR's proposed approach to Stage 3.

We have highlighted a wide range of serious flaws relating to the earlier Stage 2 work in our initial submission dated 28 April 2024, including the use of non-ANG compliant DPs, non-recognised noise metrics as a proxy for identifying flight paths and assessing noise health and annoyance impacts, HR's failure to apply all of the DPs the airport itself has adopted and the unjustified dismissal of Do Minimum options in the IOA.

On this basis we consider it is not meaningful, appropriate or potentially legally correct to re-engage on an appraisal methodology for shortlisting options **after an IOA**, which itself is a key and integral component of Stage 2 and which has been conducted on a fundamentally flawed basis. In other words, HR's Stage 2 re-submission must be considered by the CAA in its entirety, not on a piecemeal or limited basis.

We would highlight that the legal basis for undertaking option appraisals in relation to Airspace Change is set out in detail in ANG 17, CAP 1616 (in particular Appendix E) and the Treasury Green Book (which is incorporated into CAP1616). The limited re-engagement requirements as interpreted by HR in its emails and April presentation material do not conform to these legal requirements. It should be noted this framework is also binding on the CAA in deciding whether to approve HR's re-application for Stage 2 approval.

In particular the Treasury Green Book (incorporated in CAP 1616) specifies in detail the need and requirements for a Do Minimum case (or cases) to be worked up and any changes from this baseline to be identified, assessed and justified. The Green Book envisages situations where international legal compliance and new technologies may affect the construction of Do Minimum scenarios, but

this does not obviate the need for consideration of Do Minimum scenarios. HR has not applied due consideration of these requirements in its Stage 2 work to date and this should be rectified. The need for such an approach in lower airspace is also underpinned in ANG.

Extract from Treasury Green Book – an example

Chapter 4: Generating Options and Long-list Appraisal

Figure 8. The Options Framework-Filter summary matrix

Business As Usual (BAU)	Project	Do Minimum	Intermediate Option	Intermediate Option	Do Maximum
1.0 All Cities.	1. Service scope – as outlined in strategic case	1.1 Linking Cities A and B.	1.2. Linking Cities A, B and C.	1.3 Linking Cities A, B, C and D.	1.4 Linking All Cities, A, B, C, D and E.
Carried forward		Carried forward	Preferred Way Forward	Carried forward	Discounted
2.0 Current services: for road maintenance etc.	2. Service Solution – in relation to the preferred scope	2.1 Core: Refurbish existing highways.	2.2 Core & Desirable: Combination of refurbish & new highways.	2.3 Core & Desirable: Completely new highways.	2.4 Core, Desirable and Optional: New highway & facilities.
Carried forward		Carried forward	Preferred Way Forward	Carried forward	Discount
3.0 Current arrangements.	3. Service Delivery – in relation to preferred scope and solution	3.1 Local Contractor.	3.2 National Contractor.	3.3 International Contractor.	
Carried forward		Discount	Carried forward	Preferred Way Forward	
	4. Implementation – in relation to preferred scope, solution and method of service delivery	4.1 Phased over 3 years.	4.2 Phased over 2 years.	4.3 Big bang over 1 year.	
		Carried forward	Preferred Way Forward	Discount	
	5. Funding – in relation to preferred scope, solution, method of service delivery and implementation	5.1. Public funding.	5.2 Mixed public and private funding.	5.3 Private finance – service charge.	5.4 Private finance – toll.
		Discount	Preferred Way Forward	Discount	Discount

Essential workstreams – to be referred to in Stage 2 and undertaken in Stage 3

As part of Green Book specified option appraisal methodology, it is also necessary to carry out a number of other workstreams that we believe have not been undertaken to date.

This includes a risk assessment, involving identification of risks and assessing their likelihood and impact. This is especially important having regard to HR's experience of the 2014 trials (involving a very limited number of routes but generating an enormous adverse reaction and their early suspension), the US experience of NextGen roll out and ICAO's research paper on non-acoustic noise impacts (identifying change and trust in public authorities as key factors).

On a similar basis HR's Stage 2 should also be addressing the need for Sensitivity Analysis reflecting the impact of change and the absence of health and annoyance research on flight path concentration. The CAA presented to the HCNF a paper on the effect of splitting a single PBN route into two, which over 10 years released £640million in terms of monetised health benefits.

The CAA has also recently published in CAP 2971 advice on 'Exploring The Concept of Fair and Equitable Distribution to **Minimise Social Unacceptability of Airspace Design Options**' This CAP document was prepared in relation to Gatwick, but the issues are even more significant in relation to Heathrow given the density of population in its hinterland and the number of ATMs it hosts. HR should commit to undertaking similar independent research as a matter of urgency.

Moving into Stage 3 (but acknowledging the need in Stage2) it will also be necessary to factor into HR's Option Appraisals 'Optimum Bias', i.e., the danger of overstating potential benefits in consideration of any future evaluation involving change options. This is particularly important in the light of the US Government Audit Office report on the roll out of PBN in the US, which identified vast overstatement of potential benefits in the NextGen programme.

Next Steps

The Next Steps set out in our 28 April 2024 initial submission all apply.

In considering the Stage 2 re-submission HR and the CAA should consider the whole suite of documents, reflecting the significance of approving the application as a key part of the ACP process.

This should include reconsideration of the DPE and IOA, with as a minimum an assessment of all CLOOs against all the adopted DPs, highlighting where red or amber flags might apply.

HR and the CAA should ensure the Stage 2 re-submission is fully compliant with ANG, CAP 1616 and the Treasury Green Book. The document should also include a full and unambiguous commitment to work up 'Do Minimum' scenarios on a bona fide basis in Stage 3. It should also spell out how it will address a risk assessment and sensitivity analysis (particularly in relation to environmental considerations), as well as Optimum Bias.

HR should commission an independent study on a comparable basis to CAP 2971 as a matter of urgency – in HR's case this should identify and research the additional risks associated with the introduction of highly concentrated flight paths over densely populated residential areas.

HR's NACF (on behalf of itself and CISHA) should have oversight of this work, including the ability to appoint on a funded basis arm's length independent specialist advice.


Teddington Action Group (TAG)

10 May 2024

From: [REDACTED]
To: [DD - Airspace](#)
Subject: Further feedback on HAL Stage 2 Consultation (Ealing)
Date: 10 May 2024 16:53:49
Attachments: [image001.png](#)
[0.png](#)
[Further Consultation Comments on HAL Stage 2 Engagement 10.05.24.pdf](#)
Importance: High

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Dear Colleagues in Airspace team,

Please find attached further feedback as per your consultation request on the above.

Best Regards

[REDACTED]
[REDACTED]
[London Borough of Ealing, 14-16 Uxbridge Road, London W5 2HL](#)
[REDACTED]



Please consider the environment before printing this email.

The content of this email and any attachment transmitted within are confidential and may be privileged. If you are not the intended recipient and have received this email in error, please notify the sender and delete this message along with any attachments immediately. Unauthorised usage, disclosure, copying or forwarding of this email, its content and/or any attachments is strictly forbidden.

This footnote also confirms that this email message has been swept by Mimecast for the presence of computer viruses.

www.mimecast.com

Ealing Council
Perceval House
14-16 Uxbridge Road
London W5 2HL

E-mail: airspace@heathrow.com



10th May 2024

Re. HAL's Further Engagement on Shortlisting of Stage 2 Options Feedback

Dear HAL,

Following our original response to the Stage 2 consultation in December 2022, certain factors have come to light that might have been better dealt with and with greater transparency and clarity through better engagement. These are set out as follows.

Modelling exercise at Stage 2 provided no information on:

1. Flight frequency data input into the model;
2. Vertical heights of aircraft and gradient of ascent and decent;
3. Fleet mix, passenger loads, occupancy rates and noise at source;
4. Population exposed to noise from Heathrow operations.

In our view, it would not be out of kilter to model and assess 40 flight paths proposed (16 arrival flight paths and 24 departure flight paths) against 30 flight paths currently, with ending of the Cranford Agreement. Whilst HAL may be committed to doing quantitative analysis at Stage 3, we feel HAL would be better served through engagement feedback if both model inputs and outputs are presented as part of quantitative analysis at Stage 2. It's not as if HAL does not have access to such flight data to carry out such quantitative analysis, otherwise proposal risks monetisation of impact in accordance with Appendix E of CAP1616, not to mention commensurate level of protection that might be warranted due to potential increase in noise as a direct result of varying throughput through PBN (efficiency)/additional air transport movements (ATMs).

With increased number of flight paths, it's equally important to recognise the potential impact of increased noise due to increased flight frequency, not just an increase in averaged noise (L_{DEN} , L_{night}) but also how noise is experienced (bearing cognisance to noise-dose relationship) in context of event noise/short-term noise using appropriate metrics such as maximum noise level (L_{Amax}) that are relevant to sleep disturbance and associated health condition such as myocardial infarction, stroke and mental health etc. Therefore, quantitative analysis and indeed the model inputs such as aircraft vertical height and gradients of ascent and decent are important considerations when doing cost benefit analysis as part of options appraisal in a consistent way (para 135 of CAP1616). In addition to potential impact of additional flight paths/flight frequency on existing sensitive receptors, quantitative analysis could have demonstrably shed further light, albeit a numerical exercise, during stage 2 consultation engagement, how 'do nothing', or 'do minimum' fare against each of the options. As a LA, we're mindful of direct consequences and constraints of airspace change upon spatial planning. CAP1616 reflects (see E21, Appendix E) on this more eloquently by stating *"In such cases, in addition to the 'do nothing' baseline, the change sponsor must set out its informed view of the future and the minimum changes required to address the issues identified – a 'do minimum' option. Assessing the 'do minimum' option against a 'do nothing' baseline allows communities to understand the effect of the 'do minimum' in relation to current circumstances."*

Also, at no time during stage 2 community engagement it was neither apparent nor communicated, or indeed understood that how is it possible to achieve better noise impact and quality of life resulting in reduction in number of population above partial LOAEL (day-time, $L_{Aeq, 16-hour}$) of 50,100, a reduction of 4,500 (night-time, $L_{Aeq, 8-hour}$), a reduction of 238, 800 population experiencing at least 1 event of N65 (day-time) and a reduction of 97,600 population experiencing at least 1 event of N60 (night-time), as this sort of noise reduction is not feasible without causing 'noise displacement' elsewhere through concentration or otherwise. Furthermore, because the above population exposure reduction is based on PBN arrivals between 04:30-06:00, which appears not representative of how PBN arrivals might shape our environment in reality once adopted and therefore, we have concerns at the lack of information detail and therefore, confidence in due process of engagement stage 2. Similarly, for PBN departures, positioning of different SID combinations have been assessed against 'do nothing' baseline without considering departure runway throughput or airport capacity, which is also a misrepresentation.

Whilst proposed shortlisting methodology, dated March 2024, removes prior tests 4 & 5, we seek clarity on two issues, (1) what is definition of 'significantly more people' in tests 1 & 2 and what is definition of 'significantly higher' in test 3?; (2) Assuming test 1 carries higher

weighting than test 2, why would people exposed to partial LOAEL carry more weight than people experiencing noise events?

We acknowledge Heathrow's specific commitment to Richmond Park and other 'local circumstances', including assessment at stage 3, however, can Heathrow clarify and confirm its commitment to similar parks such as Walpole Park, Lammas Park in London Borough of Ealing, such that your (HAL) engagement process or actions do not discriminate between different places of tranquillity in one borough against the other?

[REDACTED]

[REDACTED]

From: [REDACTED]
To: [REDACTED]
Cc: [REDACTED]
Subject: Letter from R [REDACTED] (Case Ref: GH41423)
Date: 12 May 2024 20:12:17
Attachments: [Letter from \[REDACTED\] 12 May 2024.pdf](#)

You don't often get email from [REDACTED] [Learn why this is important](#)

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Dear [REDACTED]

Please see the attached letter with feedback from [REDACTED] regarding airspace modernisation at Heathrow Airport, for the attention of [REDACTED]

Kind regards,

[REDACTED]
Member of Parliament for Chelsea and Fulham | Minister of State for Trade and Minister for London
House of Commons, London, SW1A 0AA | [REDACTED]



For information on how this office processes data, please see the Privacy Notice [here](#).



[REDACTED]
Heathrow Airport Limited
The Compass Centre
Nelson Road, Hounslow
Middlesex, TW6 2GW

12 May 2024

Airspace Modernisation at Heathrow Airport

Dear [REDACTED]

I am writing to you today following Heathrow's letter to me dated 30 April 2024, regarding the current Heathrow airspace modernisation plans.

Thank you for taking the time to inform me that Heathrow received notification from the Civil Aviation Authority (CAA) that the submission did not meet one of the requirements of the Stage 2 Gateway, and for inviting me to provide feedback on the proposed change outlined in the letter.

As I understand, the plans are looking at making changes to flight paths. Therefore, as the Member of Parliament for Chelsea & Fulham, I would urge there is no negative impact on local residents.

I would also like to take this opportunity to reiterate my longstanding position on the expansion of Heathrow Airport and night flights. I am against the expansion of Heathrow Airport. I believe that proposals for the expansion of Heathrow Airport, such as a third runway, will have a negative impact on constituents in Chelsea and Fulham.

Furthermore, I am also against night flights. They are a wholly unnecessary strain on the liveability of London, including Chelsea and Fulham and are indefensible due to the negative effect they have on thousands of people's sleep. I have always opposed night flights and have campaigned against them across successive Governments.

Thank you for taking the time to consider my feedback.

Yours sincerely,

[REDACTED]
Member of Parliament for Chelsea & Fulham
[REDACTED]

From: [REDACTED]
To: [DD - Airspace](#)
Cc: [REDACTED]
Subject: Heathrow Airspace Modernisation Additional Stakeholder Engagement Stage 2 - feedback from the Friends of Richmond Park
Date: 13 May 2024 09:04:20
Attachments: [Heathrow Airspace Shortlisting methodology FRP feedback May 2024.pdf](#)

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

I attach the response from The Friends of Richmond Park.

[REDACTED], The Friends of Richmond Park
www.frp.org.uk



AIRSPACE MODERNISATION: AIRSPACE CHANGE PROPOSAL
FURTHER ENGAGEMENT ON SHORTLISTING OF STAGE 2 OPTIONS – MARCH 2024
FRIENDS OF RICHMOND PARK (FRP) FEEDBACK

A. Stage 2 – Shortlisting of Options

We are very disappointed with Heathrow’s proposed shortlisting methodology (“Proposed Shortlisting Methodology”) as set out in its slide deck entitled “*Further Engagement on Shortlisting of Stage 2 Options*” (“Heathrow Slides”), dated March 2024 and presented at virtual stakeholder sessions on 16 and 17 April 2024.

The sole change, from the shortlisting methodology set out in Heathrow’s slides for the “*Step 2B Engagement on Initial Options Appraisal, June/July 2023*” (“Pre-submission IOA Slides”) to the current Proposed Shortlisting Methodology, is the omission of Tests 4 and 5, the two tests relating to Tranquillity.

As a result of the change, Tranquillity, alone out of the five mandatory environmental appraisal factors, is completely ignored in the shortlisting exercise and the single local circumstance identified is now not considered at Stage 2B.

- 1. Heathrow’s Proposed Shortlisting Methodology fails to appraise the options using metrics which address all the statutory factors and relevant government policy – specifically, Tranquillity impacts are ignored**

Heathrow say that there is no methodology laid down in the CAA’s CAP1616 guidance for shortlisting options.

However, Heathrow does not have a completely free hand.

The Proposed Shortlisting Methodology does not comply with Government guidance or CAP1616.

1.1 The shortlisting process is an integral part of the IOA. The IOA must be modelled on the factors that the CAA by law is required to consider (CAP1616, para 135). These include the environmental impacts of the various options (CAP1616, B1), assessed against five factors, namely Noise, CO² Emissions, Air Quality, Tranquillity and Biodiversity.

CAP1616 sets out the purpose of the IOA and, in that context, describes how the collected data is to be used and indicates the parameters for an acceptable shortlisting methodology:

- Para 146 describes how the appraisals, beginning with the IOA, build an evidence base for decision-making. CAP1616 does not intend that data relating to each of the

mandatory factors be duly assembled as part of the available evidence base, only for the evidence relating to just one of those factors to be ignored in the IOA decision.

- Para E1 summarises the appraisal activity as being one which “delivers clear and, where possible, comparable evidence about a range of factors, so that...different airspace design options can be compared and assessed on the basis of those factors”; note that E1 refers to a comparison/assessment exercise based on “those factors”, being all the mandatory factors, and not merely a selection of those factors.
- Para E13 specifically encourages a change sponsor to develop its shortlist options using as much analysis as reasonably possible; it is not consistent with this guidance to deliberately ignore quantitative data which evidences a significant impact relating to a mandatory factor, particularly where the necessary data has been collected and the analysis conducted.

In summary, the Proposed Shortlisting Methodology does not comply with CAP1616 guidance as to how an IOA must be carried out (including as to how a shortlisting methodology must be designed).

1.2 In the IOA version submitted by Heathrow in July 2023 (“the Original IOA”), the IOA dashboard for each option gathers clear high-level data. In the case of Tranquillity for “local circumstances” that data is quantitative and uses the metric of increase in area (km²) of Richmond Park overflowed at less than 7,000ft at least once a day on average in the daytime, compared with the baseline. It is a simple exercise to extract the data from the existing IOA dashboards¹) and therefore clearly reasonably possible to use that data to apply Test 5, as illustrated on page 24 of the Pre-Submission IOA slides.

In other words, having collected and analysed the data, it is perverse, unreasonable and in breach of CAP1616 to deliberately set it on one side and not take it into account in shortlisting.

1.3 This is all the more so when Heathrow has already concluded that:

- none of the non-environmental factors (safety, capacity etc) significantly differentiate between the options²,
- Neither the CO² Emissions environmental factor nor the sweep-up test looking at the other Appendix E metrics significantly differentiate between the options³, whilst, in contrast,
- Tranquillity was a significant differentiating factor in respect of PBN Arrival Option I to runway 27R and at least one other option (see the footnote to para 5.3.4 of the Original IOA and page 6 of the Heathrow Slides).

To put it another way, HAL has dropped one of only three tests that, in its own view, had the potential to discount any options at this stage in the process.

Totally ignoring an identified, quantified and significant impact constitutes a clear failure to meet the CAP1616 requirement for an objective and consistent IOA.

¹ And, indeed, was so extracted and applied in a provisional and partial manner by Heathrow in the Pre-submission IOA Slides, before being withdrawn

² para 5.2.6 of the original IOA

³ No options were discontinued by reason of Test 3 or Test 6 in the Original IOA

2. Heathrow has failed to provide coherent reasons to justify its change in approach and the omission from its Proposed Shortlisting Methodology of any consideration of the impact on tranquillity of each of the options

Of the three reasons put forward (page 10 of the Slides and para 5.3.4 of IOA v1), none justifies the inconsistent design of the Proposed Shortlisting Methodology or adequately explains why Heathrow proposes to change course from its original intention to assess and filter options based on Appendix E in CAP1616 and the Government's Air Navigation Guidance (page 9 of the Slides).

In particular, in relation to test 5, only two of the three explanations are relevant to test 5 and neither explanation provides a clear reason for the change in approach. Instead, they simply state what will happen at stage 3, without adequately explaining why local circumstances will not be considered until stage 3.

This is particularly the case since it is clear that the data has already been collected and the analysis has taken place. There is a distinct lack of transparency, which suggests that Heathrow is "skewing evidence and detail towards its favoured option" (CAP1616 135), in breach of the obligation to produce an objective IOA.

3. Heathrow is not clearly committed to the relevant public engagement standards and the CAA's Stage 2 Gateway instructions to Heathrow for re-engagement

Page 7 of the Slides states in diagrammatic form that the IOA is outside the scope of the current engagement. It is not clear therefore whether the engagement on the shortlisting process can impact on the IOA or if the IOA will remain unchanged regardless of the outcome of this engagement.

The shortlisting exercise is an integral part of the IOA and a fresh decision on a shortlisting methodology and its application to the options must be capable of resulting in a change to the IOA. If slide 7 means that the possibility of such a change is excluded, the engagement is not meaningful or compliant with CAP1616.

The outcome of this engagement must be used to inform a fresh options appraisal to refine the list of options carried through to Stage 3.

4. To resolve the above issues:

- Test 5 must be reinstated in the shortlisting methodology as an active filter capable of leading to the discontinuation of options; and
- Test 5 must be applied in an objective, consistent and transparent manner so as to discontinue immediately (and not carry forward into Stage 3) all options which would impact Richmond Park significantly more than today.

Under Heathrow's own assessment, this means that all arrival options which increase the area of Richmond Park overflowed by 4km² (from a baseline of close to zero) must be discontinued⁴. A

⁴ PBN Arrivals B, C, I and R to runway 27R, PBN Arrival B to runway 27L

4km² threshold⁵ is the level that Heathrow said was determined by their own professional judgement in June 2023 to be an appropriate measure of “significantly” when Heathrow provisionally discontinued PBN Arrival Option I to runway 27R⁶.

FRP is of the view that there should be no increase in overflying of Richmond Park, given its status and importance as set out below.

If significance is used as the shortlisting measure at the end of Stage 2B, Heathrow’s proposed threshold for “significance” is not appropriate.

First, in relation to arrival options, Heathrow’s threshold for “significance” is unreasonably and indefensibly high. The entire area of the Park is 8.56km², so an increase of 4km² represents almost 50% of the Park being overflowed by arrivals. If 50% of the Park is overflowed at 1,500-2,500 ft, given the low height above ground level and the way sound disperses across open space, the tranquillity will be destroyed across the whole Park. We consider that, for the purposes of Stage 2B shortlisting, any arrival option that increases the area overflowed by 1km² or more will significantly impact Richmond Park more than today and should be discontinued immediately.

Turning to departure options, where flight paths already overfly the southern tip of the Park⁷, but at higher altitudes than arrivals, in our view, any departures which overfly any parts of the Park that are not currently overflowed will significantly impact the Park compared with today. However, we note that such data has not been mounted on the IOA dashboard – only total area overflowed. Accordingly, using the data available on the IOA dashboard, the threshold for “significant” impact for departing aircraft, for the purposes of Stage 2B shortlisting, should be an increase in area overflowed of 3km².

To be clear, our comments in the two preceding paragraphs relate solely to the shortlisting methodology to be used at the end of Stage 2B. Any increase in the area of Richmond Park overflowed by arrivals or departures respectively, or any change in the part of the Park currently overflowed by departures, will have a serious detrimental impact on the tranquillity and biodiversity of Richmond Park compared with today. FRP will continue to make representations that any such options that are shortlisted and carried forward into Stage 3 must be discounted by the Full Options Appraisal.

⁵ FRP will obviously continue to resist ANY increase in overflying as a result of this ACP and we reserve our right to do so.

⁶ IOA Shortlisting Outcomes in the Pre-submission IOA Slides

⁷ The IOA states that the baseline is 4km²

B. Richmond Park – local circumstance

Although this stakeholder re-engagement and our current feedback relates solely to the Proposed Shortlisting Methodology, we note that Richmond Park is acknowledged to be a “local circumstance”⁸ – a specific area that should be avoided where possible.

This status, is, of course, fully merited as Richmond Park is:

- a Royal Park
- a site of both national and international importance for wildlife conservation
- a National Nature Reserve (designated in part in recognition of its importance as a recreational resource for the London area)
- a Site of Special Scientific Interest (856ha)
- a Special Area of Conservation (846.68ha)
- a Grade 1 landscape (i.e. of exceptional historic interest) on the English Heritage Register of Parks and Gardens of Special Historic Interest
- wholly within a Conservation Area
- designated as Metropolitan Open Land
- the quietest and, at night, the darkest place in London
- visited by 5.5 million visitors a year
- an area of high ground, set within a bend in the low-lying Thames valley, such that the actual height of the ground level aggravates the impact of any overflying aircraft and means it merits special consideration under the Government’s altitude-based priorities
- an area whose special value to Londoners is supported in this ACP by us, The Friends of Richmond Park, as a community charity with 3,600 members
- an area confirmed through the highest local community engagement as worthy of special consideration, being the subject of a unanimous London Assembly motion on 2 November 2023 expressing concern that numerous flight path options would impact Richmond Park. (The London Assembly acts as the eyes and ears of Londoners, championing Londoners’ concerns.); and
- an asset of national importance, whose protection as public open space remains a statutory responsibility of central government.

Friends of Richmond Park
13 May 2024

⁸ Richmond Park’s status as a “local circumstance” was identified during the early development of proposals and options (Footnote 73 Para. B77 CAP1616)

From: [REDACTED]
To: [DD - Airspace](#)
Cc: [REDACTED]
Subject: RESPONSE FROM THE ROYAL PARKS: Heathrow Airspace Modernisation: Stage 2 _ Re-Engagement
Date: 13 May 2024 16:04:16
Attachments: [image001.png](#)
[image002.png](#)
[Heathrow Airspace Modernisation Stage 2 Re-Engagement March 2024.pdf](#)

Classification: Internal

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

[REDACTED]
[REDACTED]
Heathrow

Dear [REDACTED]

Thank you for seeking feedback on Heathrow's Stage 2 Re-engagement Material, as set out in the attached document and further explained in the online consultation session on 17 April. I am responding on behalf of The Royal Parks (TRP).

As you are aware, TRP is engaged with Heathrow's Airspace Modernisation consultation because your proposed changes have potential impact on the public open spaces for which TRP is responsible, and most particularly on Richmond and Bushy Parks.

TRP has argued that these Royal Parks should be afforded the same consideration and protection during this process as is afforded to AONBs, and we are pleased that Heathrow has broadly accepted this position.

We note that the current request for feedback is specifically about your proposed methodology for shortlisting of options at Stage 2. I would like to take the opportunity to reiterate TRP's position, which is that proposals that would increase overflight of the Royal Parks, and indeed other AONBs and their equivalents, should be discontinued as early as possible in the process. However, we note the argument that the Initial Options Appraisal (IOA) results for such assessment of overflight may be inaccurate if made at Stage 2, and that comprehensive assessments will therefore be undertaken at Stage 3.

On this basis TRP accepts the proposed methodology.

I have copied this to [REDACTED]
[REDACTED]

Yours sincerely

[REDACTED]

[REDACTED]

[REDACTED]

www.royalparcs.org.uk

The Old Police House
Hyde Park. London, W2 2UH



The Royal Parks are:

**Bushy Park | The Green Park | Greenwich Park | Hyde Park | Kensington
Gardens**

**The Regent's Park & Primrose Hill | Richmond Park | St James's Park | Brompton
Cemetery**

The Royal Parks is registered in England and Wales: Company Registration No: 10016100
Registered Charity No: 1172042 Registered Offices: The Old Police House, Hyde Park, London, W2
2UH

From: [REDACTED]
To: [DD - Airspace](#)
Cc: [REDACTED]
Subject: Re: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 13 May 2024 16:56:42
Attachments: [image001.png](#)
[RHC Response to HAL 13 May 2024 Final.pdf](#)

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Dear Airspace Team

Please find attached a further Richmond Heathrow Campaign response dated today 13 May 2024 following on from our previous response on 29 April, which for completeness is attached to today's response.

We look forward to hearing from you.

Kind regards

[REDACTED]

[REDACTED]

[REDACTED] Richmond Heathrow Campaign

Richmond Heathrow Campaign represents three amenity groups in the London Borough of Richmond upon Thames: The Richmond Society, The Friends of Richmond Green, and the Kew Society, which together have over 2000 members

RICHMOND HEATHROW CAMPAIGN

To

[REDACTED]
Heathrow Airport Limited

cc [REDACTED] Civil Aviation
cc [REDACTED] Department for Transport
cc [REDACTED] CISHA
cc [REDACTED] NACF

13 May 2024

Dear [REDACTED]

On behalf of Richmond Heathrow Campaign (RHC) I emailed airspace@heathrow.com on 29 April 2024 with feedback on Cap 1616 Stage 2 gateway issues, receipt of which was acknowledged by HAL. The deadline for responses was then extended to today, 13 May.

This email letter is a further response, while continuing with the RHC response of 29 April which for completeness I attach here.

In our 29 April response we raised some fundamental problems we face in properly assessing the Initial Options and the short-listing process and we also provided correspondence between RHC and Heathrow on some of the issues. We just do not have sufficient input information for the optioneering process, especially in relation to single flight paths of which there is no input information.

We realise the scope of our response goes beyond the two issues of Option I to runway 27R and Richmond Park, as raised by the CAA. But ourselves and other communities had no opportunity to review HAL's submission to the CAA on or around 31 July 2023 until after that date when the material was uploaded to the CAA's portal. We attended the pre-submission workshop on 27 June 2023 but even then the slide pack was not provided to us until 7 July and it focused on the approach to Initial Options Appraisal and was far short of the material submitted to the CAA on or around 29 July. We had no opportunity to review the submission before it was made. Nearly a year later we remain in the dark on much of Hal's black box modelling of the options.

This situation is extremely worrying for RHC and really does need to be rectified before going onto Stage 3 of the CAP 1616 process. How can HAL seek to justify passing the Stage 2 gateway under these circumstances? In practice, we believe the information deficit could be resolved relatively quickly by engagement with HAL. We most definitely want to engage and contribute to the CAP 1616 process and make positive progress.

We are copying this letter to the CAA and the DfT as interested parties in the airspace

modernisation process.

We hope you can see a way to resolving the issues that have arisen.

Yours sincerely,

■

■
Richmond Heathrow Campaign
■

www.richmondheathrowcampaign.org

Richmond Heathrow Campaign represents three amenity groups in the London Borough of Richmond upon Thames: The Richmond Society, The Friends of Richmond Green, and the Kew Society, which together have over 2000 members.

From: [DD - Airspace](#)
To: [REDACTED]; [DD - Airspace](#)
Subject: RE: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 03 April 2024 15:31:33
Attachments: [image001.png](#)

Classification: Internal

Dear [REDACTED],

Thank you very much for this feedback from the BHA.

Kind regards,

[REDACTED]

[REDACTED]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

w: [heathrow.com](https://www.heathrow.com) t: twitter.com/heathrowairport
a: [heathrow.com/apps](https://www.heathrow.com/apps)

From: [DD - Airspace](#)
To: [REDACTED] [DD - Airspace](#)
Subject: RE: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 23 April 2024 15:32:15
Attachments: [image002.png](#)
[image003.png](#)

Classification: Internal

Dear [REDACTED],

Thank you for your feedback on our proposals to move the consideration of AONBs (National Landscapes) to Stage 3 of our ACP. We are grateful for your engagement on this topic and thought it might be helpful for us to confirm to you our commitment to AONBs/National Landscapes.

As set out in the engagement material, Heathrow realised on review of the Stage 2 work that the assessment of AONBs/NLs would be better suited to Stage 3. Heathrow recognises the importance of AONBs/NLs, both in policy and to many of our stakeholders, and this proposed change to the shortlisting methodology is intended to ensure we adequately and accurately assess impacts at a stage when we have the appropriate information to do so.

For Stage 2, we developed single directional options – this means each arrival route is considered in isolation and each departure route is considered as part of a group of departure routes coming from the same runway end. At Stage 3, we will be developing ‘system options’ which will combine departures and arrivals for easterly and westerly operations: this will inevitably result in some refinement of the routes and it will also enable us to consider the potential impacts to overflow areas at a greater level of detail. We will be able to better identify potential overflight and/or impacts to AONBs/NLs at this stage and we will seek to engage with the relevant NLs to discuss and address any impacts we identify. At this stage, our assessments will be based on the performance of the aircraft types most likely to use the routes, so if an NL is overflowed, we will have more accurate data on the height at which aircraft would be and on any associated noise and/or visual intrusion. Where an NL is overflowed, tranquility and biodiversity assessments will be undertaken, and the results will be shared with NLs.

As we said in the engagement material, results for overflight of AONBs are likely to be overstated with the information we have at this time. This is because we have applied conservative assumptions for aircraft climb gradients and have had to assume that holding stacks remain in the same place as today: in reality NATS is undertaking a re-design of upper airspace, including Heathrow’s holding stacks, and we expect that the stacks will be moved higher/further away to facilitate aircraft making a continuous climb from the runway. This issue is more relevant to Tests 4 and 5 (AONBs and ‘local circumstances’) than to Tests 1-3 since the noise benefits of aircraft flying steeper climb gradients are felt further from the airport. Tests 1-3 generally encompass impacts closer to the airport.

I hope this helps to provide some clarity. We look forward to engaging with you further at Stage 3 and please do pass our contact details (airspace@heathrow.com) on to any other NL colleagues who might wish to engage with us.

Kind regards,



From: [DD - Airspace](#)
To: [REDACTED] [DD - Airspace](#)
Cc: [REDACTED]
Subject: RE: Heathrow Airspace Modernisation - Stage 2 Re-engagement
Date: 03 May 2024 10:48:34
Attachments: [Heathrow Airspace Modernisation Stage 2 Re-Engagement March 2024.pdf](#)

Classification: Internal

Dear [REDACTED]

Thank you for the letter you sent me on behalf of some of the NACF members. I have cc'ed the members listed in your letter but please feel free to share this email with any other interested stakeholders.

Purpose of Stage 2 Re-engagement:

Our Stage 2 re-engagement is required to address one particular issue identified by the CAA, relating to the reinstatement of PBN Option I to Runway 27R after the previous round of engagement and the application of Tests 4 and 5 in the shortlisting of options based on the IOA results. This issue is set out on slide 6 of the engagement pack sent to all stakeholders (and attached).

We understand that this request for re-engagement has caused some confusion, and we have ourselves needed to take a significant period of time since the Gateway failure in October 2023 to ensure that we:

- a. understood the reason that the CAA decided not to pass Heathrow at that Gateway, and
- b. understood what steps the CAA requires us to undertake prior to re-submission for a second Stage 2 Gateway.

The CAA's requirements are set out in a letter published on the CAA's ACP portal:

[CAA Letter to Heathrow 26-01-2024 \(1\).pdf](#)

The CAA's expectation for this round of re-engagement is set out within that letter: "*the CAA would expect to see evidence that...HAL has re-engaged with the full cohort of its Stage 2 stakeholder group (including the stakeholders emailed on 7 July 2023) on its proposed methodology for short-listing options **after the initial options appraisal***";. This engagement does not therefore relate to the results of the IOA or the potential environmental impacts assessed within that appraisal. Further engagement on environmental impacts will take place once we reach Stage 3.

The attached slide pack sets out the proposed methodology for short-listing options and the details for providing feedback to Heathrow on this issue.

CAP1616 version 4:

The CAA also confirmed within that letter that Heathrow should "*continue to follow the CAP 1616 version 4 process requirements for this Gateway until Stage 2 is completed*". We expect to move to the new version of CAP1616 (v5) once we reach Stage 3.

A 'Do-minimum' option:

This engagement does not relate to the comprehensive list of options (CLOO) created at Stage 2. Heathrow did not include a 'do-minimum' option at that stage and the CAA has confirmed that we did not need to since we illustrated a 'do nothing' option, in accordance with CAP1616. The baseline required for all environmental assessments is a 'do nothing' scenario which largely reflects the current-day scenario, although taking due consideration of known or anticipated factors that might affect it.

Heathrow understands that some stakeholders would like to see a 'do-minimum' option included in our shortlist of options and we have therefore committed to identify the system option which closest reflects a 'do-minimum' at Stage 3.

Timescales for this re-engagement:

We had allocated a period of 4 weeks for stakeholder feedback on this issue. A 4 week engagement period is consistent with the period of time given to previous rounds of engagement on this ACP, and on other ACPs (both Heathrow's and other airports'). As set out above, the CAA's requirement is for us to re-engage stakeholders on the proposed methodology for shortlisting options only (set out on slide 11). It would be disproportionate for us to have invited stakeholders to spend longer considering this issue than the previous topics of engagement on this ACP.

However, following a few stakeholder requests for more time to consider the engagement material, we extended the feedback period until Monday 13th May.

I hope the above provides some further clarity around the bounds of this current round of re-engagement and we look forward to receiving any further feedback from stakeholders who wish to share their views on the proposed shortlisting methodology for Stage 2. As stated in the slide pack, any questions or feedback relating to the proposed methodology can be emailed to us at airspace@heathrow.com.

Kind regards,



From: [DD - Airspace](#)
To: [REDACTED] [DD - Airspace](#)
Subject: RE: Re Feedback - Airspace Modernisation Airspace Change Proposal
Date: 03 May 2024 11:00:37

Classification: Internal

Dear [REDACTED]

Thank you for your feedback. This will be considered by the team and included in the evidence that we send to the CAA.

We have referred to you ([REDACTED]) as "Resident of Walton on Thames". We realise that you are not elected or appointed representatives of any geographical area or group.

We have engaged a number of formal representatives of Elmbridge (7 in total) and Surrey County Council (5 in total). I can share the names of the representatives who are members of the Noise and Airspace Community Forum (NACF):

[REDACTED] (Elmbridge Borough Council)

[REDACTED] (Surrey County Council)

I hope this helps.

Thanks,
[REDACTED]

From: [DD - Airspace](#)
To: [DD - Airspace](#); [REDACTED]
Cc: [REDACTED]
Subject: ACP Engagement Feedback
Date: 03 May 2024 16:40:47
Attachments: [image002.png](#)
[image003.png](#)

Classification: Internal

Hi [REDACTED]

Thanks for the feedback. We have provided some responses to your questions below. Please do let us know if anything is unclear.

- For Stage 3 Tests are you working on the basis of one or two assumptions about the 'do minimum' / existing operation. i.e. a) operations as today and/ or b) with full Easterly Alternation established by an earlier PPR ACP / Northern Runway project in 2028ish?
We expect to use a number of different baseline scenarios at Stage 3 (see 3.15 of [CAP1616 v5](#)), to ensure we assess the impacts of the various proposed changes effectively. Heathrow is seeking to introduce Easterly Alternation by 2028 so it is likely that Easterly Alternation will be introduced prior to the full airspace change associated with Airspace Modernisation. We will share more information on Heathrow's plans for Easterly Alternation once we have them.
- What is happening about the Single Design Entity proposal at ACOG/CAA – I'm really unclear about how and when the interaction of the different airport's systems is going to be resolved (this constrains aspirations for CCO, CDA etc). Timetable implications?
Responsibility for the introduction of a Single Design Entity (SDE) lies with DfT and CAA. We're expecting a consultation on the SDE sometime this year and we will pass on any updates that we receive.
- Really would welcome some approx.. timing of when all the LHR system and operational 'options on the table' will be laid out? – i.e. including clarity on any aspiration to multi-mode (say to help re-time night flights into the AM peak), adjusting the Westerly Preference, shifting wind assumptions 70/30s, any thought to accommodate an increase to ATM etc.
Currently, Heathrow is limited to 480,000 air transport movements (ATMs) each year. This proposed airspace change will not change this: it will be based on operating within the current cap. We would need to make a separate planning application if we wished to increase the cap at any stage in the future.
We will consider options for retaining or amending the current westerly preference and will be able to provide an update at Stage 3 of this ACP. Westerly preference remains current Government policy so any adjustments to it would be subject to public consultation and Government approval.
We are aware that a recent article in The Telegraph included a speculative reference to mixed mode being introduced at Heathrow. The design principles for this airspace

change include “Provide predictable and meaningful respite to those affected by noise from Heathrow's movements” and we will therefore be seeking to include runway alternation on both easterly and westerly operations (i.e. not mixed mode). Heathrow is already able to use both runways for arrivals during the 0600-0700 period because this hour is the busiest time of day for arrivals into Heathrow.

- Will you be doing anything more on eVTOL access at Stage 3?

We will continue to monitor developments in new aircraft types as we work through Stage 3. One of our design principles is to “Minimise the impact to all stakeholders from future changes to Heathrow’s airspace” and this will include consideration of likely future aviation requirements within the design of this ACP.

Many thanks,



cC: [DD - Airspace](#)
From: [REDACTED]
To: [DD - Airspace](#)
Subject: RE: Feedback on Heathrow's Approach to Shortlisting Options
Date: 03 May 2024 17:10:02

Dear [REDACTED]

Thank you for your feedback. We will consider your comments prior to our Stage 2 submission, and we will include your feedback in the engagement evidence that we send to the CAA.

There were a few points in your email that we wanted to provide clarification on:

a) The engagement session

We are sorry to hear that you felt the session was hurried. The session you attended finished earlier than planned and we would have been very happy to answer any questions that you had. We aim to host sessions that suit the wide range of stakeholders we have. In their letter to us (available on the ACP Portal:

<https://eur01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fairspacechange.caa.co.uk%2Fdocuments%2Fdownload%2F6481&data=05%7C02%7Cnatalie.wallis%40heathrow.com%7C6af94e061d604348585b08dc6b870e7d%7C2133b7ab6392452caa2034afbe98608e%7C0%7C0%7C638503475031312608%7CUnknown%7CTWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6IjEhaWwiLCJXVCi6Mn0%3D%7C0%7C%7C%7C&sdata=EzGAriDYh7ROnJVQ%2Bg%2FonWMtUgOu5GEFQUT4Kx2iyFc%3D&reserved=0>), the CAA stated that they expect us to re-engage stakeholders on the shortlisting of options at the end of Stage 2. The scope of this engagement is therefore not focused previous elements of the Airspace Change Proposal. Sometimes, when a stakeholder raises a topic that is not relevant to the engagement session, it is appropriate for us to respond separately to that individual via email: this avoids confusing other stakeholders and ensures we allow sufficient time for stakeholders to ask questions relevant to the topic of engagement.

b) Stakeholder Feedback on the Comprehensive List of Options (CLOO)

On slide 5 we set out the purpose of this round of engagement and the reasons that Heathrow did not pass the Stage 2 Gateway in October 2023. The second point raised by the CAA was that "More information is required from the change sponsor with regard to its summary of feedback, to ensure that all feedback is captured and responded to consistently".

This related to Tables 40-48 in the Step 2A Options Development document. In November 2022 we undertook stakeholder engagement on the Comprehensive List of Options (CLOO). This was the Stage 2 statutory engagement required under CAP1616. We provided a summary of stakeholder feedback in these tables to suit anyone who did not wish to read the full responses provided in the appendices (07 Step2A_AppendixB_v1.0 and 08 Step2A_AppendixC_v1.0).

The CAA noted that there were a couple of instances where the summary of feedback was not consistent (e.g. two stakeholders had given the same feedback but it was summarised differently by Heathrow). We will review these summary tables and amend them where necessary, prior to re-submission for the second Stage 2 Gateway. All stakeholder feedback on the CLOO was read and considered by Heathrow.

c) AONBs

An AONB is an "Area of Outstanding Natural Beauty": land protected by the Countryside and Rights of Way Act 2000 (CROW Act). It protects the land to conserve and enhance its natural beauty. You can find out more at <https://eur01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fnational-landscapes.org.uk%2Fnational-landscapes&data=05%7C02%7Cnatalie.wallis%40heathrow.com%7C6af94e061d604348585b08dc6b870e7d%7C2133b7ab6392452caa2034afbe98608e%7C0%7C0%7C638503475031323897%7CUnknown%7CTWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6IjEhaWwiLCJXVCi6Mn0%3D%7C0%7C%7C%7C&sdata=merL2ZGmdaqIcZ8flTWERFINp1SVI%2FJ9GNmzljxPz4%3D&reserved=0>, including a

[map of all UK AONBs \(which were recently re-named as 'National Landscapes'\)](https://eur01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fnational-landscapes.org.uk%2Fnational-landscapes&data=05%7C02%7Cnatalie.wallis%40heathrow.com%7C6af94e061d604348585b08dc6b870e7d%7C2133b7ab6392452caa2034afbe98608e%7C0%7C0%7C638503475031323897%7CUnknown%7CTWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6IjEhaWwiLCJXVCi6Mn0%3D%7C0%7C%7C%7C&sdata=merL2ZGmdaqIcZ8flTWERFINp1SVI%2FJ9GNmzljxPz4%3D&reserved=0).
250

d) Your feedback

Since you do not represent a public body, an organisation or a group, we categorise your feedback as "Residents of Walton on Thames". Please let us know if you have any concerns about this.

Kind regards,



Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

w: heathrow.com t: twitter.com/heathrowairport

a: heathrow.com/apps

From: [DD - Airspace](#)
To: [REDACTED]
Cc: [DD - Airspace](#)
Subject: RE: 472149 - Heathrow Airspace Modernisation - Airspace Change Proposal (ACP) - Further Engagement of Shortlisting of Stage 2 Options - online meeting
Date: 10 May 2024 15:46:37
Attachments: [image001.png](#)

Classification: Internal

Dear [REDACTED],

Thank you for your email. We will indeed be considering tranquillity and statutory designated sites at Stage 3, and we will be in contact with Natural England to discuss our proposals at an appropriate time.

Kind regards,

[REDACTED]

[REDACTED]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

w: [heathrow.com](https://www.heathrow.com) t: twitter.com/heathrowairport
a: [heathrow.com/apps](https://www.heathrow.com/apps)

From: [DD - Airspace](#)
To: [REDACTED] [DD - Airspace](#)
Subject: RE: Feedback on Further Engagement on Shortlisting of Stage 2 Options
Date: 10 May 2024 16:52:17

Classification: Internal

Dear [REDACTED]

Thank you for your feedback. We will consider your comments prior to our Stage 2 submission, and we will include your feedback in the engagement evidence that we send to the CAA.

There were a few points in your email that we wanted to provide clarification on:

We wanted to assure you that the assessment of AONBs at Stage 3 (rather than at Stage 2) does not indicate any change to the weight being given to the impact on AONBs. In fact, consideration of the impacts when we have 'system options' (with arrivals and departures, for easterly and westerly operations) and assumptions around Continuous Climb Operation (CCO) and Continuous Descent Operation (CDO) applied will ensure a more robust assessment of the impacts to AONBs. We hope that our airspace design could be refined to mitigate or minimise any significant impacts to AONBs identified at Stage 3.

In the Initial Options Appraisal (IOA) we modelled actual flight profiles from 2019 with no adjustments made for future CDO/CCO enhancements. This does not affect noise metrics such as Partial LOAEL (Test 1) or N60/65 (Test 2) but does exaggerate the expected overflight impacts in the 6,000 to 7,000 feet range. The IOA results therefore suggest greater overflight of AONBs than we expect to see in our Full Options Appraisal modelling at Stage 3, when we are able to take into account any improvements in CCO/CDO following integration of our design options with the wider London network.

The benefits of CCO and CDO are felt further from the airport because aircraft flying to/from Heathrow already climb/descend continuously to/from at least 6,000 feet. Improvements to CCO/CDO should therefore bring benefits to areas currently overflown at 6,000 feet and above, since aircraft overhead would be at higher altitudes than today.

You are correct that only one option was previously discontinued based on Tests 4 and 5 (PBN Arrival Option I to Runway 27R). That option has now been reinstated for further consideration and assessment at Stage 3.

Many thanks,

[REDACTED]

From: [DD - Airspace](#)
To: [REDACTED]
Subject: RE: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 10 May 2024 16:55:37
Attachments: [image001.png](#)

Classification: Internal

Dear [REDACTED]

Thank you for your feedback. We will consider your comments prior to our Stage 2 submission, and we will include your feedback in the engagement evidence that we send to the CAA.

There were a few points in your email that we wanted to provide clarification on:

Design Principles and Stage 3 Design

Our design principle to “*Seek to avoid overflying the same communities with multiple routes including those to/from other airports*” will be considered at Stage 3 when we have ‘system options’ (with arrivals and departures, for easterly and westerly operations). At this stage we will be able to identify (and address) any areas potentially impacted by multiple routes. We are also working with surrounding airports to try to separate future flight paths, allowing aircraft to climb and descend continuously and avoiding overflying communities with multiple routes. This should reduce the frequency of overflight for these communities to provide more noise respite and achieve noise benefits of getting higher sooner (on departures) and staying higher for longer (on arrivals).

Local Circumstances

CAP1616 requires airports to consider “local circumstances” when designing and engaging on an airspace change proposal. In [CAP1616 v4](#) paragraph B78, the term local circumstances refers to “*community feedback on specific areas that should be avoided*”: this is the context in which Richmond Park was identified during Stage 2. However, we have since had suggestions of other areas for consideration and we will therefore look at whether it is appropriate for us to have specific consideration of these areas when designing system options at Stage 3, including the parks you mentioned in your feedback.

Feedback and Consultation Process

We will be developing a programme of stakeholder engagement once we are in Stage 3. We recognise that many stakeholders would like to understand more about the evolving design process prior to the public consultation and we intend to continue providing regular updates and opportunities to provide feedback, as we have done throughout Stages 1 and 2.

Many thanks,

[REDACTED]

From: [DD - Airspace](#)
To: [REDACTED]
Cc: [DD - Airspace](#)
Subject: RE: Consultation Response - ACP - Further Engagement on Shortlisting of Stage 2 Options
Date: 10 May 2024 17:05:51
Attachments: [image001.png](#)

Classification: Internal

Dear [REDACTED],

Thank you for your feedback. We will consider your comments prior to our Stage 2 submission, and we will include your feedback in the engagement evidence that we send to the CAA.

There were a few points in your email that we wanted to provide clarification on:

1. Likely impact on shortlisting outcomes:

The CAA has asked us to *“Make a fresh decision on a shortlisting methodology”* and *“Apply the chosen shortlisting methodology to our flight path options objectively, consistently and transparently”* (steps 3 and 4 in their letter to Heathrow, quoted on slide 7). We will take these steps once we have considered all stakeholder feedback relating to our proposed shortlisting approach and we will let stakeholders know if this results in any change to the 151 shortlisted options included in our previous Stage 2 submission.

Tests 4 and 5 did not lead to the discontinuation of any of the options at Stage 2, so the removal of these tests is not expected to impact the number of shortlisted options taken through to Stage 3.

2. Definition of “significant impacts”:

As you mentioned in your feedback, decisions around the definition of ‘significant impacts’ were made by applying professional judgement to decide whether an option should be discontinued at this stage. This was a qualitative judgement informed by the Initial Options Appraisal (IOA) data and we considered options to/from each runway in isolation and compared these to the baseline.

Information on the Initial Option Appraisal results for each option, and the decision to shortlist or discontinue each option based on our previous shortlisting methodology was included within our Stage 2 submission and can be found in documents *13-15 Step2B Appendices A-C* on the [CAA’s Airspace Change Portal](#).

Options shortlisted at this stage will be further considered, assessed and refined at Stage 3 as we develop system options.

3. Consideration of time specific operation of routes:

We appreciated your feedback on this issue and can confirm that we will consider the use of different routes at different times during Stage 3. We explored a number of different concepts for providing respite to overflown communities at the beginning of Stage 2 (slides 47-56 in the attached slide pack from our engagement on our ‘Comprehensive List of Options’) and the use of different flight paths at different times

was one of these concepts. Further assessment of these concepts will be undertaken as the ACP progresses, and at Stage 3 we will be able to overlay these potential concepts on to the system options to understand whether they are both feasible and valuable.

4. 'Local Circumstances':

CAP1616 requires airports to consider “local circumstances” when designing and engaging on an airspace change proposal. In [CAP1616 v4](#) paragraph B78, the term local circumstances refers to “*community feedback on specific areas that should be avoided*”: this is the context in which Richmond Park was identified. However, as we confirmed at the recent engagement session, we have since had suggestions of other areas for consideration and we will therefore look at whether it is appropriate for us to have specific consideration of these areas when designing system options at Stage 3. Changes to overflight for local communities will be considered as ‘local circumstances’ in the broader sense, and we will need to assess and report on these at Stage 3. A variety of metrics will be used to measure change impacts, including those required by policy and additional metrics to help explain or assess the impacts of our options. We envisage undertaking further engagement with our more technically-minded stakeholders via another ‘methods and metrics’ style workshop at Stage 3 and this will be one of the topics for discussion then.

5. The Heathrow team:

The Heathrow Airspace team is leading the design and assessment of route options for this ACP, with all decisions made by Heathrow employees. They are supported by highly experienced and skilled consultants across a number of different areas (procedure design, air-traffic and airfield operations, environmental assessment, data analysis, engagement).

Thanks,



The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

w: heathrow.com t: twitter.com/heathrowairport
a: heathrow.com/apps

From: [DD - Airspace](#)
To: [REDACTED] [DD - Airspace](#)
Subject: RE: Comments on the Stage 2 re-consultation.
Date: 10 May 2024 17:11:06

Classification: Internal

Dear [REDACTED]

Thank you for your feedback. We will consider your comments prior to our Stage 2 submission, and we will include your feedback in the engagement evidence that we send to the CAA.

You queried whether the PBN Arrival options were related to Heathrow's previous proposal to introduce Independent Parallel Approaches (IPA). As you know, the IPA project (consulted on in 2019) involved proposals for some new arrival routes into Heathrow from the holding stacks. We can confirm that the ACP for this project was paused in 2020 and has now been discontinued.

We are now required to design PBN Arrival routes for this ACP, as part of the Airspace Modernisation Strategy. These were designed as part of our development of a "Comprehensive List of Options" in 2022 and were not based on the options developed for the IPA project. Our options also include vectored arrival options (similar to today's arrival paths), and we expect that vectored arrivals will continue to be used most of the time since it would be difficult for Heathrow to achieve the required throughput during core hours using PBN arrival routes. In addition, not all aircraft will be able to fly some of these approaches and there would also be weather-related limitations on when they could be flown.

At Stage 3 we will undertake an assessment of the overall viability and impacts of the PBN Arrival options and will share our evolving proposals with stakeholders.

Thanks,

[REDACTED]

From: [DD - Airspace](#)
To: [REDACTED] [DD - Airspace](#)
Subject: RE: Further feedback on HAL Stage 2 Consultation (Ealing)
Date: 17 May 2024 11:53:39
Attachments: [image001.png](#)
[image002.png](#)

Dear [REDACTED],

Thank you for your feedback. We will consider your comments prior to our Stage 2 submission, and we will include your feedback in the engagement evidence that we send to the CAA.

There were a couple of questions in your email that we wanted to respond to:

Definition of “significant impacts”:

Decisions around the definition of ‘significant impacts’ were made by applying professional judgement to decide whether an option should be discontinued at this stage. This was a qualitative judgement informed by the Initial Options Appraisal (IOA) data and we considered options to/from each runway in isolation and compared these to the baseline.

Information on the Initial Option Appraisal results for each option, and the decision to shortlist or discontinue each option based on our previous shortlisting methodology was included within our Stage 2 submission and can be found in documents *13-15 Step2B Appendices A-C* on the [CAA’s Airspace Change Portal](#).

Options shortlisted at this stage will be further considered, assessed and refined at Stage 3 as we develop system options.

Weighting of Tests 1 and 2:

Heathrow’s approach to the shortlisting of options is based on the key principles set out in CAP1616 and in the Government’s Air Navigation Guidance 2017 (ANG17). Shortlisting options based on ANG17 enables Heathrow to consider the potential environmental impact of the options as much as is practical at this early stage of the ACP.

Tests 1 and 2 were both developed to address the highest priority in [ANG’s altitude-based priorities](#) which is “*below 4,000 feet the priority is to limit and, where possible, reduce the total adverse effects on people*”. However, the LOAEL is the level above which adverse effects on health and quality of life can be detected so the number of people within the LOAEL was designated ‘Test 1’ in our Stage 2 shortlisting methodology.

Local Circumstances:

CAP1616 requires airports to consider “local circumstances” when designing and engaging on an airspace change proposal. In [CAP1616 v4](#) paragraph B78, the term local circumstances refers to “*community feedback on specific areas that should be avoided*”: this is the context in which Richmond Park was identified during Stage 2. However, we have since had suggestions of other areas for consideration and we will therefore look at whether it is appropriate for us to have specific consideration of these areas when designing system options at Stage 3, including the Ealing parks you mentioned in your feedback.

Kind regards,

[REDACTED]

From: [DD - Airspace](#)
To: [REDACTED]
Cc: [DD - Airspace](#)
Subject: RE: HACAN feedback on further engagement session
Date: 28 May 2024 15:44:07
Attachments: [image001.png](#)
[image002.png](#)

Dear [REDACTED]

Thank you for your feedback. We will consider your comments prior to our Stage 2 submission, and we will include your feedback in the engagement evidence that we send to the CAA.

There were a few questions in your email that we wanted to respond to and clarify directly now:

1. **Period of time between the Stage 2 Gateway (July 2023) and our Stage 2 re-engagement (March 2024):**

We understand stakeholders' confusion and frustration over the period of time taken for us to confirm our plans for re-engagement and re-submission. We were surprised and disappointed by the CAA's decision not to pass us at the Gateway and it took time for us to get the information we needed to firstly understand the reasons for their decision and then to plan our next steps.

The engagement period was originally scheduled to be 4.5 weeks. We felt this was proportionate to the relatively limited scope that the CAA had advised us to re-engage on. It was also consistent with the time periods allocated to previous periods of engagement for both this and other airports' ACPs. Following stakeholder feedback, we extended the deadline for feedback by a further two weeks.

2. **Rationale for deferring Tests 4 and 5 to Stage 3:**

Tests 4 and 5 considered whether AONBs, National Parks and Richmond Park were overflowed more significantly than today, and we believe that these are relevant and important "tests" when considering the impacts of this airspace change. These tests were applied when shortlisting the long list of flight path options, but Heathrow took the decision not to discontinue any of the options based on these tests because:

- a) **IOA results for overflight of AONBs are likely to be overstated** and Heathrow expects to see a reduction in areas of AONBs and National Parks overflowed once assumptions around rate of climb and descent and future use of Continuous Climb Operations (CCO) and Continuous Descent Operations (CDO) have been applied at Stage 3. The benefits of CCO and CDO are felt further from the airport because aircraft flying to/from Heathrow already climb/descend continuously to/from at least 6,000 feet. Improvements to CCO/CDO should therefore bring most benefit to areas currently overflowed at 6,000 feet and above, since aircraft overhead would be at higher altitudes than today.
- b) **Heathrow decided it would be more appropriate to address these local issues when developing system options at the beginning of Stage 3.** The compilation of system options at Stage 3 will inevitably result in some refinement of the routes with more detailed analysis. Heathrow will seek to reduce potential

overflight and/or impacts to AONBs, National Parks and Richmond Park at this stage of the process

- c) Though Heathrow will seek to reduce potential overflight and/or impacts to AONBs, CAP1616 recognises that “it will not always be practical to completely avoid overflying National Parks or AONBs – and there are no legislative requirements to do so, as this would be impractical”. **It is more appropriate to compare any options that have impacts to National Parks/AONBs to any impacts associated with other options once we have a shorter list of system options at Stage 3.** We can better understand, and share with stakeholders, the potential trade-offs between overflight of AONBs and overflight of residential areas at this stage.

3. Likely impact on shortlisting outcomes:

The CAA has asked us to “*Make a fresh decision on a shortlisting methodology*” and “*Apply the chosen shortlisting methodology to our flight path options objectively, consistently and transparently*” (steps 3 and 4 in their letter to Heathrow, quoted on slide 7). We will take these steps once we have considered all stakeholder feedback relating to our proposed shortlisting approach and we will let stakeholders know if this results in any change to the 151 shortlisted options included in our previous Stage 2 submission.

Tests 4 and 5 did not lead to the discontinuation of any of the options at our previous Stage 2 submission for the reasons outlined above.

4. ‘Local Circumstances’:

CAP1616 requires airports to consider “local circumstances” when designing and engaging on an airspace change proposal. In [CAP1616 v4](#) paragraph B78, the term local circumstances refers to “*community feedback on specific areas that should be avoided*”: this is the context in which Richmond Park was identified. However, as we confirmed at the recent engagement session, we have since had suggestions of other areas for consideration and we will therefore look at whether it is appropriate for us to have specific consideration of these areas when designing system options at Stage 3. A “local circumstance” could be a park, school, place of worship or community building identified as being particularly noise sensitive. At Stage 3 we will report on where consideration of any specific “local circumstances” has influenced the airspace design options.

Changes to overflight for local communities will continue to be assessed and considered at Stage 3. A variety of metrics will be used to measure change impacts, including those required by policy and additional metrics to help explain or assess the impacts of our options. We envisage undertaking further engagement with our more technically-minded stakeholders via another ‘methods and metrics’ style workshop at Stage 3 and this will be one of the topics for discussion then.

Kind regards,

██████

██████████

From: [DD - Airspace](#)
To: [REDACTED]
Cc: [DD - Airspace](#)
Subject: RE: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 28 May 2024 19:16:24
Attachments: [image001.png](#)

Classification: Internal

Dear [REDACTED],

Thank you for your recent feedback. We will consider your comments prior to our Stage 2 submission, and we will include your feedback (and annexes) in the engagement evidence that we send to the CAA.

All of the information relating to our Initial Options Appraisal is available on the CAA's [Airspace Change Portal](#) and we are happy to answer any questions that you have on that information.

“Do Nothing” Contours:

You have followed up on your previous query (from October 2023) regarding our (“Do Nothing”) contours. We responded to that query in November 2023, but you have asked for further clarification, which we are happy to provide.

We confirmed in our November response (your Annex E) that:

“Our noise contours differ to those shown in Figure B6 of ERCD Report 2001 because our contours show:

- a) Single direction operations (just departures in the case of Figure 2 in your note) and,
- b) Average easterly/westerly split (i.e. easterly routes only in use ~30% of the time).

Conversely, Figure B6 in the ERCD Report assumes 100% use of easterly operations (this is explained in paragraph 3.10 of the ERCD report) which would lead to a greater number of people being within the higher noise contours. We calculated population numbers and contours for 100% operation of both easterlies and westerlies (single mode) and can assure you that our results are more closely aligned with those in the ERCD report.”

You have subsequently queried why the shape of the contours match exactly.

We can confirm that the contours are the same shape because they are based on the same flight information (fleet mix, aircraft profiles, flight paths).

As you know, in our IOA we modelled ‘partial LOAELs’ to account for the period of time we would expect different flight paths/runways to be in operation. Therefore, when calculating the contours for easterly departures, we applied a correction to account for the assumed 20% of the time that Heathrow is on easterly operations during the summer months. Heathrow operates on easterly operations for c28% of the year on average but the CAA requires us to produce contours based on an average summer day ([CAP1616j](#), para 5.18). CAP1616j explains that (para 5.19) *“This calculation produces a cautious estimate of noise exposure (that is, it tends to over-*

estimate exposure). This is mainly because airports are generally busier during the summer and a higher number of movements is likely to produce higher LAeq values. Aircraft tend to climb less well in higher temperatures so, because they are closer to the ground, LAeq values will tend to be higher than in colder weather.”

A time correction of 20% results in approximately a 7dB time-corrected, so the difference between the LOAEL at the same contour was approximately 7dB, which appears in your comparison as 6dB difference between the two contours (i.e. 51dB vs 57dB).

It should be noted that the contours presented in the ERCD report ([ERCD REPORT 2201 - Heathrow Airport 2021 Summer and Noise Action Plan Contours](#)) were produced by the CAA using ANCON, and that the contours presented in the IOA were produced using AEDT by Heathrow’s consultants.

Therefore, the dB numbers are different because a) there are different inputs to the models with respect to the usage of easterly operations and b) they are two different models whose numbers will vary slightly even with the same outputs

Ascent/Descent Assumptions:

The Design Principle Evaluation (DPE) assumed a standard ascent and descent rate for all aircraft movements. However, the Initial Options Appraisal (IOA) modelling was based on 2019 actual flight profiles in/out of the airport for different aircraft types on different routes. The angle of ascent/descent is dependent on aircraft type and fuel loading (take-off weight). At Stage 3 (when we put arrival and departure routes together into a “system option”) we will be looking for opportunities to improve flight profiles compared with today where possible.

Other Modelling Assumptions:

The IOA modelling assumed the 2019 actual fleet mix. At Stage 3 we will need to consider likely future fleet mix (aircraft types) and we will share this information alongside the Full Options Appraisal results. We will also share forecast flight frequencies for each proposed flight path. For Stage 2 we used the 2019 flight frequencies to/from each waypoint. Information on relative use of Heathrow’s departure routes in 2019 can be found in Table C8-I of ERCD Report 2001 ([ERCD REPORT 2001: Heathrow Airport 2019 Summer Noise Contours and Noise Action Plan Contours](#))

As we overlay our operational concepts there may be changes to how the routes are used. For example at Stage 3 we will be looking to build the provision of respite into the system design (to meet Design Principle 6) and this may influence the frequency of use of each flight path.

The only variable in the Stage 2 IOA modelling was the geographical position of the flight paths. This ensured that the airspace design was isolated for assessment.

Population Exposed to Heathrow Noise:

The IOA used 2023 population data (CACI data). In future appraisals we will use population forecasts with different baselines, informed by the 2021 census data.

We hope this helps to provide some of the information you were seeking.

Many thanks,



Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

w: [heathrow.com](https://www.heathrow.com) t: twitter.com/heathrowairport
a: [heathrow.com/apps](https://www.heathrow.com/apps)

From: [DD - Airspace](#)
To: [REDACTED] [DD - Airspace](#)
Cc: [REDACTED]
Subject: RE: Heathrow Airspace Modernisation Additional Stakeholder Engagement Stage 2 - feedback from the Friends of Richmond Park
Date: 07 June 2024 15:08:29
Attachments: [image002.png](#)
[Heathrow Response to FRP feedback on March 2024 Engagement PDF.pdf](#)

Classification: Internal

Dear [REDACTED]

Thank you for your recent feedback. We have considered all of your comments prior to our Stage 2 submission, and we will include your feedback (and annexes) in the engagement evidence that we send to the CAA. We have summarised our response to the main points in your feedback below. We have also prepared a more detailed response to your feedback alongside our legal advisors and that is set out in the attached table.

1. *Heathrow's Proposed Shortlisting Methodology fails to appraise the options using metrics which address all the statutory factors and relevant government policy – specifically, Tranquillity impacts are ignored.*

Tranquillity impacts on local circumstances, including Richmond Park, remain an important consideration which will be taken into account and assessed as part of our options appraisal for the ACP. Our proposed approach is not to ignore the matters previously identified in Tests 4 and 5, but rather to build on the consideration of those matters at Stage 3 when system options are developed and refined with more information available, including through the Full Options Appraisal. We explained why we consider that appropriate in our original Stage 2 submission and in our email to FRP on 3 August 2023. Our reasoning for our proposed methodology was also set out in our March 2024 engagement slides (page 10) and discussed at the engagement sessions on 16 and 17 April.

Recognising the importance of considering impacts on Richmond Park, we have also made specific commitments in relation to the further assessment and engagement that will be undertaken as part of Stage 3. These commitments were highlighted in the engagement materials.

The Proposed Shortlisting Methodology does not comply with Government guidance or CAP1616.

CAP1616 does not set out a specific methodology for the shortlisting of options at Step 2A. As explained in the IOA (see in particular section 3), we had regard to and followed relevant guidance in both CAP1616 and the ANG in formulating our approach to options appraisal for the ACP and our proposed revised shortlisting methodology for Step 2A. We consider our approach and methodology to be consistent with the applicable guidance.

We agree that the shortlisting process is an integral part of the IOA but, as made clear in CAP1616, the IOA is part of an iterative phased process of options appraisal.

We have modelled our approach to options appraisal and shortlisting on the factors set out in

s70 of the Transport Act 2000 (TA 2000) and having regard to relevant guidance in the ANG and CAP1616. This is explained in sections 3 and 5 of the IOA. Our proposed revisions to the shortlisting methodology do not take the options appraisal outside the factors identified in section 70 of the Transport Act 2000.

Under the proposed methodology impacts on “local circumstances” including tranquillity impacts on Richmond Park, are not removed from the options appraisal. We assessed impacts to Richmond Park within the IOA and reported these metrics on the dashboards. The evidence which has been assembled to date in relation to tranquillity impacts is not being ignored. It will be carried forward to Stage 3 and supplemented as part of the further assessment work to be carried out as system options are generated, assessed and refined, including through further stakeholder engagement. We explained our rationale for this proposed approach in the original Stage 2 submission and in the more recent engagement. There is nothing in CAP1616 which prevents this approach being taken in the options appraisal.

Having carefully considered the paragraphs of CAP1616 referred to by FRP (including paragraphs 135, 146, E1 or E13), we consider that our approach to options appraisal and proposed shortlisting methodology is consistent with the guidance.

2. Heathrow has failed to provide coherent reasons to justify its change in approach and the omission from its Proposed Shortlisting Methodology of any consideration of the impact on tranquillity of each of the options

As set out above, we explained why we consider it appropriate to defer further consideration of the matters identified in Tests 4 and 5 (including tranquillity impacts on Richmond Park) in our original Stage 2 submission and in our email to FRP on 3 August 2023. In summary, when reviewing the Heathrow decided it would be more appropriate to address these local issues when developing system options at the beginning of Stage 3. The compilation of system options at Stage 3 will inevitably result in some refinement of the routes and Heathrow can seek to reduce potential overflight and/or impacts to AONBs, National Parks and other identified local circumstances at this stage of the process.

For the purposes of engagement on our proposed revised methodology, we set out our rationale for our proposed approach in the engagement materials (page 10) and this was discussed during the engagement sessions on 16 and 17 April. We consider that the reasons we have set out are clear and coherent and we therefore do not agree that there is a “distinct lack of transparency” in our approach.

We reject the assertion that “Heathrow is skewing evidence and detail towards its favoured option”. We have no favoured options at this stage in the process and made this clear in our original Stage 2 submission. Furthermore, it should be noted that part of the reason for deciding to defer further consideration of the Test 4 and 5 matters was to ensure consistency in our options appraisal. This was explained in our original Stage 2 submission, as well in in correspondence with FRP. In that regard we were mindful of the importance of consistency in options appraisal (as highlighted in paras 134 and 135 of CAP1616).

3. Heathrow is not clearly committed to the relevant public engagement standards and the CAA’s Stage 2 Gateway instructions to Heathrow for re-engagement

The CAA’s expectation for this round of re-engagement is set out within their January letter to us: “the CAA would expect to see evidence that...HAL has re-engaged with the full cohort of its Stage 2 stakeholder group (including the stakeholders emailed on 7 July 2023) on its proposed

methodology for short-listing options after the initial options appraisal;”. The CAA confirmed to us that they did not expect us to re-engage on the IOA. The modelling and results of the IOA have not therefore been revisited as part of this re-engagement and remain unchanged.

Following the engagement we have taken into consideration all stakeholder feedback on our shortlisting methodology (as set out on slide 7 of the engagement material) and have made a fresh decision on our approach to shortlisting. We have then applied that shortlisting approach consistently, transparently and objectively. Our approach, and all stakeholder feedback, will be included within our Stage 2 submission and we will let you know once this is available to view on the CAA’s ACP Portal.

Kind regards,

[Redacted]

[Redacted]

Heathrow

The Compass Centre, Nelson Road
Hounslow, Middlesex, TW6 2GW

w: heathrow.com t: twitter.com/heathrowairport

a: heathrow.com/apps

From: [REDACTED]
To: [DD - Airspace](#)
Cc: [REDACTED]
Subject: Re: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 30 May 2024 16:15:22
Attachments: [image001.png](#)

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Dear [REDACTED]

Thank you for your helpful responses. [REDACTED] has mentioned a meeting where we could discuss the more technical topics with Heathrow's team and a representative from your noise modelling team. RHC would very much welcome that and I know it involves more of Heathrow's time but I do think a small meeting could be highly productive. I suggest a small number of others such as TAG who have the technical understanding would be productive in joining a meeting. We can of course help others as we move forward with Heathrow.

I know it is short notice but might we try for a meeting next week say Wed 5 or Friday 7 June. I think a meeting in person would be preferable for the sort of discussion that would be most useful. I suggest a meeting before we get into the holiday season and the sooner we can better understand the optioneering the better as otherwise we end up with a continuing steam of questions.

Looking forward to hearing from you.

Kind regards

[REDACTED]

Richmond Heathrow Campaign

From: [REDACTED]
To: [DD - Airspace](#)
Cc: [REDACTED]
Subject: Re: Heathrow Airspace Modernisation: Invitation for further engagement
Date: 31 May 2024 14:12:07
Attachments: [image001.png](#)
[RHC Comparison - Departures 100% and 20% Easterlies Detling Vector.pdf](#)

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Dear [REDACTED]

Thank you for your response. I can now see broadly why the contours levels in the Do Nothing differ comparing the 2019 Actuals and the Option Appraisal. I hadn't fully understood the basis of the optioneering on this point and that 20% instead of 100% usage has been applied and you mention a correction therefore of 7dBA. However, I wonder whether the 6 or 7dBA is a constant along the track and to the side of track. I have run the RHC model and it shows the difference between 100% and 20% (the correction factor) to vary along the track and to the side. This is shown by the attached output from our noise model. The shape of the contours changes and some are adjusted by 7dBA and some by less - especially to the side of track. I am reasonably confident in our model but of course may have got it wrong. It would help if you could confirm whether the Heathrow modelling assumes a constant 7dBA correction or variable correction along the lines I have suggested. I realise the actual dBAs may differ slightly between models because of the choice of assumptions. The RHC case here is just one of many cases which our model happily churns out instantaneously with whatever assumptions we choose.

Kind regards

[REDACTED]

Richmond Heathrow Campaign

**Richmond Heathrow Campaign
Noise Model [REDACTED] RHC) 31 May 2024**

**Departures Easterlies Southern Runway Detling Vectored No respite
Comparison of 100% and 20% Easterlies.**

Assumes 11.4 ATMs per hour, no runway respite.

Annual contours are computed first from single events, then hourly, then 16hr daily and finally annual. Annual assumes 20% Easterlies (i.e. Summer 2019).

Note: velocity is calculated as 150knts at end of runway, 209knts at 3,000ft and 387knts at 8,079ft. In this case acceleration continued to 8,079 ft. It would have been better to hold velocity at 250knts but outcome not materially different. The assumed climb rate is 4.9 degrees to 2,500 ft and then 2.6 degrees. The assumed background noise between hourly, daily and annual ATM events is 45 dBA. The RHC noise model in this example uses a noise absorption rate of 8dB for double the distance. Noise duration is varied along track according to velocity and side of track according to distance from track and takes account of duration differences between inside and outside of curved track where it occurs.

L_{Aeq} is an averaging metric across events and non-event periods. The Annual contours are smaller than the Daily contours (see Fig 1) due to easterlies arising 20% of the time compared to 100% for Daily ATMs. The RHC noise model calculates heights and speeds at contours points and the comparison should be ignored here. The noise model adds antilogs of the L_{Aeq} dBA during noise events and during background with each antilog proportionate to the noise exposure period. The summed antilogs are then converted back to logarithmic L_{Aeq} dBA. The tables over-page show the dBA differences between 100% and 20% Easterlies. They vary according to noise at ground level and side of track distance.

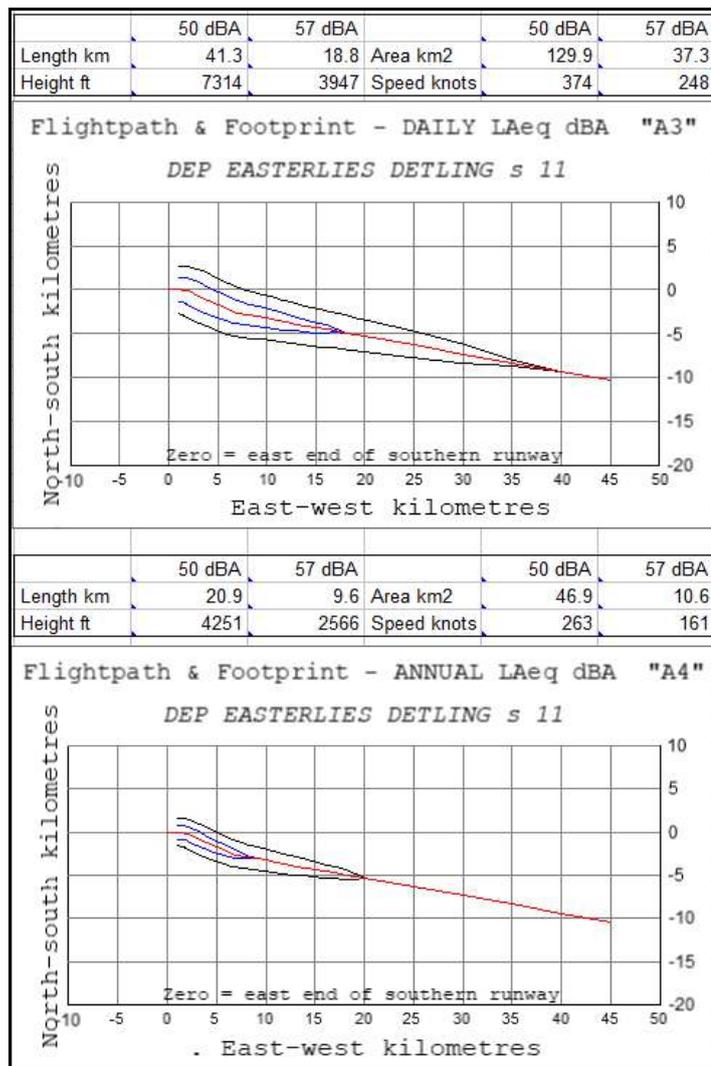


Figure 1 RHC modelled noise contours 50 and 57 dBA

Departures Easterlies Southern Runway Vectored Detling Route

Right of Track not shown here for simplicity

TABLE 17

DAILY LAeq dBA

0	E-W N-S		Side of Track																								Track				
	0 km	km	0	-12000	-11500	-11000	-10500	-10000	-9500	-9000	-8500	-8000	-7500	-7000	-6500	-6000	-5500	-5000	-4500	-4000	-3500	-3000	-2500	-2000	-1500	-1000		-500	0		
0			0	45	45	45	45	45	45	45	45	ERR	ERR	ERR	ERR																
1	0	0	0	45	45	45	45	45	45	45	45	45	45	45	45	45.1	45.3	45.6	46.1	46.8	47.8	49.1	50.8	53.1	56.3	60.8	68.7	89.3			
2	1	0	1	45	45	45	45	45	45	45	45	45	45	45	45	45.1	45.3	45.6	46.1	46.8	47.8	49.1	50.8	53.1	56.2	60.8	68.5	84.6			
3	1.5	-0.056	2	45	45	45	45	45	45	45	45	45	45	45	45	45.1	45.3	45.6	46.1	46.8	47.8	49.1	50.8	53.1	56.2	60.7	68.2	81.2			
4	2	-0.139	2	45	45	45	45	45	45	45	45	45	45	45	45	45.1	45.3	45.6	46.1	46.8	47.8	49.1	50.8	53.1	56.2	60.6	67.8	78.3			
5	2.5	-0.417	3	45	45	45	45	45	45	45	45	45	45	45	45	45.1	45.3	45.6	46.1	46.8	47.8	49.1	50.8	53.1	56.2	60.5	67.4	76.0			
6	3	-0.722	3	45	45	45	45	45	45	45	45	45	45	45	45	45.1	45.3	45.6	46.1	46.8	47.8	49.1	50.8	53.0	56.1	60.5	66.4	72.4			
7	4	-1.278	4	45	45	45	45	45	45	45	45	45	45	45	45	45.1	45.3	45.6	46.1	46.8	47.8	49.0	50.7	53.0	56.0	60.2	66.4	72.4			
8	5	-1.723	5	45	45	45	45	45	45	45	45	45	45	45	45	45.1	45.3	45.6	46.1	46.8	47.7	49.0	50.7	52.9	55.8	59.8	65.3	69.8			
9	6	-2.223	7	45	45	45	45	45	45	45	45	45	45	45	45	45.1	45.3	45.6	46.1	46.8	47.7	49.0	50.6	52.8	55.6	59.4	64.2	67.6			
10	7	-2.612	8	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.2	45.6	46.1	46.8	47.7	48.9	50.5	52.6	55.4	58.9	63.2	65.9			
11	8	-2.834	9	45	45	45	45	45	45	45	45	45	45	45	45	45.1	45.3	45.6	46.1	46.8	47.7	48.9	50.5	52.5	55.1	58.4	62.2	64.4			
12	9	-3.028	10	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.2	45.5	45.9	46.6	47.5	48.6	50.2	52.1	54.7	57.9	61.5	63.4			
13	10	-3.223	11	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.1	45.4	45.8	46.4	47.2	48.4	49.9	51.8	54.3	57.3	60.7	62.5			
14	11	-3.501	12	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.1	45.3	45.7	46.3	47.1	48.1	49.6	51.5	53.9	56.8	59.9	61.6			
15	12	-3.723	13	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.0	45.2	45.6	46.1	46.9	47.9	49.3	51.2	53.5	56.3	59.3	60.7			
16	13	-3.917	14	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.0	45.2	45.5	46.0	46.7	47.8	49.1	50.9	53.2	55.9	58.6	60.0			
17	14	-4.112	15	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.0	45.1	45.4	45.9	46.6	47.6	48.9	50.6	52.8	55.4	58.0	59.2			
18	15	-4.334	16	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.0	45.1	45.4	45.8	46.5	47.4	48.7	50.4	52.5	55.0	57.4	58.6			
19	16	-4.529	17	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.0	45.1	45.3	45.7	46.4	47.3	48.6	50.2	52.2	54.6	56.9	57.9			
20	17	-4.695	18	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.0	45.0	45.3	45.7	46.3	47.2	48.4	50.0	52.0	54.2	56.4	57.3			
21	18	-4.918	19	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.0	45.0	45.2	45.6	46.2	47.1	48.2	49.8	51.7	53.9	55.9	56.8			
22	19	-5.112	20	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.0	45.0	45.2	45.5	46.1	46.9	48.1	49.6	51.4	53.5	55.4	56.2			
23	20	-5.251	21	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.0	45.0	45.2	45.6	46.1	46.9	48.0	49.4	51.2	53.2	54.9	55.7			
24	25	-6.307	26	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.0	45.0	45.0	45.3	45.8	46.4	47.3	48.5	50.0	51.6	52.9	53.4			
25	30	-7.362	31	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.0	45.0	45.0	45.2	45.5	46.0	46.8	47.8	49.0	50.2	51.2	51.6			
26	35	-8.362	36	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.0	45.0	45.0	45.0	45.3	45.7	46.3	47.2	48.1	49.1	49.9	50.1			
27	40	-9.363	41	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.0	45.0	45.0	45.0	45.2	45.5	46.0	46.7	47.5	48.3	48.9	49.1			
28	45	-10.363	46	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0		
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

TABLE 19

ANNUAL LAeq dBA

E-W km	N-S km	Side of Track																								Track 0			
		0	-12000	-11500	-11000	-10500	-10000	-9500	-9000	-8500	-8000	-7500	-7000	-6500	-6000	-5500	-5000	-4500	-4000	-3500	-3000	-2500	-2000	-1500	-1000		-500		
1	0	0	45	45	45	45	45	45	45	45	ERR	ERR	ERR																
2	1	0	1	45	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.1	45.1	45.2	45.4	45.7	46.2	46.9	48.2	50.4	54.3	61.8	82.3
3	1.5	-0.056	2	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.1	45.1	45.2	45.4	45.7	46.2	46.9	48.2	50.4	54.2	61.6	77.6	
4	2	-0.139	2	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.1	45.1	45.2	45.4	45.7	46.2	46.9	48.2	50.4	54.2	61.3	74.2	
5	2.5	-0.417	3	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.1	45.1	45.2	45.4	45.7	46.2	46.9	48.2	50.3	54.1	60.9	71.3	
6	3	-0.722	3	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.1	45.1	45.2	45.4	45.7	46.2	46.9	48.2	50.3	54.0	60.5	69.0	
7	4	-1.278	4	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.1	45.1	45.2	45.4	45.7	46.2	46.9	48.1	50.2	53.7	59.5	65.4	
8	5	-1.723	5	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.1	45.1	45.2	45.4	45.7	46.1	46.9	48.1	50.1	53.3	58.5	62.9	
9	6	-2.223	7	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.1	45.1	45.2	45.4	45.7	46.1	46.8	48.0	49.9	53.0	57.4	60.7	
10	7	-2.612	8	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.1	45.1	45.2	45.4	45.7	46.1	46.8	47.9	49.7	52.6	56.5	59.0	
11	8	-2.834	9	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.1	45.1	45.2	45.4	45.7	46.1	46.8	47.8	49.6	52.2	55.6	57.6	
12	9	-3.028	10	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.0	45.1	45.2	45.4	45.6	46.0	46.6	47.6	49.3	51.7	54.8	56.7	
13	10	-3.223	11	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.0	45.1	45.2	45.3	45.6	45.9	46.5	47.4	49.0	51.3	54.1	55.8	
14	11	-3.501	12	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.0	45.1	45.1	45.3	45.5	45.8	46.4	47.3	48.7	50.8	53.5	54.9	
15	12	-3.723	13	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.0	45.0	45.1	45.2	45.4	45.8	46.3	47.1	48.5	50.5	52.9	54.2	
16	13	-3.917	14	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.0	45.0	45.1	45.2	45.4	45.7	46.2	47.0	48.2	50.1	52.3	53.5	
17	14	-4.112	15	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.0	45.0	45.1	45.2	45.4	45.7	46.1	46.9	48.0	49.8	51.8	52.9	
18	15	-4.334	16	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.0	45.0	45.1	45.2	45.3	45.6	46.0	46.7	47.9	49.5	51.3	52.3	
19	16	-4.529	17	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.0	45.0	45.1	45.2	45.3	45.6	46.0	46.6	47.7	49.2	50.9	51.7	
20	17	-4.695	18	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.0	45.0	45.1	45.1	45.3	45.5	45.9	46.5	47.5	48.9	50.5	51.3	
21	18	-4.918	19	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.0	45.0	45.0	45.1	45.3	45.5	45.9	46.5	47.4	48.7	50.1	50.8	
22	19	-5.112	20	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.0	45.0	45.0	45.1	45.2	45.5	45.8	46.4	47.2	48.5	49.8	50.4	
23	20	-5.251	21	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.0	45.0	45.0	45.1	45.2	45.5	45.8	46.3	47.1	48.2	49.4	50.0	
24	25	-6.307	26	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.0	45.0	45.0	45.1	45.2	45.3	45.6	46.0	46.6	47.3	48.1	48.4	
25	30	-7.362	31	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.0	45.0	45.0	45.0	45.1	45.2	45.4	45.7	46.1	46.7	47.1	47.3	
26	35	-8.362	36	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.0	45.0	45.0	45.0	45.1	45.2	45.3	45.5	45.8	46.2	46.5	46.6	
27	40	-9.363	41	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.0	45.0	45.0	45.0	45.0	45.1	45.2	45.4	45.6	45.9	46.1	46.2	
28	45	-10.363	46	45	45	45	45	45	45	45	45	45	45	45	45	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

31-May-24

Richmond Heathrow Campaign Noise Mode XXXXXXXXXX

E-W km	N-S km	Detling Route										DAILY LAeq dBA to Annual LAeq dBA at 20% Easterlies										DIFFERENCES					Track	
		0	-12000	-11500	-11000	-10500	-10000	-9500	-9000	-8500	-8000	-7500	-7000	-6500	-6000	-5500	-5000	-4500	-4000	-3500	-3000	-2500	-2000	-1500	-1000	-500		0
1	0	0	0	0	0	0	0	0	0	0	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	
2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2	0.5	0.9	1.4	2.1	2.9	3.9	4.9	5.9	6.6	6.9	7.0
3	1.5	-0.056	2	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2	0.5	0.9	1.4	2.1	2.9	3.9	4.9	5.8	6.6	6.9	7.0
4	2	-0.139	2	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2	0.5	0.9	1.4	2.1	2.9	3.9	4.9	5.8	6.5	6.9	7.0
5	2.5	-0.417	3	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2	0.5	0.9	1.4	2.1	2.9	3.9	4.9	5.8	6.5	6.9	7.0
6	3	-0.722	3	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2	0.5	0.9	1.4	2.1	2.9	3.9	4.9	5.8	6.5	6.9	7.0
7	4	-1.278	4	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2	0.5	0.9	1.4	2.1	2.9	3.8	4.8	5.8	6.5	6.9	7.0
8	5	-1.723	5	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2	0.5	0.9	1.4	2.0	2.9	3.8	4.8	5.7	6.4	6.8	6.9
9	6	-2.223	7	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2	0.5	0.8	1.4	2.0	2.8	3.8	4.8	5.7	6.4	6.8	6.9
10	7	-2.612	8	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2	0.5	0.8	1.3	2.0	2.8	3.7	4.7	5.6	6.3	6.7	6.9
11	8	-2.834	9	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2	0.5	0.8	1.3	2.0	2.8	3.7	4.7	5.6	6.3	6.7	6.8
12	9	-3.028	10	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2	0.4	0.7	1.2	1.8	2.6	3.5	4.5	5.4	6.2	6.6	6.7
13	10	-3.223	11	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1	0.3	0.6	1.1	1.7	2.5	3.4	4.3	5.3	6.1	6.5	6.7
14	11	-3.501	12	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1	0.2	0.5	1.0	1.6	2.3	3.2	4.2	5.2	6.0	6.5	6.6
15	12	-3.723	13	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.2	0.5	0.9	1.4	2.2	3.1	4.1	5.0	5.9	6.4	6.5
16	13	-3.917	14	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.1	0.4	0.8	1.3	2.0	2.9	3.9	4.9	5.8	6.3	6.5
17	14	-4.112	15	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.1	0.3	0.7	1.2	1.9	2.8	3.8	4.8	5.6	6.2	6.4
18	15	-4.334	16	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.1	0.3	0.6	1.2	1.8	2.7	3.7	4.7	5.5	6.1	6.3
19	16	-4.529	17	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.1	0.2	0.6	1.1	1.7	2.6	3.5	4.5	5.4	6.0	6.2
20	17	-4.695	18	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.2	0.5	1.0	1.7	2.5	3.4	4.4	5.3	5.9	6.1
21	18	-4.918	19	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.2	0.5	0.9	1.6	2.4	3.3	4.3	5.2	5.8	6.0
22	19	-5.112	20	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.1	0.4	0.9	1.5	2.3	3.2	4.2	5.0	5.6	5.8
23	20	-5.251	21	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.2	0.4	0.9	1.4	2.2	3.1	4.1	4.9	5.5	5.7
24	25	-6.307	26	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.3	0.6	1.1	1.8	2.6	3.4	4.2	4.8	5.0
25	30	-7.362	31	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.2	0.4	0.8	1.4	2.1	2.8	3.6	4.1	4.3
26	35	-8.362	36	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.2	0.6	1.0	1.6	2.3	2.9	3.4	3.5
27	40	-9.363	41	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.8	1.3	1.9	2.4	2.8	2.9
28	45	-10.363	46	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

From: [REDACTED]
To: [DD - Airspace](#)
Cc: [REDACTED]
Subject: Stage 2 Option Selection RHC Comment
Date: 04 June 2024 13:54:32
Attachments: [Heathrow Stage 2 Option Selection RHC comment 31 May 2024.pdf](#)

Caution: external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments.

Dear [REDACTED]

Following RHC's examination of the Stage 2 optioneering detail to date we wish to make a comment on the option selection process as set out briefly in the attached.

We would be pleased to discuss this and other matters we have raised.

Kind regards

[REDACTED]

[REDACTED]

[REDACTED] Richmond Heathrow Campaign

RICHMOND HEATHROW CAMPAIGN (RHC)
RHC Noise Model [REDACTED] 31 May 2024
Heathrow Options Appraisal, Stage 2 CAP 1616
Decisions based on Annual Contours and Population Counts

The Initial Options Appraisal in Stage 2 of the CAP 1616 process for Heathrow’s Airspace Modernisation compares options for single mode arrivals and departures to/from each runway with the “Do Nothing” base cases. There are eight Do Nothing Cases (2 runways x 2 modes (east and west) x 2 activities (arrivals and departures)). The Do Nothing cases are apparently based on the CAA’s Heathrow Airport 2019 Summer Noise Contours and Noise Action Plan Contours -ERCD Report 2001 during which there was an 80/20 split for westerlies/easterlies.

The Cranford Agreement was still operative in 2019. The following table shows the Daily operations and modes in 2019. The Initial Options are prepared on the basis of no Cranford Agreement and without Daily Respite. Heathrow plan to include Respite in Stage 3 of the Options Appraisal.

Heathrow Daily Operations 2019 with Cranford Agreement	Departures		Arrivals	
	To West (westerlies)	To East (easterlies)	From West (easterlies)	From East (westerlies)
Northern Runway	Segregated 8hrs Respite 27R	None 09L	16 hrs 09L	Segregated 8hrs Respite 27R
Southern Runway	Segregated 8hrs Respite 27L	16 hrs 09R	None 09R	Segregated 8hrs Respite 27L

The Stage 2 Initial Options Appraisal produces “difference” noise contours as a prime criteria for option selection. These are constructed by comparing Do Nothing Cases with Options for each of the eight types of mode and operation shown in the above table. The methodology used by Heathrow compares LAeq 16 hr contours for the summer period without daily respite and assuming a 80/20 split for westerlies/easterlies.

RHC has simulated a departure flight path using its noise model to illustrate the noise contours used in determining the “difference” results. We have called these Annual contours, although the input data is for the summer only. Were separate winter contours to be included it would make little difference to the principles discussed here. The example flight path is for Departures to the East on the Detling Route during a 16 hour day. Similar matters arise for all the other types of mode and operation.

Figure 1 in the Annex shows the Single ATM Event 50 and 57 dBA contours and the table shows the contour areas to be 235km² and 84km², respectively. Using very approximate population densities of 3,000 people per km² and 2,500 people per km², respectively, means the populations exposed to a Single ATM Event are approximately 705k and 210k, respectively.

LAeq averages the noise energy and while 40 ATMs per hour approximate a Single Event exposure the assumed 11.4 ATMs an hour combines the noise from each ATM with background noise for the interim periods of the time, which background noise in the example is assumed to be 45 dBA. The LAeq average thereby mathematically decreases and the 50 dBA and 57 dBA contour areas shown in the table to 130km² and 84km², respectively or 55% and 44%,

respectively of the Single Event contour areas. However, the population exposed has not reduced but rather the noise impact has reduced.

In the case of the hourly results the noise energy parameters are (a) loudness, which will not have changed, (b) duration which will have changed because of the quiet periods introduced between ATMs and (c) the pattern of noise disruption due to the intermittency of the 11.4 ATMs. Unfortunately, the analysis as applied to the Initial Options Appraisal does not take account of the dose-response impact of noise exposure. The population numbers are used as a proxy for noise impact and this is only valid if the dose-response parameter is ignored. But loudness, duration and pattern of intermittent noise are paramount in determining annoyance, health and sleep loss and the dose-response parameter cannot be ignored.

The deficient process is made worse by the Initial Options Appraisal where the “Annual” contours, which without daily respite are shown in Figure 4 of the example. On easterlies the 50 dBA and 57 dBA contour areas are reduced to 20% and 13%, respectively, of the Single ATM event area, i.e. 47km² and 11km². The population exposed is still that for the Single ATM Event and while the aggregate community noise impact certainly would be less it will not be to the extent of 80% and 87%, respectively. The dose-response equation is not a simple relationship but depends on the loudness, duration and pattern of noise and due to a cumulative effect is probably exponential in nature. The Annual population numbers used in the Initial Options Appraisal are a poor parameter for selecting the options.

The distortion caused by using contour areas and hence population numbers without including a dose-response factor is made worse when examining the contour areas including daily respite. Figure 5 shows the contour areas for 50 dBA and 57 dBA to be reduced to 12% and 7%, respectively, of the Single ATM Event contour areas. Respite is not included in Stage 2 Option Appraisal and Options are chosen without the respite benefit, although in general terms in the densely populated area surrounding Heathrow respite impact gain results in an equal loss elsewhere.

We have highlighted the distortion of using Annual contours such as shown in Figure 5 and the associated population numbers as a proxy for the impact of noise on the population. Decisions on easterlies are probably more deficient than on westerlies given the westerlies/easterlies split of say 80/20. It cannot be said that the population of 141k exposed at 50dBA on an Annual Basis using LAeq averages is the only population exposed when 705k people are exposed to each and every Single ATM. The population proxy is a deficient proxy resulting in irrational option selection.

We realise that health impacts will be taken into account in Stage 3 but this will be too late to reverse the Initial Options Appraisal short-listing decisions.


Richmond Heathrow Campaign

The RHC noise model is not an ANCON equivalent. The model detail presented here is used for illustration only and should not be used as a basis for specific flight path decisions.

ANNEX: Example Flight Path Noise Contours

RICHMOND HEATHROW CAMPAIGN RHC Noise Model () 31 May 2024

Departures to the East, Detling, Southern Runway, Day

Comparison of Single Event (Fig 1), Hourly (Fig 2), Daily with Respite (Fig 3), Annual without Daily Respite (Fig 4) and Annual with Daily Respite (Fig 5)

Note A: Daily without Respite is the same as Hourly

Note A

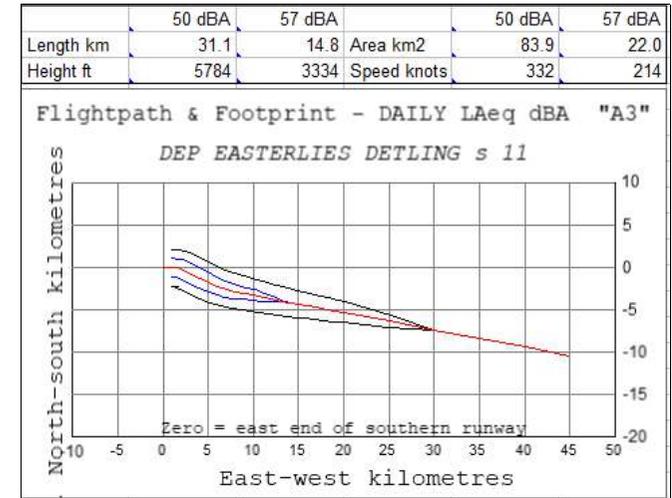
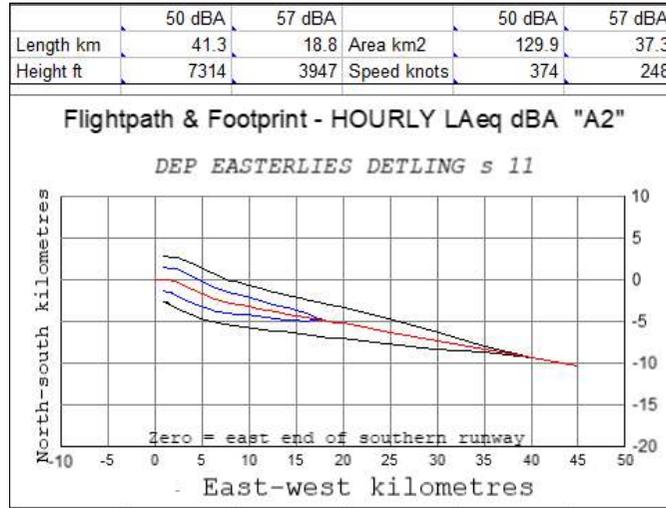
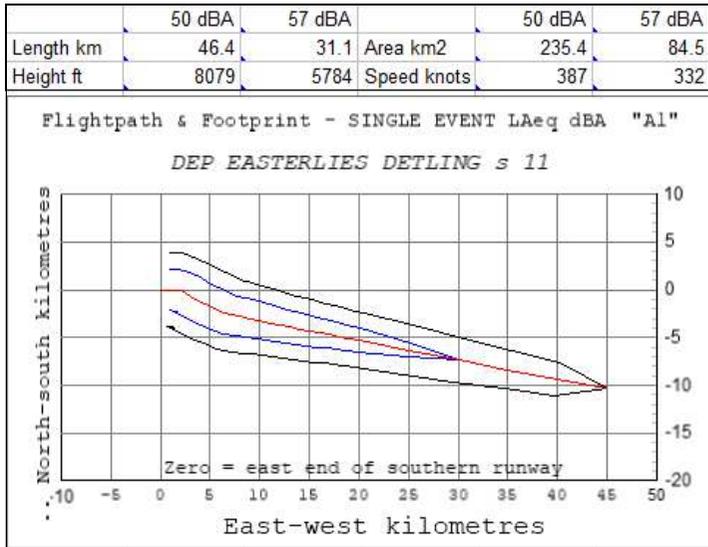
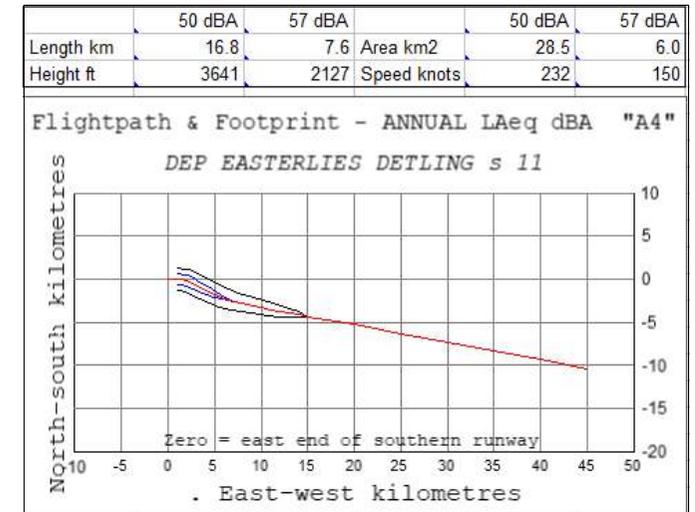
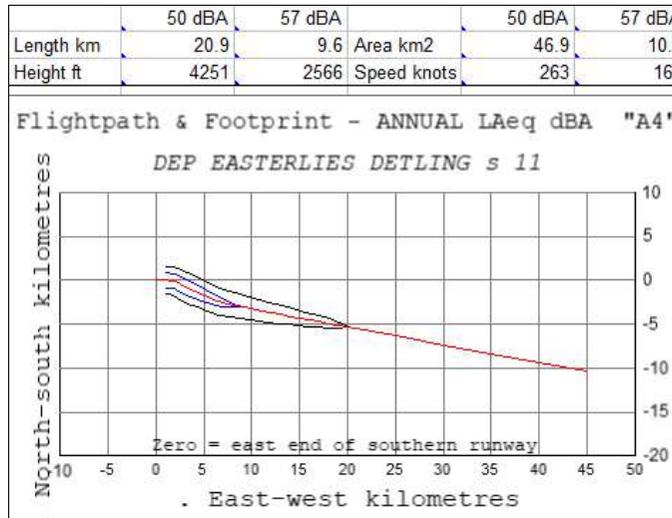


Figure 1 Single Event

Figure 2 Hourly 11.4 ATMs per hour

Figure 3 Daily 8 hrs respite (runway alternation)

Source: Richmond Heathrow Campaign Noise Model 31 May 2024	Departures to East Detling Southern Runway Day			
	Contour Areas			
	50 dBA LAeq 16hr		57 dBA LAeq 16hr	
	No Respite	Respite 8hr daily	No Respite	Respite 8hr daily
	km2	km2	km2	km2
Single Event	235	235	84	84
Hourly 11.4 ATMs/hr	130	130	37	37
Daily 16 hour	130	84	37	22
Annual 20% Easterlies	47	28	11	6
Single Event	100.0%	100.0%	100.0%	100.0%
Hourly 11.4 ATMs/hr	55.3%	55.3%	44.0%	44.0%
Daily 16 hour	55.3%	35.7%	44.0%	26.2%
Annual 20% Easterlies	20.0%	11.9%	13.1%	7.1%
Area as very approx proxy for population: 50 dBA contour 3,000 people per km2 and 57dBA contour 2,500 people per km2				



Table

Figure 4 Annual 20% Easterlies No Respite

Figure 5 Annual 20% Easterlies 8 hrs Daily Respite

Stage 2 Stakeholder re-engagement session – 16th and 17th April 2024

Report of session between the Heathrow Airspace Modernisation Team and community stakeholder group representatives (16 and 17 April 2024, Microsoft Teams)

Attendees:

Attendees	Heathrow:
Teddington Action Group Friends of Richmond Park (4) Richmond Heathrow Campaign (2) The Royal Parks (2) Englefield Green Action Group (2) Walton-on-Thames Local resident (2) NATS (3) London Borough of Newham Council for the Independent Scrutiny of Heathrow Airport (CISHA) Blackbushe Airport Harmondsworth & Sipson Residents Association Guildford Borough Council Local Authorities Aircraft Noise Council ACOG London Borough of Sutton/Royal Borough of Kingston upon Thames Farnborough Airport Heathrow Strategic Planning Group London Borough of Islington Ascot Parish Council Plane Hell Action South East Molesey Residents Association Swiss Airlines (2) HACAN Hertfordshire Council British Helicopter Association CAGNE	[REDACTED]

A slide pack was presented during the discussion and shared with stakeholders prior to the session.

Notes from the Discussion:

Purpose of this Engagement

Heathrow	Welcomed stakeholders and set out that the purpose of this engagement and subsequent requirements as set out by the CAA are to 1) Re-engage with all stakeholders on the proposed methodology for shortlisting options after the Initial Options Appraisal; 2) Take into account any views on the proposed shortlisting methodology; 3) Make a fresh decision on shortlisting methodology; and 4) Apply the chosen methodology to the flight path options.
Harmondsworth & Sipson Residents Association	Questioned the length of time between the initial CAA gateway response in October 2023, and re-engagement in April 2024. Also raised concern that the feedback period is too short, adding that local communities have written to Heathrow’s Chief Executive and intend to discuss their concerns at CISHA.

Heathrow	Responded that time spent from October to now was required to get the clarification needed from the CAA to progress. Also explained that the feedback period is four weeks, which is consistent with other feedback periods throughout the ACP.
Molesey Residents Association	Asked for clarification on which version of CAP1616 Heathrow is now engaging under.
Heathrow	Clarified that the Stage 2 resubmission is to be assessed against the requirements set out in Version 4. The CAA have advised Heathrow to follow Version 5 once Stage 3 commences.
Teddington Action Group	Commented that the scope of the Stage 2 re-engagement is too narrow and questioned how sufficient feedback will be collected in order to re-do the IOA.
Heathrow	Responded that the scope of this re-engagement is not related to the IOA itself. Clarified that the IOA has been submitted with the initial Stage 2 submission and will not be re-visited by Heathrow as part of the re-submission. Also clarified that the re-engagement exercise required by the CAA is related to the options shortlisting methodology only, which followed completion of the IOA itself.
Heathrow Strategic Planning Group	Asked for clarification on how Heathrow have responded to the feedback summary issue raised by the CAA at the Stage 2 gateway. Also asked what this means for the capturing of feedback and transparency of the process.
Heathrow	Responded that the CAA's comments refer to the Step 2A document in which some responses to feedback were not consistent. Clarified that Heathrow will be amending this in its review and that all feedback had been read and considered. Agreed that capturing feedback consistently is important.

Stage 2 Re-engagement and Feedback Process

Ascot Parish Council	Expressed concern that the timeline for the Stage 2 re-engagement is short and compresses the period in which people can provide feedback.
Heathrow	Responded that the timeline is based on the scope of the re-engagement focussing on one element of the Stage 2 work and seeking feedback on this. However, the timeline is indicative and Heathrow is open to changing and delaying further if necessary.
Plane Hill Action South East	Requested that Heathrow consider holding in person meetings in addition to online sessions for stakeholders, noting that on this occasion the lack of contour maps in the engagement is appropriate for online sessions. Commented that it would not be a fair consultation without the opportunity for stakeholders to speak to the team in person.
Heathrow	Explained that previous feedback from stakeholders highlighted a preference for online sessions but noted this feedback in regard to in person sessions.

Shortlisting Methodology

Molesey Residents Association	Asked why 'track miles' as a criteria is being given a prominent position at this stage of the process in comparison to environmental impacts or noise. Asked what the definition of "significantly higher" is when applying the test, and whether a decibel threshold will be set for noise.
Heathrow	Explained that track miles is a criteria for Test 3, and that all options will first be filtered at Tests 1 and 2, which prioritises noise. Also explained that air quality and biodiversity impacts will be considered at Test 4. Explained that the ordering of the tests reflects the altitude-based priorities set out in the governments Air Navigation Guidance 2017. Responded that the threshold will be dependent on the various metrics used. Explained that there are various metrics for noise which have different decibels associated with them, and that there will be different noise impacts at each runway end.

Richmond Heathrow Campaign	Asked how the removal of tests 4 and 5 will impact the number of options being taken forward.
Heathrow	Explained that following stakeholder feedback, Heathrow will apply the chosen methodology to the options and while it anticipates a similar number of shortlisted options this will depend on the shortlisting process to be undertaken afresh.
Richmond Heathrow Campaign	Asked whether the six access points to the network will remain the same.
Heathrow	Confirmed that it has made the assumptions based on what happens today so the access points will remain for this shortlisting exercise.

Local impacts – Community and Environmental (Incl. Richmond Park)

Guildford Borough Council	Commented that it is important air quality is taken into consideration during the airspace change process. Noted that local councils would be interested in understanding more about Heathrow's consideration of human health side effects and other local issues in regions affected by the ACP.
Ascot Parish Council	Asked if Heathrow has included quantitative assessments of environmental impacts in Stage 2, as there is a requirement to do so in CAP1616 V5. Commented that the findings of the environmental impacts may have differed at Stage 2 if Version 5 had been followed.
Heathrow	Responded that quantitative metrics for the assessment of environmental impacts have been included at Stage 2 as part of the Initial Options Appraisal (IOA). A Full Options Appraisal will take place in Stage 3 where environmental impacts will be considered in more detail.
Ascot Parish Council	Questioned the potential impacts of considering full environmental impacts at Stage 3 rather than Stage 2.
Molesey Residents Association	Asked what Heathrow is defining as "Local Circumstances", and whether assessment will encompass change effects on local communities.
Heathrow	Explained that Heathrow will compare how each option performs relative to a baseline and the assessment will use metrics related to noise and biodiversity to understand the change in impacts. Also explained that Richmond Park was identified at Stage 2 as specific area for consideration in addition to assessing populated/residential areas around Heathrow.
London Borough of Sutton/Royal Borough of Kingston upon Thames	Commented that residents of the London Boroughs of Sutton and Kingston are likely to raise concerns regarding the re-instatement of Option I due to the noise impact in these areas. Added that these boroughs will be looking for a detailed explanation of how the option will impact residents.
Heathrow	Responded that Option I was reinstated for consistency in the way the shortlisting tests were applied in the previous methodology.
Richmond Heathrow Campaign	Asked whether Heathrow's assessment of impacts of overflight and commitments is a multi-criteria analysis. Also asked for clarification on how Heathrow will mitigate impacts of overflight, and the meaning of 'where possible' in Heathrow's commitments to Richmond Park.
Englefield Green Action Group	Asked what Heathrow means by 'where possible' with regards to its commitments to minimising impacts of overflight on AONBs and national parks including Richmond Park.

Molesey Residents Association	Asked how Heathrow intends to balance the desire to meet Richmond Park's environmental requirements with the impacts on residential populations.
Heathrow	Explained that the assessment is guided by government policy. Air Navigation Guidance sets out the government's priorities relating to noise and environmental impacts resulting from airspace change. Balancing these priorities will be considered when the system options are put together at Stage 3 and will also inform the system options that will go to public consultation. Added that 'where possible' reflects the multi-year nature of the project and process of assessing options over a long period of time.
Plane Hell Action South East	Asked whether Heathrow has considered the impact on communities and other parks in addition to Richmond Park, such as those in Southeast London (Burgess Park) where residents are affected by impacts of both Heathrow Airport and London City Airport.
Heathrow	Explained that Heathrow has not yet had other suggested areas that should be under the same considerations as Richmond Park through community engagement. Also explained that Airspace Modernisation is happening across most airports in London, including London City, and the integration of options between these airports will take place at Stage 3. At this point impacts on communities affected by more than one airport will be considered and consulted on.

Stage 3 Queries

Harmonds worth & Sipson Residents Association	Asked when Heathrow anticipates moving into Stage 3.
Richmond Heathrow Campaign	Asked about the timeframe for Stage 3 and when the public consultation will take place.
Harmonds worth & Sipson Residents Association	Asked how Heathrow envisages consulting with local residents surrounding the airport who are not necessarily overflowed, and where in-person events will be held.
Heathrow	<p>Responded that a Stage 2 decision from the CAA is currently expected in June. Added that a Stage 3 engagement & consultation plan has not yet been finalised, however it will share information on Stage 3 with stakeholders when available.</p> <p>Explained that the Stage 3 consultation will target all potentially affected members of the public, however no further information is currently available regarding the location or timing of in-person events.</p>
The Royal Parks	Asked for clarity on what engagement will entail, and which stakeholders will be involved, noting previous one-to-one engagement between Heathrow and Friends of Richmond Park.
Heathrow	Responded that Heathrow currently has an ongoing informal engagement process with the Friends of Richmond Park to understand their questions and concerns relating to environmental impacts of the ACP. Also recognised that other stakeholders may be interested in engaging on local circumstances. At Stage 3, Heathrow will look to engage further with those interested stakeholders.

Richmond Heathrow Campaign	Asked whether a trade-off of the different options will be assessed at Stage 3 and explained to stakeholders?
Heathrow	Confirmed that an assessment of impacts will be part of the consultation at Stage 3, and stakeholders will have the opportunity to feedback on the options. Added that this feedback will drive the final ACP option designs.
Plane Hell Action South East	Asked if it will be too late for further comments and feedback on the proposals once the ACP moves to Stage 3.
Heathrow	Explained that Stage 3 is where a large proportion of work for the ACP takes place and where the current options will be put together into system options. Also explained that there will be further engagement at Stage 3 and a full public consultation which provides stakeholders with the opportunity to feedback into the process.
Richmond Heathrow Campaign	Asked if Heathrow has started to consider which options to take forward to consultation, and whether it will have a preferred option.
Heathrow	Confirmed that Heathrow will have a preferred option at Stage 3, and that it is currently unsure how many options will be taken to consultation stage.
Plane Hell Action South East	Asked for clarification on whether the current list of options will be narrowed down to one option to take forward to consultation. Also asked if the narrowing of options means that flight paths will be concentrated.
Heathrow	Explained that the current list of single options will become a smaller list of system options and that each system will have several single options within it. Also explained that more than one system option will be taken to consultation.
CAGNE	Asked about Heathrow's involvement and relationship with ACOG so far in the process.
Heathrow	Explained that ACOG has a role in coordinating integration of ACP's during Stage 3 and so Heathrow is currently only providing periodic updates to ACOG throughout Stage 2.
Heathrow Strategic Planning Group	Commented that stakeholders are interested in understanding the coordination with ACOG and Heathrow's integration with other airports. Also asked about the timetable for Stage 3A and when stakeholders can get more information on the options that are being considered, and whether all options will be outlined at Stage 3A or 3B.
Heathrow	Clarified that Stage 3 will include the submission of a consultation strategy to the CAA which will be put through a gateway stage. Also clarified that the outlining of options at public consultation will happen after this gateway.
Molesey Residents Association	Asked if there will be a 'do minimum' option at Stage 3.
Heathrow	Confirmed that this will be considered at Stage 3 once the system options have been compiled and it can identify an option that closest reflects minimum change.
Friends of Richmond Park	Asked how many system options does Heathrow expect to develop at Stage 3?
Heathrow	Explained that it is too early to say as that work has not yet started.

Stage 2 work: Initial Options Appraisal

Richmond Heathrow Campaign	Asked how Heathrow has determined that the IOA results for overflight of AONBs are likely to be overstated.
Heathrow	Explained that the IOA used data from 2019 as a baseline, including the current stack locations. However, Heathrow anticipates that stack locations will change which may allow

	for continuous climb and therefore lead to a reduction in overflight impact on AONBs, which are situated further away from Heathrow.
Richmond Heathrow Campaign	Asked if the data on AONBs and RAMSAR sites included in the IOA at Stage 2 will be removed and included in Stage 3 instead.
Heathrow	Responded that this data will remain part of the information contained in the IOA Stage 2, however for the shortlisting element of the process Heathrow will not be considering this data. At Stage 3 Heathrow conduct further environmental assessment on the compiled system options before taking through to public consultation.
Richmond Heathrow Campaign	Asked how the data, modelling and calculations are assessed in the ACP, and what the procedure is for checking the validity of data.
Heathrow	Responded that further modelling related to the IOA is not being carried out as part of this re-engagement period. Added that this data was previously submitted to the CAA as part of the original Stage 2 gateway for review.

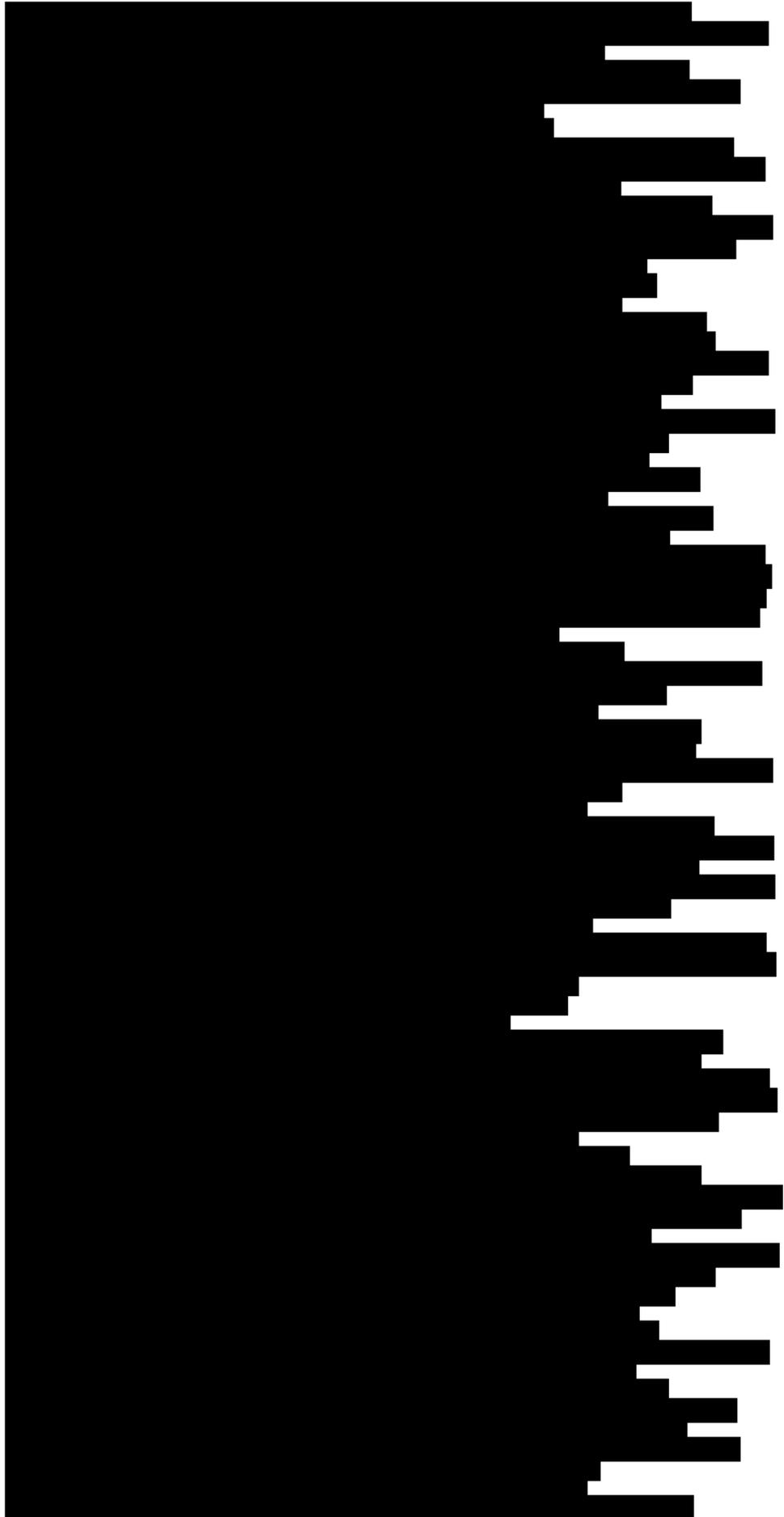
Queries related to Airport Operations

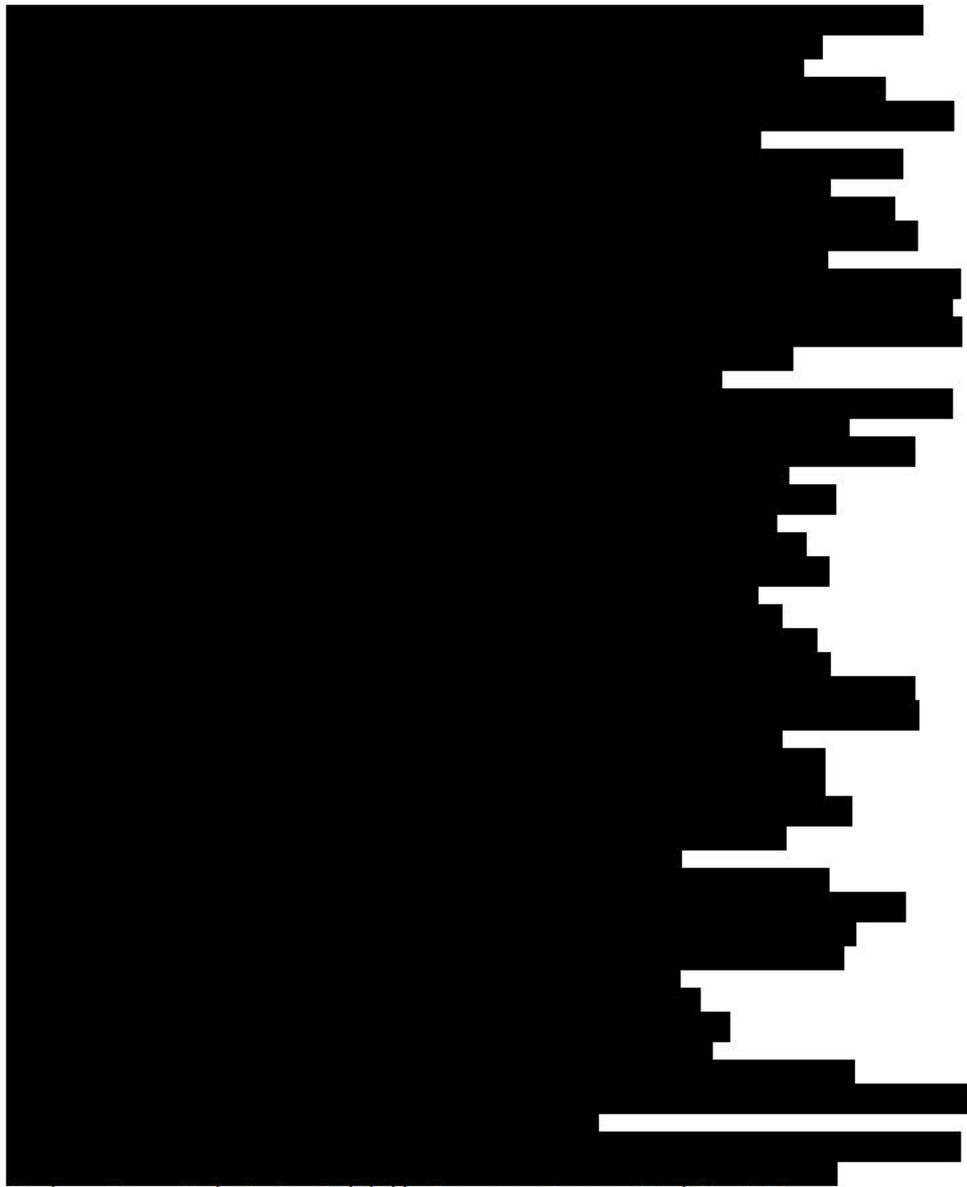
Richmond Heathrow Campaign	Asked about the estimated frequency of flights for each single-direction option included in the ACP, and how this compares to current operations.
Heathrow	Asked for this question to be submitted separately via email for a written response.
Englefield Green Action Group	Asked why climb gradients can't be higher to avoid aircraft flying low over people's houses (referencing certain airlines and fleets). Also asked for clarification on Heathrow's definition of Continuous Descent Operation.
Heathrow	Asked for this question to be submitted separately via email for a written response.
Molesey Residents Association	Asked if time of day will be considered when putting together the system options and whether there is an option for the routes to change based on the time of day, such as at night or in the late shoulder period.
Heathrow	Responded that Heathrow is exploring respite concepts which do relate to time of day and these are going to be considered when system options are compiled at Stage 3 of the ACP.
Englefield Green Action Group	Asked if mixed mode is likely to be implemented as part of the ACP.
Heathrow	Explained that the current stance is that mixed mode is unlikely to happen at Heathrow.

Closing

Heathrow	Explained that, following this period of re-engagement, it will take into account all feedback on the proposed shortlisting methodology and finalise a revised methodology which will be applied to the flight path options. Also explained that a summary of all feedback will be provided once the feedback period has ended.
Heathrow	Thanked the stakeholders and the Heathrow Team for their time. Asked stakeholders to send any comments or questions to the Airspace Inbox. Reminded attendees to provide feedback on the revised shortlisting methodology by April 29 th

From: [DD - Airspace](#)
To: [DD - Airspace](#)
Bcc:





Subject: Heathrow Airspace Modernisation: Stakeholder Engagement Summary March-May 2024
Date: 07 June 2024 15:12:00

Dear All,

Thank you to those who provided feedback on our recent engagement on Heathrow’s proposed approach to shortlisting options at the end of Stage 2.

As promised, we have compiled a summary of the feedback and a Heathrow response to each of the key themes. This is provided below and if you have any further questions, you can email us at airspace@heathrow.com.

Much of the feedback received referred to concerns or issues that did not specifically relate to the shortlisting methodology. A total of 10 pieces of written feedback related specifically to the proposed shortlisting methodology, with a mixture of views. Some stakeholders disagreed with the proposed approach to delay consideration of Tests 4 and 5 until Stage 3, stating the importance of protecting AONBs and Richmond Park from overflight. Other stakeholders recognised that these tests could be better applied at Stage 3 and were therefore in favour of the proposed approach. Having considered all of the feedback received, Heathrow then made a

fresh decision to adopt the methodology presented to you on slide 11 of the engagement material. This methodology has now been applied to shortlist 141 options at the end of Stage 2.

All of your feedback has been read and considered, and it will all be submitted to the CAA. The below provides a high-level summary of the most common themes.

We are now in the process of submitting all relevant material to the CAA. All updated Stage 2 material will be published on the [CAA's public-facing portal](#), including the application of the shortlisting methodology and the outcomes. We will let you know when it is available there. We expect the CAA to inform us of their Gateway decision later in June.

Many thanks,



	Stakeholder Feedback Theme	Heathrow Response
1	Statements on the importance of protecting AONBs (now known as "National Landscapes") and/or Richmond Park from increased aircraft noise, including the need to consider new AONB legislation and potential extensions to existing AONBs	<p>Heathrow is committed to minimising impacts of overflight to AONBs, national parks and "local circumstances where possible at Stage 3 of the process.</p> <p>We will continue to engage with representatives of National Landscapes in Stage 3, to understand the status of any planned extensions to these protected areas.</p>
2	Questions regarding the definition of 'local circumstances' with suggestions of other parks for consideration	<p>CAP1616 requires airports to consider "local circumstances" when designing and engaging on an airspace change proposal. In CAP1616 v4 paragraph B78, the term local circumstances refers to "community feedback on specific areas that should be avoided": this is the context in which Richmond Park was identified.</p> <p>We have since had suggestions of other areas that might be "local circumstances" and we will therefore look at whether it is appropriate for us to have consideration of these areas when designing system options at Stage 3.</p>
3	Questions regarding the likely impact of the proposed shortlisting methodology on the shortlisted options	<p>After considering all stakeholder feedback carefully, we have taken the decision to proceed with the shortlisting methodology proposed to stakeholders at the recent engagement. This led to 141 options being shortlisted and 28 options have been discontinued. We will let stakeholders know when they can view the outcomes of the shortlisting on the CAA's Airspace Change Portal.</p>

4	Question regarding whether moving Test 4 to Stage 3 indicates a change to the importance of AONBs in our assessments	The more detailed assessment of AONBs at Stage 3 (rather than at Stage 2) does not indicate any change to Heathrow's commitment to assessing impacts on AONBs. In fact, consideration of the impacts when we have 'system options' (with arrivals and departures, for easterly and westerly operations) and assumptions around Continuous Climb Operation (CCO) and Continuous Descent Operation (CDO) applied will ensure a more robust assessment of the impacts to AONBs. Heathrow is committed to minimising impacts of overflight to AONBs.
5	Questions regarding why the overflight of AONBs was overstated in the IOA results, and whether this is relevant to Tests 1-3 as well	Overflight of AONBs is overstated in the IOA because we have applied conservative assumptions for aircraft climb gradients and have had to assume that holding stacks remain in the same place as today: in reality NATS is undertaking a re-design of upper airspace, including Heathrow's holding stacks, and we currently anticipate that the stacks will be moved, facilitating more aircraft making a continuous climb from the runway. This issue is more relevant to Tests 4 and 5 (AONBs and 'local circumstances') than to Tests 1 and 2 since the noise benefits of aircraft flying continuous climbs or steeper climb gradients are greater further from the airport. Tests 1 and 2 generally address overflight impacts closer to the airport.
6	Concern about whether Heathrow is ignoring tranquillity impacts	Impacts on tranquillity will be further assessed at Stage 3, in accordance with current government policy. We will also consider how important habitats or species within statutory protected sites might be affected and seek to reduce impacts.
7	Questions regarding Heathrow's definition of "significant" in the shortlisting of options	<p>Heathrow has now undertaken the shortlisting of options based on a revised shortlisting approach, as advised by the CAA.</p> <p>At each test in the process, the option was compared to the baseline (or 'Do Nothing'). This allowed Heathrow to understand the impact of the option for each test. Options were also compared to each other to identify options that performed significantly worse than the other options within that set. Heathrow applied professional judgement to determine the meaning of 'significantly' when deciding if an option should be discontinued. In taking a 'fresh decision' on the shortlisting methodology, Heathrow decided to clarify that</p>

		<p>options would only be assessed within each of the 8 sets. This is because impacts will inevitably vary for arrivals vs departures and for westerly operations vs easterly operations. At Stage 2 options have been developed and assessed as single runway options, but at Stage 3 these options will be combined to create and assess system options (arrivals and departures together, for easterly and westerly operations).</p> <p>Further information on the shortlisting of options and the outcomes will be contained in our Stage 2 submission, 2B Initial Options Appraisal Document.</p>
8	Question about whether some of Heathrow's Design Principles have been given greater weight in the shortlisting approach, or whether some have been ignored	All of the Design Principles were considered when developing the Comprehensive List of Options (CLOO) and in the Design Principle Evaluation (DPE). Some Design Principles can be addressed through design of the flight paths over the ground, but some can only be addressed through the design of operational concepts overlaid on the design. Design Principles 6 and 8 relate to respite and night flights and these can only be considered effectively at Stage 3 once we have system options (arrivals and departures, for easterly and westerly operations).
9	Concern about whether some options might have been prematurely discontinued	In our previous submission, options were only discontinued if they were deemed to be significantly worse than the baseline (actual 2019 operations) in at least one of the shortlisting tests. This was a qualitative judgement informed by the Initial Options Appraisal (IOA) data and we considered options by runway group. We also stated in the IOA engagement material that "Discontinued options could be brought back into the airspace design if later analysis indicates they might actually enhance the system options design".
10	Request for greater clarity around why some options were discontinued and others shortlisted at Stage 2	<p>In our previous submission, a dashboard was produced showing a summary of the IOA results for each option. The dashboards have an 'Outcome Statement' which summarises whether the option was discontinued and the rationale for this decision.</p> <p>However, we have noted this feedback and have developed a new approach for presenting the shortlisting results, providing a clearer summary of the shortlisting process, outcomes and rationale in our Stage 2 re-</p>

	submission.
--	-------------