

22. Becky Wood said that the scheme would be implemented for large heavy vehicles in early 2008. She said it was still based on PM<sub>10</sub> emissions. TfL wanted NO<sub>2</sub> to be included and this was an option for later versions of the scheme, pending resolution of technical issues. She said that operator preference appeared to be for speeding up fleet replacement, rather than retrofitting and thus there could be NO<sub>2</sub> advantages even with a purely PM<sub>10</sub> scheme.

**ITEM 8: CONSULTATION DOCUMENT (Paper HPB (07) 12)**

23. David Gray said that comments had been received from BAA and would be included in the next version of the condoc presented to the Project Board. He said the document now contained a fairly comprehensive list of key issues, but still required much work on the drafting. Jonathan Moor suggested that the June meeting would be the time to focus heavily on the consultation document.

25. [REDACTED] said it was crucial to make clear at consultation that we were pursuing an option that meets environmental constraints and is credible, rather than the option. Jonathan Sharrock volunteered to offer further advice on the ruling of the High Court regarding positive lessons that could be drawn from the SERAS consultation.

**Action: DfT**

**ITEM 9: AOB**

26. Roger Worth asked about the rationale behind the 10% margin for uncertainty in meeting AQ limits, quoted in paper HPB (07) 10. David Gray said that this was merely illustrative at this stage.

[REDACTED]

**ITEM 10: Date of next meeting**

Friday 18 May 1430 - 1630

*AED3 April 2007*

<Natalie.Wirth@dft.gsi.gov.uk>  
"Roy Martin"  
<Roy.Martin@dft.gsi.gov.uk>  
Subject  
PSDH workplan

We did not have the chance to go through [redacted] workplan in any detail last Tuesday. That is now a key priority, informed of course by any further thinking since our discussions. (An obvious point being why the delay of 4-6 weeks for RRTM2 (if I have got that right) seems to mean we would not have final MM assessments before March 2007).

Fortunately, Ministers here have agreed that there should not be a consultation on mixed mode this year, but a combined consultation on MM and R3/T6 in 2007. But that does not mean we can slacken the pace. We need to press on as fast as we can with the enhanced modelling, and we need to agree a new timetable to which we are all committed, and which I can submit to our internal Programme Board. In particular, I remain under instructions to get results for a core scenario for MM in 2015 and R3/T6 (ideally in 2020) as soon as humanly possible. I will reflect that in a note to follow on model runs.

}  
By David Gray

As a first step I would welcome the opportunity to have an early discussion with you on the timetable, in advance of any wider discussion with [redacted] /Martin Capstick and others (though you might want to involve [redacted]).

As it happens, our colleagues in the Government Offices are seeking a meeting here to discuss the surface access issues and interface with the London Plan and SE Plan. In that context they would quite like to get into some of the detail behind the modelled scenarios, although they appreciate this is very much at 'feasibility' level. Again, [redacted] may need to be involved in that. They have offered 2 November as a possible date (suggested start time 11am). If that were convenient, we might follow on with a discussion on the programme and timetable. Could you please get in touch to discuss/agree? Thanks.

David Gray  
Project Manager  
Project for the Sustainable Development of Heathrow  
Aviation Environmental Division 3  
Department for Transport  
Zone 1/33 Great Minster House  
76 Marsham Street  
LONDON SW1P 4DR

T: 44-(0)20-7944-4961  
F: 44-(0)20-7944-2189

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"David Gray"  
 <David.Gray@dft.g  
 si.gov.uk>  
 To  
 [redacted]@baa.com>  
 05/09/2006 10:26 cc  
 "Natalie Wirth"  
 <Natalie.Wirth@dft.gsi.gov.uk>,  
 "Roger Gardner"  
 <Roger.Gardner@dft.gsi.gov.uk>  
 Subject  
 PSDH UPDATE

... this time with attachment!

There are a number of outstanding issues on which I would welcome a word soonest,

First, and most pressing, is on scenarios, where DfT tabled a note at the AQ modelling meeting on 21 August (attached) suggesting the list of priority AQ runs, and it was subsequently agreed that BAA would continue to give priority to the Mixed Mode scenario forecasts and mitigation options tests - see [redacted] annotations to the DfT meeting note (his E-mail of 4 Sept). I would like to be absolutely clear about the list of (surface access) runs, which have already been completed and the timetable for the remainder, so we can issue a definitive note for all. Are you able to provide that a.s.a.p.?

Secondly, I would welcome an update on the surface access mitigation test programme, and on NADM - on which again [redacted] annotations suggested there should be an agreed way forward "in the next couple of days" after the August meeting. I have heard nothing.

Thirdly, [redacted] was going to provide an update, or set up a meeting for a sitrep, on R3 ConOps, layouts etc. Is something in hand? She also took away an action to consider how any early R3 'sighting shots' might be obtained. } 1  
0

Silviana report

These are likely to be among the issues discussed at our next Heathrow Project Board meeting (12 Sept) so it would be as well to be preparing for that. I envisage the meeting will also be considering issues around the Mixed Mode consultation document, on which I was grateful for [redacted] various contributions and will reflect those in the next draft.

**David Gray - Re: RUNWAY 3**

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**From:** <[redacted]@baa.com>  
**To:** "David Gray" <David.Gray@dft.gsi.gov.uk>  
**Date:** 03/01/2007 16:04  
**Subject:** Re: RUNWAY 3  
**CC:** <[redacted]@baa.com>, "Natalie Wirth" <Natalie.Wirth@dft.gsi.gov.uk>

---

David

Happy New Year!

Apologies for not sending a copy of the presentation before - I have asked NATS to forward a copy to you asap.

As far as other documentation is concerned I am not sure I have anything much at present. The Con Ops document is being completely rewritten to take account of some of the more recent MM learning and I do not yet have a first draft although I am aware NATS are close to completing this version.

Regards

"David Gray" <David.Gray@dft.gsi.gov.uk>

03/01/2007 11:27

To <[redacted]@baa.com>

cc <[redacted]@baa.com>, "Natalie Wirth" <Natalie.Wirth@dft.gsi.gov.uk>

Subject RUNWAY 3

FOI  
PPT  
BN

Happy New Year!

We had a helpful presentation on 14 November on the R3 study, and as I recall you promised to forward the Powerpoint Slides. I don't think we have those yet, and would be grateful to receive them - together with any other documentation on R3 that you feel able to share ahead of the formal NATS documentation due this month.

David Gray  
Project Manager  
Project for the Sustainable Development of Heathrow  
Aviation Environmental Division 3  
Department for Transport

**Michael Jackson - Notes of this morning's fleet mix meeting**

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**From:** Michael Jackson

**Date:** 28/03/2007 16:43

**Subject:** Notes of this morning's fleet mix meeting

**CC:** David Gray; Natalie Wirth; Roy Martin

---

All,

I don't think anyone took away an action to capture the conclusions/actions from this morning's meeting, so I thought you might appreciate my summary notes:

regards

Michael

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1. Key modelling messages (based on sighting shot data)

a) For runway 3, [REDACTED]

b) For mixed mode, [REDACTED]

2. Rules of thumb - air quality

- a) moving the source away from the receptor is the most effective mitigation
- b) fleet mix is also important with a NOx ratio of about 12:6:1.5 for quad:wide twin:narrowbody

3. Rules of thumb - noise

- a) There appears to be little difference between widebody twins and quads - there is a bigger difference between specific widebody types.
- b) Widebody aircraft are very much noisier than narrowbody.

4. Neil agreed to write a short paper on the NOx performance expectations of future widebody aircraft. (Note this needs to focus in particular on NOx produced on take-off roll)

5. Neil suggested that widebody quads would comprise no more than [REDACTED] of BA's future longhaul fleet, and that BA did not expect to use [REDACTED]

6. Efforts should be concentrated initially on solving [REDACTED]

- a) Putting the A380 actual data into the model (already in-hand)
- b) Correcting the thrust settings for operations from the new runway (already in-hand)
- c) [REDACTED]

Michael Jackson - Re: PSDH NOx by aircraft type

From: <[redacted]@ba.com>  
To: "Michael Jackson" <Michael.Jackson@dft.gsi.gov.uk>  
Date: 19/03/2007 13:36  
Subject: Re: PSDH NOx by aircraft type  
CC: <[redacted]>

Michael,

A quick update:

I have tried to contact [redacted] (both last Friday and today) with no luck - I guess he is pretty busy at the moment with the Department as well, though a meeting tomorrow is still possible.

Looking at the figures for NOx, in your email, I guess there are a few points to make:

1. the B747-400 looks low, especially for our RB211-524G engined ones. I suspect that the "average engine" assumed for the PSDH modelling is actually the reason for this, and is almost certainly resulting in an optimistic level for NOx emission from this type.

2. I want to check what has been used in terms of the "pad" for the 747-Adv, as I think it can be justified as an "existing type" for the purposes of the study - there won't be a great difference from the current -400, and the engine characteristics will be the main difference. If a "pad" has been used because it has been identified as a "new type", then the extra 5% (10%?) can be removed, reducing the NOx emissions from this type.

3. The A380 is a different story as it is a new type in all respects. I have looked at the NOx emissions from its engines, and at a first glance, they are about at the same standard (though perhaps slightly better than) as the latest 777, and 747 engines that we have. The aircraft and engines are bigger than the 747-400 and RB211-524, so they will create at least the same amount of NOx, however, the difference seems to be too big, and it is probably that the "pad" is too much to be realistic - I really want to discuss this with Alaric to see what has actually been applied, as there may be an opportunity to reduce them reasonably easily (and quickly!).

Will keep you informed of progress when I've managed to make contact with [redacted]

Best regards

[redacted signature block]

"Michael Jackson"  
<Michael.Jackson@dft.gsi.gov.uk>

13/03/2007 14:16

To: [redacted]  
cc: [redacted] "David Gray"  
<David.Gray@dft.gsi.gov.uk>  
Subject: Re: PSDH NOx by aircraft type

[redacted] thanks for these.

Looking at your analysis of the 2015 mm data shows the average take-off NOx per departure as:  
747-400 = 9.27