

To:  
Planning Inspectorate  
M4 Junctions 3 to 12 Smart Motorway

From:  
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Deadline VII:

Summary of oral representation made on Thursday 11<sup>th</sup> February 2016 by Jenny Bates, representing Friends of the Earth (England, Wales and Northern Ireland) on air quality/air pollution issues.

We welcome the opportunity to have been able to address the Panel directly to help address the questions posed ([Issue specific hearing dealing with matters relating to the environment](#)), and now to follow up with this summary.

I believe the following covers the main points made at the oral hearing, but we would be pleased to forward any further information, or clarification which may be helpful.

1. TRAFFIC ISSUES

1.1 On the traffic forecasts and uncertainty, we are of the opinion that HE should re-run figures using the more conservative LTT line compared to the LTTE6 one.

1.2 Friends of the Earth referred to how traffic levels have been found to be considerably increased when schemes open and that this can be at levels greater than expected.

We refer the Panel to the report mentioned at the oral hearing: [Beyond Transport Infrastructure: Lessons for the future from recent road projects](#) and its follow up for the A34 Newbury bypass: [an analysis of the A34 Newbury bypass](#), and in addition to an article written by Transport Consultant John Elliott in World Transport Policy and Practice (volume 21, number 4 of February 2016 <http://worldtransportjournal.com/wp-content/uploads/2016/02/9th-Feb-final-opt.pdf> pages 37 to 41).

1.3 We also refer the Panel to the directly relevant evidence recently submitted by Campaign for Better Transport on the M25 traffic Smart Motorway and All Lane Running studies which show considerable traffic increases.

1.4 Reference was also made to how TfL revealed that for the Thames Gateway road bridge traffic would grow for a further 5 years after TfL's figures ([http://www.foe.co.uk/resource/media\\_briefing/thames\\_gateway\\_bridge\\_07.pdf](http://www.foe.co.uk/resource/media_briefing/thames_gateway_bridge_07.pdf) section 1 on traffic, first bullet point). It should be noted that the unreliability of the traffic figures was a key factor in the Inspector at the Public Inquiry recommending refusal for that scheme:

<http://stopcityairportmasterplan.tumblr.com/post/42442210102/thames-gateway-bridge-inspectors-report-by> (conclusions are at Chapter 9).

At the hearing HE stated that indeed traffic volumes could increase over time, but that improvements in the fleet mix etc could or would (without checking the audio I am not sure of the exact words) offset that.

This however seems very optimistic, as fleet mix may not offset further traffic increases.

1.5 All of the above increase uncertainties and risk and add weight to the concerns over the robustness of the HE M4 case.

1.6a Further it seems that from evidence being submitted by Reading Friends of the Earth to this deadline, based on material supplied by HE, that over the wider area average speeds would be lower and average journey time longer in 2037 than they were in 2009. Yet the very start of the J5-7 report cites as one of the things Smart motorways are designed to do is to lead to shorter journey times:

“Background

Smart motorways are central to the modernisation of England’s motorways and have been designed to reduce congestion, improve journey time reliability and lead to shorter journey times, while at the same time maintaining safety.”

1.6b Thus it seems that a key purpose of the scheme is invalidated by its own data.

## 2. AIR POLLUTION ASSESSMENT ISSUES

2.1 As the Panel has set out, unreliability and uncertainty in traffic figures is crucial due to the direct link to air pollution impacts and consequently health impacts (early deaths and ill health).

2.2a Friends of the Earth referred (right at the end of the day) to a study done by Kings College London on the A206 in SE London (<http://www.sciencedirect.com/science/article/pii/S0048969714010900>):

“Highlights

- Local air quality deteriorated after completion of a road widening scheme in south London.
- The EU PM<sub>10</sub> limit value (LV) was breached during construction.
- NO<sub>2</sub> LV was breached after scheme due to increased cars, taxis and LGVs.
- Increase of pro-oxidant components in the PM coarse mode after the road widening.
- Mean PM<sub>10</sub> emission factor for the construction phase was 0.0022 kg m<sup>-2</sup> month<sup>-1</sup>.”

2.2b The paper includes the following which shows impacts worse than expected: “The deterioration in air quality following the completion of the works is in stark contrast to the pre-scheme environmental impact assessment. No change in PM<sub>10</sub> concentrations were predicted at the receptor close to the AQMS-N and NO<sub>2</sub> was predicted to decrease by 0.8 µg m<sup>-3</sup>. Close to AQMS-S a very slight increase was predicted in PM<sub>10</sub> (0.1 µg m<sup>-3</sup>) and NO<sub>2</sub> (0.2 µg m<sup>-3</sup>) but overall the assessment concluded that changes would be “marginal” and the NO<sub>2</sub> Limit Value would continue to met by under typical meteorological conditions ([Babtie-Bexley, 2001](#)). It is likely that the observed increase in NO<sub>2</sub> was in part due to more primary emissions from NO<sub>2</sub> from road traffic in the UK from approximately 1998 onwards ([Carslaw, 2005](#) and [Carslaw et al., 2011](#)). However, the measured increase in air pollution from the road, and the increased residential concentrations, were not predicted in the environmental impact assessment.”

2.3a Friends of the Earth made reference to an issue which if not already taken into account would fundamentally change the air quality assessment, and should mean figures should be re-done – and that is the issue of Defra’s revised baseline compliance date for meeting EU legal limits for NO<sub>2</sub>.

2.3b The date the London Air Quality Zone is due to comply has changed from sometime after 2030, to by 2030, and the SE Zone from by 2025 to by 2020:

a. previous baseline for NO<sub>2</sub> compliance

[http://uk-air.defra.gov.uk/assets/documents/no2ten/140708\\_NO2\\_projection\\_tables\\_FINAL.pdf](http://uk-air.defra.gov.uk/assets/documents/no2ten/140708_NO2_projection_tables_FINAL.pdf) (July 2014)

b. Defra’s Air Quality Plan:

Draft (September 2015):

[https://consult.defra.gov.uk/airquality/draft-aq-plans/supporting\\_documents/Draft%20plans%20to%20improve%20air%20quality%20in%20the%20UK%20%20Overview%20document%20September%202015%20final%20version%20folder.pdf](https://consult.defra.gov.uk/airquality/draft-aq-plans/supporting_documents/Draft%20plans%20to%20improve%20air%20quality%20in%20the%20UK%20%20Overview%20document%20September%202015%20final%20version%20folder.pdf)

(from <https://consult.defra.gov.uk/airquality/draft-aq-plans>)

Page 9, TABLE 2, and NB Note 9

- Final (December 2015)

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/486636/aq-plan-2015-overview-document.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/486636/aq-plan-2015-overview-document.pdf)  
(from <https://www.gov.uk/government/publications/air-quality-in-the-uk-plan-to-reduce-nitrogen-dioxide-emissions>)  
Page 11 Table 3, and NB the Note

2.3c The importance of this is that while the London and the SE Zones are due to comply sooner than previously expected (and sooner still with Defra's plans) this changes everything as far as assessing the scheme – and it could be that somewhere affected by the scheme could now be below limits without the scheme, but be taken over them by the scheme (which would not be acceptable).

2.4a It should be noted that Clean Air in London have stated that any 0.1 microgram/cubic meter change in concentration is significant.

2.4b The reliance on guidance which screens out of increases below certain levels is something which does not seem to be compatible with EU law, in which requirements are absolute.

### 3. APPLICATION OF EU LAW

3.1 Friends of the Earth referred to how EU law applies everywhere in a zone, and that there can be no averaging or balancing of areas which might be improved against those which are worsened.

The document referred to was supplied to HE during the oral hearing, and provided here for the Panel:

Clarification to Clean Air in London ([http://cleanair.london/legal/clean-air-in-london-obtains-qc-opinion-on-air-quality-law-including-at-heathrow/attachment/cal-304-letter-of-clarification-from-the-commission-190214\\_redacted-5/](http://cleanair.london/legal/clean-air-in-london-obtains-qc-opinion-on-air-quality-law-including-at-heathrow/attachment/cal-304-letter-of-clarification-from-the-commission-190214_redacted-5/))

3.2a The NN NPS test for compliance was referred to by Friends of the Earth. We stated that we were not arguing that the NPS was not current, nor that it was unlawful – but rather that the Panel can and should weigh that with other material considerations including overarching imperatives such as the EU Ambient Air Quality Directive, and recent developments such as the requirement for Defra's new plans to meet legal limits in the shortest time possible.

3.2b HE relies on the compliance test for the scheme from the National Networks NPS, which we consider is not adequate, given the overarching requirement to comply with the EU Ambient Air Quality Directive.

The test relies on whether the scheme would delay compliance of the Zone with NO<sub>2</sub> legal limits and would allow the scheme to worsen air pollution if elsewhere in the Zone would have even worse pollution.

3.2c Friends of the Earth considers that there should be no worsening of air pollution allowed – the Ambient Air Quality Directive has a non-deterioration principle for areas within limits, and as well as a breach not being allowed, nor should worsening of air already breaching.

3.2d The NPS approach was addressed by the legal opinion of McCracken QC for Clean Air in London, as previously referred to (from paragraph 58 of the opinion), and found to not be sound.

The example was the Airports Commission which relied on the same test.

3.2e Since then there have been 2 further developments:

3.2f - a) The Environmental Audit Committee (EAC) report of 1<sup>st</sup> December 2015 on aviation (<http://www.parliament.uk/business/committees/committees-a-z/commons-select/environmental-audit-committee/news-parliament-2015/airports-commission-report-15-16/>)

Committee Chair Huw Irranca-Davies MP said "Increased pollution should certainly not be permitted on the grounds that other areas of London are even more polluted."

3.2g - b) London Plan parking standards relaxation

There have been recent Minor Alterations to the London Plan (MALP) (<https://www.london.gov.uk/what-we-do/planning/london-plan/minor-alterations-london-plan/minor-alterations-london-plan-2015>) and the Inspector's report (<https://www.london.gov.uk/file/576100/download?token=lecCfrDS>) has a section on Air Quality from paragraph 48.

3.2h The MALP Inspector's report makes clear (paragraph 48) that both the McCracken opinion, and another QC opinion prepared by TfL (<http://cleanair.london/legal/clean-air-in-london-obtains-qc-opinion-on-air-quality-law-including-at-heathrow/attachment/cal-322-stephen-tromans-qc-legal-opinion-on-lp-parking-280915/>) from <http://cleanair.london/legal/clean-air-in-london-obtains-qc-opinion-on-air-quality-law-including-at-heathrow/>) have been taken into account.

3.2i However the Inspector is clear that those proposals should not be allowed to worsen air pollution: "Therefore, provided it can be clearly demonstrated, through appropriate modelling and monitoring mechanisms, that mitigation measures outweigh the predicted 0.5% decrease in air quality that may arise from the implementation of the MALP (Parking Standards), I consider that the way forward being espoused by the Mayor is reasonable." (from paragraph 52)

3.2j The London Assembly passed a motion on 10<sup>th</sup> February (<https://www.london.gov.uk/press-releases/assembly/assembly-raises-concerns-with-minor-alterations>) on this issue and the importance of the need to ensure mitigation. This followed Clean Air in London's letter (CAL letter 31 January 2016 <https://t.co/XrQtDGgRdb>) which also made clear that mitigation measures for the scheme had to be new.

3.2k Friends of the Earth referred at the M4 oral hearing to the fact that mitigation measures would have to be additional to relevant. We stated that mitigation would have to be required for what is already known in terms of worsening of air as a result of the scheme, plus other options to cover impacts worse than anticipated.

3.2l Thus our view is that at the very least the scheme must not worsen air pollution, and indeed the NPPF at paragraph 124 is clear that "Planning policies should sustain compliance with and contribute towards EU limit values or national objectives for pollutants..."

3.3 An additional reference is provided below - on how worsening of air pollution has been deemed unacceptable in the past by an Inspector – in the report on the Thames Gateway Bridge in East London: "9.416 Turning to environmental impacts, the noise and air quality assessments are based on a traffic model of limited reliability. Subject to that, the noise effects of the scheme seem to me to be limited. I also have no difficulty regarding the impact of the scheme on flora and fauna or the issue of design. But I have concerns about air quality. It is accepted by the promoters that air quality would be worse in 2016 with the bridge than without the bridge. In an area in which air quality has historically been low, and where it is identified as a current problem, I do not regard that as acceptable."

<http://stopcityairportmasterplan.tumblr.com/post/42442210102/thames-gateway-bridge-inspectors-report-by>

3.4 The London Plan also has its Air Quality Neutral policy within Policy 7.14, and it is not clear why HE consider this does not apply to highway schemes, and whether the Panel has satisfied itself on this matter.

#### 4. SUPREME COURT RULING

4.1 As we have stated before, we consider that the ruling which requires legal limits for NO<sub>2</sub> to be met in the shortest time possible, means that all possible measures must be taken to bring down pollution, and that deliberately adding to the problem should not be allowed.

In these special circumstances (due to failure to address the problem adequately up till now) full mitigation or Air Quality Neutral is not even adequate, so that all possible measures proposed as mitigation must be pursued, but not the scheme which would add emissions.

#### 5. CONCLUSION

5.1a Sustainable development is the key principle underpinning planning and is defined in the NPPF (between paragraphs 5 and 6) ([https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/69412/pb10589-securing-the-future-050307.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69412/pb10589-securing-the-future-050307.pdf)) from <https://www.gov.uk/government/publications/securing-the-future-delivering-uk-sustainable-development-strategy>)

5.1b Chapter 1 (sections 3 and 4) set out the guiding principles and how solutions should be 'win, win, win'  
"We want to achieve our goals of living within environmental limits and a just society, and we will do it by means of a sustainable economy, good governance, and sound science."

Friends of the Earth considers that HE should instead pursue a Managed Motorway with Dynamic Hard Shoulder Running for the M4 which should have considerably better outcomes, and that the current scheme should not go ahead.

ENDS