The Government's environmental conditions for the expansion of Heathrow and their ability to mitigate the impact of aircraft noise, air pollution and climate change.

Response to the GLA Environment Committee by the 2M Group.

This statement has been prepared on behalf of the 2M Group of local authorities. The 2M Group is an alliance of local authorities concerned about the impact of Heathrow expansion on their communities. The group which took its name from the 2 million residents of the original 12 authorities now represents 24 authorities with a combined population of 5 million people.

On 15 January 2009 Geoff Hoon, Secretary of State for Transport announced that the development of a third runway at Heathrow airport had Government policy support. Within the announcement the Secretary of State set out a number of new policies and practices designed to mitigate the impact of such expansion.

These included new powers for the Civil Aviation Authority and the Environment Agency and forecasts on air quality and noise contour impacts.

Some ten months later we still have no information on what these new powers are and how they will work.

The announcement proposed a safety net limiting the third runway to an additional 125,000 movements.(i.e. not the the full 222,000 set out in the Adding Capacity at Heathrow consultation document). Expansion beyond this would depend on the environmental conditions being met and on advice from the Committee on Climate Change on whether the Government was meeting CO2 reduction targets.

These conditions mean that either the airport would never be used to its full capacity – or that the environmental conditions would have to be changed. But even if a 'half-open' third runway were a credible proposition, its reduced economic impact would make the social and environmental dis-benefits even harder to justify – not least the human impact which includes the destruction of Harmondsworth village and the forced relocation of local people and their families.

Air Quality - Attainment of the EU Limit value for nitrogen dioxide of 40μg.m^{-3} (annual average).

The Secretary of State was optimistic about the likelihood of achieving the European Union limit value for nitrogen dioxide. He said this could be controlled by limiting the number of air transport movements.

The area around Heathrow is above the limit already and past experience shows that limits will not be achieved in the foreseeable future. It is likely that the UK will be in breach of the relevant European Directives in 2010.

National documents all acknowledge that the poor air quality in this area is caused by a mixture of road traffic emissions and those associated with the operation of the airport.

Even without a third runway, air quality in the area is likely to deteriorate further. The airport is currently operating at 470,000 air transport movements below the yearly cap of 480,000 ATMs. This unused capacity is certain to be taken up in the near future.

Between 2010 and 2015 the Government predicts an annual increase of 3.04m persons in the numbers of passengers arriving at the airport by private transport. With the corresponding increase in road traffic volume it is hard to see how the EU limit value will be met within the foreseeable future.

The local authorities argue that, in a situation where the Government is planning future developments that would increase air pollution (and noise) around the airport, it should be taking steps ahead of those changes to improve the current situation.

The decision for expansion contains no specific mitigation package for reducing nitrogen dioxide beyond limiting the numbers of air transport movements for a future expanded airport.

Member States seeking additional time to meet the EU limits will be required to demonstrate the measures already being deployed. It is difficult to see how the UK Government will be able to satisfy this condition.

Once air quality and noise levels are being exceeded it is difficult to see how they can be reined in – especially when existing measures such as differential landing charges (see below) are not proving successful.

Proportion of air traffic movements with NOx emissions at least 20% better than CAEP/4 standard[1]

Year	Percentage Aircraft at Heathrow at least 20% better than CAEP/4 standard
05	23.01
06	21.29
07	20.60
08	18.69

[1] BAA Corporate Responsibility Report 2008 , page 20, table 11

Noise contour limits

The Secretary of State set the noise contour benchmark at 127 square km.

This is the 2002 level – the last year Concorde was flying. At such it is an artificial measure that bears no relation to current noise impacts. A more credible standard against which to measure future levels would be the most recent figure (116 square km).

In arriving at its forecast for future noise levels the DfT has made a series of assumptions about the make-up of the aircraft fleet for many years ahead. This has been shown to include futuristic aircraft types that are currently neither in design nor production. It is difficult to see how the DfT can project these impacts with any certainty when they are so dependent on unproven technology and unknown ordering plans.

It is not as if the noise contour is shrinking with the airport at its current capacity. Between 2006 and 2008 the 57 $L_{Aeq,16}$ contour grew from 117.4 square km to 123.1 square km.

New Powers for the CAA and the Environment Agency

The Government proposes a legally binding process where additional flights are only permitted following regular independent assessments of the anticipated air quality and noise impacts.

The CAA (for noise) and the Environment Agency (for air quality) will have the powers to ensure that relevant parties take their share of the remedial action needed to comply with respective legal limits.

The Environment Agency would also have to take into account emissions from roads and rail around Heathrow with appropriate guidance from Ministers

In the event that limits were breached, the independent regulators would have a legal duty and the necessary powers to take action – or require others to take the action.

It is not known what measures the Secretary of State has in mind but these will have to be wide-ranging and legally enforceable to encompass controls over the use of the surrounding road network and the operation of the airport.

Green Slots

The Secretary of State has placed a lot of faith in a new ‘green slots’ regime which would allow only the cleanest, greenest aircraft to use Heathrow. Yet there is no legal framework which would allow the ‘banning’ of aircraft that are already flying.

The announcement said that 'any additional capacity available on the third runway will, after consultation, be subject to a new green slot principle, to incentivise the use at Heathrow of the most modern aircraft, with further benefits for air quality and noise carbon dioxide emissions'

There is no definition of 'most modern aircraft.'

A new target to limit aviation emissions in the UK to below 2005 levels by 2050.

Before its decision the Government asked the Climate Change Committee to advise on aviation. The Government also announced, as part of its decision, that aviation emissions would be limited to 2005 levels by 2050.

The Climate Change Commission will report on the new target in December and the report will include implications for aviation expansion, if not for Heathrow specifically.

It is likely that all aspects of sustainability will be assessed with regard to the potential for biofuels which may impact on other issues such as deforestation, impact on water resources or competition for food production.

Crossrail, Airtrack and Piccadilly Line upgrades.

The Secretary of State's announcement suggested that a combination of three projects - Airtrack and Crossrail and Piccadilly Line upgrades - would provide sufficient public transport capacity for a three runway, six terminal Heathrow.

However the numbers travelling to the airport by public transport are already expected to grow from 21.34mppa in 2010 to 25mppa in 2015[2].

Currently around 40% of people travelling to Heathrow use public transport. This is a target set in the Heathrow Surface Access Strategy with an 'aspirational' target of 45%.

The Government says that Airtrack and Crossrail will each facilitate a further 1% modal shift towards public transport[3]. These will simply help the airport move towards its aspirational target.

The 2M group does not think that the identified transport projects can address the demand from an expanded airport. These will be needed to tackle the public transport deficit of the existing two-runway airport.[4].

[2] Adding Capacity Con Doc + BAA PSDH Surface Access Doc
[3] Adding Capacity p105 para 3.170
[4] The Future of Air Transport page 122, paragraph 11.58

High Speed Rail

A study produced for the 2M Group calculated that if a national high speed rail network were established it could serve around 25% of existing routes from Heathrow. This figure could grow with effective marketing of new, direct high speed links to European cites. It would transform the air-rail choice for passengers with potentially 43% of Heathrow flights facing realistic competition from high speed rail alternatives.

Before final decisions are made on new runways and new rail lines, the UK Government should first assess how a genuinely national high speed rail network, allied with European developments, might impact on demand for short haul – and quantify the consequences for CO2 emissions from such a substantial modal shift

The Climate Change Committee will report in December 2009 on the potential for reducing carbon emissions through rail substitution.

Abolition of the Cranford Agreement

The Secretary of State's announcement included abolition of the Cranford Agreement which limits departures from the northern runway to the east of the airport.

While some communities to the west of the airport will benefit from this operational change, others will experience a significant worsening of their noise environment.

So far no mitigation measures have been suggested that will address this impact.

Retention of runway alternation

The Secretary of State's announcement promised the retention of runway alternation. This provides partial relief to overflown communities when arriving aircraft switch runways at 3pm.

This means that neither of the existing runways will be used for landings and take offs at the same time. Aircraft will continue to land one runway and take off from another.

Consultation on BAA's draft Noise Action Plan (NAP) for Heathrow closed on October 5. The local authorities have said in their responses that the final approved NAP must confirm the retention of this important relief.2M Group

October 2009

www.2MGroup.org.uk