Sussex Air Quality Partnership
[redacted]

29th May 2015

Response to Airports Commission: Air Quality Local Assessment (May 2015)

The Sussex Air Quality Partnership (Sussex-air) has reviewed the Airports Commission report, Module 6: Air Quality Local Assessment (May 2015) and the following comments are provided in this document.

The Sussex Air Quality Partnership (Sussex-air) is a local authority led partnership with partners from all of the Sussex district, borough, city and county authorities, plus the Environment Agency and Public Health England. Sussex-air supports partners with technical, policy, training and information services for members. For more information please visit: www.sussex-air.net .

Local authorities under the Environment Act 1995, Part IV and National Air Quality Strategy policy are required to "work towards" local air quality improvements in tandem with UK national government policy actions. The major concern for local authorities and public health professionals is the health impacts from air pollution as well as ecological impacts on the habitats.
Local authorities are working together to improve air quality to ensure better health for communities and also to insure that areas comply with EU limit values.

This review was prepared a very short notice due as the commission required a response by Friday 29th May 2015. No detailed modelling review was possible however comments reflect the local air quality related concerns and potential mitigation options that should be considered in relation to Gatwick Airport "GR2" proposal.

The views presented in this review are not specifically from any one member but provided on behalf of Sussex-air members.

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Review of Air Quality Local Assessment for Sussex authorities.

Sussex local authorities are either in the vicinity or affected by surface and aerial (approaches) transport routes to and from Gatwick airport and as a result are most likely to be affected by the "Gatwick 2R" proposal.

Therefore this review will focus on Gatwick 2nd Runway proposal(GR2) as opposed to the Heathrow options.

1. Gatwick Airport and air pollution in Sussex

Gatwick airport is situated in the north of the borough of Crawley, West Sussex.

Crawley Borough Council to the south of Gatwick Airport, has areas of concern regarding air pollution and are currently consulting on a proposed Air Quality Management Area (AQMA) in the Hazelwick area. In addition Reigate and Banstead Borough Council (Surrey) has one AQMA to the north-east of the airport in Horley.

Sussex currently has 15 AQMAs across West and East Sussex plus Brighton and Hove City.

There are specific areas of concern regarding air pollution which are on potential transport routes to and from a newly enlarged Gatwick airport including the Worthing A27, Storrington, Cowfold and Chichester AQMAs.

In addition to these existing AQMA's the air port access routes have the potential to increase vehicle volumes and associated pollution from vehicles and so are also a concern for other towns and villages including Crawley (potential AQMA 2015), Horsham, East Grinstead, Billingshurst, Midhurst, Petworth and Billingshurst.

Therefore Gatwick airport facilities, flights in and out of Gatwick and surface transport approaches to the airport are an important consideration for Sussex authorities when assessing air quality.

2. Comments: Review of Air Quality Local Assessment

Executive Summaries

Gatwick Airport second runway Scheme (GR2)

- GR2 traffic model simulation area = 28% increase in NOx emissions (1,897 te/yr), PM10 increase 7.2% (66.te/yr), PM2.5 increase 11.75 (64.0 te/yr)
- GR2 damage costs (using green book total estimate) = £320.5m
    - Lower than NWR = £957.8m & ENR =£688.3
- No predicted NO2 conc. likely to exceed AQO (at all schemes)
- GR2 not likely to delay DEFRA achieving EU compliance
    - NWR & ENR likely to cause delay in DEFRA achieving EU compliance.

Comment:

- Emissions from GR2 will have an impact on local communities who will bear the brunt of the health and associated damage costs, thus mitigating these impacts need to be prioritised.
- Key strategic sustainable transport options and links to the airport need to be improved from the south as well as the north (London).

Assessment Methodology

The assessment methodology appeared to be through for the air quality emissions inventory, data sources and modelling approach.

- Study area, local data, verification, appropriate model (ADMS Airports), height of receptors

Comment:

- There did not appear to be a consideration of local ambient ozone concentrations in the ADMS airport model?

Gatwick Airport Second Runway

Comment:

- 4.4.3 The analysis excluded properties that lie within the Scheme boundary or within 10m of any new road link – this would exclude the most vulnerable individuals/properties
- Mitigation proposals by promoter (4.6.3) Measure 1 was commented that there was not enough detail nor deliverability on the surface access – this is key to reducing emissions and improved access.
- Other measures need to be maximised:

- Taxiing emissions reductions, zero-use of APU's(Install Fixed Electrical ground Power (FEGP) and Pre Conditioned Air (PCA)), NOx Charges need to increase to encourage cleaner aircraft, ULEV, congestion charging?

3. Areas of concern

There are some key areas not considered in the modelling assessment these include:

- Lack of modelling to assess the impacts on local AQMA's and other populated areas from increased road traffic from the south coast routes (M3, A3, A272, A27, A24, A264, A22, A264):
  - Worthing A27, Storrington, Cowfold and Chichester AQMAs
  - Proposed AQMA in Crawley, Hazelwick area
  - Towns and villages including Horsham, Midhurst, Petworth, Billingshurst, East Grinstead.

  It is noted that the modelling area specification was limited to the immediate area around the airports, however without due consideration to these other areas, the wider potential impacts have been ignored.

  Additional emissions from potential traffic volume increases have the potential to create new or worsen existing AQMA's. This is in conflict with goals of LAQM and UK attaining EU compliance.

- Lack of detail on sustainable transport improvements to encourage surface access away from private vehicles:
  - Improved train line linkages from Kent, Surrey and Sussex.
  - Gatwick express route expansion (Southampton – Chi - Hors, Canterbury- Ashford-Tonbridge).
  - Low emission parking availability and prioritisation.

4. Additional mitigation options to include:

Key areas where there could be emissions reduction do not appear to be considered or detailed in report, these include:

Gatwick Express: Southampton – Ashford - EU

Fast rail links to Gatwick from the south west and south east of England can be potential areas where links can be improved. Additional services from the SW and SE to Gatwick should be incorporated to reduce surface (road) traffic through key areas in Sussex from the south coast, Kent and Hampshire region.

- Improved rail link for commuters and Gatwick users (Sthptn – Chi – Horsh and Ashford-Maidstone/Tonbridge)
- Reduces traffic enroute to Gatwick via Sussex towns and AQMAs
- Attracts more passengers to Gatwick as opposed to M3/M20/M2/A27/A24/M25 routes from SW/SE.
- Links Ashford international to Gatwick international airport
- Links to European services encouraging Gatwick as a hub for cross channel services

Low emission strategy (Gatwick Airport & Diamond)

- Gatwick airport to lead on negotiating minimising air craft emissions with operators and aircraft and engine manufacturers:
    - Zero use of APU's, reduced taxiing emissions etc (point 4.6.3)
    - Fee structure to encourage lowest emission aircraft access.
- Utilising roof space to produce low carbon energy (PV/solar)
- Gatwick airport to work toward Zero-Emission (ZE)/Ultra Low Emission Vehicle (ULEV) ground support and delivery vehicle targets.
- Gatwick airport to establish ZE/ULEV strategy:
    - To increase ZE/ULE vehicle access to airport parking and surface transport.
    - Increase electric vehicle (EV) infrastructure (from 6-8 points)
        - Slow (3-7kW long-stay), fast (22kW short-stay) and rapid (22-50kW short – drop-off/taxi/rental)charging facilities
    - ZE/ULEV parking options
        - priority in central car parks, discounted ZE tariffs in outer car parks
    - Require ULEV taxis access
        - Provide rapid charging infrastructure

    - Require vehicle rental companies:
        - Min ULEV standards and emission targets (vehicles and operations)
        - Provide rapid charging infrastructure
    - Require low emission bus standards working with bus operators and local authorities:
        - Euro VI hybrid operate in ZE mode in Crawley/Gatwick area (min for long distance buses)
        - Electric (park'n ride and local routes)
- Work with Crawley businesses on zero emission services (in & around airport) and transport/deliveries/waste.
- Electric, Hydrogen refuelling infrastructure support to Gatwick Diamond Area –Crawley, Horley, MidSussex, Horsham